6–30–08 Monday
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Pages 36789–37350

Federal Register

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FOR: Any person who uses the Federal Register and Code of Federal Regulations.

WHO: Sponsored by the Office of the Federal Register.

WHAT: Free public briefings (approximately 3 hours) to present:

1. The regulatory process, with a focus on the Federal Register system and the public's role in the development of regulations.

2. The relationship between the Federal Register and Code of Federal Regulations.

3. The important elements of typical Federal Register documents.

4. An introduction to the finding aids of the FR/CFR system.

WHY: To provide the public with access to information necessary to research Federal agency regulations which directly affect them. There will be no discussion of specific agency regulations.

WHEN: Tuesday, July 8, 2008
9:00 a.m.–Noon

WHERE: Office of the Federal Register
Conference Room, Suite 700
800 North Capitol Street, NW.
Washington, DC 20002

RESERVATIONS: (202) 741–6008

Contents

Federal Register

Vol. 73, No. 126

Monday, June 30, 2008

Separate Parts In This Issue

Reader Aids

Consult the Reader Aids section at the end of this issue for phone numbers, online resources, finding aids, reminders, and notice of recently enacted public laws.

To subscribe to the Federal Register Table of Contents LISTSERV electronic mailing list, go to http://listserv.access.gpo.gov and select Online mailing list archives, FEDREGTOC-L, Join or leave the list (or change settings); then follow the instructions.

CFR PARTS AFFECTED IN THIS ISSUE

A cumulative list of the parts affected this month can be found in the Reader Aids section at the end of this issue.

4 CFR
22.....36789

11 CFR
Proposed Rules:
Ch. II.....36807

14 CFR
Proposed Rules:
39 (2 documents).....36819, 36821

18 CFR
284.....37058

22 CFR
62.....36789

28 CFR
Proposed Rules:
35 (2 documents).....36964, 37055
36 (2 documents).....37009, 37055

29 CFR
Proposed Rules:
1910.....36823
1915.....36823

30 CFR
3.....36789

33 CFR
165 (2 documents).....36791, 36792
Proposed Rules:
155.....36825
156.....36825

34 CFR
674.....36792
682.....36792
685.....36792
686.....36792

36 CFR
1280.....36793

38 CFR
17.....36796
70.....36796

40 CFR
9.....37096
52.....36802
85.....37096
86.....37096
89.....37096
92.....37096
94.....37096
1033.....37096
1039.....37096
1042.....37096
1065.....37096
1068.....37096

44 CFR
65.....36803
Proposed Rules:
67.....36830

47 CFR
73.....36805
Proposed Rules:
73 (4 documents).....36834, 36835, 36836

50 CFR
679.....36805

Rules and Regulations

Federal Register
Vol. 73, No. 126
Monday, June 30, 2008

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

GOVERNMENT ACCOUNTABILITY OFFICE

4 CFR Part 22

Rules of Procedure of the Government Accountability Office Contract Appeals Board; Correction

AGENCY: Government Accountability Office.

ACTION: Interim rule; correction.

SUMMARY: On June 26, 2008, the Government Accountability Office Contract Appeals Board published an interim rule, but inadvertently omitted the effective date. This document adds an effective date to the published interim rule.

DATES: The interim rule published on June 26, 2008, at 73 FR 36257 is effective on June 26, 2008, and is applicable to all appeals filed on or after October 1, 2007. Comments must be submitted on or before August 25, 2008.

ADDRESSES: Comments may be submitted by e-mail at *cab@gao.gov* or by facsimile at 202–512–9749. Due to delivery delays, submission by regular mail is discouraged. Comments may be sent by Federal Express (FedEx) or United Parcel Service (UPS) addressed to: James A. Spangenberg, Chairman, Government Accountability Office Contract Appeals Board, 441 G Street, NW., Room 7182, Washington, DC 20548.

FOR FURTHER INFORMATION CONTACT: James A. Spangenberg (Chairman), David Ashen (Vice Chairman), or Sharon L. Larkin (Member), 202–512–3342, *cab@gao.gov*. Hearing or speech impaired individuals may contact the Board via TTY by calling the toll-free Federal Information Relay Service at 800–877–8339.

Dated: June 26, 2008.

James A. Spangenberg,

Chairman, Government Accountability Contract Appeals Board.

[FR Doc. 08–1400 Filed 6–26–08; 1:23 pm]

BILLING CODE 1610–02–P

DEPARTMENT OF STATE

22 CFR Part 62

[Public Notice 6277]

Exchange Visitor Program—Au Pairs; Correction

AGENCY: Department of State.

ACTION: Interim final rule; correction.

SUMMARY: This document contains a correction to an interim final rule published on Thursday, June 19, 2008 (73 FR 34861). The Department of State published a document in the **Federal Register** on June 19, 2008, concerning Regulations regarding Exchange Visitor Program—Au Pairs. The published document contained an incorrect effective date.

FOR FURTHER INFORMATION CONTACT: Stanley Colvin, 202–203–7415.

Correction

In the **Federal Register** of June 19, 2008, FR DOC E8–13796, on page 34861, in the second column, correct the ''**DATES**'' caption to read:

DATES: This rule is effective July 21, 2008. The Department will accept comments from the public up to July 21, 2008.

Dated: June 19, 2008.

Stanley S. Colvin,

Director, Office of Exchange Coordination and Designation, Department of State.

[FR Doc. E8–14780 Filed 6–27–08; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Part 3

OMB Control Numbers Under the Paperwork Reduction Act

AGENCY: Mine Safety and Health Administration (MSHA), Labor.

ACTION: Final rule; technical amendment.

SUMMARY: This technical amendment updates MSHA's listing of Office of Management and Budget (OMB) control numbers for the Agency's standards and regulations. MSHA is prohibited from conducting a collection of information unless the Agency displays a currently valid OMB control number. This consolidated listing assists the public in searching for current MSHA standards and regulations that include information collection, recordkeeping, and reporting requirements approved by OMB under the Paperwork Reduction Act of 1995.

DATES: *Effective Date:* June 30, 2008.

FOR FURTHER INFORMATION CONTACT: Patricia W. Silvey, Director; Office of Standards, Regulations, and Variances, MSHA at *silvey.patricia@dol.gov* (E-mail); 202–693–9440 (Voice); 202–693–9441 (Facsimile).

SUPPLEMENTARY INFORMATION: MSHA first consolidated the listing of OMB control numbers in a final rule published on June 29, 1995 (60 FR 33719). This action codified the OMB control numbers for MSHA standards and regulations in one location to assist the public in quickly determining whether OMB has approved a specific information collection requirement. Table 1 in 30 CFR 3.1 displays the OMB control number for each section containing a requirement for the collection, reporting, recordkeeping, or dissemination of information.

MSHA is prohibited from conducting a collection of information unless it displays a currently valid OMB control number and informs potential responders that they are not required to respond unless the collection of information displays a currently valid OMB control number. By publishing this list, MSHA is following the recommendation of OMB pursuant to 5 CFR 1320.3(f)(3) and 1320.5(b)(2)(ii)(C) that, even where an agency has already provided the above information ''in a manner reasonably calculated to inform the public,'' the agency should also ''publish such information along with a table or codified section of OMB control numbers to be included in the *Code of Federal Regulations*.''

This revision updates MSHA's current list of OMB control numbers to include new control numbers approved by OMB for standards and regulations completed since the last update and any changes made through the renewal of previously issued OMB control numbers.

Information collection requirements go through the public review process, including notice and comment, as part of the rule to which they apply. Likewise, the renewal of an OMB control number also requires public review. As a result, MSHA finds that it is unnecessary to have further public notice and comment and that, therefore, there is ''good cause'' under 5 U.S.C. 553(b)(3)(B) of the Administrative Procedure Act (APA) to issue this technical amendment to Table 1 in 30 CFR part 3 without prior public notice and comment.

MSHA also determined that it is unnecessary to delay the effective date. This technical amendment contains no new requirements for which the public would need time to plan compliance, beyond that provided for in the regulation itself. MSHA finds, therefore, that there is ''good cause'' to except this action from the 30-day delayed effective date requirement under 5 U.S.C. 553(d)(3) of the APA.

List of Subjects in 30 CFR Part 3

Mine safety and health, Reporting and recordkeeping requirements.

Patricia W. Silvey,

Director, Office of Standards, Regulations and Variances.

■ Accordingly, under the authority of 30 U.S.C. 957, chapter I of title 30, *Code of Federal Regulations* is amended as set forth below.

PART 3—[AMENDED]

■ 1. The authority citation for part 3 continues to read as follows:

Authority: 30 U.S.C. 957; 44 U.S.C. 3501–3520.

§ 3.1 [Amended]

■ 2. Amend § 3.1 by revising Table 1 to read as follows:

* * * * *

TABLE 1.—OMB CONTROL NUMBERS

30 CFR Citation	OMB Control No.
Subchapter B—Testing, Evaluation, and Approval of Mining Products	
6.10	1219–0066
7.3	1219–0066
7.4	1219–0066
7.6	1219–0066
7.7	1219–0066
7.23	1219–0066
7.27	1219–0066
7.28	1219–0066
7.29	1219–0066
7.30	1219–0066
7.43	1219–0066
7.46	1219–0066
7.47	1219–0066
7.48	1219–0066
7.49	1219–0066
7.51	1219–0066
7.63	1219–0066
7.69	1219–0066
7.71	1219–0066
7.83	1219–0066
7.90	1219–0066
7.97	1219–0066
7.105	1219–0066
7.108	1219–0066
7.303	1219–0066
7.306	1219–0066
7.309	1219–0066
7.311	1219–0066
7.403	1219–0066
7.407	1219–0066
7.408	1219–0066
7.409	1219–0066
7.411	1219–0066
15.4	1219–0066
15.8	1219–0066
18.6	1219–0066
18.15	1219–0066
18.53	1219–0066, –0116
18.81	1219–0066
18.82	1219–0066
18.93	1219–0066
18.94	1219–0066
19.3	1219–0066
19.13	1219–0066
20.3	1219–0066
20.14	1219–0066
22.4	1219–0066
22.8	1219–0066
22.11	1219–0066
23.3	1219–0066
23.7	1219–0066
23.10	1219–0066
23.12	1219–0066
23.14	1219–0066
27.4	1219–0066
27.6	1219–0066
27.11	1219–0066
28.10	1219–0066
28.23	1219–0066
28.25	1219–0066
28.30	1219–0066
28.31	1219–0066
33.6	1219–0066
33.12	1219–0066
35.6	1219–0066
35.10	1219–0066
35.12	1219–0066
36.6	1219–0066
36.12	1219–0066
Subchapter G—Filing and Other Administrative Requirements	
40.3	1219–0042
40.4	1219–0042
40.5	1219–0042
41.20	1219–0042
43.4	1219–0014
43.7	1219–0014
44.9	1219–0065
44.10	1219–0065
44.11	1219–0065
45.3	1219–0040
45.4	1219–0040
Subchapter H—Education and Training	
46.3	1219–0131
46.5	1219–0131
46.6	1219–0131
46.7	1219–0131
46.8	1219–0131
46.9	1219–0131
46.11	1219–0131
47.31	1219–0133
47.32	1219–0133
47.32(a)(4)	1219–0133
47.41	1219–0133
47.51	1219–0133
47.71	1219–0133
47.73	1219–0133
48.3	1219–0009, –0141
48.9	1219–0009
48.23	1219–0009
48.29	1219–0009
49.2	1219–0078
49.3	1219–0078
49.4	1219–0078
49.6	1219–0078
49.7	1219–0078
49.8	1219–0078
49.9	1219–0078
49.12	1219–0144
49.16	1219–0144
49.18	1219–0144
49.50	1219–0144
Subchapter I—Accidents, Injuries, Illnesses, Employment, and Production in Mines	
50.10	1219–0007, –0141
50.11	1219–0007, –0141
50.20	1219–0007
50.30	1219–0007
Subchapter K—Metal and Nonmetal Mine Safety and Health	
56.1000	1219–0042
56.3203(a)	1219–0121
56.5005	1219–0048
56.13015	1219–0089
56.13030	1219–0089
56.14100	1219–0089
56.18002	1219–0089
56.19022	1219–0034
56.19023	1219–0034
56.19057	1219–0049
56.19121	1219–0034
57.1000	1219–0042
57.3203(a)	1219–0121
57.3461	1219–0097
57.5005	1219–0048
57.5037	1219–0003
57.5040	1219–0003
57.5047	1219–0039
57.5060	1219–0135
57.5065	1219–0135
57.5066	1219–0135
57.5067	1219–0135
57.5070	1219–0135
57.5071	1219–0135
57.5075	1219–0135

TABLE 1.—OMB CONTROL NUMBERS—Continued

30 CFR Citation	OMB Control No.
57.8520	1219–0016
57.8525	1219–0016
57.11053	1219–0046
57.13015	1219–0089
57.13030	1219–0089
57.14100	1219–0089
57.18002	1219–0089
57.19022	1219–0034
57.19023	1219–0034
57.19057	1219–0049
57.19121	1219–0034
57.22004(c)	1219–0103
57.22204	1219–0030
57.22229	1219–0103
57.22230	1219–0103
57.22231	1219–0103
57.22239	1219–0103
57.22401	1219–0096
57.22606	1219–0095
Subchapter M—Uniform Mine Health Regulations	
62.110	1219–0120
62.130	1219–0120
62.170	1219–0120
62.171	1219–0120
62.172	1219–0120
62.173	1219–0120
62.174	1219–0120
62.175	1219–0120
62.180	1219–0120
62.190	1219–0120
Subchapter O—Coal Mine Safety and Health	
70.201(c)	1219–0011
70.202(b)	1219–0011
70.204	1219–0011
70.209	1219–0011
70.210	1219–0011
70.220	1219–0011
70.220(a)	1219–0011
71.201(c)	1219–0011
71.202(b)	1219–0011
71.204	1219–0011
71.209	1219–0011
71.210	1219–0011
71.220	1219–0011
71.220(a)	1219–0011
71.300	1219–0011
71.301	1219–0011
71.301(d)	1219–0011
71.403	1219–0024
71.404	1219–0024
72.500	1219–0124
72.503	1219–0124
72.510	1219–0124
72.520	1219–0124
75.100	1219–0127
75.153(a)(2)	1219–0001
75.155	1219–0127
75.159	1219–0127
75.160	1219–0127
75.161	1219–0127
75.204(a)	1219–0121
75.215	1219–0004
75.220	1219–0004
75.221	1219–0004
75.222	1219–0004

TABLE 1.—OMB CONTROL NUMBERS—Continued

30 CFR Citation	OMB Control No.
75.223	1219–0004
75.310	1219–0088
75.312	1219–0088
75.335	1219–0142
75.336	1219–0142
75.337	1219–0142
75.338	1219–0142
75.342	1219–0088
75.350	1219–0138
75.351	1219–0088, –0116, –0138
75.352	1219–0138
75.360	1219–0088
75.361	1219–0088
75.362	1219–0088
75.363	1219–0088
75.364	1219–0088
75.370	1219–0088
75.371	1219–0088, –0138
75.372	1219–0073
75.373	1219–0073
75.382	1219–0088
75.512	1219–0116
75.703	1219–0116
75.703–3	1219–0116
75.800	1219–0116
75.800–4	1219–0116
75.820	1210–0116
75.821	1219–0116
75.900	1219–0116
75.900–4	1219–0116
75.1001–1	1219–0116
75.1100–3	1219–0054
75.1103–8	1219–0054
75.1103–11	1219–0054
75.1200	1219–0073
75.1200–1	1219–0073
75.1201	1219–0073
75.1202	1219–0073
75.1202–1	1219–0073
75.1203	1219–0073
75.1204	1219–0073
75.1204–1	1219–0073
75.1321	1219–0025
75.1327	1219–0025
75.1400–2	1219–0034
75.1400–4	1219–0034
75.1432	1219–0034
75.1433	1219–0034
75.1501	1219–0054
75.1502	1219–0054, –0141
75.1504	1219–0141
75.1505	1219–0141
75.1702	1219–0041
75.1712–4	1219–0024
75.1712–5	1219–0024
75.1713–1	1219–0078
75.1714–3	1219–0141
75.1714–3(e)	1219–0044
75.1714–4	1219–0044
75.1714–5	1219–0141
75.1714–8	1219–0141
75.1716	1219–0020
75.1716–1	1219–0020
75.1716–3	1219–0020
75.1721	1219–0073
75.1901	1219–0119
75.1904	1219–0119
75.1911	1219–0119
75.1912	1219–0119
75.1914	1219–0119

TABLE 1.—OMB CONTROL NUMBERS—Continued

30 CFR Citation	OMB Control No.
75.1915	1219–0119, –0124
77.100	1219–0127
77.103(a)(2)	1219–0001
77.105	1219–0127
77.106	1219–0127
77.107	1219–0127
77.107–1	1219–0127
77.215	1219–0015
77.215–2	1219–0015
77.215–3	1219–0015
77.215–4	1219–0015
77.216–2	1219–0015
77.216–3	1219–0015
77.216–4	1219–0015
77.216–5	1219–0015
77.502	1219–0116
77.800	1219–0116
77.800–2	1219–0116
77.900	1219–0116
77.900–2	1219–0116
77.1000	1219–0026
77.1000–1	1219–0026
77.1101	1219–0051
77.1200	1219–0073
77.1201	1219–0073
77.1202	1219–0073
77.1404	1219–0034
77.1432	1219–0034
77.1433	1219–0034
77.1702	1219–0078
77.1713	1219–0083
77.1900	1219–0019
77.1901	1219–0082
77.1906	1219–0034
77.1909–1	1219–0025
90.201(c)	1219–0011
90.202(b)	1219–0011
90.204	1219–0011
90.209	1219–0011
90.220	1219–0011
90.300	1219–0011
90.301	1219–0011
90.301(d)	1219–0011

[FR Doc. E8–14619 Filed 6–27–08; 8:45 am]
BILLING CODE 4510–43–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket No. USCG 2008–0500]

Safety Zone; Fourth of July Fireworks, City of Sausalito, Sausalito, CA

AGENCY: Coast Guard, DHS.

ACTION: Notice of enforcement of regulation.

SUMMARY: The Coast Guard will enforce the Fourth of July Fireworks, City of Sausalito, safety zone from 9 a.m. through 9:30 p.m. on July 4, 2008. This action is necessary to control vessel

traffic and to ensure the safety of event participants and spectators. During the enforcement period, unauthorized persons or vessels are prohibited from entering into, transiting through, or anchoring in the safety zone, unless authorized by the Patrol Commander (PATCOM).

DATES: The regulations in 33 CFR 165.1191 will be enforced from 9 a.m. through 9:30 p.m. on July 4, 2008.

FOR FURTHER INFORMATION CONTACT: Lieutenant Junior Grade Sheral Richardson, Waterways Management Branch, U.S. Coast Guard Sector San Francisco, at (415) 399–7436.

SUPPLEMENTARY INFORMATION: The Coast Guard will enforce the safety zone for the annual Fourth of July Fireworks, City of Sausalito, safety zone in 33 CFR 165.1191 on July 4, 2008, from 9 a.m. through 9:30 p.m.

Under the provisions of 33 CFR 165.1191, unauthorized persons or vessels are prohibited from entering into, transiting through, or anchoring in the safety zone during all applicable effective dates and times, unless authorized to do so by the PATCOM. Additionally, each person who receives notice of a lawful order or direction issued by an official patrol vessel shall obey the order of direction. The PATCOM is empowered to forbid and control the regulated area. The PATCOM shall be designated by the Commander, Coast Guard Sector San Francisco. The PATCOM may, upon request, allow the transit of commercial vessels through regulated areas when it is safe to do so.

This notice is issued under authority of 33 CFR 165.1191 and 5 U.S.C. 552(a). In addition to this notice in the **Federal Register**, the Coast Guard will provide the maritime community with extensive advance notification of this enforcement period via the Local Notice to Mariners. If the Captain of the Port determines that the regulated area need not be enforced for the full duration stated in this notice, he or she may use a Broadcast Notice to Mariners to grant general permission to enter the regulated area.

Dated: June 18, 2008.

P.M. Gugg,

Captain, U.S. Coast Guard, Captain of the Port, Sector San Francisco.

[FR Doc. E8–14804 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket No. USCG 2008–0512]

Safety Zone; Vallejo Fourth of July Fireworks, Vallejo, CA

AGENCY: Coast Guard, DHS.

ACTION: Notice of enforcement of regulation.

SUMMARY: The Coast Guard will enforce the Vallejo Fourth of July Fireworks Display safety zone for the city of Vallejo, from 8 p.m. through 10 p.m. on July 4, 2008. This action is necessary to control vessel traffic and to ensure the safety of event participants and spectators. During the enforcement period, unauthorized persons or vessels are prohibited from entering into, transiting through, or anchoring in the safety zone, unless authorized by the Patrol Commander (PATCOM).

DATES: The regulations in 33 CFR 165.1191 will be enforced from 8 p.m. through 10 p.m. on July 4, 2008.

FOR FURTHER INFORMATION CONTACT: Lieutenant Junior Grade Sheral Richardson, Waterways Management Branch, U.S. Coast Guard Sector San Francisco, at (415) 399–7436.

SUPPLEMENTARY INFORMATION: The Coast Guard will enforce the safety zone for the annual Vallejo Fourth of July Fireworks in 33 CFR 165.1191 on July 4, 2008, from 8 p.m. through 10 p.m.

Under the provisions of 33 CFR 165.1191, unauthorized persons or vessels are prohibited from entering into, transiting through, or anchoring in the safety zone during all applicable effective dates and times, unless authorized to do so by the PATCOM. Additionally, each person who receives notice of a lawful order or direction issued by an official patrol vessel shall obey the order of direction. The PATCOM is empowered to forbid and control the regulated area. The PATCOM shall be designated by the Commander, Coast Guard Sector San Francisco. The PATCOM may, upon request, allow the transit of commercial vessels through regulated areas when it is safe to do so.

This notice is issued under authority of 33 CFR 165.1191 and 5 U.S.C. 552(a). In addition to this notice in the **Federal Register**, the Coast Guard will provide the maritime community with extensive advance notification of this enforcement period via the Local Notice to Mariners. If the Captain of the Port determines that the regulated area need not be enforced for the full duration stated in this notice, he or she may use a Broadcast Notice to Mariners to grant general permission to enter the regulated area.

Dated: June 18, 2008.

P.M. Gugg,

Captain, U.S. Coast Guard, Captain of the Port, Sector San Francisco.

[FR Doc. E8–14803 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF EDUCATION

34 CFR Parts 674, 682, 685, and 686

[Docket ID ED–2008–OPE–0001]

RIN 1840–AC93

The Teacher Education Assistance for College and Higher Education (TEACH) Grant Program and Other Federal Student Aid Programs; Correction

AGENCY: Office of Postsecondary Education, Department of Education.

ACTION: Final regulations; correction.

SUMMARY: On June 23, 2008, we published final regulations in the **Federal Register** to establish regulations for the Teacher Education Assistance for College and Higher Education (TEACH) Grant program. That document inadvertently included several minor technical errors. This document corrects the final regulations.

DATES: Effective July 1, 2008.

FOR FURTHER INFORMATION CONTACT: Michelle Belton, U.S. Department of Education, 1990 K Street, NW., room 8031, Washington, DC 20006–8502. Telephone: (202) 502–7821 or via the Internet at: *Michelle.Belton@ed.gov*.

If you use a telecommunications device for the deaf (TDD), call the Federal Relay Service (FRS), toll free, at 1–800–877–8339.

Individuals with disabilities can obtain this document in an alternative format (*e.g.*, Braille, large print, audiotape, or computer diskette) on request to the contact person listed in this section.

SUPPLEMENTARY INFORMATION:

Electronic Access to This Document

You may view this document, as well as all other Department of Education documents published in the **Federal Register**, in text or Adobe Portable Document Format (PDF) on the Internet at the following site: *http://www.ed.gov/news/fedregister*.

To use PDF you must have Adobe Acrobat Reader, which is available free

at this site. If you have questions about using PDF, call the U.S. Government Printing Office (GPO), toll free, at 1–888–293–6498; or in the Washington, DC, area at (202) 512–1530.

Note: The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available on GPO Access at: *http://www.gpoaccess.gov/nara/index.html.*

Corrections

■ In rule FR Doc. E8–13587 published June 23, 2008 (73 FR 35472), make the following technical corrections:
■ 1. On page 35494, column three, in amendatory instruction 26(A), remove the paragraph reference ''(b)(2)(ii)'' and, in its place, add the paragraph reference ''(b)(4)(i)(B)''.
■ 2. On page 35495, column one, correct amendment 33 to read as follows:
■ 33. Section 682.204 is amended by:
■ A. Adding paragraph (m).
■ B. Adding an authority citation to read as follows:

§ 682.204 Maximum loan amounts.

* * * * *

(m) Any TEACH Grants that have been converted to Direct Unsubsidized Loans are not counted against annual or any aggregate loan limits under paragraphs (c), (d), (e), and (f) of this section.

(Authority: 20 U.S.C. 1070g, 1078, 1078–2, 1078–3, 1078–8)

■ 3. On page 35495, column two, in amendatory instruction 35(A), remove the paragraph reference ''(c)(1)(ii)(B)'' and, in its place, add the paragraph reference ''(c)(4)(i)(B)''.
■ 4. On page 35495, column two, in amendatory instruction 39(A), remove the paragraph reference ''(c)(2)'' and, in its place, add the paragraph reference ''(d)(1)(ii)''.
■ 5. On page 35495, column three, after amendatory instruction 41, add the heading for Part 686 to read as follows:

PART 686—TEACHER EDUCATION ASSISTANCE FOR COLLEGE AND HIGHER EDUCATION (TEACH) GRANT PROGRAM

Dated: June 26, 2008.

Sara Martinez Tucker,

Under Secretary for Education.

(Catalog of Federal Domestic Assistance Numbers: 84.007 Federal Supplemental Educational Opportunity Grant Program; 84.032 Federal Family Education Loan Program; 84.033 Federal Work Study; 84.038 Federal Perkins Loan Program; 84.063 Federal Pell Grant Program; 84.069 Leveraging Education Assistance Partnerships; 84.268 William D. Ford Federal Direct Loan Program; 84.379 TEACH Grant program)

[FR Doc. E8–14850 Filed 6–27–08; 8:45 am]

BILLING CODE 4000–01–P

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

36 CFR Part 1280

RIN 3095–AB33

[Docket NARA–08–0002]

Use of Meeting Rooms and Public Space

AGENCY: National Archives and Records Administration (NARA).

ACTION: Final rule.

SUMMARY: NARA is amending its regulations on public use of the National Archives Building in Washington, DC, for meetings or special events. This rule incorporates changes in available space as a result of the renovation of the National Archives Building by identifying the kinds of space available and procedures for requesting use. NARA also will charge fees for the use of public areas in the National Archives Building in accordance with 44 U.S.C. 2903(b). This rule affects the public.

DATES: *Effective Date:* July 30, 2008.

FOR FURTHER INFORMATION CONTACT: Jennifer Davis Heaps at 301–837–1850, or fax at 301–837–0319.

SUPPLEMENTARY INFORMATION: On April 4, 2008, NARA published a proposed rule (73 FR 18462) for a 60-day public comment period updating text in the regulations relating to the availability of public spaces in the National Archives Building and the National Archives at College Park, Maryland, for private, non-official use, including meetings and special events.

We notified several listservs and researcher organizations about the proposed rule and its availability on regulations.gov. We also posted a notice about the rule on our Web site, *http://www.archives.gov.* We received no comments. We are adopting the proposed rule as a final rule without change.

This rule is not a significant regulatory action for the purposes of Executive Order 12866 and has not been reviewed by the Office of Management and Budget. As required by the Regulatory Flexibility Act, I certify that this rule will not have a significant impact on a substantial number of small entities because it affects individuals. This regulation does not have any federalism implications. This rule is not a major rule as defined in 5 U.S.C. Chapter 8, Congressional Review of Agency Rulemaking.

List of Subjects in 36 CFR Part 1280

Archives and records, Federal buildings and facilities.

■ For the reasons set forth in the preamble, NARA amends part 1280 of title 36, Code of Federal Regulations, as follows:

PART 1280—USE OF NARA FACILITIES

■ 1. The authority citation for part 1280 is revised to read as follows:

Authority: 44 U.S.C. 2102 notes, 2104(a), 2112, 2903

■ 2. Amend § 1280.1 by revising paragraph (a) to read as follows:

§ 1280.1 What is the purpose of this part?

(a) This part tells you what rules you must follow when you use property under the control of the Archivist of the United States (see § 1280.2 of this part).

* * * * *

§ 1280.34 [Amended]

■ 3. Amend § 1280.34 as follows:
■ a. Remove ''Assistant Archivist for Administrative Services'' in paragraphs (b) and (c) and add in place ''Assistant Archivist for Administration.''
■ b. Remove ''36 CFR 1254.20'' in the third sentence of paragraph (b) and add in place ''36 CFR 1254.48.''

■ 4. Amend § 1280.46 by revising paragraph (b)(3) to read as follows:

§ 1280.46 What are the rules for filming, photographing, or videotaping on NARA property for personal use?

* * * * *

(b) * * *

(3) You may not film, photograph, or videotape while on the interior steps or ramp leading to the Declaration of Independence, the Constitution, and the Bill of Rights in the Rotunda of the National Archives Building.

■ 5. Amend § 1280.48 by revising paragraph (a) and amending paragraph (f) by revising the first sentence to read as follows:

§ 1280.48 How do I apply to film, photograph, or videotape on NARA property for news purposes?

(a) If you wish to film, photograph, or videotape for news purposes at the National Archives Building (as delineated in § 1280.2(a)), the National Archives at College Park, or the Washington National Records Center,

you must request permission from the NARA Public Affairs Officer, 700 Pennsylvania Avenue, NW., Washington, DC 20408–0001. See also § 1280.42(b) for additional permissions relating to the Washington National Records Center.

* * * * *

(f) This section does not apply to you if you have permission to use your own microfilming equipment to film archival records and donated historical materials under the provisions of 36 CFR 1254.90 through 1254.110. * * *

■ 6. Amend § 1280.52 by revising the third sentence of paragraph (a) as follows:

§ 1280.52 What are the rules for filming, photographing, or videotaping on NARA property for news purposes?

* * * * *

(a) * * * If the Public Affairs Officer approves your use of artificial lighting in the Rotunda, NARA will use facsimiles in place of the Declaration of Independence, the Constitution, and the Bill of Rights. * * *

* * * * *

■ 7. Revise § 1280.68 to read as follows:

§ 1280.68 May I use the cafeterias?

Yes, the Charters Café in the National Archives Building is normally open to the public Monday through Friday, 10 a.m. to 4 p.m. and the cafeteria at the National Archives at College Park is open to the public from 8 a.m. to 4 p.m.

■ 8. Revise subpart D to read as follows:

Subpart D—What Rules Apply to Use NARA Public Areas in the Washington, DC, Area?

General

Sec.

Subpart D—What Rules Apply to Use NARA Public Areas in the Washington, DC, Area?

General

§ 1280.70 When does NARA allow non-NARA groups to use the public areas of NARA property?

(a) The primary use of NARA property in the Washington, DC, area (the National Archives Building and the National Archives at College Park), including those areas open to the public, is the conduct of official NARA business, including public programs and other activities conducted in conjunction with government and non-government organizations and the Foundation for the National Archives (''Foundation''). In conducting official business, NARA and its partners use all of the public areas of the Washington, DC, area facilities. There are no public areas in the Washington National Records Center in Suitland, MD.

(b) NARA may permit, under the conditions described in this subpart, the occasional use of certain public areas by other Federal agencies, quasi-Federal agencies, and state, local, and tribal government organizations for official activities. NARA also permits the occasional, non-official use of its public areas by organizations when the activity relates to or furthers NARA's archival, records, or other programs.

§ 1280.71 What are the general rules for using NARA property in the Washington, DC, area?

In addition to the rules listed in Subparts A, B, and C of this part, you must adhere to the following rules when using NARA public spaces:

(a) All use must relate to or further the archival, records, or other activities of NARA. Examples of use that meet this standard include programs that promote research in or the dissemination and use of NARA holdings, including educational programs and materials, the preservation of NARA holdings or the historical records and documentary materials of other institutions, and the use and enjoyment of NARA exhibits.

(b) All use must be consistent with the public perception of NARA as an archival and research institution.

(c) When NARA cohosts an activity with the Foundation or other organizations, NARA must be identified as the cohost in all materials and publicity relating to the activity.

(d) When NARA has authorized your organization to use NARA property, you may not characterize your use of NARA property as an endorsement by NARA of your organization or its activities, or otherwise suggest an official relationship between NARA and your organization.

(e) You are not allowed to charge an admission fee or make any indirect assessment for admission, and you may not otherwise collect money at the event.

(f) You may not use NARA property or permission to use that property to advertise, promote, or sell commercial enterprises, products, or services, or for partisan political, sectarian, or similar purposes.

(g) You may not use NARA property if you or your organization or group engages in discriminatory practices proscribed by the Civil Rights Act of 1964, as amended.

(h) You must not misrepresent your identity to the public nor conduct any activities in a misleading or fraudulent manner.

(i) You must ensure that no Government property is destroyed, displaced, or damaged during your use of NARA public areas. You must take prompt action to replace, return, restore, repair or repay NARA for any damage caused to Government property during the use of NARA facilities.

§ 1280.72 What additional rules apply for a NARA approved event?

(a) Approved applicants must provide support people as needed to register guests, distribute approved literature, name tags, and other material.

(b) We must approve in advance any item that you plan to distribute or display during your use of NARA property, or any notice or advertisement that refers, directly or indirectly, to NARA, the Foundation for the National Archives, or the National Archives Trust Fund, or incorporates any of the seals described in 36 CFR 1200.2.

(c) We must approve in advance any vendor or caterer who will work in NARA facilities. You must comply with all NARA requirements for the use of food and drink at your event.

(d) No food or drink may be present or consumed in areas where original

records or historical materials are displayed.

National Archives Building, Washington, DC

§ 1280.74 What spaces in the National Archives Building are available for use by non-NARA groups and organizations?

You may ask to use the following areas in the National Archives Building, Washington, DC:

Area	Capacity
Rotunda Galleries	250 persons.
William G. McGowan Theater.	290 persons.
Archivist's Reception Room.	125 persons.
Presidential Conference Rooms.	20 to 70 persons.

§ 1280.76 When are the public areas available for private events in the National Archives Building?

Most public areas are available for set-up and use on weekdays from 6 p.m. until 10:30 p.m. during the fall and winter seasons (day after Labor Day through March 14). The areas are available for set-up and use from 7:30 p.m. until 10:30 p.m. in the spring season (March 15 through Labor Day). The areas are not available during weekends or on Federal holidays. A NARA staff member must be present at all times when non-NARA groups use NARA spaces.

§ 1280.78 Does NARA charge fees for the use of public areas in the National Archives Building?

(a) NARA is authorized to charge fees for the occasional, non-official use of its public areas, as well as for services related to such use, including additional cleaning, security, and other staff services. NARA will either exercise this authority directly, or, for activities co-sponsored with the Foundation for the National Archives, as part of your group's arrangements with the Foundation.

(b) We will inform organizations interested in using public spaces in the National Archives Building in advance and in writing of the total estimated cost associated with using the public area of interest. Fees NARA charges are paid to the National Archives Trust Fund.

(c) Federal and quasi-Federal agencies, State, local, and tribal governmental institutions using public space for official government functions pay fees to the National Archives Trust Fund only for the costs for additional cleaning, security, and other staff services NARA provides.

§ 1280.80 How do I request to use NARA public areas in the National Archives Building?

(a) Direct your request to use space to: Special Events Division Director (AI); National Archives and Records Administration, 700 Pennsylvania Avenue, NW., Room G–9, Washington, DC 20408. Request by telephone at 202–357–5164 or by fax at 202–357–5926.

(b) You must submit requests, signed by an authorized official of your organization, to use NARA public areas at least 30 calendar days before the proposed event is to occur.

(c) OMB control number 3095–0043 has been assigned to the information collection contained in this section.

§ 1280.82 How will NARA handle my request to use public areas in the National Archives Building?

(a) When you ask to use property in the National Archives Building, we review your request to:

(1) Ensure that it meets all of the provisions in this subpart;

(2) Determine if the public area you have requested is available on the date and time you have requested;

(3) Evaluate whether your proposed use is appropriate for the requested space; and

(4) Determine the costs of the event.

(b) When we have completed this review, we will notify you of the decision. We may ask for additional information before deciding whether or not to approve your event.

(c) NARA reserves the right to review, reject, or require changes in any material, activity, or caterer you intend to use for the event.

§ 1280.84 May I ask to use the Rotunda?

The Rotunda is primarily used for the public exhibition of the Charters of Freedom and other documents from NARA's holdings. NARA also uses the Rotunda for activities that further its Strategic Plan. Therefore, the use of the Rotunda for private events is not permitted. NARA may, upon application, permit other Federal agencies, quasi-Federal agencies, and State, local, and tribal governments to use the Rotunda for official functions, with NARA as a co-sponsor. Governmental groups that use the Rotunda for official functions must reimburse NARA for the cost of additional cleaning, security, and other staff services.

National Archives at College Park, MD

§ 1280.85 What space in the National Archives at College Park is available for use by non-NARA groups and organizations?

You may ask to use the following areas:

Area	Capacity
Auditorium	300.
Lecture Rooms	30 to 70 persons (or up to 300 with all dividers removed).

§ 1280.86 When are the public areas available for events in the National Archives at College Park?

Most areas are available for set-up and use from 8 a.m. until 9:30 p.m., Monday through Friday, and from 9 a.m. until 4:30 p.m. on Saturday. A NARA staff member must be present at all times when the public area is in use. If the space and staff are available, we may approve requests for events held before or after these hours and on Sunday.

§ 1280.87 Does NARA charge fees for the use of public areas in the National Archives at College Park?

NARA may charge a fee under 44 U.S.C. 2903(b) for the use of public areas at the National Archives at College Park. We inform organizations in advance and in writing of the total estimated cost of using the public area. Federal and quasi-Federal agencies, State, local, and tribal governmental institutions using public space for official government functions pay fees to the National Archives Trust Fund only for the costs for additional cleaning, security, and other staff services NARA provides.

§ 1280.88 How do I request to use NARA public areas in the National Archives at College Park?

(a) Direct your request to use space to: Special Events Coordinator (AII); Facilities and Personal Property Management Division; National Archives and Records Administration; 8601 Adelphi Road, College Park, MD 20740–6001. Request by telephone at 301–837–1900, or by fax at 301–837–3237.

(b) You must submit requests for use of NARA public areas at least 30 calendar days before the proposed event is to occur.

(c) OMB control number 3095–0043 has been assigned to the information collection contained in this section.

§ 1280.89 How will NARA handle my request to use public areas in the National Archives at College Park?

(a) When you ask to use public areas at the National Archives at College Park, we will review your request to:

(1) Ensure that it meets all of the provisions in this subpart;

(2) Determine if the room you have requested is available on the date and time you have requested; and

(3) Determine the cost of the event.

(b) When we have completed this review, we will notify you of the decision. We may ask for additional information before deciding whether or not to approve your event.

(c) NARA reserves the right to review, reject, or require changes in any material, activity, or caterer you intend to use for the event.

Dated: June 23, 2008.

Allen Weinstein,

Archivist of the United States.

[FR Doc. E8–14706 Filed 6–27–08; 8:45 am]

BILLING CODE 7515–01–P

DEPARTMENT OF VETERANS AFFAIRS

38 CFR Parts 17 and 70

RIN 2900–AM02

Beneficiary Travel Under 38 U.S.C. 111 Within the United States

AGENCY: Department of Veterans Affairs.

ACTION: Final rule.

SUMMARY: This document amends the beneficiary travel regulations of the Department of Veterans Affairs (VA) that provide a mechanism for payment of travel expenses within the United States under 38 U.S.C. 111 to help veterans and other persons obtain care and services from VA's Veterans Health Administration (VHA). The amended regulations more fully implement the statutory provisions governing such payments.

DATES: *Effective Date:* This final rule is effective July 30, 2008.

FOR FURTHER INFORMATION CONTACT: Tony Guagliardo, Chief Business Office (16), Veterans Health Administration, Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420; (202) 254–0406. (This is not a toll-free number.)

SUPPLEMENTARY INFORMATION: This document revises the beneficiary travel regulations that were previously captioned ''Transportation of Claimants and Beneficiaries.'' The revised regulations, set forth at 38 CFR part 70, provide a mechanism for payment of travel expenses within the United States under 38 U.S.C. 111 to help veterans and other persons obtain care and services from VHA, a subunit within VA.

This final rule adopts, with changes discussed below, the provisions of the corresponding proposed rule published in the **Federal Register** on July 23, 2007 (72 FR 40096), based on the rationale set forth in the proposed rule and this document.

The proposed rule provided for a 60-day comment period which ended September 21, 2007. We received comments from one commenter. We discuss below issues raised by the commenter.

The commenter asserted that the revised regulations should cover those aspects of beneficiary travel administered by the Veterans Benefit Administration (VBA), one of the Administrations within VA, and that we should add a definition of VBA. We made no changes based on these comments. These regulations properly concern, insofar as they apply to the VBA programs discussed in this comment, the beneficiary travel program administered by VHA under 38 U.S.C. 111 for eligible beneficiaries traveling to and from a Department facility in connection with vocational rehabilitation or incident to a scheduled Compensation and Pension examination. Additional transportation benefits available to vocational rehabilitation participants are, however, administered by VBA in accordance with chapter 31 of title 38, United States Code. As such, they are beyond the travel benefits authorized by section 111 and are properly administered pursuant to separate regulations (see, e.g., 38 CFR 21.154).

The commenter asserted that we should add a definition of ''beneficiary'' to read: ''Beneficiary means a person determined eligible for VHA benefits and who, subject to these regulations, is engaged in official business for the Government and authorized to travel at Government expense.'' We made no changes based on this comment. Such a definition would not be correct. A covered beneficiary's travel must be for the limited purpose of obtaining a specific VA benefit or another purpose that qualifies under this rule. Such travel is not undertaken in connection with the conduct of official business on behalf of the Government.

The commenter asserted that we should amend the regulations to provide that any recipient of benefits under 38 U.S.C. chapter 18 who travels to or from a VA facility or VA-authorized health care facility for care or services is eligible to receive beneficiary travel benefits under section 111. We made no changes based on this comment. For purposes of chapter 18, the definition of ''health care'' includes, among other things, direct transportation costs to and from approved sources of health care. The authority for travel benefits under chapter 18 is 38 U.S.C. 1803(c) and 1813(c), not section 111. These travel benefits are administered separately by VA's Health Administration Center, pursuant to 38 CFR 17.900 *et seq.*

The proposed rule explained that beneficiaries of the Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA) had previously been included in error among the groups eligible for beneficiary travel benefits under section 111. The commenter responded that this change should enable VA to have more funds available for those who are in fact eligible for beneficiary travel benefits, permitting VA to increase its reimbursement rates. However, funds allocated for the payment of beneficiary travel benefits under 38 U.S.C. 111 have not been used to pay for CHAMPVA beneficiaries' travel claims. Instead, those claims have been paid with funds allocated to the Health Administration Center, which administers the CHAMPVA program. Consequently, the amendment does not adjust the funding amounts available for the beneficiary travel program and is for clarification only.

Under the provisions of § 70.30(a)(1) as proposed, the Secretary would be authorized to establish a per mile rate for travel by a privately owned vehicle. Further, proposed § 70.30(a)(1)(iv) explained how VA would comply with the statutory provisions of 38 U.S.C. 111(g)(1), which require the Secretary, in consultation with the Administrator of General Services, the Secretary of Transportation, the Comptroller General of the United States, and representatives of veterans' service organizations, to conduct periodic investigations and other investigations required by that section on the actual cost of travel incurred by VA beneficiaries traveling to and from a Department facility for a covered purpose. Those provisions further explained how VA would provide notification of current mileage reimbursement rates. The commenter responded that the Secretary should be bound by the costs identified during such investigations, when determining VA's reimbursement rates. The commenter further stated that any rate that is less than that prescribed for Federal employee travel should be required to be fully justified in the **Federal Register**. We made no changes based on these comments.

Although the Secretary, when conducting investigations and determining rates under section 111, is required to take into consideration the actual cost of travel, along with other factors specified in the law, it is vital that the Secretary also be able to take into consideration the ramifications of diverting funds from direct medical care for the purpose of increasing mileage

reimbursement rates for the few categories of veterans eligible for beneficiary travel benefits. Indeed, in our view, by not tying the rates payable under section 111 to any other Federal travel program or otherwise mandating the reimbursement level, Congress implicitly recognized the need for this flexibility. Since the process and public notice provided for in § 70.31(a)(1) are appropriate under the applicable statutory provisions, we believe that there is no need for change based on the commenter's suggestions.

As we discuss below, this final rule makes a number of changes from the proposed rule in § 70.31, Deductibles. The proposed rule provided that VA will publish a notice of any change in the rates in the **Federal Register** and make current rates available on the Internet. In this final rule, we provide the correct Internet address for the rates in § 70.31(a)(2).

Proposed § 70.31(a) had stated, concerning reimbursement for travel to and from VA or VA-authorized health care, that VA shall deduct an amount established by the Secretary for each one-way trip from the amount otherwise payable under part 70 for such one-way trip except in limited circumstances, and had referred in parentheses to the then-current deductible. This final rule removes that parenthetical, which no longer is accurate, and provides a means for access to what the actual deductibles are. The Secretary raised the mileage reimbursement rate for travel under 38 U.S.C. 111 from 11 cents per mile to 28.5 cents per mile effective February 1, 2008, for the reasons stated in a Notice published in the **Federal Register** on February 1, 2008 (73 FR 6291), which referred to the authority in 38 U.S.C. 111 and the provision in the 2008 Appropriations Act funding an increase in the beneficiary travel mileage reimbursement rate to 28.5 cents per mile. The law requires that whenever the mileage reimbursement rates are increased, there must be a proportionate increase in the deductible amount. Accordingly, that notice announced an increase in the deductible, which for a one-way trip is $7.77. This final rule reflects in § 70.31(a) a Web site and offices at which the public can obtain this and any future change to the deductible amounts.

The Secretary is authorized to waive the deductible requirements when the imposition of the deductible would cause the beneficiary severe financial hardship. Proposed § 70.31(c) concerned implementation of this waiver authority. We are aware that, in general, deductibles and other similar cost sharing requirements constitute a barrier to access to care for those with limited income. Given the significant increase in the deductible and increasing fuel costs, many veterans will now experience financial hardship in meeting the increased deductible requirement. Therefore, the Secretary, acting within his discretionary authority, has concluded it is necessary to expand the categories of beneficiaries who are exempt from the deductible requirement to ensure their continued access to VA health care.

Thus, § 70.31 provides that the following three circumstances will constitute evidence of severe financial hardship for purposes of this section: (1) The beneficiary is in receipt of a VA pension; (2) the beneficiary has income for the year prior to the year of application made pursuant to § 70.20 that does not exceed the household income threshold determined under 38 U.S.C. 1722(a); or (3) the beneficiary's projected income for the year of application does not exceed the household income threshold determined under 38 U.S.C. 1722(a).

In addition, we have added in the final rule a provision to clarify the length of time for which a waiver granted under this section will be valid and effective. While implicit in both the current provisions in 38 CFR part 17 and in the proposed rule, we believe it preferable from a notice perspective to include this in the actual text of the regulation. Under the provisions of § 70.31(d) in this final rule, waivers granted under § 70.31(c) will be in effect: (1) To the end of the calendar year of the application; or (2) until there is a change in the beneficiary's household income status during the calendar year of application that results in the beneficiary no longer meeting the provisions of § 70.31(c) concerning severe financial hardship.

We have also changed § 70.31 by adding paragraph (e), which requires beneficiaries granted a waiver to promptly inform VA of any household income changes during the waiver period that result in their no longer meeting the severe financial hardship provisions of § 70.31(c). This is intended to ensure that those beneficiaries receiving a waiver of the deductible requirement meet eligibility criteria for it.

We are, where applicable, making changes in the final rule to display the approved information collection control numbers that have been assigned by the Office of Management and Budget (OMB). This final rule also makes changes from the proposed rule by making a number of minor clarifications and punctuation corrections.

Based on the rationale set forth in the proposed rule and in this document, we are adopting the provisions of the proposed rule as a final rule without change, except as stated above.

Executive Order 12866

Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). The Executive Order classifies a ''significant regulatory action,'' requiring review by OMB unless OMB waives such review, as any regulatory action that is likely to result in a rule that may: (1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities or the principles set forth in the Executive Order.

The economic, interagency, budgetary, legal, and policy implications of this rule have been examined and it has been determined to be a significant regulatory action under the Executive Order because it is likely to result in a rule that may raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order and/or materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof.

Unfunded Mandates

The Unfunded Mandates Reform Act of 1995 requires, at 2 U.S.C. 1532, that agencies prepare an assessment of anticipated costs and benefits before issuing any rule that may result in expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more (adjusted annually for inflation) in any given year. This rule would have no such effect on State, local, and tribal governments, or on the private sector.

Paperwork Reduction Act of 1995

This final rule contains provisions that constitute collections of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3521). OMB has approved those collections under control numbers 2900–0080 and 2900–0091. (We determined that it was not necessary to obtain OMB approval for the proposed information collection that was inadvertently described in the preamble of the proposed rule as requiring OMB approval. We did not receive any comments concerning that proposed information collection.) We display the control number under the applicable sections of the regulations in this final rule. OMB assigns a control number for each collection of information it approves. VA may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Regulatory Flexibility Act

VA hereby certifies that the provisions of the rule will not have a significant economic impact on a substantial number of small entities as they are defined in the Regulatory Flexibility Act, 5 U.S.C. 601–602. This rule primarily affects individuals and any effects on small businesses would be inconsequential. Therefore, pursuant to 5 U.S.C. 605(b), this rule is exempt from the initial and final regulatory flexibility analysis requirement of sections 603 and 604.

Catalog of Federal Domestic Assistance

The Catalog of Federal Domestic Assistance program numbers and titles are 64.007, Blind Rehabilitation Centers; 64.009, Veterans Medical Care Benefits; 64.010, Veterans Nursing Home Care; 64.011, Veterans Dental Care; 64.013, Veterans Prosthetic Appliances; 64.018, Sharing Specialized Medical Resources; 64.019, Veterans Rehabilitation Alcohol and Drug Dependence; and 64.022, Veterans Home Based Primary Care.

List of Subjects in 38 CFR Parts 17 and 70

Administrative practice and procedure, Alcohol abuse, Alcoholism, Claims, Day care, Dental health, Drug abuse, Foreign relations, Government contracts, Grant programs—health, Grant programs—veterans, Health care, Health facilities, Health professions, Health records, Homeless, Medical and dental schools, Medical devices, Medical research, Mental health programs, Nursing homes, Philippines, Reporting and recordkeeping requirements, Scholarships and fellowships, Travel and transportation expenses, Veterans.

Approved: March 31, 2008.

James B. Peake,

Secretary of Veterans Affairs.

■ For the reasons set forth in the preamble, the Department of Veterans Affairs amends 38 CFR chapter I as follows:

PART 17—MEDICAL

■ 1. The authority citation for part 17 continues to read as follows:

Authority: 38 U.S.C. 501, 1721, and as stated in specific sections.

§ 17.38 [Amended]

■ 2. In § 17.38, revise paragraph (a)(1)(xii) to read as follows:

§ 17.38 Medical benefits package.

(a) * * *

(1) * * *

(xii) Payment of beneficiary travel as authorized under 38 CFR part 70.

* * * * *

§§ 17.143 through 17.145 [Removed]

■ 3. Remove §§ 17.143 through 17.145 and the undesignated center heading ''TRANSPORTATION OF CLAIMANTS AND BENEFICIARIES''.

■ 4. Add a new part 70 to read as follows:

PART 70—VHA BENEFICIARY TRAVEL UNDER 38 U.S.C. 111

Sec.

Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302.

§ 70.1 Purpose and scope.

(a) This part provides a mechanism under 38 U.S.C. 111 for the Veterans Health Administration (VHA) to make payments for travel expenses incurred in the United States to help veterans and other persons obtain care or services from VHA.

(b) This part does not cover payment for emergency transportation of veterans for non-service-connected conditions in non-VA facilities when the payment for transportation is covered by §§ 17.1000 through 17.1008 of this chapter, as authorized by 38 U.S.C. 1725.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.2 Definitions.

For purposes of this part:

Attendant means an individual traveling with a beneficiary who is eligible for beneficiary travel and requires the aid and/or physical assistance of another person.

Beneficiary means a person determined eligible for VHA benefits.

Claimant means a veteran who received services (or his/her guardian) or the hospital, clinic, or community resource that provided the services, or the person other than the veteran who paid for the services.

Clinician means a Physician, Physician Assistant (PA), Nurse Practitioner (NP), Psychologist, or other independent licensed practitioner.

Emergency treatment means treatment for a condition of such a nature that a prudent layperson would have reasonably expected that delay in seeking immediate medical attention would have been hazardous to life or health (this standard would be met if there were an emergency medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) that a prudent layperson who possesses an average knowledge of health and medicine could reasonably expect the absence of immediate medical attention to result in placing the health of the individual in serious jeopardy, serious impairment to bodily functions, or serious dysfunction of any bodily organ or part).

Irregular discharge means the release of a competent patient from a VA or VA-authorized hospital, nursing home, or domiciliary care due to: refusal, neglect or obstruction of examination or treatment; leaving without the approval of the treating health care clinician; or disorderly conduct and discharge is the appropriate disciplinary action.

Special mode of transportation means an ambulance, ambulette, air ambulance, wheelchair van, or other mode of transportation specially designed to transport disabled persons (this would not include a mode of transportation not specifically designed to transport disabled persons, such as a bus, subway, taxi, train, or airplane). A modified, privately-owned vehicle, with special adaptive equipment and/or capable of transporting disabled persons is not a special mode of transportation for the purposes of this part.

United States means each of the several States, Territories, and

possessions of the United States, the District of Columbia, and the Commonwealth of Puerto Rico.

VA means the Department of Veterans Affairs.

VA-authorized health care facility means a non-VA health care facility where VA has approved care for an eligible beneficiary at VA expense.

VA facility means VA Medical Center (VAMC), VA Outpatient Clinic (OPC), or VA Community Based Outpatient Clinic (CBOC).

VHA means the Veterans Health Administration, a principal unit within VA.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.3 Determination of Secretary.

For each fiscal year, the Secretary of Veterans Affairs will determine whether funds are available for paying expenses of VHA beneficiary travel under 38 U.S.C. 111. If the Secretary determines that funds are available for such purpose, VA will make payment for expenses of such travel in accordance with the provisions of this part.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.4 Criteria for approval.

(a) VA will approve payment for beneficiary travel under this part if:

(1) The travel was made to obtain care or services for a person who is eligible for beneficiary travel payments under § 70.10,

(2) The travel was in connection with care or services for which such person was eligible under the laws administered by VA,

(3) Application was made in accordance with § 70.20,

(4) All of the requirements of this part for payment are met, and

(5) Any failure to obtain the care or services was due to actions by officials of VA or persons acting on behalf of VA.

(b) When a claimant requests payment for beneficiary travel after the provision of care or services and the travel did not include a special mode of transportation, VA will approve round-trip payment under this part only if the travel was:

(1) In connection with care or services that were scheduled with VHA prior to arrival at the VHA-designated facility, or

(2) For emergency treatment.

(c) When a claimant requests payment for beneficiary travel for care or services that were not scheduled with VHA prior to arrival at the facility and were not emergency treatment and the travel did not include a special mode of transportation, VA will not approve round-trip payment under this part but will approve payment for the return trip if VHA actually provided care or services.

(d) Except as provided in § 70.32 concerning reimbursement or prior payment, when payment for beneficiary travel is requested for travel that includes a special mode of transportation, VA will approve payment under this part if:

(1) The travel is medically required,

(2) The beneficiary is unable to defray the cost of such transportation, and

(3) VHA approved the travel prior to travel in the special mode of transportation or the travel was undertaken in connection with a medical emergency.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.10 Eligible persons.

(a) The following listed persons are eligible for beneficiary travel payments under this part:

(1) A veteran who travels to or from a VA facility or VA-authorized health care facility in connection with treatment or care for a service-connected disability (regardless of percent of disability).

(2) A veteran with a service-connected disability rated at 30 percent or more who travels to or from a VA facility or VA-authorized health care facility for examination, treatment, or care for any condition.

(3) A veteran who travels to a VA facility or VA-authorized health care facility for a scheduled compensation and pension examination.

(4) A veteran receiving pension under 38 U.S.C. 1521, who travels to or from a VA facility or VA-authorized health care facility for examination, treatment, or care.

(5) A veteran whose annual income (as determined under 38 U.S.C. 1503) does not exceed the maximum annual rate of pension that the veteran would receive under 38 U.S.C. 1521 (as adjusted under 38 U.S.C. 5312) if the veteran was eligible for pension and travels to or from a VA facility or VA-authorized health care facility for examination, treatment, or care.

(6) A veteran who travels to or from a VA facility or VA-authorized health care facility for examination, treatment, or care, and who is unable to defray the expenses of that travel as defined in paragraph (c) of this section.

(7) A member of a veteran's immediate family, a veteran's legal guardian, or a person in whose household the veteran certifies an intention to live, if such person is traveling for consultation, professional counseling, training, or mental health services concerning a veteran who is receiving care for a service-connected disability; or a member of a veteran's immediate family, if such person is traveling for bereavement counseling relating to the death of such veteran in the active military, naval, or air service in the line of duty and under circumstances not due to the veteran's own misconduct.

(8) An attendant other than a VA employee, who is accompanying and assisting a beneficiary eligible for beneficiary travel payments under this section, when such beneficiary is medically determined to require the presence of the attendant because of a physical or mental condition.

(9) Beneficiaries of other Federal agencies, incident to medical services rendered upon requests of those agencies, subject to reimbursement agreement by those agencies.

(10) Allied beneficiaries as defined by 38 U.S.C. 109 subject to reimbursement agreement by the government concerned.

(b) For purposes of this section, the term ''examination, treatment, or care'' means the care services provided under the Medical Benefits Package in § 17.38 of this chapter.

(c) For purposes of this section, a beneficiary shall be considered unable to defray the expenses of travel if the beneficiary:

(1) Has an income for the year (as defined under 38 U.S.C. 1503) immediately preceding the application for beneficiary travel that does not exceed the maximum annual rate of pension that the beneficiary would receive under 38 U.S.C. 1521 (as adjusted under 38 U.S.C. 5312) if the beneficiary were eligible for pension during that year; or

(2) Is able to demonstrate that due to circumstances such as loss of employment, or incurrence of a disability, his or her income in the year of travel will not exceed the maximum annual rate of pension that the beneficiary would receive under 38 U.S.C. 1521 (as adjusted under 38 U.S.C. 5312) if the beneficiary were eligible for pension; or

(3) Has a service-connected disability rated at least 30 percent; or

(4) Is traveling in connection with treatment of a service-connected disability.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.20 Application.

(a) A claimant may apply for beneficiary travel orally or in writing but must provide VA the receipt for each expense other than for mileage.

(b) A claimant must apply for payment of beneficiary travel within 30 calendar days after completing beneficiary travel that does not include a special mode of transportation.

(c) For beneficiary travel that includes a special mode of transportation, a claimant must apply for payment of beneficiary travel and obtain approval from VA prior to the travel; however, if the travel included a special mode of transportation and the claimant without prior approval applies for payment of the beneficiary travel within 30 calendar days after the travel is completed, the application will be considered timely submitted if the travel was for emergency treatment.

(d) Notwithstanding other provisions of this section, for travel that includes meals and/or lodging, a claimant must apply for and receive approval prior to obtaining the meals and/or lodging in order to receive payment in accordance with § 70.30(a)(3) for the meals and/or lodging.

(e) If VA determines that additional information is needed to make a determination concerning an application under this part, VA will notify the claimant in writing of the deficiency and request additional information. If the claimant has not responded to the request within 30 days, VA may decide the claim prior to the expiration of the 1-year submission period required by 38 U.S.C. 5103(b)(1) based on all the information contained in the file, including any information it has obtained on behalf of the claimant. If VA does so, however, and the claimant subsequently provides the information within 1 year of the date of the request, VA must readjudicate the claim.

(f) Notwithstanding other provisions of this section, if a person becomes eligible for payment of beneficiary travel after the travel takes place, payment may be made if the person applies for travel benefits within 30 days of the date when the person became eligible for travel benefits.

(g) The date of an application for beneficiary travel is the postmark date, if mailed; or the date of submission if hand delivered, provided by electronic means, or provided orally.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

(The Office of Management and Budget has approved the information collection provisions in this section under control number 2900–0080.)

§ 70.21 Where to apply.

Claimants for beneficiary travel must submit the information required in § 70.20 to the Chief of the Business Office or other designee at the VA medical facility responsible for the medical care or services being provided and for which travel is required.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.30 Payment principles.

(a) Subject to the other provisions of this section and subject to the deductibles required under § 70.31, VA will pay the following for beneficiary travel by an eligible beneficiary when travel expenses are actually incurred:

(1) The per mile rate established by the Secretary for the period of travel for use of privately owned vehicle or the actual cost for use of the most economical common carrier (bus, train, taxi, airplane, etc.), for travel to and from VA or VA-authorized health care subject to the following:

(i) Travel by a privately owned vehicle for a compensation and pension examination that is solely for the convenience of the Government (*e.g.*, repeat a laboratory test, redo a poor quality x-ray) may have a different per mile rate if deemed appropriate by the Secretary.

(ii) Per mile payment for use of privately owned vehicle may not exceed the cost of such travel by public transportation (even if it is for the convenience of the government) unless determined to be medically necessary.

(iii) Payment for a common carrier may not exceed the amount allowed for a privately owned vehicle unless travel by a privately owned vehicle is not reasonably accessible or travel by a common carrier is determined to be medically necessary.

(iv) As required by law, each time the Federal government makes a change in mileage rates payable under 5 U.S.C. 5702 and 5704 for Federal employee travel by privately owned vehicle, but not less frequently than annually, the Secretary shall conduct an investigation of the actual costs of travel, including lodging and subsistence. In conducting the investigation, the Secretary shall consult with the Administrator of the General Services Administration, the Secretary of Transportation, the Comptroller General of the United States, and veterans' service organizations. As part of the investigation, the Secretary shall review and consider various factors including vehicle depreciation, State and Federal vehicle taxes and the costs of gasoline, oil, maintenance, accessories, parts, tires, and insurance. However, to the extent that the Administrator of General Services has, within a reasonable period of time, conducted an investigation of travel costs that included the factors described in this paragraph, the Secretary may consider that investigation in lieu of conducting a separate investigation with respect to the findings of those individual factors. The Secretary is not obligated to accept or rely on any conclusions of the Administrator's investigation. Based on the investigation required by this subsection, VA shall determine whether there is a need to change the mileage rates payable under paragraph (a) of this section. If a determination is made that a change is warranted the new rate(s) will be published in the notices section of the **Federal Register**. Current rate(s) can be found at *http://www.va.gov/healtheligibility/Library/pubs/BeneficiaryTravel/BeneficiaryTravel.pdf* or by contacting the Beneficiary Travel office at the closest VA health care facility.

(2) The actual cost of ferry fares, bridge tolls, road tolls, and tunnel tolls (supported by receipts for such expenses as required by § 70.20(a)).

(3) The actual cost for meals, lodging, or both, not to exceed 50 percent of the amount allowed for government employees under 5 U.S.C. 5702, when VA determines that an overnight stay is required. Factors VA may consider in making that determination include, but are not limited to the following:

(i) The distance the veteran must travel.

(ii) The time of day when VA scheduled the veteran's appointment.

(iii) The weather conditions or congestion conditions affecting the travel.

(iv) The veteran's medical condition and its impact on the ability to travel.

(4) The actual cost of a special mode of transportation.

(b) Payments under this section are subject to the following:

(1) Except as otherwise allowed under this section, payment is limited to travel from the beneficiary's residence to the nearest VA facility where the care or services could be provided and from such VA facility to the beneficiary's residence.

(2) Payment may be made for travel from the beneficiary's residence to the nearest non-VA facility where the care or services could be provided and from such facility to the beneficiary's residence if VA determines that it is necessary to obtain the care or services at a non-VA facility.

(3) Payment may be made for travel from or to a place where the beneficiary is staying (if the beneficiary is not staying at the beneficiary's residence) but the payment may not exceed the amount that would be payable for travel

under paragraph (b)(1) or (b)(2) of this section, as applicable.

(4) If the beneficiary's residence changed while receiving care or services, payment for the return trip will be for travel to the new residence, except that payment may not exceed the amount that would be allowed from the facility where the care or services could have been provided that is nearest to the new residence (for example, if during a period of care or services in Baltimore, a beneficiary changed his or her address from Baltimore to Detroit, payment for the return trip would be limited to that allowed for traveling to the new residence from the nearest facility to the new residence in Detroit where the care or services could have been provided).

(5) If the beneficiary is in a terminal condition at a VA facility or other facility under VA auspices and travels to a non-VA medical facility for the purpose of being nearer to his or her residence, payment may be made for travel to the medical facility receiving the beneficiary for such purpose.

(6) Payment may be made for travel from a non-VA health care facility where the beneficiary is receiving care or services to the nearest VA facility where the appropriate care or services could be provided.

(7) Payment will not be made for return travel for a beneficiary receiving an irregular discharge.

(8) On a case-by-case basis, payment for travel may be paid for any distance if it is financially favorable to the government (for example, payment for travel could be allowed to a more distant nursing home when admission to that nursing home is a prerequisite to qualify for community assistance that would more than offset the additional travel payment).

(c) Payment for travel of an attendant under this section will be calculated on the same basis as for the beneficiary.

(d) For shared travel in a privately-owned vehicle, payments are limited to the amount for one beneficiary (for example, if a beneficiary and an attendant travel in the same automobile or if two beneficiaries travel in the same automobile, the amount for mileage will be limited to the amount for one beneficiary).

(e) Beneficiary travel will not be paid under the following circumstances:

(1) The payment of the travel allowance would be counterproductive to the therapy being provided and such determination is recorded in the patient's medical records, and

(2) The chief of the service or a designee reviewed and approved the determination by signature in the patient's medical record.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.31 Deductibles.

(a) VA shall deduct an amount established by the Secretary for each one-way trip from the amount otherwise payable under this part for such one-way trip, except that:

(1) VA shall not deduct any amounts in a calendar month after the completion of six one-way trips for which deductions were made in such calendar month, and

(2) Whenever the Secretary adjusts the mileage rates as a result of the investigation described in § 70.30(a)(1)(iv), the Secretary shall, effective on the date such mileage rate change should occur, adjust proportionally the deductible amount in effect at the time of the adjustment. If a determination is made that a change is warranted, the new deductible(s) will be published in the notice section of the **Federal Register**. Current deductible(s) can be found at *http://www.va.gov/healtheligibility/Library/pubs/BeneficiaryTravel/BeneficiaryTravel.pdf* or by contacting the Beneficiary Travel office at the closest VA health care facility.

(b) The provisions under this section for making deductions shall not apply to:

(1) Travel that includes travel by a special mode of transportation,

(2) Travel to a VA facility for a scheduled compensation and pension examination, and

(3) Travel by a non-veteran.

(c) VA shall waive the deductible under this section when it would cause the beneficiary severe financial hardship. For purposes of this section, severe financial hardship occurs if the beneficiary:

(1) Is in receipt of a VA pension;

(2) Has income for the year prior to the year in which application is made pursuant to § 70.20 that does not exceed the household income threshold determined under 38 U.S.C. 1722(a) (the current income thresholds can be found at *http://www.va.gov/healtheligibility/Library/pubs/VAIncomeThresholds/VAIncomeThresholds.pdf*); or

(3) Has circumstances in the year the application is made pursuant to § 70.20 that cause his or her projected income not to exceed the household income threshold determined under 38 U.S.C. 1722(a).

(d) Waivers granted under this section are valid:

(1) Through the end of the calendar year of the application made pursuant to § 70.20; or

(2) Until there is a change in the beneficiary's household income during the calendar year of the application made pursuant to § 70.20 that results in the beneficiary no longer meeting the terms of paragraph (c) of this section.

(e) A beneficiary granted a waiver under this section must promptly inform VA of any household income status change during the waiver period that results in the beneficiary no longer meeting the terms of paragraph (c) of this section.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

(The Office of Management and Budget has approved the information collection provisions in this section under control number 2900–0091.)

§ 70.32 Reimbursement or prior payment.

(a) Payment will be made on a reimbursement basis after the travel has occurred, except that:

(1) Upon completion of examination, treatment, or care, payment may be made before the return travel has occurred, and

(2) In the case of travel by a person to or from a VA facility by special mode of transportation, VA may provide payment for beneficiary travel to the provider of the transportation before determining eligibility of such person for such payment if VA determines that the travel is for emergency treatment and the beneficiary or other person made a claim that the beneficiary is eligible for payment for the travel.

(b) Payment under this part will be made to the beneficiary, except that VA may make a beneficiary travel payment under this part to a person or organization other than the beneficiary upon satisfactory evidence that the person or organization actually provided or paid for the travel.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.40 Administrative procedures.

Upon denial of an initial claim for beneficiary travel, VA will provide the claimant written notice of the decision and advise the claimant of reconsideration and appeal rights. A claimant who disagrees with the initial decision denying the claim for beneficiary travel, in whole or in part, may obtain reconsideration under § 17.133 of this chapter and may file an appeal to the Board of Veterans' Appeals under parts 19 and 20 of this chapter. An appeal may be made directly to the Board of Veterans' Appeals without requesting reconsideration.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.41 Recovery of payments.

Payments for beneficiary travel made to persons ineligible for such payment are subject to recapture under applicable law, including the provisions of §§ 1.900 through 1.953 of this chapter.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.42 False statements.

A person who makes a false statement for the purpose of obtaining payments for beneficiary travel may be prosecuted under applicable laws, including 18 U.S.C. 1001.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

§ 70.50 Reduced fare requests.

Printed reduced-fare requests for use by eligible beneficiaries and their attendants when traveling at their own expense to or from any VA facility or VA-authorized facility for authorized VA health care are available from any VA medical facility. Beneficiaries may use these request forms to ask transportation providers, such as bus companies, for a reduced fare. Whether to grant a reduced fare is determined by the transportation provider.

(Authority: 38 U.S.C. 101, 111, 501, 1701, 1714, 1720, 1728, 1782, 1783, E.O. 11302)

[FR Doc. E8–14722 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R03–OAR–2008–0183; FRL–8685–5]

Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Section 110(a)(1) 8-Hour Ozone Maintenance Plan and 2002 Base-Year Inventory for the Warren County Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is approving a State Implementation Plan (SIP) revision submitted by the Commonwealth of Pennsylvania. The Pennsylvania Department of Environmental Protection (PADEP) submitted a SIP revision consisting of a maintenance plan that provides for continued attainment of the 8-hour ozone national ambient air quality standard (NAAQS) for at least 10 years after the April 30, 2004 designations, as well as a 2002 base-year inventory for the Warren County Area. EPA is approving the maintenance plan and the 2002 base-year inventory for the Warren County Area as revisions to the Pennsylvania SIP in accordance with the requirements of the Clean Air Act (CAA).

DATES: *Effective Date:* This final rule is effective on July 30, 2008.

ADDRESSES: EPA has established a docket for this action under Docket ID Number EPA–R03–OAR–2008–0183. All documents in the docket are listed in the *http://www.regulations.gov* Web site. Although listed in the electronic docket, some information is not publicly available, i.e., confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *http://www.regulations.gov* or in hard copy for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the State submittal are available at the Pennsylvania Department of Environment Protection, Bureau of Air Quality Control, P.O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.

FOR FURTHER INFORMATION CONTACT: Gregory Becoat, (215) 814–2036, or by e-mail at *becoat.gregory@epa.gov*.

SUPPLEMENTARY INFORMATION:

I. Background

On May 1, 2008 (73 FR 23998), EPA published a notice of proposed rulemaking (NPR) for the Commonwealth of Pennsylvania. The NPR proposed approval of Pennsylvania's SIP revision that establishes a maintenance plan for the Warren County Area that provides for continued attainment of the 8-hour ozone NAAQS for at least 10 years after designation, and a 2002 base-year emissions inventory. The formal SIP revisions were submitted by PADEP on December 17, 2007. Other specific requirements of Pennsylvania's SIP revision and the rationales for EPA's proposed actions are explained in the NPR and will not be restated here. No public comments were received on the NPR.

II. Final Action

EPA is approving the maintenance plan and the 2002 base-year inventory for the Warren County Area, submitted on December 17, 2007, as revisions to the Pennsylvania SIP. EPA is approving the maintenance plan and 2002 base-year inventory for the Warren County Area because it meets the requirements of section 110(a)(1) of the CAA.

III. Statutory and Executive Order Reviews

A. General Requirements

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a ''significant regulatory action'' subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by August 29, 2008. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action.

This action approving the maintenance plan and the 2002 base-year inventory for the Warren County Area may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: June 17, 2008.

Donald S. Welsh,

Regional Administrator, Region III.

■ 40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart NN—Pennsylvania

■ 2. In § 52.2020, the table in paragraph (e)(1) is amended by adding an entry for the 8-Hour Ozone Maintenance Plan and 2002 Base-Year Inventory for Warren County at the end of the table to read as follows:

§ 52.2020 Identification of plan.

* * * * *

(e) * * *

(1) * * *

Name of non-regulatory SIP revision	Applicable geographic area	State submittal date	EPA approval date	Additional explanation
*	*	*	*	*
8-Hour Ozone Maintenance Plan and 2002 Base-Year Inventory.	Warren County ..	12/17/07	06/30/08 [Insert page number where the document begins].	

* * * * *

[FR Doc. E8–14523 Filed 6–27–08; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

44 CFR Part 65

[Docket No. FEMA–B–7789]

Changes in Flood Elevation Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Interim rule.

SUMMARY: This interim rule lists communities where modification of the Base (1% annual-chance) Flood Elevations (BFEs) is appropriate because of new scientific or technical data. New flood insurance premium rates will be calculated from the modified BFEs for new buildings and their contents.

DATES: These modified BFEs are currently in effect on the dates listed in the table below and revise the Flood Insurance Rate Maps (FIRMs) in effect prior to this determination for the listed communities.

From the date of the second publication of these changes in a newspaper of local circulation, any person has ninety (90) days in which to request through the community that the Mitigation Assistant Administrator of FEMA reconsider the changes. The modified BFEs may be changed during the 90-day period.

ADDRESSES: The modified BFEs for each community are available for inspection at the office of the Chief Executive Officer of each community. The respective addresses are listed in the table below.

FOR FURTHER INFORMATION CONTACT: William R. Blanton, Jr., Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3151.

SUPPLEMENTARY INFORMATION: The modified BFEs are not listed for each community in this interim rule. However, the address of the Chief Executive Officer of the community where the modified BFE determinations are available for inspection is provided.

Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical data.

The modifications are made pursuant to section 201 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 *et seq.*, and with 44 CFR part 65.

For rating purposes, the currently effective community number is shown and must be used for all new policies and renewals.

The modified BFEs are the basis for the floodplain management measures that the community is required to either adopt or to show evidence of being already in effect in order to qualify or to remain qualified for participation in the National Flood Insurance Program (NFIP).

These modified BFEs, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that

the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own, or pursuant to policies established by the other Federal, State, or regional entities. The changed BFEs are in accordance with 44 CFR 65.4.

National Environmental Policy Act. This interim rule is categorically excluded from the requirements of 44 CFR part 10, Environmental Consideration. An environmental impact assessment has not been prepared.

Regulatory Flexibility Act. As flood elevation determinations are not within the scope of the Regulatory Flexibility Act, 5 U.S.C. 601–612, a regulatory flexibility analysis is not required.

Regulatory Classification. This interim rule is not a significant regulatory action under the criteria of section 3(f) of Executive Order 12866 of September 30, 1993, Regulatory Planning and Review, 58 FR 51735.

Executive Order 13132, Federalism. This interim rule involves no policies that have federalism implications under Executive Order 13132, Federalism.

Executive Order 12988, Civil Justice Reform. This interim rule meets the applicable standards of Executive Order 12988.

List of Subjects in 44 CFR Part 65

Flood insurance, Floodplains, Reporting and recordkeeping requirements.

■ Accordingly, 44 CFR part 65 is amended to read as follows:

PART 65—[AMENDED]

■ 1. The authority citation for part 65 continues to read as follows:

Authority: 42 U.S.C. 4001 *et seq.*; Reorganization Plan No. 3 of 1978, 3 CFR, 1978 Comp., p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp., p. 376.

§ 65.4 [Amended]

■ 2. The tables published under the authority of § 65.4 are amended as follows:

State and county	Location and case No.	Date and name of newspaper where notice was published	Chief executive officer of community	Effective date of modification	Community No.
Alabama: Madison ...	City of Huntsville (08–04–1222P).	May 9, 2008; May 16, 2008; *Madison County Record*.	The Honorable Loretta Spencer, Mayor, City of Huntsville, P.O. Box 308, Huntsville, AL 35804.	September 15, 2008	010153
California: Placer	City of Lincoln (07–09–0934P).	May 21, 2008; May 28, 2008; *Roseville Press-Tribune*.	The Honorable Primo Santini, Mayor, City of Lincoln, 640 Fifth Street, Lincoln, CA 95648.	September 25, 2008	060241
California: Placer	Unincorporated areas of Placer County (07–09–0934P).	May 21, 2008; May 28, 2008; *Roseville Press-Tribune*.	The Honorable Jim Holmes, Chairman, Placer County, Board of Supervisors, 175 Fulweiler Avenue, Auburn, CA 95603.	September 25, 2008	060239
California: Shasta	Unincorporated areas of Shasta County (08–09–0622P).	May 21, 2008; May 28, 2008; *Valley Post*.	The Honorable Mark Cibula, Supervisor, District Two, Shasta County, 1450 Court Street, Suite 308B, Redding, CA 96001.	September 25, 2008	060358
Florida: Polk	City of Winter Haven (07–04–5629P).	May 7, 2008; May 14, 2008; *Polk County Democrat*.	The Honorable Nathaniel Birdsong, Mayor, City of Winter Haven, P.O. Box 2277, Winter Haven, FL 33883.	September 11, 2008	120271
Indiana: Lake	Town of St. John (08–05–1094P).	May 22, 2008; May 29, 2008; *Post Tribune*.	The Honorable Michael S. Fryzel, Mayor, Town of St. John, 10955 West 93rd Avenue, St. John, IN 46373.	May 16, 2008	180141
Kansas: Sedgwick ...	City of Goddard (08–07–0155P).	May 29, 2008; June 6, 2008; *Wichita Eagle*.	The Honorable Marcey Gregory, Mayor, City of Goddard, P.O. Box 667, Goddard, KS 67052.	May 21, 2008	200500
Nevada: Clark	City of Henderson (08–09–0980X).	May 22, 2008; May 29, 2008; *Las Vegas Review-Journal*.	The Honorable James B. Gibson, Mayor, City of Henderson, 240 South Water Street, Henderson, NV 89015.	September 17, 2008	320005
Texas: Brazos	Unincorporated areas of Brazos County (07–06–2185P).	May 14, 2008; May 21, 2008; *Bryan College Station Eagle*.	The Honorable Amanda S. Matzke, Brazos County Judge, 300 East 26th Street, Suite 211, Bryan, TX 77803.	September 16, 2008	481195
Texas: Brazos	City of Bryan (07–06–2185P).	May 14, 2008; May 21, 2008; *Bryan College Station Eagle*.	The Honorable D. Mark Conlee, Mayor, City of Bryan, 300 South Texas Avenue, Bryan, TX 77803.	September 16, 2008	480082
Texas: Gillespie	Unincorporated areas of Gillespie County (08–06–0677P).	May 28, 2008; June 4, 2008; *Fredericksburg Standard-Radio Post*.	The Honorable Mark Stroeher, Gillespie County Judge, 101 West Main Street, Fredericksburg, TX 78624.	October 3, 2008	480696
Texas: Lubbock	City of Lubbock (08–06–0728P).	May 23, 2008; May 30, 2008; *Lubbock Avalanche Journal*.	The Honorable David A. Miller, Mayor, City of Lubbock, P.O. Box 2000, Lubbock, TX 79457.	May 16, 2008	480452
Texas: Parker	Unincorporated areas of Parker County (08–06–0872P).	May 7, 2008; May 14, 2008; *Weatherford Democrat*.	The Honorable Mark Riley, Parker County Judge, One Courthouse Square, Weatherford, TX 76086.	April 29, 2008	480520
Texas: Williamson ...	City of Cedar Park (08–06–1336P).	May 29, 2008; June 5, 2008; *Round Rock Leader*.	The Honorable Bob Lemon, Mayor, City of Cedar Park, 600 North Bell Boulevard, Cedar Park, TX 78613.	May 16, 2008	481282
Wisconsin: Kenosha	Village of Pleasant Prairie (08–05–2135P).	May 30, 2008; June 6, 2008; *Kenosha News*.	The Honorable John Steinbrink, Village President, Village of Pleasant Prairie, 8640 88th Avenue, Pleasant Prairie, WI 53158.	May 16, 2008	550613

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Dated: June 20, 2008.

David I. Maurstad,

Federal Insurance Administrator of the National Flood Insurance Program, Department of Homeland Security, Federal Emergency Management Agency.

[FR Doc. E8–14709 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–12–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 08–1407; MB Docket No. 04–409; RM–11108, RM–11234]

Radio Broadcasting Services; Chester, VA; Fruitland, MD; Lakeside, VA; Port Norris, NJ; Warsaw, VA and Willards, MD

AGENCY: Federal Communications Commission.

ACTION: Final rule; denial.

SUMMARY: This document denies two petitions for reconsideration directed to the *Report and Order* in this proceeding, filed by MainQuad Communications, licensee of Station WARV(FM), Petersburg, Virginia, and Port Norris Radio. CXR Holdings, Inc., licensee of Station WDYL(FM), Chester, Virginia, prevailing counterproponent in the *Report and Order*, opposed the petitions for reconsideration.

ADDRESSES: Secretary, Federal Communications Commission, 445 Twelfth Street, SW., Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Victoria M. McCauley, Media Bureau, (202) 418–2180.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's *Memorandum Opinion and Order*, MB Docket No. 04–409, adopted June 11, 2008, and released June 13, 2008. This document denies two petitions for reconsideration of the *Report and Order* 71 FR 64153 (November 1, 2006). The full text of this Commission decision is available for inspection and copying during regular business hours at the FCC's Reference Information Center, Portals II, 445 Twelfth Street, SW., Room CY–A257, Washington, DC 20554. The complete text of this decision may also be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street, SW., Room CY–B402, Washington, DC 20054, telephone 1–800–378–3160 or *http://www.BCPIWEB.com*. The Commission will not send a copy of this Memorandum Opinion and Order pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A), because the petition for reconsideration was denied.

List of Subjects in 47 CFR Part 73

Radio, Radio broadcasting.

Federal Communications Commission.

John A. Karousos,

Assistant Chief, Audio Division, Media Bureau.

[FR Doc. E8–14642 Filed 6–27–08; 8:45 am]

BILLING CODE 6712–01–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 071106673–8011–02]

RIN 0648–XI69

Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Trawl Catcher Processors in the Amendment 80 Limited Access Fishery in the Bering Sea and Aleutian Islands Management Area

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for Pacific cod by trawl catcher processors participating in the Amendment 80 limited access fishery in the Bering Sea and Aleutian Islands management area (BSAI). This action is necessary to prevent exceeding the 2008 Pacific cod allowable catch (TAC) specified for trawl catcher processors participating in the Amendment 80 limited access fishery in the BSAI.

DATES: Effective 1200 hrs, Alaska local time (A.l.t.), June 25, 2008, through 2400 hrs, A.l.t., December 31, 2008.

FOR FURTHER INFORMATION CONTACT: Jennifer Hogan, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the BSAI exclusive economic zone according to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The 2008 Pacific cod TAC allocated to vessels participating in the Amendment 80 limited access fishery in the BSAI is 3,295 metric tons (mt) as established by the 2008 and 2009 final harvest specifications for groundfish in the BSAI (73 FR 10160, February 26, 2008).

In accordance with § 679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator), has determined that the 2008 Pacific cod TAC allocated to trawl catcher processors participating in the Amendment 80 limited access fishery in the BSAI will be caught as incidental catch in directed fisheries for other groundfish. Therefore, the Regional Administrator is establishing a directed fishing allowance of 0 mt and is setting aside the remaining 3,295 mt as incidental catch to support other anticipated groundfish fisheries. In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is prohibiting directed fishing for Pacific cod by trawl catcher processors participating in the Amendment 80 limited access fishery in the BSAI.

After the effective date of this closure the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA, (AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the closure of Pacific cod by trawl catcher processors participating in the Amendment 80 limited access fishery in the BSAI. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of June 24, 2008.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: June 25, 2008.

Emily H. Menashes,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 08–1397 Filed 6–25–08; 3:59 pm]

BILLING CODE 3510–22–S

Proposed Rules

Federal Register
Vol. 73, No. 126
Monday, June 30, 2008

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

ELECTION ASSISTANCE COMMISSION

11 CFR Chapter II

[Docket No. EAC–2008–0024]

RIN 3265–AA00

Freedom of Information, Government in the Sunshine, and Privacy Act Requirements

AGENCY: United States Election Assistance Commission (EAC).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The U.S. Election Assistance Commission is proposing administrative regulations to implement the Freedom of Information Act, the Government in the Sunshine Act, and the Privacy Act.

DATES: You must submit comments on or before August 29, 2008.

ADDRESSES: You may submit comments, identified by docket number, by any of the following methods. Please submit your comments via only one of the methods described.

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov.* Follow the online instructions for submitting comments.
- *E-mail:* Send comments to *havainfo@eac.gov* with ''Comments for [Insert Docket Number Here]'' in the subject line.
- *Fax:* Send to ''EAC Regulations'' at (202) 566–3128. Comments sent by fax must be limited to 6 pages. This limitation is necessary to assure access to the facsimile machine.
- *Mail:* Send to ''EAC Regulations'' at U.S. Election Assistance Commission, 1225 New York Avenue, Suite 1100, Washington, DC 20005. Comments sent by mail must be unbound, be on paper no larger than 8.5″ by 11″; and be submitted in duplicate. Mailed comments will not accepted in electronic form (floppy disk, CD, etc.).
- *Hand Delivery/Courier:* Deliver to Suite 1100, 1225 New York Avenue, Washington, DC 20005 between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. Comments submitted by hand delivery must be unbound, be on paper no larger than 8.5'' by 11''; and be submitted in duplicate. Comments sent by courier or hand delivery will not be accepted in electronic form (floppy disk, CD, etc.).

Instructions: All submissions must include the agency name and docket number for this rulemaking. Please also identify comments on regulatory text by subpart and section. For detailed instructions on submitting comments and additional information on the rulemaking process, see the Public Participation heading below. Note that all comments received will be publicly posted, including any personal information provided. Please see the Privacy Act heading below. The EAC will post comments without change unless the comment contains profanity or material that is prohibited from disclosure by law.

Docket: For access to the docket to read comments received, go to *http://www.regulations.gov* at any time or to Suite 1100 at 1225 New York Avenue, NW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Privacy Act: Anyone is able to search comments received by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.).

Public participation: The electronic docket is available 24 hours each day, 365 days each year. If you want us to notify you that we received your comments, please include a self-addressed, stamped envelope or postcard or print the acknowledgement page that appears after submitting comments on-line.

EAC will file in the public docket all comments received, subject to the limitations in this notice. EAC will consider all comments received on or before the closing date for comments; and may consider comments filed late, to the extent practicable. The EAC may, however, issue a final rule at any time after the close of the comment period.

FOR FURTHER INFORMATION CONTACT: Tamar Nedzar, Attorney, U.S. Election Assistance Commission, 1225 New York Avenue, NW., Suite 1100, Washington, DC 20005. Telephone (202) 566–3100.

SUPPLEMENTARY INFORMATION:

Preamble Table of Contents

The following is an outline of the preamble.

I. Legal Basis for the Rulemaking

This rulemaking action is taken in response to the Freedom of Information Act (FOIA), 5 U.S.C. 552, as amended; the Government in the Sunshine Act (Sunshine Act), 5 U.S.C. 552b; and the Privacy Act, 5 U.S.C. 552a, as amended. The U.S. Election Assistance Commission (EAC) is a federal agency, and is required to promulgate regulations to implement the FOIA, the Sunshine Act, and the Privacy Act. The FOIA requires each federal agency to publish certain information in the **Federal Register**, to make available for public inspection and copying certain other information, and to make available certain information to any members of the public upon specific request for that information. The FOIA stipulates that an agency must promulgate regulations, pursuant to notice and public comment, specifying the schedule of fees applicable to the processing of requests for information. The Government in the Sunshine Act requires meetings of a federal agency headed by a collegial body, a majority of whose members are appointed by the President with the advice and consent of the Senate, to be open to public observation. The EAC is a collegial body subject to the Act. The Act specifies certain exemptions from the open meeting requirement, and the procedures that an agency must follow to conduct or to close a meeting. The Sunshine Act requires publication in the **Federal Register** and opportunity for public comment of regulations to implement the policies of the Act. The Privacy Act creates requirements that apply to systems of records pertaining to individuals that are established, maintained, or controlled by a federal agency, and prescribes rights and limits to access to such records. The Privacy Act requires publication in the **Federal Register** for public comment of agency policies concerning systems of records maintained by the agency.

II. Discussion of the Proposed Rulemaking

The United States Election Assistance Commission was created by Congress in the Help America Vote Act of 2002. The

Commission's primary function is to serve as a national clearinghouse and resource for information on and procedures for federal elections. The EAC conducts studies on election administration and makes those studies available to the public. The EAC also has adopted Voluntary Voting System Guidelines; administers a voting system testing and certification program; allocates election-related federal funding to the States; and carries out administrative duties under the National Voter Registration Act of 1993 (the Motor Voter Law), including developing and maintaining a mail voter registration application form for elections to federal office.

The EAC is committed to operating transparently, competently, and subject to public scrutiny and accountability. To help implement these goals, the EAC is proposing regulations to implement three important federal statutes addressing access to information about the EAC and its activities—the Freedom of Information Act, as amended, including recent amendments found in the OPEN Government Act of 2007; the Government in the Sunshine Act; and the Privacy Act.

Most of the regulatory requirements that the EAC is proposing are specified in detail by the FOIA Act, the Sunshine Act, and the Privacy Act. In addition, the EAC is modeling the three sets of regulatory requirements it is proposing on similar regulations previously adopted by other federal agencies. Thus, many of the provisions in today's rules are identical to or closely resemble the requirements adopted by other federal agencies, and as such represent regulatory ''best practices'' on the topics of FOIA, open government, and protection of the privacy of information about individuals.

At a few points the EAC also has adopted certain unique or new provisions, to ensure that the rules as proposed meet current statutory requirements and reflect the practices of the Commission. The EAC is requesting comment in particular on the following provisions:

FOIA

Definition of Representative of the News Media: The Freedom of Information Act and implementing regulations contain special requirements for the treatment of requests for information from representatives of the news media. In § 9405.2 of the proposed rule, the EAC is proposing a definition of ''representative of the news media'' that reflects amendments to the Freedom of Information Act adopted by Congress in the ''Openness Promotes Effectiveness in our National Government Act of 2007,'' also known as the ''OPEN Government Act of 2007'' signed by the President on December 31, 2007. These provisions were intended to address the increased role of electronic media as part of the news media. The proposed definition includes as a potential representative of the news media a ''web log'' defined as ''a publicly available Web site, usually maintained by an individual, with regular entries of commentary, descriptions of events, or other material.''

FOIA Officials: Section 9405.3 of the proposed rule provides for the designation of a Chief Freedom of Information Act Officer and FOIA Public Liaison Officers, as required by section 10 of the ''OPEN Government Act of 2007.'' These officials are intended to provide a clear point of contact for the public in dealing with the EAC on FOIA matters.

Time limits for agencies to act on requests: In § 9405.7(c), the EAC is proposing time limits for action on FOIA requests that reflect the requirements established in section 6 of the ''OPEN Government Act of 2007.'' The proposed rule provides that the EAC will determine within 20 working days after receipt of a FOIA request whether to comply with the request; the EAC may make one request for additional information from the requester and interrupt the 20-day period while waiting for the clarification; the EAC will decide within 20 working days on appeals by requesters from EAC's decisions not to release the requested information; and the 20-day periods will be extended only in unusual circumstances.

Fee provisions: In § 9405.9 of the proposed rule, the EAC has designed the fee provisions to be consistent with the ''Uniform Freedom of Information Act Fee Schedule and Guidelines'' established by the Office of Management and Budget (52 FR 10017, March 27, 1987). Fees are based on the actual direct cost of conducting searches for requested records. When manual searches are necessary, the EAC will charge at the salary rates of the employees making the search, calculated as their basic pay plus 16 percent, as authorized by the OMB Guidelines. Records will be duplicated at the rate of $0.15 per page for basic duplication; the actual direct costs of production will be charged for creation of computer tapes or printouts and other methods of reproduction.

Government in the Sunshine Act

The proposed regulation generally tracks the requirements of the Government in the Sunshine Act and implementing regulations adopted by other federal agencies. It also has been drafted to ensure that it accurately reflects current means of communication and the practices of the EAC. Thus, the definition of ''meeting'' in § 9407.2 of the proposed rule specifies that a deliberation ''conducted through telephone or similar communications equipment in which all persons participating can hear each other shall be considered a meeting.'' To help ensure that this provision does not limit public access to meetings, § 9407.3(d) of the proposed rule provides that when open meetings are conducted by telephone or similar communications equipment, the Commission will make an effort to provide sufficient access to the public. The proposed rule also provides that ''meeting'' does not include ''a process of notation voting by circulated memorandum for the purpose of expediting consideration of official Commission business.''

Privacy

The proposed regulation generally tracks the requirements of the Privacy Act and implementing regulations adopted by other federal agencies. To ensure consistency among the EAC's administrative regulations, § 9410.10 establishes fees for the cost of searching for and reproducing records that parallel the fees established in § 9405.9 of the proposed FOIA regulations.

III. Regulatory Analyses and Notices

Regulatory Flexibility Act, as amended

The Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 601 *et seq.*) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small government jurisdictions. The EAC has considered the effects of this proposed regulatory action on small entities and certifies that these proposed rules will not have a significant impact on a substantial number of small entities. This rulemaking proposal would require applicants for information to submit a

letter to the EAC describing in adequate detail the information requested. The cost to a requester in terms of labor, supplies, and postage will be small. In addition, a requester may be required to pay the actual cost of identifying and copying the information. However, in most cases this cost is also expected to be small, and the proposed rules provide that it may be waived under certain specified circumstances. The average number of requesters is expected to be small. The EAC's past experience indicates that about 30 FOIA requests will be received annually, and a proportion of those will not be from small entities. The EAC also does not anticipate significant numbers of requests under the Sunshine Act or the Privacy Act regulations. Currently, the EAC only maintains 2 systems of records. Accordingly, the EAC's consideration of the economic impacts of the requirements on small entities has led it to certify that this proposed rule would not have a significant economic impact on a substantial number of small entities.

Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4; 2 U.S.C. 1532) requires each agency to assess the effects of its regulatory actions on State, local, and tribal governments and the private sector. Any agency promulgating a rule likely to result in a federal mandate requiring expenditures by a State, local, or tribal government or by the private sector of $120.7 million or more in any one year must prepare a written statement incorporating various assessments, estimates, and descriptions that are delineated in the Act. The EAC has determined that these proposed rules would create no unfunded mandates because they require no expenditures by a State, local, or tribal government and will not have an impact of $120.7 million or more in any one year.

Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by SBREFA, provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. If the rule meets the definition of a major rule, as defined in SBREFA, the Comptroller General must provide a report to Congress and the rule may not take effect until 60 days after it has been published in the **Federal Register**. The current action is a Notice of Proposed Rulemaking and is not a major rule. No actions are required under the Congressional Review Act.

National Environmental Policy Act

The EAC analyzed these rules for the purpose of the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq.*) and determined that this action includes no circumstances that would have any effect on the quality of the environment. The proposed rules pertain solely to the dissemination of information. Thus, these actions do not require an environmental assessment or an environmental impact statement.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires the EAC to consider the impact of paperwork and other information collection burdens imposed on the public. These proposed rules do not impose any reporting or recordkeeping requirements. They pertain solely to the dissemination of information under the FOIA; access to information about meetings and the decision-making process of the EAC; and dissemination of information about what information is maintained about identifiable individuals by the EAC and how they may gain access to and correct or amend information about them.

Executive Order 12630 (Taking of Private Property)

These proposed rules would not affect a taking of private property or otherwise have taking implications under Executive Order 12630, ''Governmental Actions and Interference with Constitutionally Protected Property Rights.''

Executive Order 12988 (Civil Justice Reform)

These proposed rules meet applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, ''Civil Justice Reform,'' to minimize litigation, eliminate ambiguity, and reduce burden.

Executive Order 13045 (Protection of Children)

Executive Order 13045, ''Protection of Children from Environmental Health Risks and Safety Risks'' (April 23, 1997, 62 FR 19885), requires that agencies issuing economically significant rules, which also concern an environmental health or safety risk that an agency has reason to believe may disproportionately affect children, must include an evaluation of the environmental health and safety effects of the regulation on children. Section 5 of Executive Order 13045 directs an agency to submit for a covered regulatory action an evaluation of its environmental health or safety effects on children. The EAC has determined that these proposed rules are not covered regulatory actions as defined under Executive Order 13045. This determination is based upon the fact that these proposed rules are not economically significant under Executive Order 12866, because the changes proposed would not have an impact of $100 million or more in any one year, and do not constitute an environmental health risk or safety risk that would disproportionately affect children.

Executive Order 12372 (Intergovernmental Review)

The regulations implementing Executive Order 12372 regarding intergovernmental consultation on federal programs and activities do not apply to this rulemaking.

Executive Order 13211 (Energy Supply, Distribution, or Use)

The EAC has analyzed these proposed rules under Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use.'' This proposal is not a significant energy action within the meaning of section 4(b) of the Executive Order. This proposal involves internal procedures of and dissemination of information about the EAC, is not economically significant, and will not have a significant adverse effect on the supply, distribution, or use of energy.

List of Subjects

11 CFR Part 9405

Administrative practice and procedure, Confidential business information, Freedom of information, Government employees.

11 CFR Part 9407

Administrative practice and procedure, Government employees.

11 CFR Part 9410

Administrative practice and procedure, Freedom of information, Government employees.

In consideration of the foregoing, EAC proposes to amend title 11, Code of Federal Regulations, by adding chapter II, consisting of parts 9405, 9407, and 9410, to read as follows:

CHAPTER II—ELECTION ASSISTANCE COMMISSION

PART 9405—PROCEDURES FOR DISCLOSURE OF RECORDS UNDER THE FREEDOM OF INFORMATION ACT

Sec.

Authority: 5 U.S.C. 552, as amended.

§ 9405.1 Purpose and scope.

The regulations in this part implement the provisions of the Freedom of Information Act (FOIA), 5 U.S.C. 552, as amended, with respect to the availability of records for inspection and copying.

§ 9405.2 Definitions.

As used in this part, the term—

Chief FOIA Officer means the person designated under § 9405.3(d) who has Commission-wide responsibility for the efficient and appropriate compliance with the FOIA.

Commercial use request means a FOIA request from or on behalf of a person who seeks information for a use or purpose that furthers his/her commercial, trade, or profit interests, which can include furthering those interests through litigation. The FOIA Officer will determine, whenever reasonably possible, the use to which a requester will put the requested documents. Where the FOIA Officer has reasonable cause to doubt the use for which the requester claims to have made the FOIA request or where that use is not clear from the FOIA request itself, the FOIA Officer will seek additional clarification before assigning the request to a specific category.

Commission means the U.S. Election Assistance Commission, established by the Help America Vote Act of 2002, 42 U.S.C. 15301 *et seq.*

Commissioner means an individual appointed to the Commission by the President and confirmed by the Senate under section 203 of the Help America Vote Act of 2002, 42 U.S.C. 15323.

Direct costs means those expenditures which the Commission actually incurs in searching for, duplicating, and, in the case of commercial use requesters, reviewing documents to respond to a FOIA request. Direct costs include, but are not limited to, the salary of the employee performing the work (the basic rate of pay for the employee plus 16 percent of that basic rate to cover benefits) and the cost of operating duplicating equipment. Direct costs do not include overhead expenses, such as the cost of space and heating or lighting the facility in which the records are stored.

Duplication means the process of making a copy of a document necessary to respond to a FOIA request. Examples of the form such copies can take include, but are not limited to, paper copy, microform, audio-visual materials, or machine readable documentation (e.g., magnetic tape, DVD, or CD). The Commission will honor a requester's specified preference of form or format of disclosure if the records requested are reasonably reproducible with reasonable efforts in the requested form or format.

Educational institution means a preschool, a public or private elementary or secondary school, an institution of undergraduate higher education, an institute of graduate higher education, an institution of professional education, and an institution of vocational education, which operates a program or programs of scholarly research.

Executive Director means the Executive Director of the Commission or his or her designee.

FOIA means Freedom of Information Act, 5 U.S.C. 552, as amended.

FOIA Officer means a person designated by the Chief FOIA Officer under § 9405.3(d) to carry out day-to-day implementation of the FOIA activities of the Commission.

FOIA Public Liaison means a person designated by the Chief FOIA Officer under § 9405.3(d) to assist in the resolution of any disputes between the requester and the Commission.

FOIA request means to seek the release of records under 5 U.S.C. 552, as amended.

General Counsel means the General Counsel of the Commission or his or her designee.

Non-commercial scientific institution means an organization that is not operated on a commercial basis and which is operated solely for the purpose of conducting scientific research, the results of which are not intended to promote any particular product or industry.

Record means any information that would be a Commission record subject to the requirements of this part when maintained by the Commission in any format, including, but not limited to, an electronic format. Record includes information that is maintained for the Commission by an entity under Government contract for the purposes of records management.

Representative of the news media means any person or entity that gathers information of potential interest to a segment of the public, uses editorial skills to turn the raw materials into a distinct work, and distributes that work to an audience. As used in this paragraph, ''news'' means information that is about current events or that would be of current interest to the public. Examples of news media entities include, but are not limited to, television or radio stations broadcasting to the public at large, web logs, and publishers of periodicals (but only in those instances in which these entities can qualify as disseminators of news, as defined in this paragraph) who make their products available for purchase or subscription by the general public. As used in this paragraph, a ''web log'' means a publicly available Web site, usually maintained by an individual, with regular entries of commentary, descriptions of events, or other material. A freelance journalist may be regarded as working for a news media entity and therefore, considered a representative of the news media if that person can demonstrate a solid basis for expecting publication by a news organization (whether or not the journalist is actually employed by the entity). A publication contract would present a solid basis for such an expectation. The Commission may also consider the past publication record of the requester in making this determination.

Requester is any person who submits a FOIA request to the Commission for release of a record under 5 U.S.C. 552, as amended.

Review means the process of examining a document located in response to a commercial use request to determine whether any portion of the document located is exempt from disclosure. Review also refers to processing any document for disclosure, i.e., doing all that is necessary to excise exempt portions of the document or otherwise prepare the document for release. Review time includes time spent considering any formal objection to disclosure made by a business submitter requesting confidential treatment but does not include time spent resolving general legal or policy issues regarding the application of exemptions.

Search means all time spent reviewing, manually or by automated means, Commission records for the purpose of locating those records that

are responsive to a FOIA request, including, but not limited to, page-by-page or line-by-line identification of material within documents and also includes reasonable efforts to locate and retrieve information from records maintained in electronic form or format. Search time does not include review of material to determine whether the material is exempt from disclosure.

§ 9405.3 Policy on disclosure of records.

(a) The Commission will make the fullest possible disclosure of records to the public, consistent with the rights of individuals to privacy, the rights of individuals and other entities with respect to trade secret and commercial or financial information entitled to privileged and confidential treatment, and the need for the Commission to promote free internal policy deliberations and to pursue its official activities without undue disruption.

(b) All Commission records shall be available to the public unless they are specifically exempt under this part.

(c) In the interest of efficiency and economy, the Commission's preference is to furnish records to requesters in electronic format, when possible.

(d) To carry out this policy, the Commission shall designate a Chief Freedom of Information Act Officer (Chief FOIA Officer). The Chief FOIA Officer shall designate one or more Commission officials, as appropriate, as FOIA Public Liaison and/or as FOIA Officers. A FOIA Public Liaison shall serve as a supervisory official to whom a FOIA requester can raise questions about the service the FOIA requester has received. A FOIA Officer shall have the authority, subject to the direction and supervision of the Chief FOIA Officer, the requirements of this part, and the FOIA, to make decisions concerning disclosure of records to the public.

§ 9405.4 Availability of records.

(a) The FOIA and its provisions apply only to existing Commission records; the FOIA does not require the creation of new records.

(b) In accordance with 5 U.S.C. 552(a)(2), the Commission shall make the following materials available for public inspection and copying:

(1) Statements of policy and interpretation that have been adopted by the Commission but have not been published in the **Federal Register**;

(2) Administrative staff manuals and instructions to staff that affect a member of the public;

(3) Copies of all records, regardless of form or format, that have been released to any person under this paragraph and that, because of their nature or subject matter, the Commission determines have become or are likely to become the subject of subsequent requests for substantially the same records; and

(4) A general index of the records referred to in paragraph (b)(3) of this section.

(c) In accordance with 5 U.S.C. 552(a)(3), the Commission shall make available, upon proper request, all non-exempt Commission records, or portions of records, not previously made public under 5 U.S.C. 552(a)(1) and (a)(2).

(d) The Commission shall maintain and make available current indexes and supplements providing identifying information regarding any matter issued, adopted, or promulgated after July 4, 1967. These indexes and supplements shall be published and made available on at least a quarterly basis for public distribution unless the Commission determines by Notice in the **Federal Register** that publication would be unnecessary, impracticable, or not feasible due to budgetary considerations. Nevertheless, copies of any index or supplement shall be made available upon request at a cost not to exceed the direct cost of duplication.

(e) If documents or files contain both disclosable and non-disclosable information, the non-disclosable information will be deleted and the disclosable information released, unless the disclosable portions cannot be reasonably segregated from the other portions in a manner which will allow meaningful information to be disclosed.

(f) All records created in the process of implementing provisions of 5 U.S.C. 552 will be maintained by the Commission in accordance with the authority granted by the National Archives and Records Service of the General Services Administration.

(g) The Commission encourages the public to explore the information available on the Commission's Web site, located at *http://www.eac.gov*.

§ 9405.5 Categories of exemptions.

(a) No FOIA requests under 5 U.S.C. 552 shall be denied release unless the record contains, or its disclosure would reveal, matters that are:

(1) Specifically authorized under criteria established by an Executive Order to be kept secret in the interest of national defense or foreign policy and are, in fact, properly classified under such Executive Order;

(2) Related solely to the internal personnel rules and practices of the Commission;

(3) Specifically exempted from disclosure by statute, provided that such statute:

(i) Requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or

(ii) Establishes particular criteria for withholding or refers to particular types of matters to be withheld;

(4) Trade secrets and commercial or financial information obtained from a person that are privileged or confidential. Such information includes confidential business information which concerns or relates to the trade secrets, processes, operations, style of works, or apparatus, or to the production, sales, shipments, purchases, transfers, identification of customers, inventories, or amount of source of income, profits, losses, or expenditures of any person, firm, partnership, corporation, or other organization, if the disclosure is likely to have the effect of either impairing the Commission's ability to obtain such information as is necessary to perform its statutory functions or causing substantial harm to the competitive position of the person, firm, partnership, corporation, or other organization from which the information was obtained, unless the Commission is required by law to disclose such information. For purposes of this section, trade secret means a secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Examples of trade secrets may include, but are not limited to, plans, schematics, specifications of materials used in production, source code used to develop software, technical descriptions of manufacturing process, quality control methodology, and test results. The following procedures shall be used for submitting business information in confidence:

(i) Clearly mark any portion of any data or information being submitted that in the submitter's opinion is a trade secret or commercial and financial information that the submitter is claiming should be treated as privileged and confidential and submit such data or information separately from other material being submitted to the Commission;

(ii) A request for confidential treatment shall be addressed to the Chief FOIA Officer, U.S. Election Assistance Commission, 1225 New York Avenue, NW., Suite 1100, Washington, DC 20005 and shall indicate clearly on the envelope that it is a request for confidential treatment.

(iii) With each submission of, or offer to submit, business information which a

submitter desires to be treated as confidential under paragraph (a)(4) of this section, the submitter shall provide the following, which may be disclosed to the public:

(A) A written description of the nature of the subject information and a justification for the request for its confidential treatment, and

(B) A certification in writing under oath that substantially identical information is not available to the public.

(iv) Approval or denial of requests shall be made only by the Chief FOIA Officer or his or her designees. A denial shall be in writing, shall specify the reason for the denial, and shall advise the submitter of the right to appeal to the Commission.

(v) For good cause shown, the Commission may grant an appeal from a denial by the Chief FOIA Officer or his or her designee if the appeal is filed within 15 days after receipt of the denial. An appeal shall be addressed to the Chief FOIA Officer, U.S. Election Assistance Commission, 1225 New York Avenue, NW., Suite 1100, Washington, DC 20005 and shall clearly indicate that it is a confidential submission appeal. An appeal will be decided within 20 days after its receipt (excluding Saturdays, Sundays, and legal holidays) unless an extension, stated in writing with the reasons therefore, has been provided to the person making the appeal.

(vi) Any business information submitted in confidence and determined to be entitled to confidential treatment shall be maintained in confidence by the Commission and not disclosed except as required by law. In the event that any business information submitted to the Commission is not entitled to confidential treatment, the submitter will be permitted to withdraw the tender unless it is the subject of a request under the FOIA or of judicial discovery proceedings.

(5) Interagency or intra-agency memoranda or letters that would not be available by law to a party in litigation with the Commission;

(6) Personnel and medical files and similar files, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy;

(7) Records or information compiled for law enforcement purposes, but only to the extent that the production of such law enforcement records or information:

(i) Could reasonably be expected to interfere with enforcement proceedings;

(ii) Would deprive a person of a right to a fair trial or an impartial adjudication;

(iii) Could reasonably be expected to constitute an unwarranted invasion of personal privacy;

(iv) Could reasonably be expected to disclose the identity of a confidential source, including a State, local, or foreign agency or authority or any private institution that furnished information on a confidential basis, and, in the case of a record or information compiled by a criminal law enforcement authority in the course of a criminal investigation, or by an agency conducting a lawful national security intelligence investigation, information furnished by a confidential source;

(v) Would disclose techniques and procedures for law enforcement investigations or prosecutions or would disclose guidelines for law enforcement investigations or prosecutions if such disclosure could reasonably be expected to risk circumvention of the law; or

(vi) Could reasonably be expected to endanger the life or physical safety of any individual.

(b) Any portion of a record that reasonably can be segregated from the balance of the record shall be provided to any individual requesting such record after deletion of the portions which are exempt. The amount of information deleted and the exemption under which the deletion is made shall be indicated on the released portion of the record, unless including that indication would harm an interest protected by an exemption in paragraph (a) of this section under which the deletion is made. If technically feasible, the amount of the information deleted shall be indicated at the place in the record where such deletion is made.

(c) If a requested record is one of another government agency or deals with subject matter to which a government agency other than the Commission has exclusive or primary responsibility, the request for such a record shall be promptly referred by the Commission to that agency for disposition or guidance as to disposition.

(d) Nothing in this part authorizes withholding of information or limiting the availability of records to the public, except as specifically provided; nor is this part authority to withhold information from Congress.

§ 9405.6 Discretionary release of exempt records.

The Commission may, in its discretion, release requested records despite the applicability of the exemptions in § 9405.5, if it determines that it is in the public interest and that the rights of third parties would not be prejudiced. The Executive Director will have the authority to determine that requested records may be released despite otherwise applicable exemptions.

§ 9405.7 Requests for records.

(a) Requests for copies of Commission records under the FOIA shall be made in writing and addressed to the Chief FOIA Officer, U.S. Election Assistance Commission, 1225 New York Avenue, NW., Suite 1100, Washington, DC 20005. The request shall reasonably describe the records sought with sufficient specificity with respect to names, dates, and subject matter to permit the records to be located. A requester will be promptly advised if the records cannot be located on the basis of the description given and that further identifying information must be provided before the request can be satisfied.

(b) Requests for Commission records and copies thereof shall specify the preferred form or format (including electronic formats) of the response. The Commission shall accommodate requesters as to form or format if the record is readily available in that form or format. When requesters do not specify the form or format of the response, the Commission shall respond in the form or format in which the document is most accessible to the Commission. In the interest of efficiency and economy, the Commission's preference is to furnish records to requesters in electronic format, whenever possible.

(c) The Commission shall determine within 20 working days after receipt of a request, or 20 working days after an appeal is granted, whether to comply with such request, unless in unusual circumstances the time is extended. The 20-day period shall commence on the date on which the request was first received by the appropriate component of the Commission, but in any event, not later than 10 days after the request is first received by the component of the Commission designated to receive requests under this part. The 20-day period shall not be tolled by the Commission except—

(1) The Commission may make one request of the requester for information and toll the 20-day period while it is awaiting such information that it has reasonably requested from the requester.

(2) If it is necessary to clarify with the requester issues regarding fee assessment.

(3) Under paragraphs (c)(1) or (2) of this section, the Commission's receipt of the requester's response to the Commission's request for information or clarification ends the tolling period.

(d) In the event the time is extended under paragraph (c) of this section, the requester shall be notified of the reasons for the extension and the date on which a determination is expected to be made. An extension may be made if it is—

(1) Necessary to locate records or transfer them from physically separate facilities; or

(2) Necessary to search for, collect, and appropriately examine a large quantity of separate and distinct records that are the subject of a single request; or

(3) Necessary for consultation with another agency that has a substantial interest in the determination of the request.

(e) If the Commission determines that an extension of time is necessary to respond to a request satisfying the unusual circumstances specified in paragraph (c) of this section, the Commission shall so notify the requester and give the requester an opportunity to limit the scope of the request so that it may be processed within the time limit prescribed in paragraph (c) of this section or arrange with the Commission an alternative time frame for processing the request or a modified request.

(f) The Commission may aggregate and process as a single request requests by the same requester, or a group of requesters acting in concert, if the Commission reasonably believes that the requests actually constitute a single request that would otherwise satisfy the unusual circumstances specified in paragraph (c) of this section, and the requests involve clearly related matters.

(g) The Commission will process requests under the FOIA based on the order they are received.

(h) The Commission shall consider requests for the expedited processing of requests in cases where the requester demonstrates a compelling need for such processing.

(1) The term ''compelling need'' means, with respect to a request made by a person primarily engaged in disseminating information, urgency to inform the public concerning actual or alleged Federal government activity.

(2) Requesters for expedited processing must include in their requests a statement setting forth the basis for the claim that a ''compelling need'' exists for the requested information, certified by the requester to be true and correct to the best of his or her knowledge and belief.

(3) The Commission shall determine whether to grant a request for expedited processing and notify the requester of such determination within 10 days of receipt of the request. Denials of requests for expedited processing may be appealed as set forth in § 9405.8. The Commission shall expeditiously determine any such appeal. As soon as practicable, the Commission shall process the documents responsive to a request for which expedited processing is granted.

(i) Any person denied access to records by the Commission shall be notified immediately of the denial, including the reasons for the decision and notified of his or her right to appeal the adverse determination to the Commission.

(j) The date of receipt of a request under this part shall be the date on which the Chief FOIA Officer actually receives the request.

(k) Each request received by the Chief FOIA Officer will be assigned an individualized tracking number. Requesters may call (866) 747–1471 and, using the tracking number, obtain information about the request, including the date on which the Commission originally received the request and an estimated date on which the Commission will complete action on the request.

§ 9405.8 Appeals of denials of requests for records.

(a) Any person who has been notified under § 9405.7(i) that his/her request for inspection of a record or for a copy of a record has been denied, or who has received no response within 20 working days (or within such extended period as is permitted under § 9405.7(d)) after the request has been received by the Commission, or who has received no response within 20 days after a request for expedited processing has been received by the Commission, may appeal the adverse determination or the failure to respond by requesting the Commission to direct that the record be made available or that the expedited processing shall occur.

(b) The appeal request shall be in writing, shall clearly and prominently state on the envelope or other cover and at the top of the first page ''FOIA Appeal,'' and shall identify the record in the form in which it was originally requested.

(c) The appeal request should be delivered or addressed to the Chief FOIA Officer, U.S. Election Assistance Commission, 1225 New York Avenue NW., Suite 1100, Washington, DC 20005.

(d) The requester may state facts and cite legal or other authorities as he or she deems appropriate in support of the appeal request.

(e) The Commission will make a determination with respect to any appeal within 20 working days after receipt of the appeal (or within such extended period as is permitted under § 9405.7). If, on appeal, the denial of the request for a record or a copy is in whole or in part upheld, the Commission shall advise the requester of the denial and shall notify him or her of the provisions for judicial review of that determination as set forth in 5 U.S.C. 552(a)(4).

(f) Because of the risk of misunderstanding inherent in oral communications, the Commission will not entertain any appeal from an alleged denial or failure to comply with an oral request. Any person who has orally requested a copy of a record that he or she believes to have been improperly denied should resubmit the request in writing as set forth in § 9405.7.

§ 9405.9 Fees in general.

(a) *Generally.* The Commission will charge fees that recoup the full allowable direct costs it incurs. The Commission will use the most efficient and least costly means to comply with requests for documentation.

(b) *Manual searches for records.* The Commission will charge fees at the salary rate(s) (basic pay plus 16 percent) of the employee(s) making the search.

(c) *Computer searches for records.* The Commission will charge the actual direct cost of operating the central processing unit (CPU) for that portion of operating time that is directly attributable to searching for records responsive to a FOIA request and operator/programmer salary apportionable to the search.

(d) *Review of records.* Only requesters who are seeking documents for commercial use may be charged for time spent reviewing records to determine whether they are exempt from mandatory disclosure. Charges may be assessed only for the initial review (i.e. the review undertaken the first time the Commission analyzes the applicability of a specific exemption to a particular record or portion of a record). Records or portions of records withheld in full under an exemption that is subsequently determined not to apply may be reviewed again to determine the applicability of other exemptions not previously considered. The costs for such a subsequent review are assessable. The Commission will charge at the salary rate(s) (basic pay plus 16 percent) of the employee(s) reviewing records.

(e) *Duplication of records.* Records will be duplicated at a rate of fifteen (15) cents per page. For copies prepared by computers, such as tapes, CDs, DVDs, or printouts, the Commission shall charge the actual cost, including

operator time, of production. For other methods of reproduction or duplication, the Commission will charge the actual direct costs of producing the document(s). If the Commission estimates that duplication charges are likely to exceed $25, it shall notify the requester of the estimated amount of fees, unless the requester has indicated in advance a willingness to pay fees as high as those anticipated. Such a notice shall offer a requester the opportunity to confer with agency personnel with the object of reformulating the request to meet his or her needs at a lower cost.

(f) *Other charges.* The Commission will recover the full costs of providing services such as those enumerated below when it provides them in response to a direct request for such services:

(1) Certifying that records are true copies; or

(2) Sending records by special methods such as express mail.

(g) *Payment of fees.* Remittance shall be in the form either of a personal check or bank draft drawn on a bank in the United States or a postal money order. Remittance shall be made payable to the order of the Treasury of the United States and mailed to the Chief FOIA Officer, U.S. Election Assistance Commission, 1225 New York Avenue NW., Suite 1100, Washington, DC 20005.

(h) *Receipt of fees.* A receipt for fees paid will be given upon request. Refund of fees paid for services actually rendered will not be made.

(i) *Restrictions on assessing fees.* The Commission shall not assess search fees or duplication fees under this paragraph if the Commission fails to comply with any time limit in these regulations. The Commission will not charge fees to any requester, including commercial use requesters, if the cost of collecting a fee would be equal to or greater than the fee itself. With the exception of requesters seeking documents for a commercial use, the Commission will not charge fees for the first 100 pages of duplication and the first two hours of search time.

(1) The elements to be considered in determining the ''cost of collecting a fee'' are the administrative costs of receiving and recording a requester's remittance and processing the fee for deposit in the Treasury Department's special account.

(2) For purposes of these restrictions on assessment of fees, the word ''pages'' means paper copies of 8.5'' x 11'' or 11'' x 14.'' Thus, requesters are not entitled to 100 computer disks, for example.

(3) For purposes of these restrictions on assessment of fees, the term ''search time'' means manual search. To apply this term to searches made by computer, the Commission will determine the hourly cost of operating the CPU and the operator's hourly salary plus 16 percent. When the cost of such search (including operator time and the cost of operating the computer to process a request) equals the equivalent dollar amount of two hours of salary of the person performing the search (i.e. the operator), the Commission will begin assessing charges for computer search.

§ 9405.10 Fees to be charged—categories of requesters.

There are four categories of FOIA requesters: Commercial use requesters; educational and non-commercial scientific institutions; representatives of the news media; and all other requesters.

(a) *Commercial use requesters.* When the Commission receives a request for documents for commercial use, it will assess charges that recover the full direct costs of searching for, reviewing for release, and duplicating the record sought. Commercial use requesters are neither entitled to two hours of free search time nor 100 free pages of duplication. The Commission may recover the cost of searching for and reviewing records even if there is ultimately no disclosure of records (see § 9405.11(b)).

(b) *Educational and non-commercial scientific institution requesters.* The Commission shall provide documents to requesters in this category for the cost of reproduction alone, excluding charges for the first 100 pages. To be eligible for inclusion in this category, requesters must show that the record is being made as authorized by and under the auspices of a qualifying institution and that the records are not sought for a commercial use but are sought in the furtherance of scholarly (if the request is from an educational institution) or scientific (if the request is from a non-commercial scientific institution) research.

(c) *Representatives of the news media.* The Commission shall provide documents to requesters in this category for the cost of reproduction alone, excluding charges for the first 100 pages. To be eligible for inclusion in this category, the requester must fit the definition of a representative of the news media as stated in § 9405.2, and the request must not be made for commercial use. For purposes of this paragraph, a request for records supporting the news dissemination function of the requester shall not be considered to be a request that is for commercial use.

(d) *All other requesters.* The Commission shall charge requesters who do not fit into any of the categories above fees that recover the full reasonable direct cost of searching for and reproducing records that are responsive to the request, except that the first 100 pages of reproduction and the first two hours of search time shall be furnished without charge.

§ 9405.11 Miscellaneous fee provisions.

(a) *Charging Interest—notice and rate.* The Commission may begin assessing interest charges on an unpaid bill starting on the 31st day following the day on which the billing was sent. The fact that the fee has been received by the Commission within the 30-day grace period, even if it is not processed, will suffice to stay the accrual of interest. Interest will be at the rate prescribed in section 3717 of title 31 of the United States Code and will accrue from the date of the billing.

(b) *Charges for unsuccessful search.* The Commission may assess charges for time spent searching, even if it fails to locate the records or if the records located are determined to be exempt from disclosure. If the Commission estimates that search charges are likely to exceed $25, it shall notify the requester of the estimated amount of fees, unless the requester has indicated in advance his willingness to pay fees as high as those anticipated. Such a notice shall offer the requester the opportunity to confer with agency personnel with the object of reformulating the request to meet his or her needs at a lower cost.

(c) *Aggregating requests.* A requester may not file multiple requests at the same time, each seeking portions of a document or documents, solely in order to avoid payment of fees. When the Commission reasonably believes that a requester or a group of requestors acting in concert has submitted requests that constitute a single request involving clearly related matters, the Commission may aggregate those requests and charge accordingly. One element to be considered in determining whether a belief would be reasonable is the time period over which the requests have occurred.

(d) *Advance payments.* The Commission may not require a requester to make an advance payment (*i.e.*, payment before work is commenced or continued on a request) unless:

(1) The Commission estimates or determines that allowable charges that a requester may be required to pay are likely to exceed $250. Then, the Commission will notify the requester of the likely cost and obtain satisfactory

assurance of full payment where the requester has a history of prompt payment of FOIA fees or require an advance payment of an amount up to the full estimated charges in the case of requesters with no history of payment; or

(2) A requester has previously failed to pay a fee charged in a timely fashion (*i.e.*, within 30 days of the date of the billing). Then, the Commission may require the requester to:

(i) Pay the full amount owed plus any applicable interest as provided above or demonstrate that he or she has, in fact, paid the fee, and

(ii) Make an advance payment of the full amount of the estimated fee before the agency begins to process a new request or a pending request from that requester.

(3) When the Commission acts under paragraphs (d)(1) or (2) of this section, the administrative time limits prescribed in 5 U.S.C. 552(a)(6) will begin only after the Commission has received payments described in paragraphs (d)(1) and (2) of this section.

(e) *Effect of Debt Collection Act of 1982.* The Commission shall comply with the provisions of the Debt Collection Act, including disclosure to consumer reporting agencies and use of collection agencies, where appropriate, to encourage repayment.

§ 9405.12 Waiver or reduction of charges.

Records responsive to a request will be furnished without charge when the Chief FOIA Officer determines, based on all available information, that disclosure of the requested information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester.

PART 9407—IMPLEMENTATION OF THE GOVERNMENT IN THE SUNSHINE ACT

Sec.

Authority: 5 U.S.C. 552b.

§ 9407.1 Purpose and scope.

This part contains the regulations of the U.S. Election Assistance Commission implementing the Government in the Sunshine Act (5 U.S.C. 552b). Consistent with the Act, it is the policy of the Commission that the public is entitled to the fullest practicable information regarding its decision making processes. This part sets forth the basic responsibilities of the Commission with regard to this policy and offers guidance to members of the public who wish to exercise the rights established by the Act. These regulations also fulfill the requirement of 5 U.S.C. 552b(g) that each agency subject to the Act promulgates regulations to implement the open meeting requirements of paragraphs (b) through (f) of section 552b.

§ 9407.2 Definitions.

As used in this part, the term—

Commission means the U.S. Election Assistance Commission, established by the Help America Vote Act of 2002, 42 U.S.C. 15301 *et seq.*

Commissioner means an individual appointed to the Commission by the President and confirmed by the Senate under section 203 of the Help America Vote Act of 2002, 42 U.S.C. 15323.

Executive Director means the Executive Director of the Commission or his or her designee.

General Counsel means the General Counsel of the Commission or his or her designee.

Meeting means the deliberations of at least three Commissioners where such deliberations determine or result in the joint conduct or disposition of official Commission business. A deliberation conducted through telephone or similar communications equipment in which all persons participating can hear each other shall be considered a meeting. For the purposes of this section, ''joint conduct'' does not include situations where the requisite number of members is physically present in one place but not conducting agency business as a body. In addition, the term ''meeting'' does not include a process of notation voting by circulated memorandum for the purpose of expediting consideration of official Commission business. The term ''meeting'' also does not include deliberations on whether to:

(1) Schedule a meeting;

(2) Hold a meeting with less than seven days notice, as provided in § 9407.4(e);

(3) Change the subject matter of a publicly announced meeting or the determination of the Commission to open or close a meeting or portions of a meeting to public observation, as provided in § 9407.4(f);

(4) Change the time or place of an announced meeting, as provided in § 9407.4(g);

(5) Close a meeting or portions of a meeting, as provided in § 9407.5; or

(6) Withhold from disclosure information pertaining to a meeting or portions of a meeting, as provided in § 9407.5.

Public observation means attendance by one or more members of the public at a meeting of the Commission but does not include participation in the meeting.

Public participation means the presentation or discussion of information, raising of questions, or other manner of involvement in a meeting of the Commission by one or more members of the public in a manner that contributes to the disposition of Commission business.

§ 9407.3 Open meetings.

(a) The Commissioners shall not jointly conduct, determine, or dispose of agency business other than in accordance with this section.

(b) Except as otherwise provided in this part, every portion of every Commission meeting shall be open to public observation.

(c) No additional right to participate in Commission meetings is granted to any person by this part. Meetings of the Commission, or portions of a meeting, shall be open to public participation only when an announcement to that effect is issued under § 9407.4(b)(4) . Public participation shall be conducted in an orderly, non-disruptive manner and in accordance with any procedures as the chairperson of the meeting may establish. Public participation may be terminated at any time for any reason.

(d) When holding open meetings, the Commission shall make a diligent effort to provide appropriate space, sufficient visibility, and adequate acoustics to accommodate the public attendance anticipated for the meeting. When open meetings are conducted through telephone or similar communications equipment, the Commission shall make an effort to provide sufficient access to the public in a manner which allows the public to clearly hear, see, or otherwise follow the proceedings. The meeting room or other forum selected shall be sufficient to accommodate a reasonable number of interested members of the public. The Commission shall ensure that public meetings are held at a reasonable time and are readily accessible to individuals with disabilities.

(e) Members of the public attending open Commission meetings may use small electronic audio recording devices to record the proceedings. The use of any other recording equipment and cameras requires advance coordination with and notice to the Commission's Communications Office. The chair or acting chair of the Commission may

prohibit, at any time, the use of any recording equipment during a public meeting if he or she determines that such recording would disrupt the orderly conduct of the meeting.

§ 9407.4 Notice of meetings.

(a) Except as otherwise provided in this section, the Commission shall make a public announcement at least seven days prior to a meeting.

(b) The public announcement shall include:

(1) The time and place of the meeting;

(2) The subject matter of the meeting;

(3) Whether the meeting is to be open, closed, or portions of a meeting will be closed;

(4) Whether public participation will be allowed; and

(5) The name and telephone number of the person who will respond to requests for information about the meeting.

(c) The public announcement requirement shall be implemented by:

(1) Publishing the announcement on the Commission's Web site; and

(2) Distributing the announcement to affected government entities and persons and organizations that the Executive Director determines may have an interest in the subject matter of the meeting.

(d) The announcement will be submitted for publication in the **Federal Register** immediately following the public posting and distribution noted in paragraph (c) of this section.

(e) A meeting may be held with less than seven days' notice if a majority of the Commission determines by recorded vote that the business of the Commission so requires. The Commission shall make a public announcement to this effect at the earliest practicable time. The announcement shall include the information required by paragraph (b) of this section and shall be issued in accordance with those procedures set forth in paragraphs (c) and (d) of this section that are practicable given the available period of time.

(f) The subject matter of an announced meeting or the determination of the Commission to open or close a meeting or portions of a meeting to public observation may be changed only if:

(1) A majority of the Commissioners determine by a recorded vote that agency business so requires and that no earlier announcement of the change was possible,

(2) The Commission publicly announces the change and the vote of each Commissioner upon such change at the earliest practicable time.

(3) The announcement of the change noted in paragraph (f)(2) of this section is issued in accordance with those procedures set forth in paragraphs (c) and (d) of this section that are practicable given the available period of time.

(g) The time or place of an announced meeting may be changed only if a public announcement of the change is made at the earliest practicable time. The announcement shall be issued in accordance with those procedures set forth in paragraphs (c) and (d) of this section that are practicable given the available period of time.

§ 9407.5 Closed meetings.

(a) A meeting or portions of a meeting may be closed and information pertaining to such meeting or portions of a meeting may be withheld from the public only if the Commission determines that such meeting or portions of a meeting or the disclosure of such information is likely to:

(1) Disclose matters that are:

(i) Specifically authorized under criteria established by an Executive Order to be kept secret in the interest of national defense or foreign policy, and

(ii) To be properly classified under that Executive Order;

(2) Relate solely to the internal personnel rules and practices of the Commission;

(3) Disclose matters specifically exempted from disclosure by statute (other than the Freedom of Information Act, 5 U.S.C. 552) provided that the statute:

(i) Requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or

(ii) Establishes particular criteria for withholding or refers to particular types of matters to be withheld;

(4) Disclose the trade secrets and commercial or financial information obtained from a person and privileged or confidential;

(5) Involve either accusing any person of a crime or formally censuring any person;

(6) Disclose information of a personal nature, if disclosure would constitute a clearly unwarranted invasion of personal privacy;

(7) Disclose either investigatory records compiled for law enforcement purposes or information which, if written, would be contained in such records but only to the extent that the production of the records or information would:

(i) Interfere with enforcement proceedings,

(ii) Deprive a person of a right to either a fair trial or an impartial adjudication,

(iii) Constitute an unwarranted invasion of personal privacy,

(iv) Disclose the identity of a confidential source or sources and, in the case of a record compiled either by a criminal law enforcement authority in the course of a criminal investigation or by an agency conducting a lawful national security intelligence investigation, confidential information furnished only by the confidential source or sources,

(v) Disclose investigative techniques and procedures, or

(vi) Endanger the life or physical safety of law enforcement personnel;

(8) Disclose information contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions;

(9) Disclose information the premature disclosure of which would be likely to significantly frustrate implementation of a proposed action of the Commission. This exception shall not apply in any instance where the Commission has already disclosed to the public the content or nature of the proposed action or where the Commission is required by law to make such disclosure on its own initiative prior to taking final action on the proposal; or

(10) Specifically concern the issuance of a subpoena by the Commission; or the participation of the Commission in a civil action or proceeding, an action in a foreign court or international tribunal, or an arbitration; or the initiation, conduct, or disposition by the Commission of a particular case of formal adjudication under the procedures in 5 U.S.C. 554 or otherwise involving a determination on the record after opportunity for a hearing.

(b) Before a meeting or portions of a meeting may be closed to public observation, the Commission shall determine, notwithstanding the exemptions set forth in paragraph (a) of this section, whether the public interest requires that the meeting or portions of a meeting be open consistent with Federal law. The Commission may open a meeting or portions of a meeting that could be closed under paragraph (a) of this section if the Commission finds it to be in the public interest to do so and the disclosure is not otherwise prohibited by Federal law.

§ 9407.6 Procedures for closing meetings.

(a) A meeting or portions of a meeting may be closed and information

pertaining to a meeting or portions of a meeting may be withheld under § 9407.5(a) only when a majority of the members of the Commission vote to take the action.

(b) A separate vote of the Commissioners shall be taken with respect to each meeting or portion of a meeting proposed to be closed and with respect to information which is proposed to be withheld. A single vote may be taken with respect to a series of meetings or portions of a meeting that are proposed to be closed, so long as each meeting or portion of a meeting in the series involves the same particular matter and is scheduled to be held no more than 30 days after the initial meeting in the series. The vote of each participating Commission member shall be recorded, and no proxies shall be allowed.

(c) A person whose interests may be directly affected by a portion of a meeting may request in writing that the Commission close that portion of the meeting for any of the reasons referred to in § 9407.5(a) (5), (6), or (7) . Upon the request of a Commissioner, a recorded vote shall be taken whether to close such meeting or a portion of a meeting.

(d) Before the Commission may hold a meeting that is closed, in whole or part, a certification shall be obtained from the General Counsel that, in his or her opinion, the meeting may properly be closed. The certification shall be in writing and shall state each applicable exemption provision from § 9407.5(a).

(e) Within one day of a vote taken under this section, the Commission shall make publicly available a written copy of such vote reflecting the vote of each Commissioner.

(f) In the case of the closure of a meeting or portions thereof, the Commission shall make publicly available within one day of the vote on such action a full written explanation of the reasons for the closing with a list of all persons expected to attend the meeting and their affiliation.

§ 9407.7 Recordkeeping requirements.

(a) The Commission shall maintain either a complete transcript or electronic recording of the proceedings of each meeting.

(b) In the case of either a meeting or portions of a meeting closed to the public under § 9407.5(a)(8) or (10), the Commission shall maintain a complete transcript, an electronic recording, or a set of minutes of the proceedings. If minutes are maintained, they shall fully and clearly describe all matters discussed and shall provide a full and accurate summary of any actions taken and the reasons for which such actions were taken, including a description of the views expressed on any item and a record reflecting the vote of each Commissioner. All documents considered in connection with any action shall be identified in the minutes.

(c) The transcript, electronic recording, or copy of the minutes of a meeting shall disclose the identity of each speaker.

(d) The Commission shall maintain a complete verbatim copy of the transcript, a complete electronic recording, or a complete copy of the minutes of the proceedings of each meeting for at least two years, or for one year after the conclusion of any Commission proceeding with respect to which the meeting was held, whichever occurs later.

§ 9407.8 Public availability of records.

The Commission shall make available to the public the transcript, electronic recording, or minutes of a meeting, except for items of discussion or testimony that relate to matters the Commission has determined to contain information that may be withheld under § 9407.5(a). This information shall be made available as soon as practicable after each meeting on the Commission's Web site. Otherwise, requests to receive or review transcripts, electronic recordings, or minutes of a meeting should be addressed to the Communications Director, U.S. Election Assistance Commission, 1225 New York Avenue, Suite 1100, Washington, DC 20005. Copies of a transcript, a transcription of the electronic recording, or the minutes of a meeting (except for items of discussion or testimony that relate to matters withheld under § 9407.5) shall be furnished at cost to any person upon written request pursuant to the requirements of 11 CFR 9405.

PART 9410—IMPLEMENTATION OF THE PRIVACY ACT OF 1974

Sec.

Authority: 5 U.S.C. 552a.

§ 9410.1 Purpose and scope.

(a) This part sets forth rules that inform the public as to what information is maintained by the U.S. Election Assistance Commission about identifiable individuals and that inform those identifiable individuals how they may gain access to and correct or amend information about them.

(b) The regulations in this part carry out the requirements of the Privacy Act of 1974 (Pub. L. 93–579) and in particular 5 U.S.C. 552a as added by that Act.

(c) The regulations in this part apply only to records disclosed or requested under the Privacy Act of 1974 and not to requests for information made under 5 U.S.C. 552, the Freedom of Information Act, or requests for reports and statements filed with the Election Assistance Commission which are public records and available for inspection and copying.

§ 9410.2 Definitions.

As used in this part, the term—

Commission means the U.S. Election Assistance Commission, established by the Help America Vote Act of 2002, 42 U.S.C. 15301 *et seq.*

Commissioner means an individual appointed to the Commission by the President and confirmed by the Senate under section 203 of the Help America Vote Act of 2002, 42 U.S.C. 15323.

Individual means a citizen of the United States or an alien lawfully admitted for permanent residence.

Maintain includes maintain, collect, use, or disseminate.

Record means any item, collection, or grouping of information about an individual that is maintained by the Commission including, but not limited to, his or her education, financial transactions, medical history, and criminal or employment history and that contains his or her name or the identifying number, symbol, or other identifying information particularly assigned to the individual, such as finger or voice print or a photograph.

Systems of records means a group of any records under the control of the Commission from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying information particularly assigned to the individual.

§ 9410.3 Procedures for requests pertaining to individual records in a record system.

(a) Any individual may request the Commission to inform him or her whether a particular record system named by the individual contains a record pertaining to him or her. The request may be made in person or in writing at the location of the record system and to the person specified in the notice describing that record system.

(b) An individual, who believes that the Commission maintains records pertaining to him or her but cannot determine which record system contains those records, may request assistance by mail or in person from the Executive Director, U.S. Election Assistance Commission, 1225 New York Avenue, Suite 1100, Washington, DC 20005 during the hours of 9 a.m. to 5:30 p.m.

(c) Requests under paragraphs (a) or (b) of this section shall be acknowledged by the Commission within 15 working days from the date of receipt of the request. If the Commission is unable to locate the information requested under paragraphs (a) or (b) of this section, it shall so notify the individual within 15 working days after receipt of the request. The notification may request additional information to assist the Commission in locating the record, or it may advise the individual that no record or document exists about that individual.

§ 9410.4 Times, places, and requirements for identification of individuals making requests.

(a) After being informed by the Commission that a record system contains a record pertaining to him or her, an individual may request that the Commission disclose that record in the manner described in this section. Each request for the disclosure of a record or a copy of a record it shall be made in person or by written correspondence to the U.S. Election Assistance Commission, 1225 New York Avenue, Suite 1100, Washington, DC 20005 and to the person identified in the notice describing the systems of records. Requests can also be made by specifically authorized agents or by parents or guardians of individuals.

(b) Each individual requesting the disclosure of a record or copy of a record shall furnish the following information with his or her request:

(1) The name of the record system containing the record;

(2) Proof as described in paragraph (c) of this section that he or she is the individual to whom the requested record relates; and

(3) Any other information required by the notice describing the record system.

(c) Proof of identity as required by paragraph (b)(2) of this section shall be provided as described in paragraphs (c)(1) and (c)(2) of this section. Requests made by an agent, parent, or guardian shall be in accordance with the procedures described in § 9410.9.

(1) Requests made in writing shall include a statement affirming the individual's identity, signed by the individual and either notarized or witnessed by two persons (including witnesses' addresses). If the individual appears before a notary, he or she shall submit adequate proof of identification in the form of a driver's license, birth certificate, passport, or other identification acceptable to the notary. If the statement is witnessed, it shall include a sentence above the witnesses' signatures that they personally know the individual or that the individual has submitted proof of his or her identification to their satisfaction. In cases involving records of extreme sensitivity, the Commission may determine that the identification is not adequate and may request the individual to submit additional proof of identification.

(2) If the request is made in person, the requester shall submit proof of identification similar to that described in paragraph (c)(1) of this section, acceptable to the Commission.

§ 9410.5 Disclosure of requested information to individuals.

(a) Upon submission of proof of identification as required by § 9410.4, the Commission shall allow the individual to see and/or obtain a copy of the requested record or shall send a copy of the record to the individual by registered mail. If the individual requests to see the record, the Commission may make the record available either at the location where the record is maintained or at a place more suitable to the requestor, if possible. The record shall be made available as soon as possible, but in no event later than 15 working days after proof of identification. The individual may have a person or persons of his or her own choosing accompany him or her when the record is disclosed.

(b) The Commission must furnish each record requested by an individual under this part in a form intelligible to that individual.

(c) If the Commission denies access to a record to an individual, he or she shall be advised of the reason for the denial and advised of the right to judicial review.

(d) Upon request, an individual will be provided access to the accounting of disclosures from his or her record under the same procedures as provided above and in § 9410.4.

§ 9410.6 Request for correction or amendment to record.

(a) Any individual who has reviewed a record pertaining to him or her that was furnished under this part may request that the Commission correct or amend all or any part of that record.

(b) Each individual requesting a correction or amendment shall send or provide in person the written request to the Commission through the person who furnished the record.

(c) Each request for a correction or amendment of a record shall contain the following information:

(1) The name of the individual requesting the correction or amendment;

(2) The name of the system of records in which the record sought to be amended is maintained;

(3) The location of the system of records from which the individual record was obtained;

(4) A copy of the record sought to be amended or corrected or a sufficiently detailed description of that record;

(5) A statement of the material in the record that the individual desires to correct or amend; and

(6) A statement of the basis for the requested correction or amendment including any material that the individual can furnish to substantiate the reasons for the correction or amendment sought.

§ 9410.7 Commission review of request for correction or amendment of record.

(a) The Commission shall, not later than 10 working days after the receipt of the request for a correction or amendment of a record under § 9410.6, acknowledge receipt of the request and inform the individual whether additional information is required before the correction or amendment can be considered.

(b) If no additional information is required, within 10 working days from receipt of the request, the Commission shall either make the requested correction or amendment or notify the individual of its refusal to do so, including in the notification the reasons for the refusal and the appeal procedures provided in § 9410.8.

(c) The Commission shall make each requested correction or amendment to a record if that correction or amendment will negate inaccurate, irrelevant, untimely, or incomplete information in the record.

(d) The Commission shall inform prior recipients of a record of any

amendment or correction or notation of dispute of the individual's record if an accounting of the disclosure was made. The individual may request a list of prior recipients if an accounting of the disclosure was made.

§ 9410.8 Appeal of initial adverse determination on amendment or correction.

(a) Any individual whose request for a correction or amendment has been denied in whole or in part may appeal that decision to the Commissioners no later than 180 days after the adverse decision is rendered.

(b) The appeal shall be in writing and shall contain the following information:

(1) The name of the individual making the appeal;

(2) Identification of the record sought to be amended;

(3) The record system in which that record is contained;

(4) A short statement describing the amendment sought; and

(5) The name and location of the Commission official who initially denied the correction or amendment.

(c) Not later than 30 working days after the date on which the Commission receives the appeal, the Commissioners shall complete their review of the appeal and make a final decision thereon. However, for good cause shown, the Commissioners may extend that 30-day period. If the Commissioners extend the period, the individual requesting the review shall be promptly notified of the extension and the anticipated date of a decision.

(d) After review of an appeal, the Commission shall send a written notice to the requestor containing the following information:

(1) The decision and, if the denial is upheld, the reasons for the decision;

(2) The right of the requestor to institute a civil action in a Federal District Court for judicial review of the decision; and

(3) The right of the requestor to file with the Commission a concise statement setting forth the reasons for his or her disagreement with the Commission's denial of the correction or amendment. The Commission shall make this statement available to any person to whom the record is later disclosed, together with a brief statement, if appropriate, of the Commission's reasons for denying the requested correction or amendment. The Commission shall also send a copy of the statement to prior recipients of the individual's record if an accounting of the disclosures was made.

§ 9410.9 Disclosure of record to person other than the individual to whom it pertains.

(a) Any individual who desires to have a record covered by this part disclosed to or mailed to another person may designate such person and authorize the person to act as his or her agent for that specific purpose. The authorization shall be in writing, signed by the individual, and notarized or witnessed as provided in § 9410.4(c).

(b) The parent of any minor individual or the legal guardian of any individual who has been declared by a court of competent jurisdiction to be incompetent due to physical or mental incapacity or age may act on behalf of that individual in any matter covered by this part. A parent or guardian who desires to act on behalf of such an individual shall present suitable evidence of parentage or guardianship, by birth certificate, certified copy of a court order, or similar documents, and proof of the individual's identity in a form that complies with § 9410.4(c).

(c) An individual to whom a record is to be disclosed in person under this part may have a person or persons of his or her own choosing accompany him or her when the record is disclosed.

§ 9410.10 Fees.

(a) The Commission shall not charge an individual for the cost of making a search for a record or the cost of reviewing the record. When the Commission makes a copy of a record as a necessary part of the process of disclosing the record to an individual, the Commission shall not charge the individual for the cost of making that copy. When the Commission makes a copy of a record in response to a request from an individual, the Commission may charge the individual for the reasonable cost of making the copy.

(b) If an individual requests that the Commission furnish a copy of the record, the Commission shall charge the individual for the cost of making the copy. The fee that the Commission has established for making a copy is fifteen (15) cents per page.

§ 9410.11 Penalties.

Any person who makes a false statement in connection with any request for a record or an amendment or correction thereto under this part is subject to the penalties prescribed in 18 U.S.C. 494 and 495 and 5 U.S.C. 552a(i)(3).

Thomas R. Wilkey,

Executive Director, U.S. Election Assistance Commission.

[FR Doc. E8–14549 Filed 6–27–08; 8:45 am]

BILLING CODE 6820–KF–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2008–0545; Directorate Identifier 2008–NE–16–AD]

RIN 2120–AA64

Airworthiness Directives; Dowty Propellers Models R354/4–123–F/13; R354/4–123–F/20; R354/4–123–F/21; R375/4–123–F/21; R389/4–123–F/25; R354/4–123–F/26; and R390/4–123–F/27 Propellers

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD results from mandatory continuing airworthiness information (MCAI) issued by the European Aviation Safety Agency (EASA) to identify and correct an unsafe condition on Dowty Propellers models R354/4–123–F/13; R354/4–123–F/20; R354/4–123–F/21; R375/4–123–F/21; R389/4–123–F/25; R354/4–123–F/26; and R390/4–123–F/27 propellers. The MCAI describes the unsafe condition as:

A number of propeller blade outer sleeves have been found with cracks since 1996. Testing has shown that blade retention integrity is not affected by this cracking. However, this condition, if not detected and corrected, can lead to blade counterweight release, possibly resulting in damage to the aircraft and injury to occupants or persons on the ground.

We are proposing this AD to prevent blade counterweight release, which could result in injury or damage to the airplane.

DATES: We must receive comments on this proposed AD by July 30, 2008.

ADDRESSES: You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.
- *Mail:* Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.
- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- *Fax:* (202) 493–2251.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov*; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647–5527) is the same as the Mail address provided in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Terry Fahr, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; *e-mail: terrance.fahr@faa.gov*; telephone (781) 238–7155; fax (781) 238–7170.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2008–0545; Directorate Identifier 2008–NE–16–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov*, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477–78).

Discussion

EASA, which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2008–0033, dated February 19, 2008, to correct an unsafe condition for the specified products. The EASA AD states:

> A number of propeller blade outer sleeves have been found with cracks since 1996. Testing has shown that blade retention integrity is not affected by this cracking. However, this condition, if not detected and corrected, can lead to blade counterweight release, possibly resulting in damage to the aircraft and injury to occupants or persons on the ground.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Dowty Propellers has issued Alert Service Bulletin No. SF340–61–A106, dated December 5, 2007. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of the United Kingdom, and is approved for operation in the United States. Pursuant to our bilateral agreement with the United Kingdom, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 292 propellers installed on airplanes of U.S. registry. We also estimate that it would take 0.5 work-hour per propeller to visually inspect for cracks. The average labor rate is $80 per work hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be $11,680.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. ''Subtitle VII: Aviation Programs,'' describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in ''Subtitle VII, Part A, Subpart III, Section 44701: General requirements.'' Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a ''significant regulatory action'' under Executive Order 12866;

2. Is not a ''significant rule'' under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

Dowty Propellers: Docket No. FAA–2008–0545; Directorate Identifier 2008–NE–16–AD.

Comments Due Date

(a) We must receive comments by July 30, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Dowty Propellers models R354/4–123–F/13; R354/4–123–F/20; R354/4–123–F/21; R375/4–123–F/21; R389/4–123–F/25; R354/4–123–F/26; and R390/4–123–F/27 propellers. These propellers are installed on, but not limited to, Saab AB, Saab Aerosystems SF340A and SF340B airplanes.

Reason

(d) European Aviation Safety Agency (EASA) AD No. 2008–0033, dated February 19, 2008, states:

A number of propeller blade outer sleeves have been found with cracks since 1996. Testing has shown that blade retention integrity is not affected by this cracking. However, this condition, if not detected and corrected, can lead to blade counterweight release, possibly resulting in damage to the aircraft and injury to occupants or persons on the ground.

This AD requires initial and repetitive visual inspections of propeller blade root outer sleeves for cracks, and removal before further flight of propeller blades with cracked blade root outer sleeves. We are issuing this AD to prevent blade counterweight release, which could result in injury or damage to the airplane.

Actions and Compliance

(e) Unless already done, do the following actions.

Propeller Blade Outer Sleeve Visual Inspections

(1) At the next 1,600 flight hours (FH) aircraft check after the effective date of this AD, or, after any blade accumulates 15,000 FH time-in-service, whichever occurs later, visually inspect all propeller blade root outer sleeves for cracks.

(2) Thereafter, at intervals not to exceed 1,600 FH, visually inspect all propeller blade root outer sleeves for cracks.

(3) Before further flight, remove any propeller blades found cracked during the visual inspections in paragraphs (e)(1) and (e)(2) of this AD.

FAA AD Differences

(f) None.

(g) *Alternative Methods of Compliance (AMOCs):* The Manager, Boston Aircraft Certification Office, FAA, Engine and Propeller Directorate, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) Refer to European Aviation Safety Agency AD 2008–0033, dated February 19, 2008, and Dowty Propellers Alert Service Bulletin No. SF340–61–A106, dated December 5, 2007, for related information.

(i) Contact Terry Fahr, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: *terrance.fahr@faa.gov*; telephone (781) 238–7155; fax (781) 238–7170, for more information about this AD.

Issued in Burlington, Massachusetts, on June 24, 2008.

Peter A. White,

Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. E8–14715 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–28691; Directorate Identifier 2006–SW–22–AD]

RIN 2120–AA64

Airworthiness Directives; Eurocopter France Model AS355E, F, F1, F2, and N Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Supplemental notice of proposed rulemaking; reopening of comment period.

SUMMARY: This document revises an earlier proposed superseding airworthiness directive (AD) for the specified Eurocopter France (ECF) model helicopters. That AD currently requires certain checks of the magnetic chip detector plug (chip detector) and the main gearbox (MGB) oil-sight glass, certain inspections of the lubrication pump (pump), and replacing the MGB and the pump with an airworthy MGB and pump, if necessary. Also, the AD requires that before a pump or MGB with any hours time-in-service (TIS) can be installed, it must meet the AD requirements. The earlier proposed superseding AD proposed retaining those requirements but proposed adding all serial-numbered pumps to the applicability. This supplemental proposal is prompted by an improved procedure for detecting oil pump wear earlier and is considered more accurate than the procedure proposed previously. The actions specified by the proposed AD are intended to implement improved procedures to detect a failing MGB oil pump, to prevent failure of the MGB pump, seizure of the MGB, loss of drive to an engine and main rotor, and subsequent loss of control of the helicopter.

DATES: Comments must be received on or before August 29, 2008.

ADDRESSES: Use one of the following addresses to submit comments on this proposed AD:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov*. Follow the instructions for submitting comments.
- *Fax:* 202–493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You may get the service information identified in this proposed AD from American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053–4005, telephone (972) 641–3460, fax (972) 641–3527.

FOR FURTHER INFORMATION CONTACT: Ed Cuevas, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Safety Management Group, Fort Worth, Texas 76193–0111, telephone (817) 222–5355, fax (817) 222–5961.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any written data, views, or arguments regarding this proposed AD. Send your comments to the address listed under the caption **ADDRESSES**. Include the docket number ''FAA–2007–28691, Directorate Identifier 2006–SW–22–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov*, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed rulemaking. Using the search function of the docket Web site, you can find and read the comments to any of our dockets, including the name of the individual who sent or signed the comment. You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477–78).

Examining the Docket

You may examine the docket that contains the proposed AD, any comments, and other information in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Operations office (telephone (800) 647–5527) is located in Room W12–140 on the ground floor of the West Building at the street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

Discussion

A proposal to amend 14 CFR part 39 to add an AD for the specified ECF

model helicopters was published in the **Federal Register** on July 13, 2007 (72 FR 38529). That Notice of Proposed Rulemaking (NPRM) proposed superseding AD 2003–21–09 R1, Amendment 39–14621, (71 FR 31070, June 1, 2006) by retaining the requirements in that AD and adding pumps, P/N 355A32–0700–01, 355A32–0700–02, and 355A32–0701–00, any S/N, to the applicability. That NPRM was prompted by additional cases of MGB lubrication pump deterioration and a further investigation that determined that all serial-numbered pumps might be affected. This condition, if not corrected, could result in failure of the MGB pump, seizure of the MGB, loss of drive to an engine and main rotor, and subsequent loss of control of the helicopter.

Since issuing that NPRM, the manufacturer has developed an improved procedure for monitoring the condition of the MGB lubrication pump. Eurocopter has issued an Alert Service Bulletin No. 05.00.51, dated July 9, 2007 (ASB), specifying the improved procedure. The European Aviation Safety Agency (EASA), the Technical Agent for the Member States of the European Community, has issued EASA Emergency AD No. 2007–0209E, dated August 6, 2007, in response to the ASB. Also, we received comments from one commenter to the NPRM. The commenter agrees that the improved procedure, described in the ASB, is a better way to detect MGB oil pump problems because ''sludge on the chip plug can come from sources within the MGB oil system.''

The FAA agrees with the commenter that the improved procedure described in the ASB is a better way to detect MGB oil pump problems because this process reflects the progressive inefficiency as the oil pump wears as it relates to steady oil temperature and variable outside air temperature (OAT). Therefore, we are proposing to require the improved procedure for monitoring the condition of the MGB lubrication pump in lieu of checking the chip detector and oil-sight glass after an initial 25 hours TIS.

Since this change expands the scope of the originally proposed rule, the FAA has determined that it is necessary to reopen the comment period to provide additional opportunity for public comment.

We estimate that this proposed AD would affect 80 helicopters of U.S. registry, and the proposed actions would take about:

- 15 minutes to perform the procedures to check the condition of the MGB oil and chip detector plug,
- 4 work hours to remove the MGB and pump,
- 1 work hour to inspect the pump under the 10-hour, 25-hour, and 110-hour TIS procedures,
- 4 work hours to install a serviceable MGB and pump at an average labor rate of $80 per work hour, and
- $4,000 for an overhauled pump and up to $60,000 for an overhauled MGB per helicopter.

Based on these figures, we estimate the total cost impact of the proposed AD on U.S. operators to be $107,040 per year, assuming (a) one overhauled MGB and pump would be replaced on one helicopter per year, (b) all 80 helicopters would operate for 10 days undergoing 10 daily checks and 2 10-hour TIS inspections, and (c) each of the 80 helicopters operate for 260 hours per year with 20 helicopters receiving the repetitive 25-hour TIS inspection or 10.4 inspections per helicopter per year (260/25) for a total of 208 inspections (20 * 10.4) and 60 helicopters receiving the repetitive 110-hour TIS inspection or 2.36 inspections per helicopter per year (260/110) for a total of 142 inspections (60 * 2.36).

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. Additionally, this proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

1. Is not a ''significant regulatory action'' under Executive Order 12866;

2. Is not a ''significant rule'' under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a draft economic evaluation of the estimated costs to comply with this proposed AD. See the AD docket to examine the draft economic evaluation.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, ''General requirements.'' Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

Eurocopter France: Docket No. FAA–2007–28691; Directorate Identifier 2006–SW–22–AD. Supersedes AD 2003–21–09 R1, Amendment 39–14621, Docket No. 2003–SW–10–AD.

Applicability: Model AS355E, F, F1, F2, and N helicopters, with a main gear box (MGB) lubrication pump (pump), part number (P/N) 355A32–0700–01, 355A32–0700–02, or 355A32–0701–00, any serial number (S/N), certificated in any category.

Compliance: Required as indicated.

To detect sludge on the chip detector and dark oil in the MGB, to prevent failure of the MGB pump, seizure of the MGB, loss of drive to an engine and main rotor, and subsequent loss of control of the helicopter, do the following:

(a) Before the first flight of each day and at intervals not to exceed 10 hours time-in-service (TIS), check the MGB magnetic chip detector plug (chip detector) for any sludge. Also, check for dark oil in the MGB oil-sight glass. An owner/operator (pilot) holding at least a private pilot certificate may perform this visual check and must enter compliance into the aircraft maintenance records in accordance with 14 CFR 43.11 and 91.417(a)(2)(v). ''Sludge'' is a deposit on the chip detector that is typically dark in color and in the form of a film or paste, as compared to metal chips or particles normally found on a chip detector. Sludge

may have both metallic or nonmetallic properties, may consist of copper (pinion bearing), magnesium (pump case), and steel (pinion) from the oil pump, and a nonmetallic substance from the chemical breakdown of the oil as it interacts with the metal.

(b) Before further flight, if any sludge is found on the chip detector, remove, open, and inspect the pump.

(c) Before further flight, if the oil appears dark in color when it is observed through the MGB oil-sight glass, take an oil sample. If the oil taken in the sample is dark or dark purple, before further flight, remove, open, and inspect the pump.

Note 1: Eurocopter France Alert Service Bulletin No. 05.00.40, Revision 1, dated January 5, 2006, and Emergency ASB No. 05.00.40, Revision 2, dated December 20, 2006, pertain to the subject of this AD.

(d) Within 25 hours TIS, unless accomplished previously, after operating both engines at normal operating revolutions per minute (RPM) for at least 20 minutes to ensure the MGB oil temperature has stabilized, inspect the oil pump for wear by following the Accomplishment Instructions, paragraph 2.B.2., steps 1. through 6., of Eurocopter Alert Service Bulletin No. 05.00.51, dated July 9, 2007 (ASB). This AD does not require you to send the information to the manufacturer.

(1) Record the outside air temperature (OAT) and rotor speed (NR RPM) and plot the point at which they intersect using the graph in Figure 1 or 2 of the ASB.

(2) If the point on the graph at the intersection of the recorded OAT and the NR RPM falls within:

(i) Zone 3—Before further flight, replace the MGB and pump with an airworthy MGB and pump.

(ii) Zone 2—At intervals not to exceed 25 hours TIS, repeat the inspection procedures by following the Accomplishment Instructions, paragraph 2.B.2, steps 1 through 6, of the ASB. After being classified in ''Zone 2,'' you must obtain two successive inspections separated by at least 24 hours TIS that fall within Zone 1 before you can begin to inspect at intervals not to exceed 110 hours TIS by following paragraph (d)(2)(iii) of this AD for Zone 1.

Note 2: In addition to a worn oil pump, the loss of oil pressure could also be due to a clogged oil filter or cooler, a pinched hose, or an inaccurate pressure switch.

(iii) Zone 1—At intervals not to exceed 110 hours TIS, repeat the inspection procedures by following the Accomplishment Instructions, paragraph 2.B.2., steps 1 through 6, of the ASB.

(3) Compliance with paragraphs (d)(1) and (d)(2) of this AD constitutes terminating action for the checks and inspections required by paragraphs (a), (b), and (c) of this AD.

(e) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Safety Management Group, FAA, *ATTN:* Ed Cuevas, Aviation Safety Engineer, Rotorcraft Directorate, Fort Worth, Texas 76193–0111, telephone (817) 222–5355, fax (817) 222–5961.

Note 3: The subject of this AD is addressed in European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, Emergency AD No. 2006–0378–E, dated December 21, 2006, and AD No. 2007–0209E, dated August 6, 2007.

Issued in Fort Worth, Texas, on June 19, 2008.

Judy I. Carl,

Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. E8–14723 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Parts 1910 and 1915

[Docket No. OSHA–S049–2006–0675 (formerly OSHA Docket No. S–049)]

RIN 1218–AB50

General Working Conditions in Shipyard Employment

AGENCY: Occupational Safety and Health Administration (OSHA), Department of Labor.

ACTION: Proposed rule; notice of informal public hearings.

SUMMARY: OSHA is scheduling informal public hearings on the proposed rule on general working conditions in shipyard employment.

DATES: *Informal public hearings:* The hearings will begin at 9:30 a.m., on the following dates:

- September 9, 2008, in Washington, DC; and
- October 21, 2008, in Seattle, WA.

If necessary, the hearing will continue at the same time on subsequent days at each location.

Notice of intention to appear at the hearing: Interested persons who intend to present testimony or question witnesses at either the Washington, DC, or Seattle, WA, hearing must submit (transmit, send, postmark, deliver) a notice of their intention to do so by July 18, 2008.

Hearing testimony and documentary evidence: Interested persons who request more than 10 minutes to present testimony or who intend to submit documentary evidence at the hearing must submit (transmit, send, postmark, deliver) the full text of their testimony and all documentary evidence by August 8, 2008.

ADDRESSES:

Informal public hearings: The Washington, DC, hearing will be held in the auditorium of the U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. OSHA will announce the address of the Seattle, WA, hearing in a later **Federal Register** document.

Notice of intention to appear, hearing testimony and documentary evidence: You may submit (transmit, send, postmark, deliver) your notice of intention to appear, hearing testimony, and documentary evidence, identified by docket number OSHA–S049–2006–0675, by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov*. Follow the instructions online for electronically submitting materials, including attachments;
- *Fax:* If your written submission does not exceed 10 pages, including attachments, you may fax it to the OSHA Docket Office at (202) 693–1648; or
- *Regular mail, express delivery, hand delivery, and messenger and courier service:* Submit your materials to the OSHA Docket Office, Docket No. OSHA–S049–2006–0675, U.S. Department of Labor, Room N–2625, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–2350 (TTY number (877) 889–5627). Deliveries (express mail, hand delivery, and messenger and courier service) are accepted during the Department of Labor's and OSHA Docket Office's normal hours of operation, 8:15 a.m. to 4:45 p.m., e.t.

Instructions: All submissions must include the Agency name and docket number for this rulemaking (Docket No. OSHA–S049–2006–0675). All submissions, including any personal information, are placed in the public docket without change and may be available online at *http://www.regulations.gov*. Therefore, OSHA cautions you about submitting certain personal information such as social security numbers and birthdates. Because of security-related procedures, the use of regular mail may cause a significant delay in the receipt of your submissions. For information about security-related procedures for submitting materials by express delivery, hand delivery, messenger, or courier service, please contact the OSHA Docket Office. For additional information on submitting notices of intention to appear, hearing testimony or documentary evidence, see the **SUPPLEMENTARY INFORMATION** section of this notice.

Docket: To read or download background documents as well as

comments and materials submitted in response to the proposed rule or this **Federal Register** notice, go to Docket No. OSHA–S049–2006–0675 at *http://www.regulations.gov*. All submissions are listed in the *http://www.regulations.gov* index; however, some information (e.g., copyrighted material) is not publicly available to read or download through the Web page. All submissions and other material related to the proposed rule are available for public inspection and copying in the OSHA Docket Office. For information on reading or downloading materials in the docket and obtaining materials not available through the Web page, please contact the OSHA Docket Office.

Electronic copies of this **Federal Register** notice are available at *http://www.regulations.gov*. This notice as well as news releases and other relevant information also are available at OSHA's Web page at *http://www.osha.gov*.

FOR FURTHER INFORMATION CONTACT:

Press inquiries: Jennifer Ashley, OSHA, Office of Communications, Room N–3647, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–1999.

Technical information: Joseph Daddura, OSHA, Office of Maritime Standards, Room N–3609, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–2222.

Hearings: Ms. Veneta Chatmon, OSHA, Office of Communications, Room N–3647; 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–1999; e-mail *chatmon.veneta@dol.gov*.

SUPPLEMENTARY INFORMATION: On December 20, 2007, OSHA published a proposed rule to revise the standards on general working conditions in shipyard employment (72 FR 72451). The deadline for submitting written comments and hearing requests was March 19, 2008. OSHA received several hearing requests and is scheduling hearings to begin on September 9, 2008, in Washington, DC, and October 21, 2008, in Seattle, WA. This notice describes the procedures the public must use to participate in the hearings.

Informal public hearings—purpose, rules and procedures. OSHA invites interested persons to participate in this rulemaking by providing oral testimony and documentary evidence at the informal public hearings. In particular, OSHA invites interested persons who have knowledge of or experience with shipyard employment and the issues the proposed rule raises to participate in the hearings. OSHA also welcomes data and documentary evidence that will assist the Agency in developing a complete and accurate record.

Pursuant to section 6(b)(3) of the Occupational Safety and Health Act of 1970 (OSH Act) (29 U.S.C. 655), members of the public have an opportunity for an informal public hearing on a proposed rule and the issues it raises at which they may provide oral testimony and evidence. An administrative law judge (ALJ) presides over the hearing and resolves procedural matters relating to the hearing.

The legislative history of section 6 of the OSH Act, as well as OSHA's rules governing public hearings (29 CFR 1911.15), establish the purpose and procedures of informal public hearings. Although the presiding officer of such hearings is an ALJ and questioning of witnesses is allowed on crucial issues, the proceeding is largely informal and essentially legislative in purpose. Therefore, the hearing provides interested persons with an opportunity to make oral presentations in the absence of procedural restraints or rigid procedures that could impede or protract the rulemaking process. In addition, because the primary purpose of the hearing is to gather information and clarify the record, it is an informal administrative proceeding rather than an adjudicative one in which the technical rules of evidence apply. OSHA's rules governing public hearings and the pre-hearing guidelines that the ALJ issues for the hearings will ensure fairness and due process for participants as well as facilitate the development of a clear, accurate, and complete record. Accordingly, application of these rules and guidelines will be such that questions of relevance, procedure, and participation generally will be resolved in favor development of the record.

Conduct of the hearing will conform to OSHA's Rules of Procedure for Promulgating, Modifying, or Revoking Occupational Safety and Health Standards (29 CFR Part 1911). The rules also specify that the Assistant Secretary may, on reasonable notice, issue additional or alternative procedures to expedite the proceedings, to provide greater procedural protections to interested persons or to further any other good cause consistent with applicable law (29 CFR 1911.4). Although the ALJs who preside over the hearings make no decisions or recommendations on the merits of OSHA proposed rules, they do have the responsibility and authority necessary to ensure that the hearing progresses at a reasonable pace and in an orderly manner and to ensure that interested persons receive a full and fair hearing. To effectuate that, ALJs have the power to regulate the course of the proceedings; dispose of procedural requests, objections, and comparable matters; confine presentations to matters pertinent to the issues the proposed rule raises; use appropriate means to regulate the conduct of persons present at the hearing; question witnesses and permit others to do so; limit the time for such questioning; and leave the record open for a reasonable time after the hearing for the submission of additional data, evidence, comments and arguments (29 CFR 1911.16).

At the close of the hearing the ALJ will establish a post-hearing comment period for interested persons who filed a timely notice of intention to appear at the hearing. During the first part of the post-hearing period, those persons may submit additional data and information to OSHA. During the second part they may submit final briefs, arguments, and summations.

Notice of intention to appear at the hearing. Interested persons who intend to participate in and provide oral testimony or documentary evidence at the hearing must file a written notice of intention to appear prior to the hearing. To testify or questions witnesses at either the Washington, DC, or Seattle, WA, hearing, interested persons must submit (transmit, send, postmark, deliver) their notice by July 18, 2008. The notice must provide the following information:

- Name, address, and telephone number of each individual who will give oral testimony;
- Name of the establishment or organization each individual represents, if any;
- Occupational title and position of each individual testifying;
- Hearing location at which each individual wishes to appear and testify;
- Approximate amount of time required for each individual's testimony;
- A brief statement of the position each individual will take with respect to the issues identified in the proposed rule; and
- A brief summary of documentary evidence each individual intends to present.

OSHA emphasizes that the hearings are open to the public; however, only individuals who file a notice of intention to appear may question witnesses and participate fully at the hearing. If time permits, and at the discretion of the ALJ, an individual who did not file a notice of intention to appear may be allowed to testify at the

hearing, but for no more than 10 minutes.

Hearing testimony and documentary evidence. Individuals who request more than 10 minutes to present their oral testimony at the hearing or who will submit documentary evidence at the hearing must submit (transmit, send, postmark, deliver) the full text of their testimony and all documentary evidence no later than August 8, 2008.

The Agency will review each submission and determine if the information it contains warrants the amount of time the individual requested for the presentation. If OSHA believes the requested time is excessive, the Agency will allocate an appropriate amount of time for the presentation. The Agency also may limit to 10 minutes the presentation of any participant who fails to comply substantially with these procedural requirements, and may request that the participant return for questioning at a later time. Before the hearing, OSHA will notify participants of the time the Agency is allowing for their presentation and the reasons for its decision. In addition, before the hearing OSHA will provide the pre-hearing guidelines and hearing schedule to each participant.

Certification of the hearing record and Agency final determination. Following the close of the hearing and the post-hearing comment periods, the ALJ will certify the record to the Assistant Secretary of Labor for Occupational Safety and Health. The record will consist of all of the written comments, oral testimony and documentary evidence received during the proceeding. The ALJ, however, will not make or recommend any decisions as to the content of the final standard. Following certification of the record, OSHA will review all the evidence received as part of the record and will issue the final rule based on the record as a whole.

Authority and Signature

Edwin G. Foulke, Jr., Assistant Secretary of Labor for Occupational Safety and Health, directed the preparation of this notice under the authority granted by section 6(b) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 655), Secretary of Labor's Order 5–2007 (72 FR 31160), and 29 CFR part 1911.

Signed at Washington, DC on this 23rd day of June, 2008.

Edwin G. Foulke, Jr.,

Assistant Secretary of Labor for Occupational Safety and Health.

[FR Doc. E8–14672 Filed 6–24–08; 8:45 am]

BILLING CODE 4510–26–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Parts 155 and 156

[USCG–2001–9046]

RIN 1625–AB12

Tank Level or Pressure Monitoring Devices on Single-Hull Tank Ships and Single-Hull Tank Barges Carrying Oil or Oil Residue as Cargo

AGENCY: Coast Guard, DHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to remove its regulations for tank level or pressure monitoring (TLPM) devices because compliant devices remain unavailable. In July 2005, we published a final rule suspending Coast Guard regulations for TLPM devices with a request for public comments on the status of TLPM technology development and other means of detecting leaks from oil cargo tanks into the water. We received two comments supporting our suspension of the regulations for TLPM devices. We received no new information on TLPM devices or alternatives for detecting leaks into the water from single-hull tank vessels carrying oil or oil residue as cargo. Based on the public response to the suspension, the absence of new information regarding TLPM devices or alternatives, and the results of a Congressionally-mandated study, the Coast Guard revisited the feasibility and practicality of retaining regulations for TLPM devices on single-hull tank vessels and concluded that it is appropriate to remove these regulations.

DATES: Comments and related material must reach the Docket Management Facility on or before August 29, 2008.

ADDRESSES: You may submit comments identified by Coast Guard docket number USCG–2001–9046 to the Docket Management Facility at the U.S. Department of Transportation. To avoid duplication, please use only one of the following methods:

(1) *Online: http://www.regulations.gov.*

(2) *Mail:* Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590.

(3) *Hand Delivery:* Room W12–140 on the Ground Floor of the West Building, 1200 New Jersey Avenue, SE., Washington, DC 20590. Deliveries may be made between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202–366–9329.

(4) *Fax:* 202–493–2251.

The Docket Management Facility maintains the public docket for this rulemaking. Comments and materials received from the public, as well as documents mentioned in this preamble as being available in the docket, will become part of this docket and will be available for inspection or copying at room W12–140 on the Ground Floor of the West Building, 1200 New Jersey Avenue, SE., Washington, DC 20590 between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. You can also find this docket on the Internet at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: If you have questions on this rule, contact Mr. Vincent Berg, Regulatory Development Manager, Office of Standards Evaluation and Development (CG–523), Coast Guard, telephone 202–372–1493, or e-mail address, *Vincent.F.Berg@uscg.mil.* For technical questions concerning tank level or pressure monitoring devices contact Ms. Dolores Mercier, Technical Program Manager, Systems Engineering Division (CG–521), Coast Guard, telephone 202–372–1381, or e-mail *Dolores.Mercier@uscg.mil.* If you have questions on viewing or submitting material to the docket, call Ms. Renee V. Wright, Program Manager, Docket Operations, telephone 202–493–0402.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Public Participation and Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related materials. All comments received will be posted, without change, to *http://www.regulations.gov* and will include

any personal information you have provided. We have an agreement with the Department of Transportation (DOT) to use the Docket Management Facility. Please see DOT's ''Privacy Act'' paragraph below.

A. Submitting Comments

If you submit a comment, please include the docket number for this rulemaking (USCG–2001–9046), indicate the specific section of this document to which each comment applies, and give the reason for each comment. We recommend that you include your name, mailing address, and an e-mail address or other contact information in the body of your document to ensure that you can be identified as the submitter. This also allows us to contact you in the event further information is needed or if there are questions. For example, if we cannot read your submission because of technical difficulties and you cannot be contacted, your submission may not be considered. You may submit your comments and material by electronic means, mail, fax, or delivery to the Docket Management Facility at the address under **ADDRESSES**; but please submit your comments and material by only one means. If you submit them by mail or delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit them by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and material received during the comment period. We may change this proposed rule in view of them.

B. Viewing Comments and Documents

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to *http://www.regulations.gov* at any time, click on ''Search for Dockets,'' and enter the docket number for this rulemaking (USCG–2001–9046) in the Docket ID box, and click enter. You may also visit the Docket Management Facility in Room W12–140 on the ground floor of the DOT West Building, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

C. Privacy Act

Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review the Department of Transportation's Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477), or you may visit *http://DocketsInfo.dot.gov*.

D. Public Meeting

We do not now plan to hold a public meeting. But you may submit a request for one to the Docket Management Facility at the address under **ADDRESSES** explaining why one would be beneficial. If we determine that one would aid this rulemaking, we will hold one at a time and place announced by a later notice in the **Federal Register**.

II. Background and Purpose

The Oil Pollution Act of 1990 (OPA 90) (Pub. L. 101–380), directed the Coast Guard to promulgate a number of regulations, including a variety of standards for the design and operation of equipment to reduce the number and severity of tank vessel oil spill incidents. Section 4110 of OPA 90 (46 U.S.C 3703 note) addressed initiatives to:

- Establish standards for devices that measure oil levels in cargo tanks or devices that monitor cargo tank pressure level (Functionally, these tank level or pressure monitoring (TLPM) devices measure changes in cargo volume, thereby detecting possible oil leaks into the water); and
- Issue regulations establishing requirements concerning the use of these devices on tank vessels carrying oil or oil residue as cargo.

In May 1991, the Coast Guard published in the **Federal Register** an advance notice of proposed rulemaking (ANPRM) seeking public comments related to TLPM devices on tank vessels carrying oil cargo. 56 FR 21116. In August of 1992, the Volpe National Transportation Systems Center completed a feasibility study (Volpe study) on TLPM devices for the Coast Guard Marine Technical and Hazardous Materials Division. Some important features of the Volpe study were:

- Identifying ship motions, sloshing, air pocketing, and the formation of foam in cargo tanks as the major obstacles to accurate tank-level detection;
- Finding that the attainable accuracy with electronic surface level sensing systems is within 2 percent of the actual cargo level; and
- Concluding that the high cost of installing a modern tank level sensing system will naturally lead to development of alternative approaches to leak detection and alarming.

In February 1993, we solicited public comment on the study via **Federal Register** Notice and we held a public meeting at Coast Guard Headquarters in December 1994 to discuss proposed standards and rules for TLPM devices. 58 FR 7292 and 59 FR 58810, respectively. As a result of the comments received, on August 21, 1995, we published a notice of proposed rulemaking (NPRM) to establish minimum performance standards for TLPM devices. 60 FR 43427.

In March 1997, we published a temporary rule on performance standards for TLPM devices. 62 FR 14828. In the temporary rule, we advised the public of our conclusion that current technology could not meet the sensitivity requirements proposed in the NPRM and requested the submission of new or modified TLPM devices that could meet the performance standards set out in the proposed rule. It was our intent to evaluate submitted devices and confirm that they met the performance standards required by the temporary rule. We would have assessed the costs and benefits offered by these devices and used that information to decide whether or not to develop regulations on the installation and use of TLPM devices; but when the temporary rule expired in April 1999, no devices had been submitted to us for evaluation. Therefore, based on the absence of devices that would satisfy our proposed requirements and the negligible contribution TLPM devices would make to prevent oil pollution compared to the rest of the OPA 90 initiatives, we decided not to proceed with regulations that required the use of TLPM devices on single-hull tank vessels.

In 1999, Bluewater Network and Ocean Advocates brought suit in the U.S. Court of Appeals for the District of Columbia Circuit. In their suit, the petitioners asked the Court for a Writ of Mandamus ordering us to promulgate TLPM regulations. In December 2000, the Court agreed with the petitioners on this item and directed the Coast Guard to promptly promulgate regulations setting TLPM standards and requiring use of TLPM devices on tank vessels.

In October 2001, we published in the **Federal Register** another NPRM entitled ''Tank Level or Pressure Monitoring Devices.'' 66 FR 49877. In September 2002, we published the Final Rule for ''Tank Level or Pressure Monitoring Devices.'' 67 FR 58515. This final rule detailed TLPM performance criteria and described the vessels required to install and use TLPM devices by 2007. To date, however, we have identified no devices meeting the performance criteria established in the final rule, and none have been submitted by industry for our evaluation.

In 2004, Congress amended the language of section 4110 of OPA 90 in section 702 of the Coast Guard and Marine Transportation Authorization Act of 2004 (Pub. L. 108–293, 118 Stat 1028 (2004)). The amended statute grants the Coast Guard discretion in establishing performance standards and carriage requirements for TLPM devices. Congress also directed the Coast Guard to study alternatives to TLPM devices for detecting leaks from oil cargo tanks into the water. We submitted the final report to Congress entitled ''Report to Congress on Costs and Benefits of Alternatives to Tank Level or Pressure Monitoring Devices'' (Final Report) in March 2006. A copy of this report was added into the docket for the original TLPM device rulemaking, USCG–2001–9046. We also notified the public of the availability of the final report to Congress through a notice published in the **Federal Register** on November 17, 2006. 71 FR 66960.

In July 2005, we published a final rule suspending the regulations for TLPM devices for three years until July 21, 2008. 70 FR 41614. In the final rule, we also solicited public comment on the status of TLPM technology development and alternatives to TLPM devices. In response, we received two comments supporting our suspension of the regulations for TLPM devices and no new information on TLPM devices or alternatives. In our Final Report, referenced above, we concluded that the ratio of cost versus effectiveness for TLPM devices is greater than it was when the original regulations were published in 2002. 67 FR 58515. As a result, we revisited the feasibility and practicality of retaining regulations for TLPM devices on single-hull tank vessels and concluded that it is appropriate to remove these regulations.

Since the suspension of regulations for TLPM devices would expire on July 21, 2008 and no TLPM devices have been submitted to the Coast Guard for approval, we published another final rule on May 5, 2008 extending the suspension for three additional years until May 5, 2011.

Now, given this background and the continued unavailability of devices meeting the performance criteria established in the final rule, we propose to remove the regulations in 33 CFR parts 155 and 156 for TLPM devices.

III. Regulatory Evaluation

A. Executive Order 12866

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, and does not require an assessment of potential costs and benefits under section 6(a)(3) of that Order. The Office of Management and Budget has not reviewed it under that Order.

A draft Regulatory Assessment follows:

The effectiveness of TLPM devices and alternatives are dependent upon the crew's ability to take corrective action when alerted. Some of the factors affecting the amount of oil saved, or not spilled, include:

- The alarm threshold;
- The size and number of tanks involved;
- The leakage rate;
- The crew's capacity for taking action, such as equipment and training; and
- The time required to respond to an alarm.

While developing the 2002 TLPM device regulations (67 FR 58515, September 17, 2002), we identified 27 pollution incidents during the period from 1992 to 2001 where a TLPM device would have reduced the amount of oil spilled. Our analysis included estimating the barrels of oil that would have been prevented from entering the water by a TLPM device, based on the amount spilled, the failure mechanism (such as tank overfill and hull failure), and factors representing the probability of effectiveness. After analyzing these cases, we found an average of 339 barrels of oil per year would have been prevented from entering the water from 1992 to 2001. We further projected that a TLPM device would result in a benefit of preventing 874 barrels of oil (discounted) from entering the water for the period 2006, when the benefits began accruing, to 2015, when all single-hull tank vessels would be phased out. This figure took into account the dwindling number of single-hull tank vessels between the years 2000 and 2015 and the diminishing risk of pollution.

For the 2002 rule, we estimated the cost to industry was $166.4 million (discounted at 7%) for the five-year phase-in period of the rule, between 2003 and 2007. We calculated a cost-effectiveness figure of about $190,000 per barrel of oil not spilled by dividing the cost of the rule by the projected 874 barrels of oil (discounted at 7%) prevented from entering the water. This means that it costs society approximately $190,000 to keep each barrel of oil out of the water through installation of a compliant TLPM device. The estimate of benefits was based on an assumption that compliant TLPM device technology would be available by 2005. However, no compliant TLPM device technology existed at the publishing of the final rule in 2002 and none has been marketed since then. Table 1 shows the original projections of oil not spilled for 2000 to 2015 as a result of the TLPM device regulations. The full regulatory analysis for the 2002 rulemaking can be found in docket for USCG–2001–9046.

TABLE 1.—BARRELS NOT SPILLED ATTRIBUTABLE TO TLPM DEVICE

Calendar year (CY)	Percent of total available capacity (U.S.)	Schedule of barrels not spilled	Implementation schedule (%)	Benefit for TLPM (barrels not spilled)	Present value PV benefit (barrels not spilled, 2002) *
All Tank Ships (U.S. and International)					
CY 2000	100.00	91.10	.....	.....	.....
CY 2001	96.17	87.61	.....	.....	.....
CY 2002	88.16	80.32	.....	.....	.....
CY 2003	83.59	76.15	.....	.....	.....
CY 2004	74.90	68.23	.....	.....	.....
CY 2005	66.60	60.67	.....	.....	.....
CY 2006	51.36	46.79	33	15.44	11.78
CY 2007	47.35	43.14	66	28.47	20.30
CY 2008	41.66	37.95	100	37.95	25.29
CY 2009	37.25	33.93	100	33.93	21.13
CY 2010	32.82	29.89	100	29.89	17.40
CY 2011	27.11	24.70	100	24.70	13.44
CY 2012	20.43	18.61	100	18.61	9.46

TABLE 1.—BARRELS NOT SPILLED ATTRIBUTABLE TO TLPM DEVICE—Continued

Calendar year (CY)	Percent of total available capacity (U.S.)	Schedule of barrels not spilled	Implementation schedule (%)	Benefit for TLPM (barrels not spilled)	Present value PV benefit (barrels not spilled, 2002) *
CY 2013	15.54	14.16	100	14.16	6.73
CY 2014	12.14	11.06	100	11.06	4.91
CY 2015	0.00	.....	.....	.....	.....
Total	.....	.....	.....	214.21	130.44
U.S. Tank Barges					
CY 2000	100.00	248.38	.....	.....	.....
CY 2001	98.00	243.41	.....	.....	.....
CY 2002	98.08	243.61	.....	.....	.....
CY 2003	97.63	242.49	.....	.....	.....
CY 2004	96.16	238.84	.....	.....	.....
CY 2005	78.02	193.79	.....	.....	.....
CY 2006	72.85	180.94	33	59.71	45.55
CY 2007	67.77	168.33	66	111.10	79.21
CY 2008	67.77	168.33	100	168.33	112.17
CY 2009	66.59	165.40	100	165.40	103.00
CY 2010	63.65	158.09	100	158.09	92.01
CY 2011	63.65	158.09	100	158.09	85.99
CY 2012	63.65	158.09	100	158.09	80.36
CY 2013	63.65	158.09	100	158.09	75.11
CY 2014	63.65	158.09	100	158.09	70.19
CY 2015	0.00	.....	.....	.....	.....
Total	.....	.....	.....	1,294.99	743.59
Grand Total	.....	.....	.....	1,509.20	874.03

* Present values discounted at 7%.

To determine if the benefits of installing a TLPM device have increased since publication of the TLPM device regulations, we examined pollution reports involving single-hull tank vessels for 2001 through 2007 The same one percent threshold in the original 2002 TLPM device rulemaking was used to determine how much oil would be prevented from entering the water. For example, if a cargo tank has a capacity of 400,000 gallons (9,524 barrels, 42 gallons = 1 barrel), a one percent threshold would equal 4,000 gallons. Thus, in this example, a TLPM device with the sensitivity currently required in regulations would only detect a spill of 4,000 gallons or more; whereas the data shows many pollution incidents result in spills less than 4,000 gallons.

We followed the same methodology used in the original rulemaking to update our oil pollution information. Of the 599 cases we examined, we found five new instances, resulting in a total of 715 barrels of oil spilled, where a TLPM device would have helped prevent oil from a cargo tank spilling into the water. Two of those cases alone accounted for 626 barrels of oil spilled.

If we consider the very best case and assume we can claim all 715 barrels of oil as a benefit attributable to a TLPM device, the new average annual amount of oil that would be prevented from entering the water by a TLPM device becomes 102 barrels per year versus our earlier calculation of 339 barrels per year. Furthermore, from Table 1, we project the amount of oil that project would be prevented from entering the water between 2008 and 2015 is about 718 barrels (discounted). If we divide the estimated cost of the rule in 2002 ($166.4 million) by the 718 barrels, the new cost-effectiveness figure is about $232,000 per barrel of oil prevented from entering the water.

When we researched the technology that could potentially be applied as an alternative to TLPM devices, we found that commercial, off-the-shelf oil/water interface sensors are available to monitor cargo tank levels. However, although the costs for these types of systems initially appear to be lower than for the liquid level devices that were reviewed as part of the original TLPM device regulations, these costs do not account for the modifications that would be needed for these systems to function as a TLPM device alternative. Developing and testing these systems and confirming they meet performance requirements would likely necessitate substantial research and development and add to the equipment costs.

In 2002, we estimated the total cost to the affected industries of implementing the measures outlined in the final rule would be approximately $166.4 million dollars, all incurred during the 5-year phase-in period. Since the Coast Guard published the final rule in September 2002, no TLPM devices have been submitted to the Coast Guard for approval and there are currently no TLPM devices on the market that meet the performance requirements of 33 CFR 150.490 for a TLPM device. The cost-effectiveness of regulations for TLPM devices continues to degrade. In our March 2006 study on alternatives to TLPM devices, we found that there are some other devices that monitor tank level or pressure; but these devices do not meet the performance requirements of 33 CFR 150.490, and therefore could not be approved as TLPM devices without a substantial investment by the manufacturers to modify and test these devices for the performance standards currently in the regulations. We have seen no indication the maritime industry is willing to make that investment for the shrinking population of vessels comprising the marketplace.

Through this NPRM, we would remove regulations for TLPM devices—a type of shipboard equipment that does not currently exist in the marketplace and which has no practical alternative. We estimate this proposed rule will have no impact on industry.

B. Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have considered whether this rule would have a significant economic impact on a substantial number of small entities. The term ''small entities'' comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

We concluded that removing the performance standards for TLPM devices and the requirements for their use will not have a significant economic impact on a substantial number of small entities since industry did not adopt or implement any TLPM provisions. Therefore, the Coast Guard certifies under 5 U.S.C 605(b) that this notice of proposed rulemaking will not have a significant economic impact on a substantial number of small entities.

C. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding the rule so that they can better evaluate its effects on them and participate in the rulemaking. Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247).

D. Collection of Information

This rule calls for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

E. Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on State or local governments and would either preempt State law or impose a substantial direct cost of compliance on them.

It is well settled that States may not regulate in categories reserved for regulation by the Coast Guard. It is also well settled, now, that all of the categories covered in 46 U.S.C. 3306, 3703, 7101, and 8101 (design, construction, alteration, repair, maintenance, operation, equipping, personnel qualification, and manning of vessels), as well as the reporting of casualties and any other category in which Congress intended the Coast Guard to be the sole source of a vessel's obligations, are within the field foreclosed from regulation by the States. (See the decision of the Supreme Court in the consolidated cases of *United States* v. *Locke and Intertanko* v. *Locke*, 529 U.S. 89, 120 S.Ct. 1135 (March 6, 2000)). This rule removes previously published rules on performance standards and use of TLPM devices fall into the category of vessel equipment and operation. Because the States may not regulate within these categories, preemption under Executive Order 13132 is not an issue.

F. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of $100,000,000 or more in any one year. Though this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in the preamble.

G. Taking of Private Property

This rule will not affect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

H. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

I. Protection of Children

We have analyzed this rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and does not create an environmental risk to health or risk to safety that may disproportionately affect children.

J. Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

K. Energy Effects

We have analyzed this rule under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. We have determined that it is not a ''significant energy action'' under that order. As it is not a ''significant energy action,'' this rule is not likely to have a significant adverse effect on the supply, distribution, or use of energy. It has not been designated by the Administrator of the Office of Information and Regulatory Affairs as a ''significant energy action.''

L. Technical Standards

The National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note) directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through the Office of Management and Budget, with an explanation of why using these standards would be inconsistent with the applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation: test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

M. Environment

We have analyzed this proposed rule under Department of Homeland Security Management Directive 5100.1 and Commandant Instruction M16475.lD, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321–4370f), and have made a preliminary determination under the Instruction that this action is not likely to have a significant effect on the human environment. A preliminary ''Environmental Analysis Check List'' supporting this determination is available in the docket where indicated under the ''Public Participation and Request for Comments'' section of this preamble. We seek any comments or information that may lead to discovery of a significant environmental impact from this proposed rule.

List of Subjects

33 CFR Part 155

Alaska, Hazardous substances, Oil pollution, Reporting and recordkeeping requirements.

33 CFR Part 156

Hazardous substances, Oil pollution, Reporting and recordkeeping requirements, Water pollution control.

For the reasons discussed in the preamble, the Coast Guard is proposing to amend 33 CFR parts 155 and 156 as follows:

PART 155—OIL OR HAZARDOUS MATERIAL POLLUTION PREVENTION REGULATIONS FOR VESSELS

1. The authority citation for 33 CFR part 155 and the note following citation continue to read as follows:

Authority: 33 U.S.C. 1231, 1321(j); E.O. 11735, 3 CFR, 1971–1975 Comp., p. 793. Sections 155.100 through 155.130, 150.350 through 155.400, 155.430, 155.440, 155.470, 155.1030(j) and (k), and 155.1065(g) are also issued under 33 U.S.C. 1903(b). Sections 155.480, 155.490, 155.750(e), and 155.775 are also issued under 46 U.S.C. 3703. Section 155.490 also issued under section 4110(b) of Pub. L. 101–380. **Note:** Additional requirements for vessels carrying oil or hazardous materials are contained in 46 CFR parts 30 through 40, 150, 151, and 153.

§ 155.200 [Amended]

2. In § 155.200, remove the definition for ''Sea state 5.''

§ 155.490 [Removed and Reserved]

3. Remove and reserve § 155.490.

PART 156—OIL AND HAZARDOUS MATERIAL TRANSFER OPERATIONS

4. The authority citation for 33 CFR part 156 continues to read as follows:

Authority: 33 U.S.C. 1231, 1321(j); 46 U.S.C. 3703a, 3715; E.O. 11735, 3 CFR 1971–1975 Comp., p. 793. Section 156.120(bb) and (ee) are also issued under 46 U.S.C. 3703.

§ 156.120 [Amended]

5. In § 156.120, remove paragraph (ee).

Dated: June 24, 2008.

Brian M. Salerno,

Rear Admiral, U.S. Coast Guard, Assistant Commandant for Marine Safety, Security, and Stewardship.

[FR Doc. E8–14800 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

44 CFR Part 67

[Docket No. FEMA–B–7790]

Proposed Flood Elevation Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Proposed rule.

SUMMARY: Comments are requested on the proposed Base (1 percent annual-chance) Flood Elevations (BFEs) and proposed BFE modifications for the communities listed in the table below. The purpose of this notice is to seek general information and comment regarding the proposed regulatory flood elevations for the reach described by the downstream and upstream locations in the table below. The BFEs and modified BFEs are a part of the floodplain management measures that the community is required either to adopt or show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). In addition, these elevations, once finalized, will be used by insurance agents, and others to calculate appropriate flood insurance premium rates for new buildings and the contents in those buildings.

DATES: Comments are to be submitted on or before September 29, 2008.

ADDRESSES: The corresponding preliminary Flood Insurance Rate Map (FIRM) for the proposed BFEs for each community are available for inspection at the community's map repository. The respective addresses are listed in the table below.

You may submit comments, identified by Docket No. FEMA–B–7790, to William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3151, or (e-mail) *bill.blanton@dhs.gov*.

FOR FURTHER INFORMATION CONTACT: William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3151 or (e-mail) *bill.blanton@dhs.gov*.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) proposes to make determinations of BFEs and modified BFEs for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed BFEs and modified BFEs, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own, or pursuant to policies established by other Federal, State, or regional entities. These proposed elevations are used to meet the floodplain management requirements of the NFIP and are also used to calculate the appropriate flood insurance premium rates for new buildings built after these elevations are made final, and for the contents in these buildings.

Comments on any aspect of the Flood Insurance Study and FIRM, other than the proposed BFEs, will be considered. A letter acknowledging receipt of any comments will not be sent.

Administrative Procedure Act Statement. This matter is not a rulemaking governed by the Administrative Procedure Act (APA), 5 U.S.C. 553. FEMA publishes flood elevation determinations for notice and comment; however, they are governed by the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and the National Flood Insurance Act of 1968, 42 U.S.C. 4001 *et seq.*, and do not fall under the APA.

National Environmental Policy Act. This proposed rule is categorically excluded from the requirements of 44 CFR part 10, Environmental Consideration. An environmental impact assessment has not been prepared.

Regulatory Flexibility Act. As flood elevation determinations are not within the scope of the Regulatory Flexibility Act, 5 U.S.C. 601–612, a regulatory flexibility analysis is not required.

Executive Order 12866, Regulatory Planning and Review. This proposed rule is not a significant regulatory action under the criteria of section 3(f) of Executive Order 12866, as amended.

Executive Order 13132, Federalism. This proposed rule involves no policies that have federalism implications under Executive Order 13132.

Executive Order 12988, Civil Justice Reform. This proposed rule meets the applicable standards of Executive Order 12988.

List of Subjects in 44 CFR Part 67

Administrative practice and procedure, Flood insurance, Reporting and recordkeeping requirements.

Accordingly, 44 CFR part 67 is proposed to be amended as follows:

PART 67—[AMENDED]

1. The authority citation for part 67 continues to read as follows:

Authority: 42 U.S.C. 4001 *et seq.*; Reorganization Plan No. 3 of 1978, 3 CFR, 1978 Comp., p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp., p. 376.

§ 67.4 [Amended]

2. The tables published under the authority of § 67.4 are proposed to be amended as follows:

State	City/town/county	Source of flooding	Location **	* Elevation in feet (NGVD) + Elevation in feet (NAVD) # Depth in feet above ground	
				Existing	Modified
Village of Maple Bluff, Wisconsin					
Wisconsin	Village of Maple Bluff.	Lake Mendota	Entire Shoreline	+852	+853

* National Geodetic Vertical Datum.
+ North American Vertical Datum.
# Depth in feet above ground.
** BFEs to be changed include the listed downstream and upstream BFEs, and include BFEs located on the stream reach between the referenced locations above. Please refer to the revised Flood Insurance Rate Map located at the community map repository (see below) for exact locations of all BFEs to be changed.

Send comments to William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

ADDRESSES

Village of Maple Bluff

Maps are available for inspection at 18 Oxford Place, Madison, WI 53704.

Flooding source(s)	Location of referenced elevation **	* Elevation in feet (NGVD) + Elevation in feet (NAVD) # Depth in feet above ground		Communities affected
		Effective	Modified	
Lea County, New Mexico, and Incorporated Areas				
Main Street Ditch	Approximately 270 feet downstream of S. Industrial Rd.	None	+3887	Unincorporated Areas of Lea County.
	Approximately 2050 feet upstream of S. Industrial Road.	None	+3893	
Railroad Ditch	Intersection of S. Main Street and E. Gilmore Road	None	+3880	Unincorporated Areas of Lea County.
	Intersection of R Avenue and 9th Street	None	+3911	
Stream 2	Intersection with Dal Paso Street	None	+3637	Unincorporated Areas of Lea County.
	Approximately 2650 feet upstream of Dal Paso St. (City of Hobbs limits).	None	+3643	
Stream 3	Intersection with N. Dal Paso St	None	+3655	Unincorporated Areas of Lea County.
	Approximately 2850 feet upstream of N. Rolling Meadows Dr.	None	+3674	

* National Geodetic Vertical Datum.
+ North American Vertical Datum.
# Depth in feet above ground.
** BFEs to be changed include the listed downstream and upstream BFEs, and include BFEs located on the stream reach between the referenced locations above. Please refer to the revised Flood Insurance Rate Map located at the community map repository (see below) for exact locations of all BFEs to be changed.

Send comments to William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

ADDRESSES

Unincorporated Areas of Lea County

Maps are available for inspection at 100 North Main, Lovington, NM 88260.

Nassau County, New York, and Incorporated Areas				
Atlantic Ocean	Approximately 1,000 feet west of the county line and 1,600 feet inland from the Atlantic Ocean.	+11	+6	Town of Oyster Bay.
	Approximately 2.86 miles west of the county line and 0.547 miles inland from the Atlantic Ocean.	+9	+8	

Flooding source(s)	Location of referenced elevation **	* Elevation in feet (NGVD) + Elevation in feet (NAVD) # Depth in feet above ground		Communities affected
		Effective	Modified	
Atlantic Ocean	Approximately 510 feet north of the intersection of Bay Boulevard and Coronado Street.	+9	+10	City of Long Beach, Village of Atlantic Beach.
	At the intersection of East Broadway and Riverside Boulevard.	+9	+16	
Cold Spring Harbor	Approximately 1,960 feet northeast of the intersection of Elfland Court and Tennis Court Road.	+12	+11	Village of Cove Neck.
	Approximately 0.4 mile northeast of the intersection of Elfland Court and Tennis Court Road.	+14	+11	
Glen Cove Creek	On Morris Avenue, 1,070 feet west northwest of the intersection of Shore Boulevard and Glen Cove Avenue.	+13	+11	City of Glen Cove.
	Approximately 850 feet west northwest of the intersection of Hammond Road and Shore Boulevard.	+13	+12	
Head of Bay	At the intersection of Bayswater Boulevard and Walnut Road.	+7	+11	Town of Hempstead.
Motts Creek	At a point approximately 1,234 feet downstream of Cochran Place.	+7	+11	Village of Valley Stream.
	At a point approximately 40 feet downstream of Rockaway Avenue.	+10	+11	
South Oyster Bay	At the intersection of Deerwater Avenue and Edgewater Avenue.	+6	+7	Village of Freeport, Town of Oyster Bay.
	Approximately 195 feet southwest of the intersection of Woodcleft Avenue and Richmond Street.	+6	+10	
Valley Stream	At a point approximately 95 feet downstream of Central Avenue.	+7	+11	Village of Valley Stream.
	At Sunrise Highway	+10	+11	

* National Geodetic Vertical Datum.
+ North American Vertical Datum.
# Depth in feet above ground.
** BFEs to be changed include the listed downstream and upstream BFEs, and include BFEs located on the stream reach between the referenced locations above. Please refer to the revised Flood Insurance Rate Map located at the community map repository (see below) for exact locations of all BFEs to be changed.

Send comments to William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

ADDRESSES

City of Glen Cove

Maps are available for inspection at Glen Cove City Hall, 9 Glen Street, Glen Cove, NY.

City of Long Beach

Maps are available for inspection at Long Beach City Hall, 1 West Chester Street, Long Beach, NY.

Town of Hempstead

Maps are available for inspection at Hempstead Town Hall, One Washington Street, Hempstead, NY.

Town of Oyster Bay

Maps are available for inspection at Oyster Bay Town Hall North, 74 Audry Avenue, Oyster Bay, NY.

Village of Atlantic Beach

Maps are available for inspection at Atlantic Beach Village Hall, 65 The Plaza, Atlantic Beach, NY.

Village of Cove Neck

Maps are available for inspection at Cove Neck Village Attorney's Office, 147 Forest Avenue, Locust Valley, NY.

Village of Freeport

Maps are available for inspection at Freeport Village Hall, 46 North Ocean Avenue, Freeport, NY.

Village of Valley Stream

Maps are available for inspection at Valley Stream Village Hall, 123 South Central Avenue, Valley Stream, NY.

Haywood County, North Carolina, and Incorporated Areas

Plott Creek	Approximately 200 feet upstream of the confluence with Richland Creek.	+2701	+2702	Unincorporated Areas of Haywood County, Town of Waynesville.
	Approximately 650 feet upstream of Serenity Mountain Road.	None	+3225	

* National Geodetic Vertical Datum.
+ North American Vertical Datum.
# Depth in feet above ground.

Flooding source(s)	Location of referenced elevation **	* Elevation in feet (NGVD) + Elevation in feet (NAVD) # Depth in feet above ground		Communities affected
		Effective	Modified	

** BFEs to be changed include the listed downstream and upstream BFEs, and include BFEs located on the stream reach between the referenced locations above. Please refer to the revised Flood Insurance Rate Map located at the community map repository (see below) for exact locations of all BFEs to be changed.

Send comments to William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472.

ADDRESSES

Town of Waynesville

Maps are available for inspection at Waynesville Town Hall, 16 South Main Street, Waynesville, NC.

Unincorporated Areas of Haywood County

Maps are available for inspection at Haywood County Planning Office, 1233 North Main Street, Waynesville, NC.

Knox County, Ohio, and Incorporated Areas

Center Run	At East Gambier Rd	None	+979	Unincorporated Areas of Knox County.
	Approximately 700 feet downstream of E Vine St	None	+981	
Kokosing River	0.55 miles upstream of Big Run Road	None	+944	Village of Gambier.
	Approximately 360 feet upstream of Laymon Rd	None	+953	

* National Geodetic Vertical Datum.
# Depth in feet above ground.
+ North American Vertical Datum.
** BFEs to be changed include the listed downstream and upstream BFEs, and include BFEs located on the stream reach between the referenced locations above. Please refer to the revised Flood Insurance Rate Map located at the community map repository (see below) for exact locations of all BFEs to be changed.

Send comments to William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

ADDRESSES

Unincorporated Areas of Knox County

Maps are available for inspection at 117 East High Street, Mount Vernon, OH 43050.

Village of Gambier

Maps are available for inspection at 115 Meadow Lane, Gambier, OH 43022.

Waukesha County, Wisconsin, and Incorporated Areas

Lake Nagawicka	Entire Shoreline	*891	*893	Village of Nashotah.
North Lake	Entire Shoreline	None	*900	Village of Chenequa.

* National Geodetic Vertical Datum.
+ North American Vertical Datum.
# Depth in feet above ground.
** BFEs to be changed include the listed downstream and upstream BFEs, and include BFEs located on the stream reach between the referenced locations above. Please refer to the revised Flood Insurance Rate Map located at the community map repository (see below) for exact locations of all BFEs to be changed.

Send comments to William R. Blanton, Jr., Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

ADDRESSES

Village of Chenequa

Maps are available for inspection at 31275 W. Hwy. K, Chenequa, WI 53029.

Village of Nashotah

Maps are available for inspection at N44 W32950 Watertown Plank Rd., Nashotah, WI 53058–0123.

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Dated: June 20, 2008.

David I. Maurstad,

Federal Insurance Administrator of the National Flood Insurance Program, Department of Homeland Security, Federal Emergency Management Agency.

[FR Doc. E8–14714 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–12–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MB Docket Nos. 07–294; 06–121; 02–277; 04–228, MM Docket Nos. 01–235; 01–317; 00–244; DA 08–1359]

In the Matter of Promoting Diversification of Ownership in the Broadcasting Services; Order Granting Request for Extension of Time

AGENCY: Federal Communications Commission.

ACTION: Proposed rule; extension of comment period.

SUMMARY: In this document, the Media Bureau extends the comment and reply comment period in this proceeding. The Commission seeks comment on various proposals to increase participation in the broadcasting industry by new entrants and small businesses, especially minority- and women-owned businesses, with the goal of promoting innovation, diversity of ownership and viewpoints, spectrum efficiency, and competition in media markets.

DATES: Comments are due July 30, 2008 and reply comments are due August 29, 2008.

ADDRESSES: You may submit comments, identified by MB Docket No. 07–294; FCC 07–217, by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov*. Follow the instructions for submitting comments.
- *Federal Communications Commission's Web Site: http://www.fcc.gov/cgb/ecfs/*. Follow the instructions for submitting comments.
- *Mail:* 445 12th Street, SW., Washington, DC 20554, with a copy to the Commission's duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street, SW., Room CY–B402, Washington, DC 20554.
- *People with Disabilities:* Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: *FCC504@fcc.gov* or phone: 202–418–0530 or TTY: 202–418–0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of *In the Matter of Promoting Diversification of Ownership in the Broadcasting Services*, 73 FR 28,400 (May 16, 2008).

FOR FURTHER INFORMATION CONTACT: Julie Salovaara, 202–418–0783. Press inquiries should be directed to Clyde Ensslin, (202) 418–0506.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Order in DA 08–1359, adopted and released June 16, 2008.

Synopsis of the Order

1. On March 5, 2008, the Commission released a *Report and Order and Third Further Notice of Proposed Rule Making (''Order and Third Further Notice'')* establishing new rules and seeking comment on other rule proposals to increase participation in the broadcasting industry by new entrants and small businesses, including minority- and women-owned businesses. The current deadlines to file comments and reply comments in this proceeding are June 30, 2008, and July 14, 2008, respectively.

2. In the *Order and Third Further Notice*, the Commission seeks comment on various proposals to increase participation in the broadcasting industry by new entrants and small businesses, especially minority- and women-owned businesses, with the goal of promoting innovation, diversity of ownership and viewpoints, spectrum efficiency, and competition in media markets.

3. On June 5, 2008, the Diversity and Competition Supporters (''DCS'') filed a motion requesting that the deadline to file comments be extended to July 30, 2008 and that the deadline to file reply comments be extended to August 29, 2008. DCS is a coalition of 29 organizations. DCS identifies 18 entities, representing a broad range of interests, that support its extension request. These 18 entities are: Belo Corp.; Benton Foundation; Common Cause; Community Broadcasters Association; Council Tree Communications, Inc.; Destiny Communications LLC; Dover Capital Partners, LLC; First Broadcasting Investment Partners, LLC; Gannett Co., Inc.; Granite Broadcasting Corporation; Independent Spanish Broadcasters Association; Media Alliance; Mullaney Engineering; National Association of Broadcasters; National Organization for Women; News Corporation; Spanish Broadcasting System, Inc.; and ZGS Communications.

4. Citing the broad range of the proposals at issue in the proceeding, DCS argues that an extension is warranted to allow DCS to work with various stakeholders to explain the proposals, hear their concerns, and seek their support, and that this extension of time would facilitate the development of a full record.

5. As set forth in Section 1.46(a) of the Commission's Rules, 47 CFR 1.46, the Commission's policy is that extensions of time for filing comments in rulemaking proceedings shall not be routinely granted. In this case, however, given the breadth and importance of the issues in this proceeding, the Commission grants an extension of time to facilitate the development of a full record. The new deadline for comments is July 30, 2008, and the new deadline for reply comments is August 29, 2008. This action is taken pursuant to authority found in Sections 4(i), 4(j), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and 303(r) and Sections 0.61, 0.283, and 1.46 of the Commission's rules, 47 CFR 0.61, 0.283, and 1.46.

List of Subjects in 47 CFR Part 73

Radio, Television.

Federal Communications Commission.

Monica Shah Desai,

Chief, Media Bureau.

[FR Doc. E8–14785 Filed 6–27–08; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 08–1408; MB Docket No. 08–58; RM–11425]

Radio Broadcasting Services; Laramie, WY

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document requests comments on a petition for rulemaking filed by Superior Broadcasting of Denver, LLC, proposing to allot Channel 283C2 at Laramie, Wyoming, as a thirteenth local service. Channel 283C2 can be allotted at Laramie, Wyoming with a site restriction of 18 kilometers (11.2 miles) northeast at coordinates 41–27–15 NL and 105–29–20 WL.

DATES: Comments must be filed on or before August 4, 2008, and reply comments on or before August 19, 2008.

ADDRESSES: Federal Communications Commission, 445 Twelfth Street, SW.,

Washington, DC 20554. In addition to filing comments with the FCC, interested parties should serve the petitioner's counsel as follows: Richard R. Zaragoza, Esq., Christine Reilly, Esq., Pillsbury Winthrop Shaw Pittman, LLP, 2300 N Street, NW., Washington, DC 20037.

FOR FURTHER INFORMATION CONTACT: Victoria McCauley, Media Bureau, (202) 418–2180.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Notice of Proposed Rule Making, MB Docket No. 08–58, adopted August 4, 2008, and released August 19, 2008. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC's Reference Information Center at Portals II, CY–A257, 445 Twelfth Street, SW., Washington, DC 20554. This document may also be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street, SW., Room CY–B402, Washington, DC 20554, telephone 1–800–378–3160 or *http://www.BCPIWEB.com*.

This document does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, therefore, it does not contain any proposed information collection burden ''for small business concerns with fewer than 25 employees,'' pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, *see* 44 U.S.C. 3506(c)(4). Provisions of the Regulatory Flexibility Act of l980 do not apply to this proceeding.

Members of the public should note that from the time a Notice of Proposed Rule Making is issued until the matter is no longer subject to Commission consideration or court review, all *ex parte* contacts are prohibited in Commission proceedings, such as this one, which involve channel allotments. See 47 CFR 1.1204(b) for rules governing permissible *ex parte* contacts.

For information regarding proper filing procedures for comments, see 47 CFR 1.415 and 1.420.

List of Subjects in 47 CFR Part 73

Radio, Radio broadcasting.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 73 as follows:

PART 73—RADIO BROADCAST SERVICES

1. The authority citation for part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334, 336.

§ 73.202 [Amended]

2. Section 73.202(b), the Table of FM Allotments under Wyoming is amended by adding Laramie, Channel 283C2.

Federal Communications Commission.

John A. Karousos,

Assistant Chief, Audio Division, Media Bureau.

[FR Doc. E8–14645 Filed 6–27–08; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 08–1405; MB Docket No. 08–67; RM–11426)

Radio Broadcasting Services; La Grande and Prairie City, OR

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document requests comment on a Petition for Rule Making filed on behalf of KSRV, Inc., licensee of Station KWRL, Channel 225C1, La Grande, Oregon. This document proposes the substitution of Channel 272C for vacant Channel 260C at Prairie City, Oregon. This would allow Station KWRK, La Grande, Oregon, to continue operation on Channel 260C1. The coordinates for the Channel 272C allotment at Prairie City, Oregon, would be 45–07–21 and 117–46–44.

DATES: Comments must be filed on or before August 4, 2008, and reply comments on or before August 19, 2008.

ADDRESSES: Secretary, Federal Communications Commission, Washington, DC 20554. In addition to filing comments with the FCC, interested parties should serve the petitioner's counsel, as follows: J. Dominic Monahan, c/o Luvaas, Cobb, Richards & Fraser, PC, 777 High Street, Suite 300, Eugene, Oregon 97401.

FOR FURTHER INFORMATION CONTACT: Robert Hayne, Media Bureau (202) 418–2177.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's *Notice of Proposed Rule Making* in MB Docket No. 08–67; adopted June 11, 2008, and released June 13, 2008. The full text of this Commission action is available for inspection and copying during normal business hours in the FCC Reference Information Center at Portals II, CY–A257, 445 12th Street, SW., Washington, DC. The complete text of this action may also be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street, SW., Room CY–B402, Washington, DC 20554, telephone 1–800–378–3160 or *http://www.BCPIWEB.com*. This document does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, therefore, it does not contain any proposed information collection burden ''for small business concerns with fewer than 25 employees,'' pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, *see* 44 U.S.C. 3506(c)(4). Provisions of the Regulatory Flexibility Act of 1980 do not apply to this proceeding. Members of the public should note that from the time a Notice of Proposed Rule Making is issued until the matter is no longer subject to Commission consideration or court review, all *ex parte* contacts are prohibited in Commission proceedings, such as this one, which involve channel allotments. See 47 CFR 1.1204(b) for rules governing permissible *ex parte* contacts.

For information regarding proper filing procedures for comments, *see* 47 CFR 1.415 and 1.420.

List of Subjects in 47 CFR Part 73

Radio, Radio broadcasting.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 73 as follows:

PART 73—RADIO BROADCAST SERVICES

1. The authority citation for part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334, 336.

§ 73.202 [Amended]

2. Section 73.202(b), the Table of FM Allotments under Oregon, is amended by removing Channel 260C and by adding Channel 272C at Prairie City.

Federal Communications Commission.

John A. Karousos,

Assistant Chief, Audio Division, Media Bureau.

[FR Doc. E8–14652 Filed 6–27–08; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 08–1404; MB Docket No. 06–11; RM–11304]

Radio Broadcasting Services; Crowell, TX

AGENCY: Federal Communications Commission.

ACTION: Proposed rule; dismissal.

SUMMARY: The Audio Division, at the request of LKCM Radio Licenses, LP, licensee of FM Station KFWR, Mineral Wells, Texas, and Fort Worth Media Group, GP, LLC, licensee of FM Station KYBE, Frederick, Oklahoma, together proponents of a petition for reconsideration and of a counterproposal, previously dismissed in the Report and Order in this proceeding, dismisses the petition for reconsideration and the counterproposal and terminates the proceeding.

FOR FURTHER INFORMATION CONTACT: Deborah Dupont, Media Bureau, (202) 418–2180.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's *Memorandum Opinion and Order,* MB Docket No. 06–11, adopted June 11, 2008, and released June 13, 2008. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC's Reference Information Center, Portals II, 445 12th Street, SW., Room CY–A257, Washington, DC 20554. The complete text of this decision also may be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street, SW., Room CY–B402, Washington, DC, 20554, (800) 378–3160, or via the company's Web site, *http://www.bcpiweb.com.* The *Memorandum Opinion and Order* is not subject to the Congressional Review Act. (The Commission, is, therefore, not required to submit a copy of this Report and Order to GAO, pursuant to the Congressional Review Act, see U.S.C. 801(a)(1)(A) because the proposed rule was dismissed.)

List of Subjects in 47 CFR Part 73

Radio, Radio broadcasting.

Federal Communications Commission.

John A. Karousos,

Assistant Chief, Audio Division, Media Bureau.

[FR Doc. E8–14646 Filed 6–27–08; 8:45 am]

BILLING CODE 6712–01–P

Notices

Federal Register
Vol. 73, No. 126
Monday, June 30, 2008

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Agricultural Research Service

Notice of Intent To Renew a Currently Approved Information Collection

AGENCY: Agricultural Research Service, USDA.

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (Pub. L. 104–13) and Office of Management and Budget (OMB) regulations at 5 CFR 1320 (60 FR 44978, August 29, 1995), this notice announces the Agricultural Research Service's (ARS) intention to request an extension for a currently approved information collection in support of USDA's Biological Control Documentation Program dealing with documenting the importation and release of foreign biological control agents.

DATES: Comments on this notice must be received by September 3, 2008, to be assured of consideration.

ADDRESSES: Address all comments concerning this notice to Glenn Hanes, ARS Biological Control Documentation Center, National Program Staff, National Agricultural Library, ARS, USDA, 10301 Baltimore Avenue, Beltsville, MD 20705–2351.

FOR FURTHER INFORMATION CONTACT: Glenn Hanes, ARS Biological Control Documentation Center, (301) 504–8137.

SUPPLEMENTARY INFORMATION:

Title: USDA Biological Shipment Record—Beneficial Organisms: Foreign/Overseas Source (AD–941); Quarantine Facility (AD–942); and Non-Quarantine (AD–943).

OMB Number: 0518–0013.

Expiration Date: 3 years from date of approval.

Type of Request: To renew the currently approved information collection.

Abstract: The purpose of the Biological Control Documentation Program is to record the importation (AD–941), release from quarantine (AD–942), and shipment and/or field release/recolonization (AD–942 and AD–943) of foreign/introduced beneficial organisms (pollinators and biological control agents for invasive species). The information collected is entered into the USDA ''Releases of Beneficial Organisms in the United States and Territories'' (ROBO) database, established in 1984. It is a cooperative program among USDA and other Federal agencies, state governmental agencies, and U.S. universities. The use of the forms and the information provided is voluntary. The program is for the benefit of biological control research and action agency personnel, taxonomists, federal and state regulatory agencies, agricultural administrators, and the general public. The AD–941 has been computerized and efforts are underway to replace the other paper forms with computerized information collection, and when completed, only those units for which computerized input is not possible would use the forms.

Estimate of Burden: Public reporting burden for this collection of information is estimated to average 1/12 hour per response.

Non-Federal Respondents: Universities, and state and local governments.

Estimated Number of Non-Federal Respondents: 40.

Estimated Number of Responses per Respondent: An average of 3 (range 1–30).

Estimated Total Annual Burden on Respondents: 10 hours.

Copies of the three forms used in this information collection, and information on the computerized form can be obtained from Glenn Hanes, ARS Biological Control Documentation Center, at (301) 504–8137.

Comments: Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the Validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including through use of appropriate automated, electronic, mechanical or other technological collection techniques or other forms of information technology. Comments may be sent to: Glenn Hanes, ARS Biological Control Documentation Center, National Program Staff, ARS, USDA, National Agricultural Library, 10301 Baltimore Avenue, Beltsville, MD 20705–2351.

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Dated: June 16, 2008.

Antoinette A. Betschart,

Associate Administrator, ARS.

[FR Doc. E8–14692 Filed 6–27–08; 8:45 am]

BILLING CODE 3410–03–P

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

[Docket No. APHIS–2008–0047]

Notice of Request for Extension of Approval of an Information Collection; Select Agent Registration

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Extension of approval of an information collection; comment request.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces the Animal and Plant Health Inspection Service's intention to request an extension of approval of an information collection associated with regulations for the possession, use, and transfer of biological agents and toxins that have the potential to pose a severe threat to human and animal health, to animal health, to plant health, or to animal products and plant products.

DATES: We will consider all comments that we receive on or before August 29, 2008.

ADDRESSES: You may submit comments by either of the following methods:

- Federal eRulemaking Portal: Go to *http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=APHIS–*

2008–0047 to submit or view comments and to view supporting and related materials available electronically.

• *Postal Mail/Commercial Delivery:* Please send two copies of your comment to Docket No. APHIS–2008–0047, Regulatory Analysis and Development, PPD, APHIS, Station3A–03.8, 4700 River Road Unit 118, Riverdale, MD 20737–1238. Please state that your comment refers to Docket No. APHIS–2008–0047.

Reading Room: You may read any comments that we receive on this docket in our reading room. The reading room is located in room 1141 of the USDA South Building, 14th Street and Independence Avenue, SW., Washington, DC. Normal reading room hours are 8 a.m. to 4:30 p.m., Monday through Friday, except holidays. To be sure someone is there to help you, please call (202) 690–2817 before coming.

Other Information: Additional information about APHIS and its programs is available on the Internet at *http://www.aphis.usda.gov.*

FOR FURTHER INFORMATION CONTACT: For information regarding the select agent registration process associated with the possession, use, or transfer of biological agents and toxins in 7 CFR 331, contact Dr. Charles L. Divan, Senior Agricultural Microbiologist, Agriculture Select Agent Program, Permits, Registrations, Imports and Manuals, PPQ, APHIS, 4700 River Road Unit 133, Riverdale, MD 20737; (301) 734–5663.

For information regarding the select agent registration process associated with the possession, use, or transfer of biological agents and toxins in 9 CFR 121, contact Mr. Robert Rice, Security Manager, Agriculture Select Agent Program, Technical Trade Services Team, NCIE, VS, APHIS, 4700 River Road Unit 39, Riverdale, MD 20737; (301) 734–5557.

For copies of more detailed information on the information collection, contact Mrs. Celeste Sickles, APHIS' Information Collection Coordinator, at (301) 851–2908.

SUPPLEMENTARY INFORMATION:

Title: Select Agent Registration.

OMB Number: 0579–0213.

Type of Request: Extension of approval of an information collection.

Abstract: The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 provides for the regulation of certain biological agents and toxins by the Department of Agriculture (USDA) and the Department of Health and Human Services (HHS). Under section 212 of the Act, USDA regulates biological agents and toxins that have the potential to pose a severe threat to both human and animal health, to animal health, to plant health, or to animal and plant products. The Animal and Plant Health Inspection Service (APHIS) has the primary responsibility for implementing the provisions of the Act within USDA. Select agents and toxins that have been determined to pose a severe threat to both human and animal health or animal products are subject to regulation by both APHIS and the Centers for Disease Control and Prevention (CDC), HHS, which has the primary responsibility for implementing the provisions of the Act within HHS.

APHIS regulations are contained in 7 CFR 331 (plant) and 9 CFR 121 (animal and overlap). They require an individual or entity (unless specifically exempted under the regulations) to register with APHIS or, for overlap agents or toxins, APHIS or CDC, in order to possess, use, or transfer biological agents or toxins.

To register, an individual or entity must submit a registration application package; develop and implement a Biocontainment and Security Plan or Biosafety and Security Plan, as applicable; and request access approval for individuals who have been identified as having a legitimate need to handle or use listed agents or toxins and who have the appropriate training and skills to handle or use such agents or toxins.

We are asking the Office of Management and Budget (OMB) to approve our use of these information collection activities for an additional 3 years.

The purpose of this notice is to solicit comments from the public (as well as affected agencies) concerning our information collection. These comments will help us:

(1) Evaluate whether the collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of our estimate of the burden of the information collection, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the information collection on those who are to respond, through use, as appropriate, of automated, electronic, mechanical, and other collection technologies, e.g., permitting electronic submission of responses.

Estimate of burden: The public reporting burden for this collection of information is estimated to average 1.7033 hours per response.

Respondents: Researchers, universities, research and development organizations, diagnostic laboratories, and other interested parties who possess, use, or transfer select agents or toxins.

Estimated annual number of respondents: 655.

Estimated annual number of responses per respondent: 1.1526717.

Estimated annual number of responses: 755.

Estimated total annual burden on respondents: 1,286 hours. (Due to averaging, the total annual burden hours may not equal the product of the annual number of responses multiplied by the reporting burden per response.)

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Done in Washington, DC, this 24th day of June 2008.

Kevin Shea,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. E8–14792 Filed 6–27–08; 8:45 am]

BILLING CODE 3410–34–P

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

[Docket No. APHIS–2008–0046]

Notice of Request for Extension of Approval of an Information Collection; Treatments for Fruits and Vegetables

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Extension of approval of an information collection; comment request.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces the Animal and Plant Health Inspection Service's intention to request an extension of approval of an information collection associated with regulations for the interstate movement of fruits and vegetables from Hawaii, Puerto Rico, and the U.S. Virgin Islands to help ensure that injurious plant pests are not spread to noninfested areas of the United States.

DATES: We will consider all comments that we receive on or before August 29, 2008.

ADDRESSES: You may submit comments by either of the following methods:

• Federal eRulemaking Portal: Go to *http://www.regulations.gov/fdmspublic/*

component/main?main=DocketDetail&d=APHIS–2008–0046 to submit or view comments and to view supporting and related materials available electronically.

• *Postal Mail/Commercial Delivery:* Please send two copies of your comment to Docket No. APHIS–2008–0046, Regulatory Analysis and Development, PPD, APHIS, Station 3A–03.8, 4700 River Road Unit 118, Riverdale, MD 20737–1238. Please state that your comment refers to Docket No. APHIS–2008–0046.

Reading Room: You may read any comments that we receive on this docket in our reading room. The reading room is located in room 1141 of the USDA South Building, 14th Street and Independence Avenue, SW., Washington, DC. Normal reading room hours are 8 a.m. to 4:30 p.m., Monday through Friday, except holidays. To be sure someone is there to help you, please call (202) 690–2817 before coming.

Other Information: Additional information about APHIS and its programs is available on the Internet at *http://www.aphis.usda.gov.*

FOR FURTHER INFORMATION CONTACT: For information on regulations for the interstate movement of fruits and vegetables from Hawaii, Puerto Rico, and the U.S. Virgin Islands, contact Dr. Inder P. S. Gadh, Senior Risk Manager, Commodity Import Analysis and Operations, PPQ, APHIS, 4700 River Road Unit 133, Riverdale, MD 20737; (301) 734–8758. For copies of more detailed information on the information collection, contact Mrs. Celeste Sickles, APHIS' Information Collection Coordinator, at (301) 851–2908.

SUPPLEMENTARY INFORMATION:

Title: Treatments for Fruits and Vegetables.

OMB Number: 0579–0281.

Type of Request: Extension of approval of an information collection.

Abstract: As authorized by the Plant Protection Act (7 U.S.C. 7701 *et seq.*) (PPA), the Secretary of Agriculture may prohibit or restrict the importation, entry, exportation, or movement in interstate commerce of any plant, plant product, biological control organism, noxious weed, means of conveyance, or other article if the Secretary determines that the prohibition or restriction is necessary to prevent a plant pest or noxious weed from being introduced into or disseminated within the United States. This authority has been delegated to the Animal and Plant Health Inspection Service (APHIS), which administers regulations to implement the PPA.

Regulations governing the interstate movement of plants and plant products from Hawaii and U.S. territories, including Guam, Puerto Rico, and the U.S. Virgin Islands, are contained in 7 CFR 318, ''Hawaiian and Territorial Quarantine Notices.'' These regulations are necessary to prevent the interstate spread of plant pests such as the Mediterranean fruit fly, the melon fly, the Oriental fruit fly, green coffee scale, the bean pod borer, and other plant pests to noninfested areas of the United States.

Certain fruits and vegetables moved interstate from Hawaii, Puerto Rico, and the U.S. Virgin Islands must undergo irradiation treatment. Requirements for irradiation treatment of fruits and vegetables are contained in 7 CFR 305, ''Phytosanitary Treatments.'' These requirements involve information collection activities, including the use of permits, certificates, requests for facility approval, and package marking.

We are asking the Office of Management and Budget (OMB) to approve our use of these information collection activities for an additional 3 years.

The purpose of this notice is to solicit comments from the public (as well as affected agencies) concerning our information collection. These comments will help us:

(1) Evaluate whether the collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of our estimate of the burden of the information collection, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the information collection on those who are to respond, through use, as appropriate, of automated, electronic, mechanical, and other collection technologies, e.g., permitting electronic submission of responses.

Estimate of burden: The public reporting burden for this collection of information is estimated to average 0.2444 hours per response.

Respondents: Persons moving fruits and vegetables interstate from Hawaii, Puerto Rico, and the U.S. Virgin Islands, irradiation facility personnel, shippers, and State plant regulatory officials.

Estimated annual number of respondents: 23.

Estimated annual number of responses per respondent: 9.7826.

Estimated annual number of responses: 225.

Estimated total annual burden on respondents: 55 hours. (Due to averaging, the total annual burden hours may not equal the product of the annual number of responses multiplied by the reporting burden per response.)

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Done in Washington, DC, this 24th day of June 2008.

Kevin Shea,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. E8–14793 Filed 6–27–08; 8:45 am]

BILLING CODE 3410–34–P

DEPARTMENT OF AGRICULTURE

Commodity Credit Corporation

2008 Direct and Counter-Cyclical Program

AGENCY: Commodity Credit Corporation, USDA.

ACTION: Notice.

SUMMARY: As announced by this notice, the Commodity Credit Corporation (CCC) is implementing the provisions of the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill) regarding direct and counter-cyclical payments for the 2008 crop year. The 2008 Farm Bill authorizes direct and counter-cyclical payments, with some changes, that were previously authorized for preceding crops under the Farm Security and Rural Investment Act of 2002 (the 2002 Farm Bill). As a result of this notice, CCC will be able to commence administration of the Direct and Counter-cyclical Program (DCP) for the 2008 crop. Through a subsequent rule, CCC will implement DCP for the 2009 through 2012 crops.

EFFECTIVE DATE: June 30, 2008.

FOR FURTHER INFORMATION CONTACT: Salomon Ramirez, Director, Production, Emergencies and Compliance Division, Farm Service Agency, USDA, STOP 0517, 1400 Independence Avenue, SW., Washington, DC 20250–0517; *telephone:* (202) 720–7641; *e-mail: salomon.ramirez@wdc.usda.gov*. Persons with disabilities who require alternative means for communication (Braille, large print, audiotape, etc.) should contact the USDA Target Center at (202) 720–2600 (voice and TDD).

SUPPLEMENTARY INFORMATION: As explained in this notice, CCC will operate the 2008 DCP program as required by the 2008 Farm Bill using the

standards of 7 CFR 1412 to the extent they are not in conflict with the 2008 Farm Bill and this notice. With a few changes, the Food, Conservation, and Energy Act of 2008 (Pub. L. 110–246) (the 2008 Farm Bill) authorizes a continuation for the 2008 crop year of the Direct and Counter-cyclical Program authorized by the Farm Security and Rural Investment Act of 2002 (the 2002 Farm Bill) and set forth in regulations at 7 CFR 1412.

Section 1001 of the 2008 Farm Bill provides that the base acres and yields established by the 2002 Farm Bill that were in effect on September 30, 2007 will, with a few exceptions, constitute the base acres for the 2008 through 2012 crop years. The 2008 Farm Bill contains requirements for adjustments of base acres for various reasons including, but not limited to, land no longer being devoted to agricultural uses.

With respect to payment yields, the 2008 Farm Bill provides that the payment yields for direct and counter cyclical payments under the 2002 Farm Bill, as in effect on September 30, 2007, will be used. Section 1102 further requires the Secretary to establish a payment yield for direct and counter-cyclical payments for each farm for any designated oilseed or eligible pulse crop for which a payment yield was not established under the 2002 Farm Bill. For new yields, this will involve a determination of an average yield per planted acre for the designated oilseed or pulse crop on a farm for the 1998 through 2001 crop years, excluding any crop year in which the acreage planted was zero. An adjustment to the payment yield will equal the product of the average yield and the ratio resulting from dividing the national average yield for the 1981 through 1985 crops by the national average for the 1998 through 2001 crops. If the yield for a farm for any of the 1998 through 2001 crop years was less than 75 percent of the county yield, then the Secretary will assign a yield equal to 75 percent of the county yield to determine the average.

Like with the 2002 Farm Bill, the 2008 Farm Bill sets forth certain requirements to which the participant must agree to be eligible for direct and counter-cyclical payments. Included in these requirements is the requirement to effectively control noxious weeds and otherwise maintain the land in accordance with sound agricultural practices. These provisions will continue to be applicable in 2008.

One significant change in the 2008 Farm Bill that was not present in the 2002 Farm Bill, which will be implemented in 2008, relates to farms with small bases. A producer on a farm may not receive DCP payments if the sum of the base acres of the farm is 10 acres or less. However, such prohibition does not apply to a farm that is wholly owned by socially disadvantaged or limited resource farmers or ranchers, as provided by Section 1101 of the 2008 Farm Bill. If the farm is owned by a legal entity, such as a corporation, each shareholder, partner, or member of the entity must be a socially disadvantaged or limited resource farmer or rancher. Effective with the date of publication of this notice, to be assured that producers on farms with base acres of 10 acres or less are prohibited from receiving payments as provided in the 2008 Farm Bill, Farm Service Agency County Committees (COC) will not approve requests for farm combination reconstitutions of farms having base acres of 10 acres or less if the request was received after the date of enactment of the 2008 Farm Bill (May 22, 2008). However, as an exception to the above rule, a farm with a total of 10 base acres or less may combine with another farm if one of the farms undergoes a change in land ownership. To qualify for this exception the owners of each of the farms participating in the new combination must be identical and have identical shares in both farms.

Subject to subsections (b) and (c) of section 1108 of the 2008 Farm Bill, for the purposes of determining the amount of the counter-cyclical payments to be paid to the producers on a farm for long grain rice and medium grain rice under section 1104 of the 2008 Farm Bill, base acres on the farm will be apportioned based on acreage planted to long grain rice and medium grain rice during the 2003–2006 crop years. Section 1108 requires that base acres, payment acres, and payment yields established with respect to rice under sections 1101 and 1102 be maintained. Although these provisions of the 2008 Farm Bill are effective for the 2008 crop year, because of administrative concerns related to the late date of enactment of the 2008 Farm Bill, these calculations cannot be accomplished at this time, as counter-cyclical payments are not anticipated for rice in 2008. This should have no impact. If the situation changes, measures will be taken to implement these provisions.

In response to concerns regarding the sharing of contract payments and various forms of cash and share leases (such as traditional cash leases, traditional share leases, and combination or flex leases that have features of both traditional cash and traditional share leases), an Advance Notice of Proposed Rulemaking was issued on September 28, 2007 (72 FR 55105–55108). Accordingly, regulations will be issued to clarify that for the purpose of determining payments made with respect to the 2009 through 2012 crop years, combination or flex leases will be viewed as cash leases.

The final enrollment date for 2008 DCP is September 30, 2008. A DCP contract not having all requisite signatures of producers having more than a zero share of DCP contract acreage on or before the enrollment deadline will not be considered submitted to CCC for any purpose and will not be acted on or approved. With respect to those contracts submitted by a producer on or before September 30, 2008, that were not signed by other producers on the farm, DCP payments will be issued only with respect to the producers who enrolled prior to September 30, 2008.

Accordingly, this notice announces that CCC will implement DCP provisions for the 2008 crop year based on the current regulation in 7 CFR 1412, Direct and Counter-cyclical Program except as otherwise noted in this Notice and as otherwise required by the 2008 Farm Bill.

Environmental Review

FSA has determined that this change would not constitute a major Federal action that would significantly affect the quality of the human environment. Therefore, in accordance with the 7 CFR 799, Environmental Quality and Related Environmental Concerns—Compliance with the National Environmental Policy Act, implementing the regulations of the Council on Environmental Quality (40 CFR 1500–1508), no environmental assessment or environmental impact statement will be prepared.

Signed at Washington, DC, on June 24, 2008.

Glen L. Keppy,

Acting Executive Vice President, Commodity Credit Corporation.

[FR Doc. E8–14694 Filed 6–27–08; 8:45 am]

BILLING CODE 3410–05–P

DEPARTMENT OF COMMERCE

International Trade Administration

A–552–801

Certain Frozen Fish Fillets from the Socialist Republic of Vietnam: Final Results and Partial Rescission of New Shipper Reviews

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: June 30, 2008.

FOR FURTHER INFORMATION CONTACT: Julia Hancock, AD/CVD Operations, Office 9, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482–1394.

SUPPLEMENTARY INFORMATION:

Case History

On February 1, 2008, the Department of Commerce (the ''Department'') published in the **Federal Register** the preliminary results of these new shipper reviews of the antidumping duty order (''Order'') on certain frozen fish fillets from the Socialist Republic of Vietnam (''Vietnam''). *See Certain Frozen Fish Fillets From the Socialist Republic of Vietnam: Partial Rescission and Preliminary Results of the First New Shipper Reviews*, 73 FR 6119 (February 1, 2008) (''*Preliminary Results*''); *Notice of Antidumping Duty Order: Certain Frozen Fish Fillets from the Socialist Republic of Vietnam*, 68 FR 47909 (August 12, 2003) (''*Order*''). The *Preliminary Results* were announced to interested parties on January 22, 2008. Since the *Preliminary Results*, the following events have occurred.

On January 30, 2008, Vinh Quang Fisheries Co., Ltd. (''Vinh Quang'') filed comments on the Department's preliminary rescission of Vinh Quang/New Century's[1] new shipper review. Additionally, on February 12, 2008, the Catfish Farmers of America (''Petitioners'') submitted rebuttal comments regarding Vinh Quang/New Century's preliminary results comments. On February 13, 2008, Vinh Quang/New Century submitted rebuttal comments to Petitioners' February 12, 2008, letter. On February 28, 2008, the Department issued a memorandum regarding its analysis of the post–preliminary results of Vinh Quang/New Century. In the post–preliminary results memorandum, the Department reversed its preliminary decision to rescind the new shipper review for Vinh Quang/New Century and calculated an antidumping duty margin for Vinh Quang/New Century for purposes of providing all parties an opportunity to comment on a calculated antidumping duty margin prior to the final results. *See* Memorandum to the File, through James C. Doyle, Director, Office 9, and Alex Villanueva, Program Manager, Office 9, from Julia Hancock, Senior Analyst, Office 9, Subject: Post–Preliminary Results Analysis of Vinh Quang/New Century'' (February 28, 2008) (''VQ Post–Prelim Rescission Memo'').

On April 10, 2008, Petitioners, Anvifish Co., Ltd. (''Anvifish''), Ngoc Thai Company, Ltd. (''Ngoc Thai''), and Vinh Quang/New Century submitted case briefs. Also on April 15, 2008, Petitioners, Anvifish, and Vinh Quang/New Century submitted rebuttal briefs. On May 20, 2008, the Department extended the time limit for completion of the final results of these new shipper reviews by 60 days. *See Certain Frozen Fish Fillets from the Socialist Republic of Vietnam: Extension of Time Limit for Final Results of the New Shipper Reviews*, 73 FR 29111 (May 20, 2008).

Period of Review

The period of review (''POR'') is August 1, 2006, through January 31, 2007.

Scope of the Order

The product covered by this order is frozen fish fillets, including regular, shank, and strip fillets and portions thereof, whether or not breaded or marinated, of the species *Pangasius Bocourti*, *Pangasius Hypophthalmus* (also known as *Pangasius Pangasius*), and *Pangasius Micronemus*. Frozen fish fillets are lengthwise cuts of whole fish. The fillet products covered by the scope include boneless fillets with the belly flap intact (''regular'' fillets), boneless fillets with the belly flap removed (''shank'' fillets), boneless shank fillets cut into strips (''fillet strips/finger''), which include fillets cut into strips, chunks, blocks, skewers, or any other shape. Specifically excluded from the scope are frozen whole fish (whether or not dressed), frozen steaks, and frozen belly–flap nuggets. Frozen whole dressed fish are deheaded, skinned, and eviscerated. Steaks are bone–in, cross–section cuts of dressed fish. Nuggets are the belly–flaps.

The subject merchandise will be hereinafter referred to as frozen ''basa'' and ''tra'' fillets, which are the Vietnamese common names for these species of fish. These products are classifiable under tariff article codes 1604.19.4000, 1604.19.5000, 0305.59.4000, 0304.29.6033 (Frozen Fish Fillets of the species *Pangasius* including basa and tra) of the Harmonized Tariff Schedule of the United States (''HTSUS'').[2] This order covers all frozen fish fillets meeting the above specification, regardless of tariff classification. Although the HTSUS subheading is provided for convenience and customs purposes, our written description of the scope of the order is dispositive.

Final Partial Rescission

In the *Preliminary Results*, the Department preliminarily rescinded this review with respect to Ngoc Thai. The Department found in the *Preliminary Results* that Ngoc Thai was affiliated and should be treated as a single entity with Thai Tan Seafood Company (''Thai Tan''), Ngoc Thu Company, Ltd. (''Ngoc Thu''), and Kim Anh Company (''Kim Anh'') (collectively, the ''Kim Anh Group''), pursuant to section 771(33) of the Tariff Act of 1930, as amended (''the Act''), and 19 CFR 351.401(f)(1); *see* Memorandum to James C. Doyle, Director, Office 9, through Alex Villanueva, Program Manager, Office 9, from Michael Holton, Senior Case Analyst, Subject: New Shipper Review of the Antidumping Duty Order on Certain Frozen Fish Fillets from the Socialist Republic of Vietnam: Affiliation and Collapsing of Ngoc Thai Company Ltd., (January 22, 2008) (''Ngoc Thai Affiliation Memo''). Because the Department found that the Kim Anh Group, including Ngoc Thai, is a single entity, the Department preliminarily rescinded the new shipper review of Ngoc Thai because as a single entity the Kim Anh Group shipped subject merchandise over a year prior to the POR of this new shipper review. *See* Ngoc Thai Affiliation Memo.

We received comments with respect to our preliminary decision to rescind the new shipper review for Ngoc Thai. The Department continues to find that the deadline for requesting a new shipper review of the Kim Anh Group's first entry of subject merchandise had passed, pursuant to 19 CFR 351.214(b)(2)(iv)(A) and 19 CFR 351.214(c). Accordingly, the Department continues to find that the Kim Anh Group's request for a new shipper review of Ngoc Thai was untimely, pursuant to 19 CFR 351.214(b)(2)(iv)(A) and 19 CFR 351.214(c). *See* Comment 7 of the ''Issues and Decision Memorandum for the Final Results and

[1] In the *Preliminary Results*, we found that Vinh Quang and New Century Trading Company (''New Century'') should be treated as a single entity for purposes of this new shipper review. No party has challenged this for the final results and we will continue to treat Vinh Quang/New Century as a single entity for the final results, pursuant to 19 CFR 351.401(f). Accordingly, for the entirety of this notice, Vinh Quang and New Century will be known as ''Vinh Quang/New Century.''

[2] Until July 1, 2004, these products were classifiable under tariff article codes 0304.20.60.30 (Frozen Catfish Fillets), 0304.20.60.96 (Frozen Fish Fillets, NESOI), 0304.20.60.43 (Frozen Freshwater Fish Fillets) and 0304.20.60.57 (Frozen Sole Fillets) of the HTSUS. Until February 1, 2007, these products were classifiable under tariff article code 0304.20.60.33 (Frozen Fish Fillets of the species *Pangasius* including basa and tra) of the HTSUS.

Partial Rescission of the First New Shipper Review: Certain Frozen Fish Fillets from the Socialist Republic of Vietnam'' (''Issues and Decision Memorandum'') accompanying this notice for a detailed discussion of our decision with respect to Ngoc Thai. Because the Kim Anh Group shipped subject merchandise over a year prior to the POR of this new shipper review, the Department is rescinding Ngoc Thai's new shipper review. *See* 19 CFR 351.214(c).

Separate Rates

In the *Preliminary Results*, we determined that one new shipper, Anvifish, met the criteria for the assignment of a separate rate. *See Preliminary Results*, 73 FR at 6123. Additionally, in the VQ Post–Prelim Rescission Memo, where we reversed our preliminary decision to rescind the new shipper review for Vinh Quang/New Century, we also determined that Vinh Quang/New Century met the criteria for the assignment of a separate rate. *See* Memorandum to the File, through Alex Villanueva, Program Manager, from Julia Hancock, Senior Analyst, Subject: 1st New Shipper Review of Certain Frozen Fish Fillets from the Socialist Republic of Vietnam: Analysis for Vinh Quang Fisheries Corporation (''Vinh Quang'') (February 28, 2008) at 10–12 (''Vinh Quang Post–Prelim Analysis Memo''). The Department received no comments on these issues, and we did not receive any further information since the issuance of the *Preliminary Results* and the VQ Post–Prelim Analysis Memo that provides a basis for the reconsideration of these determinations.

Additionally, as discussed above, the Department is not performing a separate rate analysis to determine whether the other new shipper, Ngoc Thai, is eligible for a separate rate for the final results because the Department is rescinding Ngoc Thai's request for a new shipper review. See 19 CFR 351.214(c).

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this proceeding and to which we have responded are listed in the Appendix to this notice and addressed in the Issues and Decision Memorandum, which is hereby adopted by this notice. Parties can find a complete discussion of the issues raised in this administrative review and the corresponding recommendations in this public memorandum which is on file in the Central Records Unit (''CRU''), Room 1117 of the main Department building. In addition, a copy of the Issues and Decision Memorandum can be accessed directly on our website at *http://ia.ita.doc.gov/*. The paper copy and electronic version of the Issues and Decision Memorandum are identical in content.

Changes Since the Preliminary Results

Based on a review of the record as well as comments received from parties regarding our *Preliminary Results*, we have made revisions to the margin calculations for Anvifish and Vinh Quang for the final results. For all changes to the calculations for Anvifish and Vinh Quang/New Century, see the Issues and Decision Memorandum and the company–specific analysis memoranda.

Final Results of Review

We determine that the following weighted–average dumping margins exist for the period August 1, 2006, through January 31, 2007:

CERTAIN FROZEN FISH FILLETS FROM VIETNAM

Manufacturer/Exporter	Weighted–Average Margin (Percent)
Anvifish	31.68
Vinh Quang/New Century/New Century	15.38

Assessment Rates

Pursuant to 19 CFR 351.212(b), the Department will determine, and U.S. Customs and Border Protection (''CBP'') shall assess, antidumping duties on all appropriate entries on a per–unit basis.[3] The Department intends to issue assessment instructions to CBP 15 days after the date of publication of these final results of review. For assessment purposes, where possible, we calculated importer–specific per–unit duty assessment rates for subject merchandise from Vietnam. We will instruct CBP to assess antidumping duties on all appropriate entries covered by this review.

Cash Deposit Requirements

The following cash–deposit requirements will be effective upon publication of the final results of these new shipper reviews for all shipments of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the publication date, as provided for by section 751(a)(2)(C) of the Act: (1) for subject merchandise produced and exported by Anvifish, or produced and exported by Vinh Quang/New Century, the cash deposit rate will be the company–specific rate show above (except that if the rate for a particular company is *de minimis*, *i.e.*, less than 0.5 percent, no cash deposit will be required for that company); (2) for subject merchandise exported by Anvifish but not manufactured by Anvifish, and for subject merchandise exported by Vinh Quang/New Century but not manufactured by Vinh Quang/New Century, the cash deposit rate will continue to be the Vietnam–wide rate (*i.e.*, 63.88 percent); and (3) for subject merchandise manufactured by Anvifish or Vinh Quang/New Century, but exported by any other party, the cash deposit rate will be the rate applicable to the exporter. These cash deposit requirement will remain in effect until further notice.

Reimbursement of Duties

This notice also serves as a final reminder to importers of their responsibility under 19 CFR 351.402(f) to file a certificate regarding the reimbursement of antidumping duties prior to liquidation of the relevant entries during this POR. Failure to comply with this requirement could result in the Department's presumption that reimbursement of antidumping duties has occurred and the subsequent assessment of doubled antidumping duties.

Administrative Protective Orders

This notice also serves as a reminder to parties subject to administrative protective orders (''APO'') of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305, which continues to govern business proprietary information in this segment of the proceeding. Timely written notification of the return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

We are issuing and publishing this administrative review and notice in accordance with sections 751(a)(2)(B), and 777(i)(1) of the Act and 19 CFR 351.214(h)(i).

[3] We divided the total dumping margins (calculated as the difference between normal value (''NV'') and export price or constructed export price) for each importer by the total quantity of subject merchandise sold to that importer during the POR to calculate a per-unit assessment amount. We will direct CBP to assess importer-specific assessment rates based on the resulting per-unit (*i.e.*, per-kilogram) rates by the weight in kilograms of each entry of the subject merchandise during the POR.

Dated: June 20, 2008.

Stephen J. Claeys,

Acting Assistant Secretary for Import Administration.

Appendix I

General Issues

Comment 1: Surrogate Financial Ratios
A. Apex Foods Limited and Bionic
B. Adequate Notice
Comment 2: Clerical Error and Inflator
Comment 3: Fish Waste Surrogate Value
Comment 4: Whole Live Fish Surrogate Value
Comment 5: Conversion of Surrogate Values

Company–Specific Issues

Comment 6: Ving Quang
A. Rescission of Vinh Quang
B. *Bona Fide* Nature of Vinh Quang's Sale
C. U.S. Inland Freight
Comment 7: Anvifish
A. Basis of U.S. Sales
B. *Bona Fide* Nature of Anvifish's Sale
C. Deduction of By–products
Comment 8: Rescission of Ngoc Thai

[FR Doc. E8–14801 Filed 6–27–08; 8:45 am]

BILLING CODE 3510–DS–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Announcement of Chesapeake Bay Maryland National Estuarine Research Reserve Revised Management Plan Including a Boundary Expansion

AGENCY: Estuarine Reserves Division, Office of Ocean and Coastal Resource Management, National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

ACTION: Notice of Approval and Availability of the Final Revised Management Plan for the Chesapeake Bay Maryland National Estuarine Research Reserve.

SUMMARY: Notice is hereby given that the Estuarine Reserves Division, Office of Ocean and Coastal Resource Management, National Ocean Service, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce has approved the revised management plan, which includes an expansion of the boundary of the reserve, for the Chesapeake Bay Maryland National Estuarine Research Reserve.

The Chesapeake Bay Maryland National Estuarine Research Reserve has three sites: Monie Bay, Jug Bay, and Otter Point Creek. Monie Bay was designated as part of the National Estuarine Research Reserve in 1985 and Jug Bay and Otter Point Creek were designated in 1990 pursuant to Section 315 of the Coastal Zone Management Act of 1972, as amended, 16 U.S.C. 1461. The reserve has been operating under a management plan approved in 1990. Pursuant to 15 CFR Section 921.33(c), a state must revise their management plan every five years. The submission of this plan brings the reserve into compliance and sets a course for successful implementation of the goals and objectives of the reserve. A boundary expansion, new facilities, and updated programmatic objectives are notable revisions to the 1990 approved management plan.

The revised management plan outlines the administrative structure; the education, stewardship, and research goals of the reserve; and the plans for future land acquisition and facility development to support reserve operations. Since 1990, the reserve has added a coastal training program that delivers science-based information to key decision makers in the Chesapeake Bay. The reserve has realized many aspects of the 1990 plan, including the completion of the Anita C. Leight Center in Harford County. This facility provides classrooms, lab space, exhibit space and office space and has allowed the implementation of research, education and volunteer activity at the Otter Point Creek component of the reserve.

This management plan calls for a boundary expansion at two reserve sites: 1,345 acres are incorporated into the Jug Bay component site and approximately 32 acres will be incorporated into the Otter Point Creek site. The Otter Point Creek component will expand its land area from 443 to 475 acres. The land increase consists of two forested parcels adjacent to the current boundary that will serve as a buffer for core estuarine habitat and will also provide an important access point for monitoring and education programming. The expansion at Jug Bay includes land on both sides of the Patuxent River, increasing the acreage of this site from 491 to 1,836. The original boundary for this component site included a portion of the county-owned parks. This expansion incorporates a larger portion of those parks to become designated as part of the National Estuarine Research Reserves. West of the Patuxent River, the reserve will add 455 acres of wetlands and buffer lands that will enhance the protection of core reserve lands and will enhance the research and monitoring. East of the Patuxent River, the reserve will be expanded by 890 acres to increase the level of protection surrounding the river and expand the area available for reserve programming.

FOR FURTHER INFORMATION CONTACT: Michael Migliori at (301) 563–1126 or Laurie McGilvray at (301) 563–1158 of NOAA's National Ocean Service, Estuarine Reserves Division, 1305 East-West Highway, N/ORM5, 10th floor, Silver Spring, MD 20910. For copies of the Chesapeake Bay Management Plan revision, visit *http://www.dnr.state.md.us/bay/cbnerr/*.

Dated: June 12, 2008.

David M. Kennedy,

Director, Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

[FR Doc. E8–14818 Filed 6–27–08; 8:45 am]

BILLING CODE 3510–08–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN: 0648–XI70

Gulf of Mexico Fishery Management Council; Public Hearings

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of public hearings.

SUMMARY: The Gulf of Mexico Fishery Management Council (Council) will convene public hearings on Reef Fish Amendment 29, Spiny Lobster and Aquaculture Amendment.

DATES: The public hearings will held from July 21 - 31, 2008 at 10 locations throughout the Gulf of Mexico. For specific dates, times and subjects, see **SUPPLEMENTARY INFORMATION**.

ADDRESSES: The public hearings will be held in the following locations: Galveston, TX, New Orleans, LA, Biloxi, MS, Orange Beach, AL, Ft. Myers, Key West, Marathon, Miami, Tampa and Panama City, FL. For specific dates, times and subjects, see **SUPPLEMENTARY INFORMATION**.

Council address: Gulf of Mexico Fishery Management Council, 2203 North Lois Avenue, Suite 1100, Tampa, FL 33607.

FOR FURTHER INFORMATION CONTACT: Assane Diagne, Economist; telephone: (813) 348–1630.

SUPPLEMENTARY INFORMATION: The Gulf of Mexico Fishery Management Council (Council) has scheduled a series of public hearings on Reef Fish Amendment 29, Spiny Lobster and

Aquaculture Amendment. Reef Fish Amendment 29 proposes to rationalize effort and reduce overcapacity in the commercial grouper and tilefish fisheries in order to achieve and maintain optimum yield (OY). Effort management approaches considered in this amendment include permit endorsements and the implementation of an Individual Fishing Quota (IFQ) program. Spiny Lobster Amendment 8 examines various alternatives to restrict imports of spiny lobster into the United States to minimum conservation standards to achieve an increase in the spawning biomass of the spiny lobster stock and increase long-term yields from the fishery. The Aquaculture amendment will require persons to obtain a permit from NMFS to participate in aquaculture by constructing an aquaculture facility in the EEZ of the Gulf of Mexico. Each application for a permit must comply with many permit conditions related to record keeping and operation of the facility. These permit conditions will assure the facility has a minimal affect on the environment and on other fishery resources. Compliance with the conditions will be evaluated annually for the duration of the permit as the basis for renewal of the permit for the next year.

An informal open question and answers session on IFQ's will begin at 5:30 p.m. At 6 p.m. the public hearings will begin and conclude at the end of public testimony or no later than 9 p.m. at each of the following locations:

•*Monday, July 21, 2008*, Reef Fish Amendment 29 Public Hearing, Best Western, 5914 Seawall Blvd., Galveston, TX 77550; telephone: (409) 740–1261;

•*Monday, July 21, 2008*, Spiny Lobster, Reef Fish Amendment 29 and Aquaculture Amendment Public Hearings, Radisson Hotel, 3820 N. Roosevelt Blvd., Key West, FL 33040, telephone: (305) 294–5511;

•*Tuesday, July 22, 2008*, Reef Fish Amendment 29 Public Hearing, Hilton Airport, 901 Airline Drive, Kenner, LA 70062, telephone: (504) 469–5000;

•*Tuesday, July 22, 2008*, Spiny Lobster and Reef Fish Amendment 29 Public Hearings, Banana Bay Resort, 4590 Overseas Highway, Marathon, FL 33050, telephone: (305) 743–3500;

•*Wednesday, July 23, 2008*, Spiny Lobster and Reef Fish Amendment 29 Public Hearings, Doubletree, 2649 S. Bayshore Blvd., Miami, FL 33133, telephone: (305) 858–2500;

•*Wednesday, July 23, 2008*, Reef Fish Amendment 29 Public Hearing, Wingate Inn, 12009 Indian River Road, Biloxi, MS 39540, telephone: (228) 396–0036;

•*Thursday, July 24, 2008*, Reef Fish Amendment 29 Public Hearing, Clarion Hotel, 12635 S. Cleveland Ave., Ft. Myers, FL 33907, telephone: (239) 936–4300;

•*Thursday, July 24, 2008*, Reef Fish Amendment 29 Public Hearing, City of Orange Beach Parks & Rec., 27235 Canal Rd, Orange Beach, AL 36561, telephone: (251) 981–6028;

•*Wednesday, July 30, 2008*, Reef Fish Amendment 29 Public Hearing, Quorum, 700 N. Westshore Blvd, Tampa, FL 33609, telephone: (813) 289–8200;

•*Thursday, July 31, 2008*, Reef Fish Amendment 29 Public Hearing, NMFS Panama City Lab, 350 Dellwood Beach Dr., Panama City, FL 32408, telephone: (850) 234–6541.

Copies of the Amendments can be obtained by calling the Council office at (813) 348–1630.

Special Accommodations

These hearings are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Tina O'Hern at the Council (see **ADDRESSES**) at least 5 working days prior to the meeting.

Dated: June 25, 2008.

Tracey L. Thompson,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. E8–14806 Filed 6–27–08; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN: 0648–XI72

Gulf of Mexico Fishery Management Council; Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of a public meeting.

SUMMARY: The Gulf of Mexico Fishery Management Council to convene its Spiny Lobster Advisory Panel (AP) via conference call.

DATES: The conference call will be held July 28, 2008, at 2 p.m. EDT.

ADDRESSES: The meeting will be held via conference call and listening stations will be available. For specific locations, see **SUPPLEMENTARY INFORMATION.**

Council address: Gulf of Mexico Fishery Management Council, 2203 North Lois Avenue, Suite 1100, Tampa, FL 33607.

FOR FURTHER INFORMATION CONTACT: Carrie Simmons, Fishery Biologist, Gulf of Mexico Fishery Management Council; telephone: (813) 348–1630.

SUPPLEMENTARY INFORMATION: The conference call will begin at 2 p.m. EDT and conclude no later than 3:30 p.m. EDT. Listening stations are available at the following locations:

The Gulf Council office (see **ADDRESSES**), and the National Marine Fisheries Service (NMFS) offices as follows:

St. Petersburg, FL

263 13th Ave. S., St Petersburg, FL 33701, Karolyn Potter, telephone: (727) 551–5705; and

Miami, FL

75 Virginia Beach Drive, Miami, FL 32149, Sonia Prevo, telephone: (305) 361–4200.

The Spiny Lobster Advisory Panel will discuss Amendment 8 on FMP of Gulf of Mexico and South Atlantic, preferred alternatives of the South Atlantic, and the Advisory panel recommendations for the fishery management plan.

Although other non-emergency issues not on the agenda may come before the Spiny Lobster AP for discussion, in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), those issues may not be the subject of formal action during the meeting. Actions will be restricted to the issue specifically identified in the agenda and any issues arising after publication of this notice that require emergency action under Section 305(c) of the Magnuson-Stevens Act, provided the public has been notified of the Council's intent to take action to address the emergency.

Special Accommodations

The listening stations are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Tina O'Hern at the Council (see **ADDRESSES**) at least 5 working days prior to the meeting.

Dated: June 25, 2008.

Tracey L. Thompson,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. E8–14808 Filed 6–27–08; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN: 0648–XI71

Mid-Atlantic Fishery Management Council; Public Meetings

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of a public meeting.

SUMMARY: The Mid-Atlantic Fishery Management Council's (MAFMC) Ad Hoc Scientific and Statistical Committee will hold a public meeting.

DATES: The meeting will be held on Thursday, July 17, 2008, from 8 a.m. until 2 p.m.

ADDRESSES: The meeting will be held at the Hilton Philadelphia Airport, 4509 Island Avenue, Philadelphia, PA, telephone: (215) 365–4150.

Council address: Mid-Atlantic Fishery Management Council, Room 2115, 300 S. New Street, Dover, DE 19904, telephone: (302) 674–2331.

FOR FURTHER INFORMATION CONTACT: Daniel T. Furlong, Executive Director, Mid-Atlantic Fishery Management Council; telephone: (302) 674–2331, extension 19.

SUPPLEMENTARY INFORMATION: The purpose of this meeting will be to review NMFS' proposed rule to modify National Standard 2 of the Magnuson-Steven Act. Particular emphasis will focus on compliance with new annual catch limits (ACL) and accountability measures (AM).

Although non-emergency issues not contained in this agenda may come before this group for discussion, in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), those issues may not be the subject of formal action during this meeting. Actions will be restricted to those issues specifically identified in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the Magnuson-Stevens Act, provided the public has been notified of the Council's intent to take final action to address the emergency.

Special Accommodations

The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to M. Jan Bryan, (302) 674–2331 extension 18, at the Council Office at least five days prior to the meeting date.

Dated: June 25, 2008.

Tracey L. Thompson,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. E8–14807 Filed 6–27–08; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN: 0648–XI73

Pacific Fishery Management Council; Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of a public meeting.

SUMMARY: The Pacific Fishery Management Council's (Council) Highly Migratory Species Management Team (HMSMT) will hold a work session, which is open to the public.

DATES: The Pacific Fishery Management Council's (Council) Highly Migratory Species Management Team (HMSMT) will a hold work session, which is open to the public. The work session will be from 8:30 a.m. to 5 p.m. on Thursday, July 31 and from 8:30 a.m. until the business of the meeting is finished on Friday, August 1, 2008.

ADDRESSES: The work sessions will be held at the National Marine Fisheries Service, Southwest Fisheries Science Center, Large Conference Room, 8604 La Jolla Shores Drive, La Jolla, CA 92037, telephone: (858) 546–7000.

Council address: Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, OR 97220–1384.

FOR FURTHER INFORMATION CONTACT: Dr. Kit Dahl, Pacific Fishery Management Council; telephone: (503) 820–2280.

SUPPLEMENTARY INFORMATION: The HMSMT will discuss the following topics: (1) the environmental analysis for a range of alternatives for a limited entry program to allow a shallow-set longline fishery, which targets swordfish, to be prosecuted from the west coast, including qualifying criteria for limited entry; (2) a range of options for the management of the recreational fishery for thresher sharks in California; (3) preparation of the 2008 HMS Stock Assessment and Fishery Evaluation (SAFE) report; (4) a NMFS proposal to develop management concepts for the west coast albacore troll fishery; and (5) application of the results of a recent workshop on interactions between west coast swordfish fisheries and leatherback sea turtles to future research, monitoring, and management.

Although non-emergency issues not contained in the meeting agenda may be discussed, those issues may not be the subject of formal action during these meetings. Action will be restricted to those issues specifically listed in this document and any issues arising after publication of this document that require emergency action under Section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act, provided the public has been notified of the intent to take final action to address the emergency.

Special Accommodations

The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Ms. Carolyn Porter at (503) 820–2280 at least 5 days prior to the meeting date.

Authority: : 16 U.S.C. 1801 *et seq.*

Dated: June 25, 2008.

Tracey L. Thompson,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. E8–14809 Filed 6–27–08; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF DEFENSE

Office of the Secretary

Defense Science Board

AGENCY: Department of Defense.

ACTION: Notice of Advisory Committee Meetings.

SUMMARY: The Defense Science Board 2008 Summer Study on Capability Surprise will meet in closed session on August 4–14, 2008; at the Beckman Center, Irvine, CA.

FOR FURTHER INFORMATION CONTACT: LtCol Chad Lominac, USAF, Defense Science Board, 3140 Defense Pentagon, Room 3B888A, Washington, DC 20301–3140, via e-mail at *charles.lominac@osd.mil*, or via phone at (703) 571–0081.

SUPPLEMENTARY INFORMATION: The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Acquisition, Technology & Logistics on scientific and technical matters as they affect the perceived needs of the Department of Defense. At this meeting, the Board will discuss interim finding and recommendations resulting from ongoing Task Force activities. The study will focus on the whats and whys of

capability surprise and the measures to ensure that DoD and its interested partners are best positioned to prevent, or mitigate, capability surprise against itself. The Board will also discuss plans for future consideration of scientific and technical aspects of specific strategies, tactics, and policies as they may affect the U.S. national defense posture and homeland security.

In accordance with section 10(d) of the Federal Advisory Committee Act, Public Law No. 92–463, as amended (5 U.S.C. App. 2) and 41 CFR 102–3.155, the Department of Defense has determined that these Defense Science Board Quarterly meetings will be closed to the public. Specifically, the Under Secretary of Defense (Acquisition, Technology and Logistics), with the coordination of the DoD Office of General Counsel, has determined in writing that all sessions of these meetings will be closed to the public because they will be concerned throughout with matters listed in 5 U.S.C. 552b(c)(1).

Interested persons may submit a written statement for consideration by the Defense Science Board. Individuals submitting a written statement must submit their statement to the Designated Federal Official at the address detailed above, at any point, however, if a written statement is not received at least 10 calendar days prior to the meeting, which is the subject of this notice, then it may not be provided to or considered by the Defense Science Board. The Designated Federal Official will review all timely submissions with the Defense Science Board Chairperson, and ensure they are provided to members of the Defense Science Board before the meeting that is the subject of this notice.

Dated: June 23, 2008.

Patricia L. Toppings,

OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. E8–14779 Filed 6–27–08; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Office of the Secretary

Transformation Advisory Group

AGENCY: Department of Defense.

ACTION: Notice of Advisory Committee Closed Meeting.

SUMMARY: Pursuant to the Federal Advisory Committee Act of 1972 (5 U.S.C. App 2, Section 1), the Sunshine in the Government Act of 1976 (5 U.S.C. 552b), and 41 CFR 102–3.150, the Department of Defense announces the following closed meeting of the Transformation Advisory Group.

DATES: August 7, 2008 (8:00 a.m. to 5 p.m.)

ADDRESSES: Institute for Defense Analysis, 4850 Mark Center Drive, Alexandria, VA 22311.

FOR FURTHER INFORMATION CONTACT: Ms. Tammy R. Van Dame, Designated Federal Officer, (757) 836–5365, 1562 Mitscher Ave., Suite 200, Norfolk, VA 23551–2488, *tammy.vandame@jfcom.mil.*

You may also contact Mr. Floyd March, Joint Staff, (703) 697–0610.

SUPPLEMENTARY INFORMATION:

Purpose of the Meeting: The purpose of the meeting is to obtain, review and evaluate information related to scientific, technical and policy-related issues for the nation's joint enterprise, and U.S. Joint Forces Command with emphasis on how these issues relate to the shaping of the command's efforts today and in the future.

Agenda: Topics include: Joint Operating Environment, Futures, Capstone Concept for Joint Operations.

Meeting Accessibility: Pursuant to 5 U.S.C. 552b, and 41 CFR 102–3.155, the Department of Defense has determined that the meeting shall be closed to the public. Per delegated authority by the Chairman, Joint Chiefs of Staff, LTG John R. Wood, Deputy Commander, U.S. Joint Forces Command in consultation with his legal advisor, has determined in writing that the public interest requires that all sessions of this meeting be closed to the public because they will be concerned with matters listed in section 552b(c)(1) of Title 5, U.S.C.

Written Statements: Pursuant to 41 CFR 102–3.105(j) and 102–3.140, the public or interested organizations may submit written statements to the membership of the Transformation Advisory Group at any time or in response to the stated agenda of a planned meeting. Written statements should be submitted to the Transformation Advisory Group's Designated Federal Officer; the Designated Federal Officer's contact information can be obtained from the GSA's FACA Database—*https://www.fido.gov/facadatabase/public.asp.* Written statements that do not pertain to a scheduled meeting of the Transformation Advisory Group may be submitted at any time. However, if individual comments pertain to a specific topic being discussed at a planned meeting then these statements must be submitted no later than 14 business days prior to the meeting in question. The Designated Federal Officer will review all submitted written statements and provide copies to all the committee members.

Dated: June 23, 2008.

Patricia L. Toppings,

OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. E8–14781 Filed 6–27–08; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Availability of Finding

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality regulations (40 CFR parts 1500–1508), implementing procedural provisions of NEPA, and Executive Order (EO) 12114, Environmental Effects Abroad of Major Federal Actions, the Department of the Navy (DON) gives notice that a combined Finding of No Significant Impact (FONSI)/Finding of No Significant Harm (FONSH) has been issued and is available for Expeditionary Strike Group Composite Training Unit Exercise (ESG COMPTUEX) July 2008.

DATES: The effective date of the finding is June 24, 2008.

ADDRESSES: Electronic copies of the combined FONSI/FONSH are available for public viewing or downloading at *http://www.navydocuments.com.*

FOR FURTHER INFORMATION CONTACT: Commander, Second Fleet Public Affairs, Commander Phillips, telephone: 757–443–9822 or visit *http://www.navydocuments.com.*

SUPPLEMENTARY INFORMATION: ESG COMPTUEX (July 2008) is a major Navy Atlantic Fleet training exercise proposed to occur in July 2008 in the offshore Cherry Point, Charleston, and Jacksonville Operating Areas (OPAREAs) and adjacent military installations. The purpose of this exercise is to certify naval forces as combat-ready. Activities conducted during the exercise include air-to-ground bombing, shore fire control party training, amphibious landings, non-explosive naval gunfire, fast attack craft/fast inshore attack craft, maritime interdiction operations and anti-submarine warfare, including use of mid-frequency active sonar.

The FONSI is based on analysis contained in a Comprehensive Environmental Assessment (EA)

addressing environmental impacts associated with land-based training for Major Atlantic Fleet Training Exercises on the East and Gulf Coasts of the U.S. (February 2006) and the EA for Routine Shore Fire Control Party (SFCP) Training, Marine Corps Base Camp Lejeune (July 2002). The FONSH is based on analysis contained in a Comprehensive Overseas Environmental Assessment (OEA) (February 2006) and a Supplement to the Comprehensive OEA (SOEA) for environmental impacts associated with Navy's conduct of major exercise training in offshore operating areas along the East and Gulf Coasts of the U.S. (April 2008).

Environmental concerns addressed in the EA included land use, community facilities, coastal zone management, socioeconomics, cultural resources, airspace, air quality, noise, geology, soils, water resources, biological resources, munitions and hazardous materials management, and safety.

The EA and OEA addressed potential impacts to the ocean physical environment, fish and Essential Fish Habitat; sea turtles and marine mammals; seabirds and migratory birds; endangered and threatened species; socioeconomics; and cultural resources. The SOEA included an updated analysis of MFA sonar use.

This action includes mitigation measures to reduce impacts to a level that is less than significant. In accordance with the Major Atlantic Fleet Training Exercise EA and OEA and the SOEA and the evaluation of the nature, scope and intensity of the proposed action, the Navy finds that the conduct of the ESG COMPTUEX in July 2008 will not significantly impact or harm the environment and, therefore, an Environmental Impact Statement or Overseas Environmental Impact Statement is not required.

Dated: June 24, 2008.

T.M. Cruz,

Lieutenant, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. E8–14811 Filed 6–27–08; 8:45 am]

BILLING CODE 3810–FF–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Cancellation of the Notice of Intent To Prepare an Environmental Impact Statement for TRIDENT Support Facilities Explosives Handling Wharf, Naval Base Kitsap-Bangor, Silverdale, Kitsap County, WA

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: The Department of the Navy (DON) hereby cancels its notice of intent to prepare an Environmental Impact Statement for TRIDENT Support Facilities Explosives Handling Wharf, Naval Base Kitsap-Bangor, Silverdale, Kitsap County, WA, as published in the **Federal Register**, June 10, 2008 (73 FR 112).

The previously published notice is cancelled because the DON has determined that this MILCON project is not ready for consideration in the current budget cycle and therefore the project will not be funded. DON will perform a thorough Business Case Analysis on this project, a thorough review and validation of the project requirement and timeline, and will explore and identify other alternative solutions to this $780M MILCON project.

FOR FURTHER INFORMATION CONTACT: Mr. Jack Spiller, Public Affairs Officer, Department of the Navy, Strategic Systems Programs, 2521 South Clark Street, Suite 1000, Arlington, VA 22202–3930, *telephone:* 703–601–9009, *e-mail at: nbkehweis@ssp.navy.mil.*

Dated: June 25, 2008.

L.R. Almand,

Office of the Judge Advocate General, U.S. Navy, Alternate Federal Register Liaison Officer.

[FR Doc. E8–14810 Filed 6–27–08; 8:45 am]

BILLING CODE 3810–FF–P

DEPARTMENT OF EDUCATION

Notice of Proposed Information Collection Requests

AGENCY: Department of Education.

SUMMARY: The IC Clearance Official, Regulatory Information Management Services, Office of Management, invites comments on the proposed information collection requests as required by the Paperwork Reduction Act of 1995.

DATES: Interested persons are invited to submit comments on or before August 29, 2008.

SUPPLEMENTARY INFORMATION: Section 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that the Office of Management and Budget (OMB) provide interested Federal agencies and the public an early opportunity to comment on information collection requests. OMB may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The IC Clearance Official, Regulatory Information Management Services, Office of Management, publishes that notice containing proposed information collection requests prior to submission of these requests to OMB. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, e.g., new, revision, extension, existing or reinstatement; (2) Title; (3) Summary of the collection; (4) Description of the need for, and proposed use of, the information; (5) Respondents and frequency of collection; and (6) Reporting and/or Recordkeeping burden. OMB invites public comment.

The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology.

Dated: June 24, 2008.

Angela C. Arrington,

IC Clearance Official, Regulatory Information Management Services, Office of Management.

Federal Student Aid

Type of Review: Extension.

Title: Teacher Education Assistance for College and Higher Education (TEACH) Grant Program Agreement to Serve.

Frequency: On Occasion.

Affected Public: Individuals or household.

Reporting and Recordkeeping Hour Burden:

Responses: 55,800.

Burden Hours: 27,900.

Abstract: The TEACH Grant Program Agreement to Serve must be signed by a student each year before receiving a TEACH Grant. By signing the Agreement to Serve, the student promises to meet the teaching service requirements of the TEACH Grant Program as described in the Agreement, and to repay with interest the full amount of any TEACH Grant as a Direct Unsubsidized Loan if the student does not complete the required teaching service or otherwise fails to meet the requirements of the TEACH Grant Program.

Requests for copies of the proposed information collection request may be accessed from *http://edicsweb.ed.gov*, by selecting the ''Browse Pending Collections'' link and by clicking on link number 3747. When you access the information collection, click on ''Download Attachments'' to view. Written requests for information should be addressed to U.S. Department of Education, 400 Maryland Avenue, SW., LBJ, Washington, DC 20202–4537. Requests may also be electronically mailed to *ICDocketMgr@ed.gov* or faxed to 202–401–0920. Please specify the complete title of the information collection when making your request.

Comments regarding burden and/or the collection activity requirements should be electronically mailed to *ICDocketMgr@ed.gov*. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339.

[FR Doc. E8–14674 Filed 6–27–08; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

Notice of Proposed Information Collection Requests

AGENCY: Department of Education.

SUMMARY: The Acting Leader, Information Collection Clearance Division, Regulatory Information Management Services, Office of Management, invites comments on the proposed information collection requests as required by the Paperwork Reduction Act of 1995.

DATES: Interested persons are invited to submit comments on or before August 29, 2008.

SUPPLEMENTARY INFORMATION: Section 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that the Office of Management and Budget (OMB) provide interested Federal agencies and the public an early opportunity to comment on information collection requests. OMB may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The Acting Leader, Information Collection Clearance Division, Regulatory Information Management Services, Office of Management, publishes that notice containing proposed information collection requests prior to submission of these requests to OMB. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, e.g., new, revision, extension, existing or reinstatement; (2) Title; (3) Summary of the collection; (4) Description of the need for, and proposed use of, the information; (5) Respondents and frequency of collection; and (6) Reporting and/or Recordkeeping burden. OMB invites public comment.

The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology.

Dated: June 24, 2008.

James Hyler,

Acting Leader, Information Collection Clearance Division, Regulatory Information Management Services, Office of Management.

Institute of Education Sciences

Type of Review: Revision.

Title: Beginning Postsecondary Study 2004/09 (BPS:04/09) Transcript Collection.

Frequency: One time.

Affected Public: Businesses or other for-profit; Not-for-profit institutions; State, Local, or Tribal Gov't, SEAs or LEAs.

Reporting and Recordkeeping Hour Burden:

Responses: 2,619.

Burden Hours: 7,857.

Abstract: This is a revision to the 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09). This revision is to collect postsecondary transcripts for sample members. The BPS is being conducted to continue the series of longitudinal collection efforts started in 1990 with the National Postsecondary Students Aid Study to enhance knowledge concerning progress and persistence in postsecondary education for new entrants. The study will address issues such as progress, persistence, and completion of postsecondary education programs, entry into the workforce, the relationship between experiences during postsecondary education and various societal and personal outcomes, and returns to the individual and to society on the investment in postsecondary education.

Requests for copies of the proposed information collection request may be accessed from *http://edicsweb.ed.gov*, by selecting the ''Browse Pending Collections'' link and by clicking on link number 3746. When you access the information collection, click on ''Download Attachments'' to view. Written requests for information should be addressed to U.S. Department of Education, 400 Maryland Avenue, SW., LBJ, Washington, DC 20202–4537. Requests may also be electronically mailed to *ICDocketMgr@ed.gov* or faxed to 202–401–0920. Please specify the complete title of the information collection when making your request.

Comments regarding burden and/or the collection activity requirements should be electronically mailed to *ICDocketMgr@ed.gov*. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339.

[FR Doc. E8–14676 Filed 6–27–08; 8:45 am]

BILLING CODE 4000–01–P

ELECTION ASSISTANCE COMMISSION

Office of Inspector General; Privacy Act of 1974; System of Records

AGENCY: Office of Inspector General, U.S. Election Assistance Commission.

ACTION: Notice of Privacy Act system of records.

SUMMARY: The U.S. Election Assistance Commission Office of Inspector General is establishing a new system or records, ''Office of Inspector General Investigative Records,'' subject to the Privacy Act of 1974, as amended. The new system of records is necessary to fulfill the duties of the Office of Inspector General, including, but not limited to (1) investigations of complaints; investigations of cases referred to OIG; and reports and correspondence in conjunction with any such investigation.

DATES: *Effective Date:* The proposed amendments will be effective without further notice on July 30, 2008 unless comments received require a contrary determination.

ADDRESSES: Send written comments to Curtis Crider, Inspector General, Office of Inspector General, 1225 New York Avenue, NW., Suite 1100, Washington, DC 20005.

FOR FURTHER INFORMATION CONTACT: Curtis Crider, Inspector General (202) 566–3125.

SUPPLEMENTARY INFORMATION: 5 U.S.C. 552a(e)(4) and (11) provides that the

public be afforded a 30-day period in which to comment on this creation of a system of records. Additionally, a copy of this notice has been submitted to the Committee on Government Reform of the House of Representatives, the Committee on Governmental Affairs of the Senate, and the Office of Management and Budget, pursuant to 5 U.S.C. 552a(r).

The Office of Inspector General Investigative Files consists of paper records maintained in folders, binders and logbooks; and various records in electronic form. The folders, binders and logbooks are stored in the Office of Inspector General's file cabinets and offices. The electronic records are maintained on a file server and backup tapes. The records are retrieved by the name of the subject of the investigation or inquiry, Records are only accessible to OIG staff authorized to review such records and only for the purpose of performing investigations.

SYSTEM NAME:

Office of Inspector General (OIG) Investigative Records.

SECURITY CLASSIFICATION:

Records in this system are sensitive but unclassified.

SYSTEM LOCATION:

Office of Inspector General, EAC, 1225 New York Avenue, Suite 150, Washington DC 20005.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Subjects of investigation, complainants, and witnesses referred to in complaints or actual investigative cases, reports, accompanying documents, and correspondence prepared by, compiled by, or referred to the OIG.

CATEGORIES OF RECORDS IN THE SYSTEM:

The system is comprised of paper and electronic files of OIG investigative reports, correspondence, cases, matters, cross-indices, memoranda, materials, legal papers, evidence, exhibits, data, and workpapers pertaining to all closed and pending investigations and inspections.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

The Inspector General Act of 1978, as amended, 5 U.S.C. App.3.

PURPOSE:

These records are used to document the conduct and outcome of inquiries, complaints, and investigations concerning allegations of fraud, waste, and abuse that affect the EAC. The information is used to report the results of investigations to EAC management, contractors, grantees, prosecutors, law enforcement agencies, Congress, and others for an action deemed appropriate. These records are used also to retain sufficient information to fulfill reporting requirements and to maintain records related to the OIG's activities.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES AS FOLLOWS:

Information from this system of records may be disclosed:

1. To any other Federal agency or any foreign, State, tribal, or local government agency responsible for enforcing, investigating, or prosecuting violations of administrative, civil, or criminal law or regulation where that information is relevant to an enforcement proceeding, investigation, or prosecution within the agency's jurisdiction.

2. To (1) The Department of Justice in connection with requests for legal advice and in connection with actual or potential criminal prosecutions or civil litigation pertaining to the Office of Inspector General, and (2) a Federal or State grand jury, a Federal or State court, administrative tribunal, opposing counsel, or witnesses in the course of civil or criminal proceedings pertaining to the Office of Inspector General.

3. To a Federal, State, tribal, or local agency maintaining civil, criminal or other relevant enforcement records or other pertinent records, such as current licenses, if necessary to obtain a record relevant to an agency decision concerning the hiring or retention of an employee, the issuance of a license, grant or other benefit.

4. To a Federal agency in response to its request in connection with the hiring or retention of an employee, the issuance of a security clearance, the reporting of an investigation of an employee, the letting of a contract, or the issuance of a license grant, or other benefit by the requesting agency, to the extent that the record is relevant and necessary to the requesting agency's decision on the matter.

5. To the news media and general public where there exists a legitimate public interest, *e.g.*, to provide information on events in the criminal process, such as indictments, and where necessary, for protection from imminent threat to life or property.

6. To Federal agencies' issuing a subpoena, such as the Internal Revenue Service.

7. To independent auditors or other private firms with which the Office of the Inspector General has contracted to carry out an independent audit or investigation, or to collate, aggregate, or otherwise refine data collected in the system or records. These contractors will be required to maintain Privacy Act safeguards with respect to such records.

8. In the course of employee discipline of competence determination proceedings.

9. To a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of the individual.

10. To the Department of Justice, to a judicial or administrative tribunal, opposing counsel, and witnesses, in the course of proceedings involving EAC, an EAC employee (where the matter pertains to the employee's official duties), or the United States, or any agency thereof where the litigation is likely to affect EAC or EAC is a party or has an interest in the litigation and the use of the information is relevant and necessary to the litigation.

11. To a Federal, State, tribal or local agency maintaining pertinent records, if necessary, to obtain a record relevant to a Commission decision concerning the hiring or retention of an employee, the issuance of a security clearance, the letting of a contract, or the issuance of a license, grant, or other benefit.

12. To third party contacts, including public and private organizations, in order to obtain information relevant and necessary to the investigation of potential violations in EAC programs and operations, or where disclosure would enable the OIG to identify violations in EAC programs or operations or otherwise assist the OIG in pursuing on-going investigations.

13. To any official charged with the responsibility to conduct qualitative assessment reviews of internal safeguards and management procedures employed in investigative operations. This disclosure category includes members of the President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency including officials and administrative staff within their investigative chain of command, as well as authorized officials of the Department of Justice and the Federal Bureau of Investigation. Recipients shall be required to comply with the requirements of the Privacy Act.

14. To a contractor, grantee or other direct recipient of federal funds to allow such entity to effect corrective action in agency's best interest. A record from a system of records may be disclosed, as a routine use, to any direct or indirect recipient of federal funds where such record reflects serious inadequacies with a recipient's personnel, and disclosure of the record is made to

permit a recipient to take corrective action beneficial to the Government.

15. To a board of contract appeals, GAO or any other entity hearing a contractor protest or dispute. A record from a system of records may be disclosed, as a routine use, to the United States General Accounting Office, to a board of contract appeals, or to the claims court in bid protest cases or contract dispute cases involving procurement.

16. To OMB or DOJ regarding Freedom of Information Act and Privacy Act advice. Information from a system of records may be disclosed, as a routine use, to the Office of Management and Budget or the Department of Justice in order to obtain advice regarding statutory or other requirements under the Freedom of Information Act or Privacy Act.

17. To the White House in response to an inquiry made at the written request of the individual about whom the record is maintained. Disclosure will not be made until the White House has furnished appropriate documentation of the individual's request, such as a copy of the individual's written request.

18. To a Congressional office from the record of an individual in response to an inquiry from the Congressional office made at the written request of the individual about whom the record is maintained. Disclosure will not be made until the Congressional office has furnished appropriate documentation of the individual's request, such as a copy of the individual's written request.

19. To the National Archives and Records Administration or to the General Services Administration for records management inspections conducted under 44 U.S.C. 2903 and 2904.

20. To agency or OIG contractors (including employees of contractors), grantees, experts, or volunteers who have been engaged to assist the agency or OIG in the performance of a contract, service, grant, cooperative agreement, or other activity related to this system of records and who need to have access to the records in order to perform the activity for the agency or OIG. Recipients shall be required to comply with the requirements of the Privacy Act.

21. To officials who have been engaged to assist the Office of Inspector General in the conduct of inquiries, complaints, and investigations who need to have access to the records in order to perform the work. This disclosure category includes members of the President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency, and officials and administrative staff within their chain of command. Recipients shall be required to comply with the requirements of the Privacy Act.

22. To the Office of Personnel Management for matters concerned with oversight activities (necessary for the Office of Personnel Management to carry out its legally-authorized Government-wide personnel management programs and functions) and in their role as an investigation agency.

23. To debt collection contractors to collect debts owed to the Government, as authorized under the Debt Collection Act of 1982, 31 U.S.C. 3718, and subject to the Privacy Act safeguards.

24. To appropriate agencies, entities, and persons when (1) It is suspected or confirmed that the security or confidentiality of information in the system of records has been compromised; (2) the Commission has determined that as a result of the suspected or confirmed compromise there is a risk of harm to economic or property interests, identity theft or fraud, or harm to the security or integrity of this system or other systems or programs (whether maintained by the Commission or another agency or entity) that rely upon the compromised information; and (3) the disclosure is made to such agencies, entities, and persons who are reasonably necessary to assist in connection with the Commission's efforts to respond to the suspected or confirmed compromise and prevent, minimize, or remedy such harm.

DISCLOSURE TO CONSUMER REPORTING AGENCIES:

We may disclose the record or information from this system, pursuant to 5 U.S.C. 552a(b)(12), to consumer reporting agencies as defined in the Fair Credit Reporting Act, 15 U.S.C. 1681a(f) or the Federal Claims Collection Act of 1966, as amended, 31 U.S.C. 3701(a)(3), in accordance with section 3711(f) of Title 31.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records are stored in both a paper and electronic format.

RETRIEVABILITY:

The records may be retrieved by the name of the subject of the complaint/investigation or by a unique control number assigned to each complaint/investigation.

SAFEGUARDS:

Access is limited to Office of Inspector General employees whose official duties require access. The paper records and electronic information not stored on computers are maintained in lockable cabinets. Information stored on computers is on a server located in a locked room. All electronic records are protected from unauthorized access through appropriate administrative, physical, and technical safeguards. These safeguards include the application of appropriate access control mechanisms to ensure the confidentiality, integrity, and availability of those records are only accessed by those with a need to know and dictated by their official duties.

RETENTION AND DISPOSAL:

These records will be maintained permanently until disposition authority is granted by the National Archives and Records Administration. Upon approval, the records will be retained in accordance with NARA's schedule and disposed of in a secure manner.

SYSTEM MANAGER(S) AND ADDRESS:

Inspector General, Office of Inspector General, EAC, 1225 New York Avenue, Suite 150, Washington, DC 20005.

NOTIFICATION PROCEDURE:

The OIG Investigative Files are generally exempt pursuant to 5 U.S.C. 552a(j)(2) and (k)(2). Any individual who wants to know whether this system of records contains a record about him or her, who wants access to his or her record, or who wants to contest the contents of a record, should make a written request to the System Manager. Requesters will be required to provide adequate identification, such as a driver's license, employee identification card, or other identifying document. Additional identification procedures may be required in some instances.

RECORD ACCESS PROCEDURES:

Same as ''Notification procedure.''

CONTESTING RECORD PROCEDURES:

Same as ''Notification procedure.''

RECORD SOURCE CATEGORIES:

The OIG collects information from many sources, including the subject individuals, employees of the EAC, other government employees, and witnesses and informants, and non-governmental sources.

SYSTEMS EXEMPTED FROM CERTAIN PROVISIONS OF THE ACT:

(a) *Criminal Law Enforcement:* Information compiled for this purpose is exempt from all of the provisions of the

Act except the following sections: (b), (c)(1) and (2), (e)(4)(A) through (F), (e)(6), (7), (9), (10), and (11), and (i). This material is exempt because the disclosure and other requirements of the Act would substantially compromise the efficacy and integrity of OIG operations in a number of ways. Indeed, disclosure of even the existence of these files would be problematic.

Disclosure could enable suspects to take action to prevent detection of criminal activities, conceal evidence, or escape prosecution. Required disclosure of information contained in this system could lead to the intimidation of, or harm to, informants, witnesses and their respective families or OIG personnel and their families.

Disclosure could invade the privacy of individuals other than subjects and disclose their identity when confidentiality was promised to them. Disclosures from these files could interfere with the integrity of other information which would otherwise be privileged, *see, e.g.*, 5 U.S.C. 552(b)(5) and which could interfere with other important law enforcement concerns, *see, e.g.*, 5 U.S.C. 552(b)(7).

The requirement that only relevant and necessary information be included in a criminal investigative file is contrary to good investigative practices which require a full and complete inquiry and exhaustion of all potential sources of information. 5 U.S.C. 552a(e)(1). Similarly, maintaining only those records which are accurate, relevant, timely and complete and which assure fairness in a determination is contrary to established investigative techniques. 5 U.S.C. 552a(e)(5). Requiring investigators to obtain information to the greatest extent practicable directly from the subject individual would be counterproductive to performance of a clandestine criminal investigation. 5 U.S.C. 552a(e)(2). Finally, providing notice to an individual interviewed of the authority of the interviewer, the purpose to which the information provided may be used, the routine uses of that information and the effect upon the individual should he choose not to provide the information sought could discourage the free flow of information in a criminal law enforcement inquiry 5 U.S.C. 552a(e)(3).

(b) *Other Law Enforcement:* In accordance with 5 U.S.C. 552a(k)(2), investigatory material compiled for law enforcement purposes (to the extent it is not already exempted by 5 U.S.C. 552a(j)(2)), is exempted from the following provisions of the ACT: (c)(3), (d), (e)(1), (e)(4)(G), (H), (I) and (f). This material is exempt because the disclosure and other requirements of the act could substantially compromise the efficacy and integrity of OIG operations. Disclosure could invade the privacy of other individuals and disclose their identity when they were expressly promised confidentiality.

Disclosure could interfere with the integrity of information which would otherwise be subject to privileges, *see, e.g.*, 5 U.S.C. 552(b)(5), and which could interfere with other important law enforcement concerns. *See, e.g.*, 5 U.S.C. 552(b)(7).

Signed:

Curtis Crider,

Inspector General, U.S. Election Assistance Commission.

[FR Doc. E8–14678 Filed 6–27–08; 8:45 am]

BILLING CODE 6820–KF–P

DEPARTMENT OF ENERGY

Environmental Management Site-Specific Advisory Board, Idaho National Laboratory

AGENCY: Department of Energy.

ACTION: Notice of Open Meeting.

SUMMARY: This notice announces a meeting of the Environmental Management Site-Specific Advisory Board (EM SSAB), Idaho National Laboratory. The Federal Advisory Committee Act (Pub. L. No. 92–463, 86 Stat. 770) requires that public notice of this meeting be announced in the **Federal Register**.

DATES: Wednesday, July 16, 2008, 8 a.m.–5 p.m. Opportunities for public participation will be held on Wednesday, July 16, from 1 p.m. to 1:15 p.m. and from 3:15 p.m. to 3:30 p.m. These times are subject to change; please contact the Federal Coordinator (below) for confirmation of times prior to the meeting.

LOCATION: AmeriTel Inn, 645 Lindsay Boulevard, Idaho Falls, Idaho 83402.

FOR FURTHER INFORMATION CONTACT: Robert L. Pence, Federal Coordinator, Department of Energy, Idaho Operations Office, 1955 Fremont Avenue, MS–1203, Idaho Falls, ID 83415. Phone (208) 526–6518; Fax (208) 526–8789 or *e-mail: pencerl@id.doe.gov* or visit the Board's Internet home page at: *http://www.inlemcab.org.*

SUPPLEMENTARY INFORMATION:

Purpose of the Board: The purpose of the Board is to make recommendations to DOE in the areas of environmental restoration, waste management, and related activities.

Tentative Topics (agenda topics may change up to the day of the meeting; please contact Robert L. Pence for the most current agenda):

- Cultural and Historic Areas at the Idaho National Laboratory.
- Progress to Cleanup.
- Waste Area Group 7 (WAG–7) Draft Record of Decision.
- Accelerated Retrieval Project III Engineering Evaluation/Cost Analysis.
- WAG–10 Proposed Plan.
- WAG–3 Work Plan.
- Understanding Indian Culture and Federal Tribal Relations.

Public Participation: The meeting is open to the public. Written statements may be filed with the Board either before or after the meeting. Individuals who wish to make oral presentations pertaining to agenda items should contact Robert L. Pence at the address or telephone number listed above. The request must be received five days prior to the meeting and reasonable provision will be made to include the presentation in the agenda. The Deputy Designated Federal Officer is empowered to conduct the meeting in a fashion that will facilitate the orderly conduct of business. Individuals wishing to make public comment will be provided a maximum of five minutes to present their comments.

Minutes: Minutes will be available by writing or calling Robert L. Pence, Federal Coordinator, at the address and phone number listed above. Minutes will also be available at the following Web site: *http://www.inlemcab.org/meetings.html.*

Issued at Washington, DC on June 25, 2008.

Rachel Samuel,

Deputy Committee Management Officer.

[FR Doc. E8–14770 Filed 6–27–08; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Environmental Management Site-Specific Advisory Board, Northern New Mexico

AGENCY: Department of Energy.

ACTION: Notice of Open Meeting.

SUMMARY: This notice announces a meeting of the Environmental Management Site-Specific Advisory Board (EM SSAB), Northern New Mexico. The Federal Advisory Committee Act (Pub. L. No. 92–463, 86 Stat. 770) requires that public notice of this meeting be announced in the **Federal Register**.

DATES: Wednesday, July 30, 2008, 2 p.m.–8 p.m.

LOCATION: Jemez Complex, Santa Fe Community College, 6401 Richards Avenue, Santa Fe, New Mexico.

FOR FURTHER INFORMATION CONTACT: Menice Santistevan, Northern New Mexico Citizens' Advisory Board (NNMCAB), 1660 Old Pecos Trail, Suite B, Santa Fe, NM 87505. Phone (505) 995–0393; Fax (505) 989–1752 or *E-mail: msantistevan@doeal.gov*.

SUPPLEMENTARY INFORMATION:

Purpose of the Board: The purpose of the Board is to make recommendations to DOE in the areas of environmental restoration, waste management, and related activities.

Tentative Agenda

2 p.m. Call to Order by Deputy Designated Federal Officer (DDFO), Christina Houston; Establishment of a Quorum, Lorelei Novak; Welcome, Ed Moreno; Approval of Agenda, J.D. Campbell; Approval of Minutes of May 22, 2008, Board Meeting, J.D. Campbell.

2:05 p.m. Old Business, Ed Moreno:
- A. Questions/Answers on Written Reports from Board Chair, DDFO and Executive Director;
- B. Other Matters.

2:20 p.m. New Business, Ed Moreno:
- A. First Reading—Proposed Amendments to NNMCAB Bylaws, Menice Santistevan;
- B. Report from Nominating Committee;
- C. Report/Questions on Environmental Justice Conference, Mike Loya;
- D. Matters from the Board Members.

3 p.m. Committee Business/Reports, Ed Moreno:
- A. Environmental Monitoring, Surveillance and Remediation Committee, Pam Henline:
  - Introduction of Draft Recommendations;
- B. Waste Management Committee, Ralph Phelps:
  - Introduction of Draft Recommendations;
- C. Report from Ad Hoc Committees, Ralph Phelps:
  - NNMCAB Effectiveness and DOE Responsiveness, Larry Rapagnani;
  - Rapid Response, Jane Gaziano;
  - Public Outreach, Antonio Lopez.

4:10 p.m. Break.

4:30 p.m. Discussion with Secretary Ron Curry, New Mexico Environment Department, Ed Moreno; Presentation on Upcoming Consent Order Deliverables.

5:30 p.m. Public Comment Period.

5:45 p.m. Dinner Break.

6:45 p.m. Consideration and Action on Recommendations to DOE (2008–1 to 2008–4), Ed Moreno.

7:45 p.m. Recap of Meeting: Issuance of Press Releases, Editorials, etc., Ed Moreno.

8 p.m. Adjourn, Christina Houston.

This agenda is subject to change at least one day in advance of the meeting.

Public Participation: The meeting is open to the public. Written statements may be filed with the Board either before or after the meeting. Individuals who wish to make oral statements pertaining to agenda items should contact Menice Santistevan at the address or telephone number listed above. Requests must be received five days prior to the meeting and reasonable provision will be made to include the presentation in the agenda. The Deputy Designated Federal Officer is empowered to conduct the meeting in a fashion that will facilitate the orderly conduct of business. Individuals wishing to make public comment will be provided a maximum of five minutes to present their comments.

Minutes: Minutes will be available by writing or calling Menice Santistevan at the address or phone number listed above. Minutes and other Board documents are on the Internet at: *http://www.nnmcab.org/minutes/board-minutes.htm*.

Issued at Washington, DC on June 23, 2008.

Rachel Samuel,

Deputy Committee Management Officer.

[FR Doc. E8–14771 Filed 6–27–08; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP08–420–000];PF07–15–000

Algonquin Gas Transmission, LLC; Notice of Application

June 20, 2008.

Take notice that on June 9, 2008, Algonquin Gas Transmission, LLC (Algonquin), 5400 Westheimer Court, Houston, Texas 77056, filed in the above referenced docket an application pursuant to section 7(c) of the Natural Gas Act (NGA), and parts 157 of the Commission's regulations for an order granting a certificate of public convenience to construct, install, own, operate and maintain natural gas pipelines facilities necessary to provide at least 746,500 dekatherms per day (Dth/d) of firm transportation capacity. The proposed HubLine/East to West Project consists of constructing 31.4 miles of multi-diameter pipeline and related facilities, including the new 10,310 horsepower Rehoboth Compressor Station in Rehoboth, MA, all of which are located in Massachusetts, Rhode Island, Connecticut, and New Jersey. Algonquin also requests: (i) Authority to charge its existing HubLine 2003 Project rate for service on the HubLine/East to West Project facilities; and (ii) any waivers, authority, and further relief as may be necessary to implement the proposal contain in its application, all as more fully set forth in the application which is on file with the Commission and open to public inspection. The filing may also be viewed on the Web at *http://www.ferc.gov* using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov* or toll free at (866) 208–3676, or TTY, contact (202) 502–8659.

Any questions concerning this application may be directed to Garth Johnson, General Manager, Certificates and Reporting, P.O. Box 1642, Houston, Texas 77251–1642, or at (713) 627–5415, or *gjohnson@spectraenergy.com*.

On September 10, 2007, the Commission staff granted Algonquin's request to utilize the National Environmental Policy Act (NEPA) Pre-Filling Process and assigned Docket No. PF07–15–000 to staff activities involving the HubLine/East to West Project. Now, as the filing of Algonquin's application on June 9, 2008, the NEPA Pre-Filling Process for this project has ended. From this time forward, Algonquin's proceeding will be conducted in Docket No. CP08–420–000, as noted in the caption of this Notice.

Pursuant to section 157.9 of the Commission's rules, 18 CFR 157.9, within 90 days of this Notice the Commission staff will either complete its environmental assessment (EA) and place it into the Commission's public record (eLibrary) for this proceeding, or issue a Notice of Schedule for Environmental Review. If a Notice of Schedule for Environmental Review is issued, it will indicate, among other milestones, the anticipated date for the Commission staff's issuance of the final environmental impact statement (FEIS) or EA for this proposal. The filing of the EA in the Commission's public record for this proceeding or the issuance of a Notice of Schedule for Environmental Review will serve to notify federal and state agencies of the timing for the completion of all necessary reviews, and the subsequent need to complete all federal authorizations within 90 days of the date of issuance of the Commission staff's FEIS or EA.

There are two ways to become involved in the Commission's review of

this project. First, any person wishing to obtain legal status by becoming a party to the proceedings for this project should, on or before the comment date stated below, file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, a motion to intervene in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the NGA (18 CFR 157.10). A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies of all documents filed by the applicant and by all other parties. A party must submit 14 copies of filings made with the Commission and must mail a copy to the applicant and to every other party in the proceeding. Only parties to the proceeding can ask for court review of Commission orders in the proceeding.

However, a person does not have to intervene in order to have comments considered. The second way to participate is by filing with the Secretary of the Commission, as soon as possible, an original and two copies of comments in support of or in opposition to this project. The Commission will consider these comments in determining the appropriate action to be taken, but the filing of a comment alone will not serve to make the filer a party to the proceeding. The Commission's rules require that persons filing comments in opposition to the project provide copies of their protests only to the party or parties directly involved in the protest.

Persons who wish to comment only on the environmental review of this project should submit an original and two copies of their comments to the Secretary of the Commission. Environmental commentors will be placed on the Commission's environmental mailing list, will receive copies of the environmental documents, and will be notified of meetings associated with the Commission's environmental review process. Environmental commentors will not be required to serve copies of filed documents on all other parties. However, the non-party commentors will not receive copies of all documents filed by other parties or issued by the Commission (except for the mailing of environmental documents issued by the Commission) and will not have the right to seek court review of the Commission's final order.

The Commission strongly encourages electronic filings of comments, protests and interventions in lieu of paper using the ''eFiling'' link at *http://www.ferc.gov*. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426.

This filing is accessible on-line at *http://www.ferc.gov,* using the ''eLibrary'' link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an ''eSubscription'' link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov,* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: July 11, 2008.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14685 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP08–418–000]

Southeast Gas Storage, LLC; Notice of Application

June 20, 2008.

Take notice that on June 6, 2008, Southeast Gas Storage LLC (SGS), 1001 Louisisana, Houston, TX 77002, filed in the above referenced docket an abbreviated application pursuant to section 7(c) of the Natural Gas Act (NGA), and Parts 157 and 284 of the Commission's regulations for an order granting a certificate of public convenience to develop, construct, own and operate an underground gas storage facility (Black Warrior Storage Project), which will allow SGS to provide up to 24.7 Bcf of working gas capacity in Monroe and Lowndes Counties, Mississippi. Additionally, SGS requests a blanket certificate authorizing it to engage in certain self-implementing routine activities under Part 157, Subpart F, and a blanket certificate under Part 284, Subpart G, authorizing SGS to provide open-access non-discriminatory firm and interruptible natural gas storage services. SGS also requests authorization to charge market-based rates for the proposed storage services and the Commission's approval of SGS's Pro-Forma Gas Tariff, all as more fully set forth in the application which is on file with the Commission and open to public inspection. The filing may also be viewed on the Web at *http://www.ferc.gov* using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov* or toll free at (866) 208–3676, or TTY, contact (202) 502–8659.

Any questions concerning this application may be directed to Susan T. Halbach, El Paso Corporation, Senior Counsel, 1001 Louisiana, Houston, TX 77002, at (713) 420–5751.

Pursuant to section 157.9 of the Commission's rules, 18 CFR 157.9, within 90 days of this Notice the Commission staff will either: Complete its environmental assessment (EA) and place it into the Commission's public record (eLibrary) for this proceeding; or issue a Notice of Schedule for Environmental Review. If a Notice of Schedule for Environmental Review is issued, it will indicate, among other milestones, the anticipated date for the Commission staff's issuance of the final environmental impact statement (FEIS) or EA for this proposal. The filing of the EA in the Commission's public record for this proceeding or the issuance of a Notice of Schedule for Environmental Review will serve to notify federal and state agencies of the timing for the completion of all necessary reviews, and the subsequent need to complete all federal authorizations within 90 days of the date of issuance of the Commission staff's FEIS or EA.

There are two ways to become involved in the Commission's review of this project. First, any person wishing to obtain legal status by becoming a party to the proceedings for this project should, on or before the comment date stated below, file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, a motion to intervene in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the NGA (18 CFR 157.10). A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies of all documents filed by the applicant and by all other parties. A party must submit 14 copies of filings made with the Commission and must mail a copy to the applicant and to every other party in the proceeding. Only parties to the proceeding can ask for court review of Commission orders in the proceeding.

However, a person does not have to intervene in order to have comments considered. The second way to

participate is by filing with the Secretary of the Commission, as soon as possible, an original and two copies of comments in support of or in opposition to this project. The Commission will consider these comments in determining the appropriate action to be taken, but the filing of a comment alone will not serve to make the filer a party to the proceeding. The Commission's rules require that persons filing comments in opposition to the project provide copies of their protests only to the party or parties directly involved in the protest.

Persons who wish to comment only on the environmental review of this project should submit an original and two copies of their comments to the Secretary of the Commission. Environmental commentors will be placed on the Commission's environmental mailing list, will receive copies of the environmental documents, and will be notified of meetings associated with the Commission's environmental review process. Environmental commentors will not be required to serve copies of filed documents on all other parties. However, the non-party commentors will not receive copies of all documents filed by other parties or issued by the Commission (except for the mailing of environmental documents issued by the Commission) and will not have the right to seek court review of the Commission's final order.

The Commission strongly encourages electronic filings of comments, protests and interventions in lieu of paper using the ''eFiling'' link at *http://www.ferc.gov*. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy regulatory Commission, 888 First Street, NE., Washington, DC 20426.

This filing is accessible on-line at *http://www.ferc.gov,* using the ''eLibrary'' link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an ''eSubscription'' link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov,* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: July 14, 2008.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14683 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP08–422–000]

Gulfstream Natural Gas System, L.L.C.; Notice of Request Under Blanket Authorization

June 20, 2008.

Take notice that on June 13, 2008, Gulfstream Natural Gas System, L.L.C. (Gulfstream), 5400 Westheimer Court, Houston, Texas 77251–1642, filed in Docket No. CP08–422–000, an application pursuant to sections 157.205, 157.208, and 157.210 of the Commission's Regulations under the Natural Gas Act (NGA) as amended, to construct, install, own, operate, and maintain a compressor station (Station 430) at approximate milepost 520.75 on Gulfstream's existing pipeline system in Highlands County, Florida, under Gulf Stream's blanket certificate issued in Docket No. CP00–8–000,[1] all as more fully set forth in the application which is on file with the Commission and open to the public for inspection.

Gulf Stream proposes to construct, install, own, operate, and maintain Station 430, which would consist of one 7,700 HP Solar Taurus 60 gas turbine compression unit and related facilities, including piping, suction and discharge headers, a scrubber, a control building, communications equipment, an electric transformer, two skid-mounted air compressors, and other facilities, all at an estimated cost of $19,890,000. Gulf Stream states that it would finance the Station 430 project with funds on hand and/or by borrowing under short-term financing arrangements. Gulf Stream also states that the proposed Station 430 project facilities would allow Gulf Stream to maintain deliveries at higher pressures on the downstream portion of its pipeline system.

Any questions concerning this application may be directed to Garth Johnson, General Manager, Certificates and Reporting—Regulatory Affairs, Gulf Stream Natural Gas System, L.L.C., P.O. Box 1642, Houston, Texas 77251–1642, or via telephone at (713) 627–5415, facsimile number (713) 627–5947, or e-mail *gjohnson@spectraenergy.com.*

This filing is available for review at the Commission or may be viewed on the Commission's Web site at *http://www.ferc.gov,* using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number filed to access the document. For assistance, please contact FERC Online Support at *FERC OnlineSupport@ferc.gov* or call toll-free at (866) 206–3676, or, for TTY, contact (202) 502–8659. Comments, protests and interventions may be filed electronically via the Internet in lieu of paper. See, 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the ''e-Filing'' link. The Commission strongly encourages intervenors to file electronically.

Any person or the Commission's staff may, within 60 days after issuance of the instant notice by the Commission, file pursuant to rule 214 of the Commission's Procedural Rules (18 CFR 385.214) a motion to intervene or notice of intervention and pursuant to section 157.205 of the regulations under the NGA (18 CFR 157.205), a protest to the request. If no protest is filed within the time allowed therefore, the proposed activity shall be deemed to be authorized effective the day after the time allowed for filing a protest. If a protest is filed and not withdrawn within 30 days after the allowed time for filing a protest, the instant request shall be treated as an application for authorization pursuant to section 7 of the NGA.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14686 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

[1] 94 FERC ¶ 61,185 (2001).

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER08–1069–000]

Happy Jack Windpower, LLC; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

June 23, 2008.

This is a supplemental notice in the above-referenced proceeding of Happy Jack Windpower, LLC's application for market-based rate authority, with an accompanying rate schedule, noting that such application includes a request for blanket authorization, under 18 CFR Part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Anyone filing a motion to

intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing interventions or protests with regard to the applicant's request for blanket authorization, under 18 CFR Part 34, of future issuances of securities and assumptions of liability, is July 14, 2008.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov*. To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 14 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First St. NE., Washington, DC 20426.

The filings in the above-referenced proceeding are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list.

They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov*. or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14681 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER08–1115–000]

Northern Virginia Electric Corporative; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

June 20, 2008.

This is a supplemental notice in the above-referenced proceeding of Northern Virginia Electric Corporative's application for market-based rate authority, with an accompanying rate schedule, noting that such application includes a request for blanket authorization, under 18 CFR Part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing interventions or protests with regard to the applicant's request for blanket authorization, under 18 CFR Part 34, of future issuances of securities and assumptions of liability, is July 10, 2008.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov*. To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 14 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First St., NE., Washington, DC 20426.

The filings in the above-referenced proceeding are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov*. or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14688 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER08–1121–000]

Royal Bank of Canada; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

June 20, 2008.

This is a supplemental notice in the above-referenced proceeding of Royal Bank of Canada's application for market-based rate authority, with an accompanying rate schedule, noting that such application includes a request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and § 385.214). Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing interventions or protests with regard to the applicant's request for blanket authorization, under 18 CFR Part 34, of future issuances of securities and assumptions of liability, is July 10, 2008.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov*. To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 14 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First St., NE., Washington, DC 20426.

The filings in the above-referenced proceeding are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC

Online service, please e-mail *FERCOnlineSupport@ferc.gov.* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14689 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

June 24, 2008.

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Docket Numbers: RP00–426–036.

Applicants: Texas Gas Transmission, LLC.

Description: Texas Gas Transmission, LLC submits Fifth Revised Sheet 52 and 52A *et al.* to FERC Gas Tariff, Second Revised Volume 1.

Filed Date: 06/20/2008.

Accession Number: 20080623–0064.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 02, 2008.

Docket Numbers: RP08–123–002.

Applicants: Central Kentucky Transmission Corporation.

Description: Central Kentucky Transmission Corporation submits First Revised Sheet 35 *et al.* to FERC Gas Tariff, Original Volume 1.

Filed Date: 06/19/2008.

Accession Number: 20080620–0039.

Comment Date: 5 p.m. Eastern Time on Tuesday, July 01, 2008.

Docket Numbers: RP08–125–002.

Applicants: Crossroads Pipeline Company.

Description: Crossroads Pipeline Company submits Second Revised Sheet 50 *et al.* to FERC Gas Tariff, First Revised Volume 1.

Filed Date: 06/19/2008.

Accession Number: 20080620–0038.

Comment Date: 5 p.m. Eastern Time on Tuesday, July 01, 2008.

Docket Numbers: RP08–362–001.

Applicants: Cheyenne Plains Gas Pipeline Company LLC.

Description: Cheyenne Plains Gas Pipeline Company, LLC submits Substitute First Revised Sheet 311 to its FERC Gas Tariff, Original Volume 12.

Filed Date: 06/18/2008.

Accession Number: 20080618–0129.

Comment Date: 5 p.m. Eastern Time on Monday, June 30, 2008.

Docket Numbers: RP08–391–001.

Applicants: Sabine Pipe Line LLC.

Description: Sabine Pipe Line, LLC submits Substitute First Revised Sheet 235 to FERC Gas Tariff, Original Volume 1, to be effective 7/1/08.

Filed Date: 06/19/2008.

Accession Number: 20080623–0021.

Comment Date: 5 p.m. Eastern Time on Tuesday, July 01, 2008.

Docket Numbers: RP08–392–001.

Applicants: Texas Gas Transmission, LLC.

Description: Texas Gas Transmission, LLC submits their request to amend the 5/30/08 filing of proposed tariff sheets to Third Revised Volume 1 by modifying its effective date.

Filed Date: 06/17/2008.

Accession Number: 20080618–0081.

Comment Date: 5 p.m. Eastern Time on Monday, June 30, 2008.

Docket Numbers: RP08–413–000.

Applicants: Texas Gas Transmission, LLC.

Description: Texas Gas Transmission, LLC submits Sixth Revised Volume of its FERC Gas Tariff, Second Revised Volume 1, to become effective 8/1/08.

Filed Date: 06/18/2008.

Accession Number: 20080618–0128.

Comment Date: 5 p.m. Eastern Time on Monday, June 30, 2008.

Docket Numbers: RP08–415–000.

Applicants: Questar Pipeline Company.

Description: Questar Pipeline Co submits Fifth Revised Sheet 47A to FERC Gas Tariff, First Revised Volume 1, effective 7/21/08.

Filed Date: 06/20/2008.

Accession Number: 20080620–0112.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 02, 2008.

Docket Numbers: RP08–416–000.

Applicants: Iroquois Gas Transmission System, L.P.

Description: Report of Measurement Variance/Fuel Use Factors re Iroquois Gas Transmission System.

Filed Date: 06/20/2008.

Accession Number: 20080620–5048.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 02, 2008.

Docket Numbers: RP08–417–000.

Applicants: Natural Gas Pipeline Company of America.

Description: Natural Gas Pipeline Company of America LLC submits a Petition for Temporary Waiver of Tariff Provisions and Request for Expedited Action.

Filed Date: 06/20/2008.

Accession Number: 20080620–0130.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 02, 2008.

Docket Numbers: RP08–418–000.

Applicants: Cheyenne Plains Gas Pipeline Company LLC.

Description: Cheyenne Plains Gas Pipeline Company, LLC submits Ninth Revised Sheet 1 to its Gas Tariff, Original Volume 1, to become effective 7/21/08.

Filed Date: 06/20/2008.

Accession Number: 20080623–0063.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 02, 2008.

Docket Numbers: RP08–419–000.

Applicants: Cheyenne Plains Gas Pipeline Company LLC.

Description: Cheyenne Plains Gas Pipeline Co, LLC submits First Revised Sheet 285 *et al.* to FERC Gas Tariff, Original Volume 1.

Filed Date: 06/20/2008.

Accession Number: 20080623–0062.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 02, 2008.

Docket Numbers: CP06–64–002.

Applicants: Central New York Oil and Gas Company, LLC.

Description: Central New York Oil and Gas Company, LLD submits First Revised Sheet 1 *et al.* to FERC Gas Tariff, Original Volume No. 1.

Filed Date: 06/20/2008.

Accession Number: 20080623–0061.

Comment Date: 5 p.m. Eastern Time on Monday, July 7, 2008.

Docket Numbers: CP07–44–003; CP07–45–002.

Applicants: Southeast Supply Header, LLC.

Description: Southeast Supply Header, LLC submits second application for amendment to certificate of public convenience.

Filed Date: 06/20/2008.

Accession Number: 20080623–0060.

Comment Date: 5 p.m. Eastern Time on Monday, July 7, 2008.

Docket Numbers: CP08–25–001.

Applicants: Transcontinental Gas Pipe Line Corporation.

Description: Transcontinental Gas Pipe Line Corporation submits Twenty-Seventh Revised Sheet No. 1, *et al.*, to FERC Gas Tariff, Original Volume No. 2.

Filed Date: 06/18/2008.

Accession Number: 20080623–0023.

Comment Date: 5 p.m. Eastern Time on Monday, July 7, 2008.

Docket Numbers: CP08–406–001.

Applicants: Transcontinental Gas Pipe Line Corporation.

Description: Transcontinental Gas Pipe Line Corporation submits Nineteenth Revised Sheet No. 1A, *et al.*, to its FERC Gas Tariff, Original Volume No. 2.

Filed Date: 06/18/2008.

Accession Number: 20080623–0022.

Comment Date: 5 p.m. Eastern Time on Monday, July 7, 2008.

Any person desiring to intervene or to protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Rules of

Practice and Procedure (18 CFR 385.211 and 385.214) on or before 5 p.m. Eastern time on the specified comment date. It is not necessary to separately intervene again in a subdocket related to a compliance filing if you have previously intervened in the same docket. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant. In reference to filings initiating a new proceeding, interventions or protests submitted on or before the comment deadline need not be served on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov.* To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 14 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First St., NE., Washington, DC 20426.

The filings in the above proceedings are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. E8–14789 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings # 1

June 23, 2008.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER03–345–011.

Applicants: New England Power Pool Participants Committee.

Description: ISO New England Inc submits its semi-annual status report on Load Response Programs.

Filed Date: 06/18/2008.

Accession Number: 20080619–0114.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 09, 2008.

Docket Numbers: ER05–1097–004.

Applicants: BJ Energy LLC.

Description: BJ Energy, LLC submits an updated market power analysis, and request for determination of Category 1 Seller Status pursuant to Order 697 and 697–A.

Filed Date: 06/18/2008.

Accession Number: 20080620–0010.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 09, 2008.

Docket Numbers: ER08–1069–000.

Applicants: Happy Jack Windpower, LLC.

Description: Application of Happy Jack Windpower, LLC for Market-Based Rate Authority.

Filed Date: 06/18/2008.

Accession Number: 20080620–0083.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 09, 2008.

Docket Numbers: ER08–1120–000.

Applicants: Trans-Allegheny Interstate Line Company.

Description: Trans-Allegheny Interstate Line Company submits its Information Filing of 2008 Formula Rate Annual Update.

Filed Date: 05/15/2008.

Accession Number: 20080515–5103.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 02, 2008.

Docket Numbers: ER08–1140–000.

Applicants: Southern California Edison Company.

Description: Southern California Edison Co submits Second Revised Sheet 19 et al to First Revised Rate Schedule 466 to the Second Amended and Restated 33 kV Added Facilities Agreement with Southern California Water Co.

Filed Date: 06/19/2008.

Accession Number: 20080620–0011.

Comment Date: 5 p.m. Eastern Time on Thursday, July 10, 2008.

Docket Numbers: ER08–1141–000.

Applicants: Public Service Company of New Mexico.

Description: Public Service Company of New Mexico submits Service Agreement 291 under the PNM OATT for 25 MW of capacity etc with Aragonne Wind, LLC.

Filed Date: 06/19/2008.

Accession Number: 20080620–0012.

Comment Date: 5 p.m. Eastern Time on Thursday, July 10, 2008.

Docket Numbers: ER08–1142–000.

Applicants: Southern California Edison Company.

Description: Southern California Edison Company submits an amended letter agreement with PPM Energy, Inc.

Filed Date: 06/19/2008.

Accession Number: 20080620–0013.

Comment Date: 5 p.m. Eastern Time on Thursday, July 10, 2008.

Take notice that the Commission received the following open access transmission tariff filings:

Docket Numbers: OA07–91–001.

Applicants: Xcel Energy Services Inc.

Description: Order No. 890 OATT Filing of Xcel Energy Services Inc. in response to letter Order of FERC issued May 20, 2008.

Filed Date: 06/19/2008.

Accession Number: 20080619–5057.

Comment Date: 5 p.m. Eastern Time on Thursday, July 10, 2008.

Docket Numbers: OA08–52–001.

Applicants: New York Independent System Operator, Inc.

Description: New York Independent System Operator, Inc et al submits additional revisions to Attachment Y etc in compliance with Order 890.

Filed Date: 06/18/2008.

Accession Number: 20080620–0085.

Comment Date: 5 p.m. Eastern Time on Wednesday, July 09, 2008.

Any person desiring to intervene or to protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214) on or before 5 p.m. Eastern time on the specified comment date. It is not necessary to separately intervene again in a subdocket related to a compliance filing if you have previously intervened in the same docket. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant. In reference to filings initiating a new proceeding, interventions or protests submitted on or before the comment deadline need not be served on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov.* To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 14 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First St., NE., Washington, DC 20426.

The filings in the above proceedings are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov,* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. E8–14790 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. OR08–11–000]

Nexen Marketing U.S.A. Inc. Complainant, v. Enbridge Pipelines (North Dakota) LLC, Respondent; Notice of Complaint

June 20, 2008.

Take notice that on June 18, 2008, Nexen Marketing U.S.A. Inc. (Nexen) filed a formal complaint against Enbridge Pipelines (North Dakota) LLC (Enbridge North Dakota), pursuant to Rule 206 of the Rules of Practice and Procedures of the Commission's regulations, 18 CFR 385.206. Nexen alleges that Enbridge North Dakota has unfairly and unreasonably imposed penalties that substantially reduce the quantity of crude oil that Nexen is able to ship on its pipeline. Nexen alleges that a force majeure event occurred and Enbridge North Dakota's interpretation and application of the force majeure provision of its tariff was unjust and unreasonable and violated its obligation under the Interstate Commerce Act to treat shippers in a just, reasonable and nondiscriminatory manner.

Nexen certifies that copies of the complaint were served on the issuing officer of Enbridge North Dakota's tariff.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. The Respondent's answer and all interventions, or protests must be filed on or before the comment date. The Respondent's answer, motions to intervene, and protests must be served on the Complainants.

The Commission encourages electronic submission of Respondent's answer, protests and interventions in lieu of paper using the ''eFiling'' link at *http://www.ferc.gov*. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426.

This filing is accessible on-line at *http://www.ferc.gov*, using the ''eLibrary'' link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an ''eSubscription'' link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov*, or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: 5 p.m. Eastern Time on July 18, 2008.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14684 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP08–89–000]

Williston Basin Interstate Pipeline Company; Notice of Availability of the Environmental Assessment for the Proposed Sheyenne Expansion Project

June 20, 2008.

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared an environmental assessment (EA) of the Sheyenne Expansion Project proposed by Williston Basin Interstate Pipeline Company (Williston Basin) in the above-referenced docket.

The EA was prepared to satisfy the requirements of the National Environmental Policy Act. The FERC staff concludes that approval of the proposed project, with appropriate mitigating measures, would not constitute a major federal action significantly affecting the quality of the human environment.

The EA assesses the potential environmental effects of the construction and operation of Williston Basin's proposed Sheyenne Expansion Project (Project), consisting of the new Steele Compressor Station in Kidder County, North Dakota; installation of additional compression at the existing Bismarck Compressor Station in Burleigh County, North Dakota; minor modifications to the existing Cleveland Compressor Station in Stutsman County, North Dakota; and construction and operation of approximately 6,400 feet of 8-inch-diameter pipeline lateral and metering facilities to connect to the proposed Tharaldson Ethanol Plant in Cass County, North Dakota.

The EA has been placed in the public files of the FERC. A limited number of copies of the EA are available for distribution and public inspection at: Federal Energy Regulatory Commission, Public Reference Room, 888 First Street, NE., Room 2A, Washington, DC 20426, (202) 502–8371.

Copies of the EA have been mailed to federal, state, and local agencies, interested individuals, newspapers, libraries, and parties to this proceeding. Any person wishing to comment on the EA may do so. To ensure consideration prior to a Commission decision on the proposal, it is important that we receive your comments before the date specified below.

You can make a difference by providing us with your specific comments or concerns about the Project. Your comments should focus on the

potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental impacts. The more specific your comments, the more useful they will be. To ensure that your comments are timely and properly recorded, please send in your comments so that they will be received in Washington, DC on or before July 21, 2008.

For your convenience, there are three methods in which you can use to submit your comments to the Commission. In all instances please reference the project docket number CP08–89–000 with your submission. The docket number can be found on the front of this notice. The Commission encourages electronic filing of comments and has dedicated eFiling expert staff available to assist you at 202–502–8258 or *efiling@ferc.gov.*

(1) You may file your comments electronically by using the Quick Comment feature, which is located on the Commission's internet Web site at *http://www.ferc.gov* under the link to Documents and Filings. A Quick Comment is an easy method for interested persons to submit text-only comments on a project;

(2) You may file your comments electronically by using the eFiling feature, which is located on the Commission's internet Web site at *http://www.ferc.gov* under the link to Documents and Filings. eFiling involves preparing your submission in the same manner as you would if filing on paper, and then saving the file on your computer's hard drive. You will attach that file as your submission. New eFiling users must first create an account by clicking on ''Sign up'' or ''eRegister''. You will be asked to select the type of filing you are making. A comment on a particular project is considered a ''Comment on a Filing;'' or

(3) You may file your comments via mail to the Commission by sending an original and two copies of your letter to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First St., NE, Room 1A, Washington, DC 20426;

Label one copy of the comments for the attention of Gas Branch 3, PJ11.3.

Comments will be considered by the Commission but will not serve to make the commentor a party to the proceeding. Any person seeking to become a party to the proceeding must file a motion to intervene pursuant to Rule 214 of the Commission's Rules of Practice and Procedures (18 CFR 385.214).[1] Only intervenors have the right to seek rehearing of the Commission's decision.

Affected landowners and parties with environmental concerns may be granted intervenor status upon showing good cause by stating that they have a clear and direct interest in this proceeding which would not be adequately represented by any other parties. You do not need intervenor status to have your comments considered.

Additional information about the project is available from the Commission's Office of External Affairs, at 1–866–208–FERC or on the FERC Internet Web site (*www.ferc.gov*) using the eLibrary link. Click on the eLibrary link, click on ''General Search'' and enter the docket number excluding the last three digits in the Docket Number field. Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at *FercOnlineSupport@ferc.gov* or toll free at 1–866–208–3676, or for TTY, contact (202) 502–8659. The eLibrary link also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rulemakings.

In addition, the Commission offers a free service called eSubscription which allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries and direct links to the documents. Go to *www.ferc.gov/esubscribenow.htm.*

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14687 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

[1] Interventions may also be filed electronically via the Internet in lieu of paper. See the previous discussion on filing comments electronically.

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP08–403–000]

Wyoming Interstate Company, Ltd; Notice of Intent To Prepare an Environmental Assessment for the Proposed Piceance Compression Expansion Project and Request for Comments on Environmental Issues

June 20, 2008.

The staff of the Federal Energy Regulatory Commission (FERC or Commission) will prepare an environmental assessment (EA) that will discuss the environmental impacts of the Wyoming Interstate Company, Ltd. (WIC) involving construction and operation of facilities by WIC in Rio Blanco County and Moffat County, Colorado.

This notice announces the opening of the scoping process we will use to gather input from the public and interested agencies on the project. Your input will help the Commission staff determine which issues need to be evaluated in the EA. Please note that the scoping period will close on July 21, 2008.

This notice is being sent to affected landowners; federal, state, and local government representatives and agencies; environmental and public interest groups; Native American tribes; other interested parties in this proceeding; and local libraries and newspapers. We encourage government representatives to notify their constituents of this planned project and encourage them to comment on their areas of concern.

If you are a landowner receiving this notice, you may be contacted by a pipeline company representative about the acquisition of an easement to construct, operate, and maintain the proposed facilities. The pipeline company would seek to negotiate a mutually acceptable agreement. However, if the project is approved by the Commission, that approval conveys with it the right of eminent domain. Therefore, if easement negotiations fail to produce an agreement, the pipeline company could initiate condemnation proceedings in accordance with state law.

A fact sheet prepared by the FERC entitled ''An Interstate Natural Gas Facility On My Land? What Do I Need To Know?'' was attached to the project notice BBS provided to landowners. This fact sheet addresses a number of typically asked questions, including the use of eminent domain and how to participate in the Commission's proceedings. It is available for viewing on the FERC Internet Web site (*www.ferc.gov*).

Summary of the Proposed Project

The proposed project would involve modifications of the Greasewood Compressor Station (Greasewood CS) and the construction of a new compressor station called the Snake River Compressor Station (Snake River CS) as described below.

Greasewood CS

WIC proposes to uprate the existing compressor unit and install a new compressor unit at the Greasewood CS located at milepost (MP) 141.7 on Line 233 A in Rio Blanco County, Colorado. All construction activity would be

confined to the previously disturbed land within the existing 10-acre industrial site. The uprate and modifications would include the following:

- Uprate its existing Solar Centaur 40 Turbine at the WIC Greesewood CS. The uprate requires the replacement of the existing control panel and software changes that would re-set control points on the unit. The uprate would increase available horsepower (hp) for the station from the existing 1,650 site hp to 2,832 site hp;
- Install an additional compressor unit within the existing station yard. The new unit would consist of a Solar Centaur 40 S Turbine capable of generating a maximum of 2,832 site hp. Subsequent to the uprate and the installation of the new unit, the Greasewood CS would have a total of 5,6654 site hp;
- Construct an extension of the compressor building approximately 25 feet to accommodate the new compressor;
- A new inlet separator installed in parallel with the existing separator;
- A new discharge gas cooler installed in parallel with the existing gas cooler; and
- 24-inch-diameter suction and discharge headers and valves.

Snake River CS

The new Snake River CS would be located at approximately MP 54.2 near the midpoint of the Piceance Lateral in Moffat County, Colorado. The new compressor station would include the following facilities:

- Two gas fired Solar Taurus 70 units with a total output of 13,664 site hp, including all ancillary equipment such as exhaust stacks, air intake, lobe oil cooler, etc.;
- A new line separator;
- A new discharge gas cooler;
- An auxiliary building that would house electrical motor controls, control panels, generators, instrument air systems, battery systems, etc. This building would be approximately 30 feet by 120 feet in size;
- Two generators would be installed for both primary and backup electric generation requirements. Each generator would be approximately 400 kilovolts-ampers (Kva);
- 24-inch-diameter suction and discharge headers and valves; and
- 40 feet self supporting (no guy wires) microwave tower and accompanying 10 feet by 12 feet prefabricated building.

In addition, WIC would also modify the regulator runs at the existing WIC's existing Wamsutter Compressor Station located in Sweetwater County, Wyoming under section 2.55(a) of the Commission's regulations. WIC would also reimburse Colorado Interstate Gas Company who would replace the existing 40-foot Lookout Mountain communication tower located in Moffat County Colorado to accommodate an additional microwave dish under section 2.55(a) of the regulations. The communication site is located on lands administered by the Bureau of Land Management.

The location of the project facilities is shown in Appendix 1.[1]

Nonjurisdictional Facilities

There are no non-jurisdictional facilities associated with this project.

Land Requirements for Construction

Construction of the proposed facilities would require about 30.2 acres of land Following construction, about 6.1 acres of land would be maintained as new aboveground facility sites and pipeline right-of-way. The remaining 24.1 acres of land would be restored within new Snake River CS property or revert to its former use within the existing Greasewood CS and Wamsutter Compressor Station property. The Lookout Mountain Communication Tower would be constructed within the footprint of an existing communication tower yard.

The EA Process

The National Environmental Policy Act (NEPA) requires the Commission to take into account the environmental impacts that could result from an action whenever it considers the issuance of a Certificate of Public Convenience and Necessity. NEPA also requires us to discover and address concerns the public may have about proposals. This process is referred to as ''scoping.'' The main goal of the scoping process is to focus the analysis in the EA on the important environmental issues. By this Notice of Intent, the Commission staff requests public comments on the scope of the issues to address in the EA. All comments received are considered during the preparation of the EA. State and local government representatives are encouraged to notify their constituents of this proposed action and encourage them to comment on their areas of concern.

In the EA we[2] will discuss impacts that could occur as a result of the construction and operation of the proposed project under these general headings:

- Geology and soils.
- Land use.
- Water resources, fisheries, and wetlands.
- Cultural resources.
- Vegetation and wildlife.
- Air quality and noise.
- Endangered and threatened species.
- Hazardous waste.
- Public safety.

We will also evaluate possible alternatives to the proposed project or portions of the project, and make recommendations on how to lessen or avoid impacts on the various resource areas.

Our independent analysis of the issues will be in the EA. Depending on the comments received during the scoping process, the EA may be published and mailed to federal, state, and local agencies, public interest groups, interested individuals, affected landowners, newspapers, libraries, and the Commission's official service list for this proceeding. A comment period will be allotted for review if the EA is published. We will consider all comments on the EA before we make our recommendations to the Commission.

To ensure your comments are considered, please carefully follow the instructions in the public participation section below.

Currently Identified Environmental Issues

We have already identified several issues that we think deserve attention based on a preliminary review of the proposed facilities and the environmental information provided by Texas Eastern. This preliminary list of issues may be changed based on your comments and our analysis.

- Cultural resources may be affected by the project.
- The project may have air emissions and noise impacts.
- The Snake River CS and Greaswood CS may have visual impacts.

Public Participation

You can make a difference by providing us with your specific comments or concerns about the Piceance Compression Expansion

[1] The appendices referenced in this notice are not being printed in the **Federal Register**. Copies of all appendices, other than Appendix 1 (maps), are available on the Commission's *Web site* at the ''eLibrary'' link or from the Commission's Public Reference Room, 888 First Street, NE., Washington, DC 20426, or call (202) 502–8371. For instructions on connecting to eLibrary refer to the last page of this notice. Copies of the appendices were sent to all those receiving this notice in the mail.

[2] ''We'', ''us'', and ''our'' refer to the environmental staff of the Office of Energy Projects (OEP).

Project. Your comments should focus on the potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental impacts. The more specific your comments, the more useful they will be. To ensure that your comments are timely and properly recorded, please send in your comments so that they will be received in Washington, DC on or before July 21, 2008.

For your convenience, there are three methods in which you can use to submit your comments to the Commission. In all instances please reference the project docket number CP08–403–000 with your submission. The docket number can be found on the front of this notice. The Commission encourages electronic filing of comments and has dedicated eFiling expert staff available to assist you at 202–502–8258 or *efiling@ferc.gov*.

(1) You may file your comments electronically by using the Quick Comment feature, which is located on the Commission's Internet Web site at *http://www.ferc.gov* under the link to Documents and Filings. A Quick Comment is an easy method for interested persons to submit text-only comments on a project;

(2) You may file your comments electronically by using the eFiling feature, which is located on the Commission's Internet Web site at *http://www.ferc.gov* under the link to Documents and Filings. eFiling involves preparing your submission in the same manner as you would if filing on paper, and then saving the file on your computer's hard drive. You will attach that file as your submission. New eFiling users must first create an account by clicking on ''Sign up'' or ''eRegister.'' You will be asked to select the type of filing you are making. A comment on a particular project is considered a ''Comment on a Filing;'' or

(3) You may file your comments via mail to the Commission by sending an original and two copies of your letter to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First St., NE., Room 1A, Washington, DC 20426;

Label one copy of the comments for the attention of Gas Branch 2, PJ11.2.

Environmental Mailing List

An effort is being made to send this notice to all individuals, organizations, and government entities interested in and/or potentially affected by the proposed project. This includes all landowners who are potential right-of-way grantors, whose property may be used temporarily for project purposes, or who own homes within distances defined in the Commission's regulations of certain aboveground facilities. By this notice we are also asking governmental agencies, especially those in Appendix 2, to express their interest in becoming cooperating agencies for the preparation of the EA.

If you do not want to send comments at this time but still want to remain on our mailing list, please return the Information Request (Appendix 3). If you do not return the Information Request, you will be taken off the mailing list.

Becoming an Intervenor

In addition to involvement in the EA scoping process, you may want to become an official party to the proceeding known as an ''intervenor.'' Intervenors play a more formal role in the process. Among other things, intervenors have the right to receive copies of case-related Commission documents and filings by other intervenors. Likewise, each intervenor must send one electronic copy (using the Commission's eFiling system) or 14 paper copies of its filings to the Secretary of the Commission and must send a copy of its filings to all other parties on the Commission's service list for this proceeding.

If you want to become an intervenor you must file a motion to intervene according to Rule 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.214). Only intervenors have the right to seek rehearing of the Commission's decision.

The Notice of Application for this proposed project issued on May 29, 2008 identified the date for the filing of interventions as June 19, 2008. However, affected landowners and parties with environmental concerns may be granted late intervenor status upon showing good cause by stating that they have a clear and direct interest in this proceeding which would not be adequately represented by any other parties. You do not need intervenor status to have your environmental comments considered.

Availability of Additional Information

Additional information about the project is available from the Commission's Office of External Affairs, at 1–866–208–FERC or on the FERC Internet Web site (*http://www.ferc.gov*) using the eLibrary link. Click on the eLibrary link, click on ''General Search'' and enter the docket number excluding the last three digits in the Docket Number field. Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at *FercOnlineSupport@ferc.gov* or toll free at 1–866–208–3676, or for TTY, contact (202) 502–8659. The eLibrary link also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rulemakings.

In addition, the Commission now offers a free service called eSubscription which allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries and direct links to the documents. Go to *http://www.ferc.gov/esubscribenow.htm*.

Finally, public meetings or site visits will be posted on the Commission's calendar located at *http://www.ferc.gov/EventCalendar/EventsList.aspx* along with other related information.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14691 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER08–1143–000]

Geneva Energy LLC; Notice of Filing

June 20, 2008.

Take notice that June 19, 2008, Geneva Energy LLC tendered for filing its Notice of Cancellation (Attachment A) of it market-based rate schedule, effective July 1, 2008.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the ''eFiling'' link at *http://www.ferc.gov*. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission,

888 First Street, NE., Washington, DC 20426.

This filing is accessible on-line at *http://www.ferc.gov*, using the ''eLibrary'' link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an ''eSubscription'' link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov*, or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: 5 p.m. Eastern Time on June 30, 2008.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14690 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP08–424–000]

Colorado Interstate Gas Company; Notice of Request Under Blanket Authorization

June 23, 2008.

Take notice that on June 17, 2008, Colorado Interstate Gas Company (CIG), Post Office Box 1087, Colorado Springs, Colorado 80944, filed in Docket No. CP08–424–000, a prior notice request pursuant to sections 157.205(b) and 157.216(b) of the Federal Energy Regulatory Commission's regulations under the Natural Gas Act for authorization to abandon in place a 4.7-mile segment of 22-inch outer diameter pipe on its Wyoming Mainline (Line No. 5A) located in Adams and Denver Counties, Colorado, all as more fully set forth in the application, which is on file with the Commission and open to public inspection. The filing may also be viewed on the Web at *http://www.ferc.gov* using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, contact FERC at *FERCOnlineSupport@ferc.gov* or call toll-free, (866) 208–3676 or TTY, (202) 502–8659.

CIG proposes to abandon in place a 4.7-mile segment of Line No. 5A. CIG asserts that this segment has not provided natural gas service for several years. CIG states that this segment is located in an area with increasing right-of-way encroachment, which requires increased monitoring, making this segment operationally undesirable. CIG asserts that the ongoing monitoring, operation, and maintenance (O&M) activities on the 4.7-mile segment of Line No. 5A cost CIG approximately $12,000 annually. CIG states that the proposed abandonment will have no operational impacts on CIG, nor will it adversely affect CIG's ability to meet any of its existing contractual obligations. CIG avers that the abandonment of the 4.7-mile segment of Line No. 5A will not impact the available capacity for CIG's Wyoming Mainline or its overall system capacity.

Any questions regarding the application should be directed to Richard Derryberry, Director, Regulatory Affairs Department, Colorado Interstate Gas Company, Post Office Box 1087, Colorado Springs, Colorado 80904, or (719) 520–3782.

Any person may, within 60 days after the issuance of the instant notice by the Commission, file pursuant to Rule 214 of the Commission's Procedural Rules (18 CFR 385.214) a motion to intervene or notice of intervention. Any person filing to intervene or the Commission's staff, may, pursuant to section 157.205 of the Commission's Regulations under the Natural Gas Act (NGA) (18 CFR 157.205) file a protest to the request. If no protest is filed within the time allowed therefore, the proposed activity shall be deemed to be authorized effective the day after the time allowed for protest. If a protest is filed and not withdrawn within 30 days after the time allowed for filing a protest, the instant request shall be treated as an application for authorization pursuant to section 7 of the NGA.

The Commission strongly encourages electronic filings of comments, protests, and interventions via the internet in lieu of paper. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site (*http://www.ferc.gov*) under the ''e-Filing'' link.

Comment Date: August 25, 2008.

Kimberly D. Bose,

Secretary.

[FR Doc. E8–14682 Filed 6–27–08; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–R01–OAR–2008–0445; A–1–FRL–8686–5]

Adequacy Status of the Rhode Island 8-Hour Ozone Motor Vehicle Emissions Budgets for Transportation Conformity Purposes; Rhode Island

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of adequacy.

SUMMARY: EPA is notifying the public that EPA has found that the 2008 and 2009 motor vehicle emissions budgets in the April 30, 2008 Rhode Island 8-hour ozone State Implementation Plan revision are adequate for transportation conformity purposes. The submittal includes 2008 and 2009 motor vehicle emission budgets for the Providence (All of RI), RI 8-hour ozone nonattainment area. As a result of our finding, Rhode Island must use these motor vehicle emission budgets for future conformity determinations.

DATES: This finding is effective July 15, 2008.

FOR FURTHER INFORMATION CONTACT: Ariel Garcia, Environmental Engineer, Air Quality Planning Unit, U.S. Environmental Protection Agency, EPA New England Regional Office, One Congress Street, Suite 1100 (CAQ), Boston, MA 02114–2023, (617) 918–1660, *garcia.ariel@epa.gov*.

SUPPLEMENTARY INFORMATION: Throughout this document, whenever ''we,'' ''us'' or ''our'' is used, we mean EPA.

Today's action is simply an announcement of a finding that we have already made. EPA New England sent a letter to the Rhode Island Department of Environmental Management on June 16, 2008, stating that the 2008 and 2009 motor vehicle emissions budgets (MVEBs) in the Providence (All of RI), RI 8-hour ozone nonattainment area are adequate. Rhode Island submitted the budgets on April 30, 2008, as part of the 8-hour ozone attainment demonstration and reasonable further progress plan for Rhode Island. This submittal was announced on EPA's conformity Web site, and received no comments. (See *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm.* Once there, click on ''What SIP submissions are currently under EPA adequacy review?'')

The 2008 and 2009 MVEBs, in tons per summer day (tpsd), for volatile organic compounds (VOC) and oxides of nitrogen (NO_X) for Providence (All of RI), RI, are as follows:

ADEQUATE MOTOR VEHICLE EMISSIONS BUDGETS

	Providence (All of RI), RI area	
	VOC (tpsd)	NO_X (tpsd)
Year 2008	24.64	28.26
Year 2009	22.75	25.29

Transportation conformity is required by section 176(c) of the Clean Air Act. EPA's conformity rule requires that transportation plans, programs, and projects conform to state air quality implementation plans and establishes the criteria and procedures for determining whether or not they do. Conformity to a SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards.

The criteria by which we determine whether a SIP's motor vehicle emissions budgets are adequate for conformity purposes are outlined in 40 CFR 93.118(e)(4). We have described our process for determining the adequacy of submitted SIP budgets in our July 1, 2004, preamble starting at 69 FR 40038, and we used the information in these resources while making our adequacy determination. Please note that an adequacy review is separate from EPA's completeness review, and it also should not be used to prejudge EPA's ultimate approval of the SIP. Even if we find a budget adequate, the SIP could later be disapproved.

Authority: 42 U.S.C. 7401–7671 q.

Dated: June 21, 2008.

Robert W. Varney,

Regional Administrator, EPA New England.

[FR Doc. E8–14798 Filed 6–27–08; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OAR–2005–0120–0003 and EPA–HQ–OAR–2005–0121–0002, FRL–8686–3]

Agency Information Collection Activities: Proposed Collections; Request for Comment on Two Proposed Information Collection Requests (ICRs)

AGENCY: Environmental Protection Agency.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) (44 U.S.C. 3501 *et seq.*), this document announces that EPA is planning to submit a request to renew two existing approved Information Collection Requests (ICRs) to the Office of Management and Budget (OMB). One of these ICRs is scheduled to expire on September 30, 2008. The second ICR is scheduled to expire on February 28, 2009. Before submitting the ICRs to OMB for review and approval, EPA is soliciting comments on specific aspects of the proposed information collection as described below.

ADDRESSES: Submit your comments, identified by the Docket ID numbers provided for each item in the text, by one of the following methods:

- *http://www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail: a-and-r-Docket@epa.gov.*
- *Fax:* (202) 566–9744
- *Mail:* Air Docket, Environmental Protection Agency, Mailcode: 2822T, 1200 Pennsylvania Ave., NW., Washington, DC 20460.
- *Hand Delivery:* Docket Center, (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to the Docket ID Numbers identified for each item in the text. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *http://www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *http://www.regulations.gov* or e-mail. The *http://www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *http://www.regulations.gov*, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.*

FOR FURTHER INFORMATION CONTACT: Nydia Yanira Reyes-Morales, Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Mail Code 6403J, Washington, DC 20460; telephone number: 202–343–9264; *fax number:* 202–343–2804; *e-mail address: reyes-morales.nydia@epa.gov.*

SUPPLEMENTARY INFORMATION:

How Can I Access the Docket and/or Submit Comments?

EPA has established a public docket for each of the ICRs identified in this document (see the Docket ID numbers for each ICR that are provided in the text), which is available for online viewing at *http://www.regulations.gov,* or in person viewing at the Air Docket in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The EPA/DC Public Reading Room is open from 8 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is 202–566–1744, and the telephone number for the Air Docket is 202–566–1742.

Use *http://www.regulations.gov* to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. Once in the system, select ''search,'' then key in the Docket ID number identified in this document.

What Information Is EPA Particularly Interested In?

Pursuant to section 3506(c)(2)(A) of the PRA, EPA specifically solicits comments and information to enable it to:

(i) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;

(ii) Evaluate the accuracy of the Agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(iii) Enhance the quality, utility, and clarity of the information to be collected; and

(iv) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.*, permitting electronic submission of responses. In particular, EPA is requesting comments from very small businesses (those that employ less than 25) on examples of specific additional efforts that EPA could make to reduce the paperwork burden for very small businesses affected by this collection.

What Should I Consider When I Prepare My Comments for EPA?

You may find the following suggestions helpful for preparing your comments:

1. Explain your views as clearly as possible and provide specific examples.
2. Describe any assumptions that you used.
3. Provide copies of any technical information and/or data you used that support your views.
4. If you estimate potential burden or costs, explain how you arrived at the estimate that you provide.
5. Offer alternative ways to improve the collection activity.
6. Make sure to submit your comments by the deadline identified under **DATES**.
7. To ensure proper receipt by EPA, be sure to identify the docket ID number assigned to this action in the subject line on the first page of your response. You may also provide the name, date, and **Federal Register** citation.

What Information Collection Activity or ICR Does This Apply To?

Docket ID No.: EPA–HQ–OAR–2005–0120–0003.

Affected entities: Entities potentially affected by this action are large on-highway heavy-duty engine and vehicle manufacturers.

Title: Nonconformance Penalties for Heavy-Duty Engines and Heavy-Duty Vehicles, Including Light-Duty Trucks; Reporting and Recordkeeping Requirements (Renewal).

ICR numbers: EPA ICR No. 1285.07, OMB Control No. 2060–0132.

ICR status: This ICR is currently scheduled to expire on November 30, 2008. An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information, unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in title 40 of the CFR, after appearing in the **Federal Register** when approved, are listed in 40 CFR part 9, are displayed either by publication in the **Federal Register** or by other appropriate means, such as on the related collection instrument or form, if applicable. The display of OMB control numbers in certain EPA regulations is consolidated in 40 CFR part 9.

Abstract: Nonconformance penalties (NCP) provisions allow a manufacturer to introduce into commerce heavy-duty engines (HDEs) or heavy-duty vehicles (HDVs), including light-duty trucks (LDTs), which fail to conform with certain emission standards, upon payment of a monetary penalty. The information collection activities for the NCP program include the collection of periodic reports and other information which the manufacturer creates and submits to the Compliance and Innovative Strategies Division (CISD), Office of Transportation and Air Quality (OTAQ), Office of Air and Radiation (OAR), of the U.S. Environmental Protection Agency (EPA). CISD uses this information to ensure that manufacturers are in compliance with the regulations of the Clean Air Act (Act) and paying the appropriate penalties. The information submitted in the manufacturers' NCP reports is stored in CISD's computer tracking system to ensure accurate accounting of NCP payments. Since nonconformance penalties and associated PCAs are an option elected by manufacturers, EPA cannot be certain how many engine families manufacturers will request to be included in the NCP program each year. Likewise, we cannot be certain of the number of PCAs that will be conducted each model year. However, EPA estimates for ICR purposes, that six engine families will be included in the NCP program each model year. This information is collected by the Heavy-Duty and Nonroad Engines Group (HDNEG) in CISD. Besides CISD, this information could be used by the Office of Enforcement and Compliance Assurance (OECA) and the Department of Justice for enforcement purposes. Non Confidential Business Information (CBI) information is also disclosed in a public database and over the Internet. It is used by trade associations, environmental groups, and the public. The information is usually submitted in an electronic format, and it is stored in HDNEGs certification database.

Burden Statement: The annual public reporting and recordkeeping burden for this collection of information is estimated to average 589 hours per year. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements which have subsequently changed; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

The ICR provides a detailed explanation of the Agency's estimate, which is only briefly summarized here:

Estimated total number of potential respondents: 2.

Frequency of response: Quarterly, Annually, On Occasion.

Estimated total average number of responses for each respondent: 26.

Estimated total annual burden hours: 1,178 hours.

Estimated total annual costs: $94,999. This includes an estimated burden cost of $76,819.28 and an estimated cost of $18,180.00 for capital investment or maintenance and operational costs.

Docket ID No.: EPA–HQ–OAR–2005–0121–0002.

Affected entities: Entities potentially affected by this action are manufacturers, importers or vendors of on-road heavy duty vehicles, and all categories of nonroad engines and nonroad equipment.

Title: Exclusion Determinations for New Nonroad Spark-ignited, New Nonroad Compression-ignited Engines, New Marine Engines, and New On-road Heavy Duty Engines (Renewal).

ICR numbers: EPA ICR No. 1852.04, OMB Control No. 2060–0395.

ICR status: This ICR is currently scheduled to expire on February 28, 2009. An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information, unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in title 40 of the CFR, after appearing in the **Federal Register** when approved, are listed in 40 CFR part 9, are displayed either by publication in the **Federal Register** or by other appropriate means, such as on the related collection instrument or form, if applicable. The display of OMB control numbers in certain EPA regulations is consolidated in 40 CFR part 9.

Abstract: Under the provisions of the Clean Air Act (CAA), the Administrator is required to promulgate regulations to control air pollutant emissions from

motor vehicles and non-road engines, as defined in the CAA. Motor vehicles and non-road engines not meeting the applicable definitions are excluded from compliance with current regulations. A manufacturer may make an exclusion determination by itself; however, manufacturers and importers may routinely request EPA to make such determination to ensure that their determination does not differ from the Agency's. To request an exclusion determination, manufacturers submit a letter with a description of the engine and/or vehicle (engine type, horsepower rating, intended usage etc.,) and sales brochures, to the Compliance and Innovative Strategies Division (CISD), Heavy-Duty and Nonroad Engines Group (HDNEG), Office of Transportation and Air Quality (OTAQ). CISD uses this information to determine whether the engine or vehicle is excluded from compliance with one or more emission regulations. CISD then stores the data in its internal files, and makes it available to environmental groups and the public upon request under the Freedom of Information Act.

Burden Statement: The annual public reporting and recordkeeping burden for this collection of information is estimated to average seven hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements which have subsequently changed; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

The ICR provides a detailed explanation of the Agency's estimate, which is only briefly summarized here:

Estimated total number of potential respondents: 12.

Frequency of response: Annual or on occasion.

Estimated total average number of responses for each respondent: 3.

Estimated total annual burden hours: 69.

Estimated total annual costs: $5,654. This includes an estimated burden cost of $5,538 and an estimated cost of $116 for capital investment or maintenance and operational costs.

Are There Changes in the Estimates from the Last Approval?

To date, there are no changes in the number of hours in the total estimated respondent burden compared with that identified in the ICR currently approved by OMB. However, EPA is still evaluating information that may lead to a change in the estimates.

What Is the Next Step in the Process for These ICRs?

EPA will consider the comments received and amend the ICRs as appropriate. The final ICR packages will then be submitted to OMB for review and approval pursuant to 5 CFR 1320.12. At that time, EPA will issue another **Federal Register** notice pursuant to 5 CFR 1320.5(a)(1)(iv) to announce the submission of the ICR to OMB and the opportunity to submit additional comments to OMB. If you have any questions about this ICR or the approval process, please contact the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

Dated: June 18, 2008.

Karl Simon,

Director, Compliance and Innovative Strategies Division, Office of Transportation and Air Quality, Office of Air and Radiation.

[FR Doc. E8–14799 Filed 6–27–08; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[Docket# EPA–RO4–SFUND–2008–0500, FRL–8686–7]

Component Concepts Superfund Site; Thomasville, Davidson County, NC; Notice of Settlement

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Settlement.

SUMMARY: Under section 122(h)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the United States Environmental Protection Agency has entered into a settlement for reimbursement of past response costs concerning the Component Concepts Site located in Thomasville, Davidson County, North Carolina for publication.

DATES: The Agency will consider public comments on the settlement until July 30, 2008. The Agency will consider all comments received and may modify or withdraw its consent to the settlement if comments received disclose facts or considerations, which indicate that the settlement is inappropriate, improper, or inadequate.

ADDRESSES: Copies of the settlement are available from Ms. Paula V. Painter. Submit your comments, identified by Docket ID No. EPA–RO4–SFUND–2008–0500 or Site name Component Concepts Superfund Site by one of the following methods:

- *http://www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail: Painter.Paula@epa.gov.*
- *Fax:* 404/562–8842/Attn Paula V. Painter.

Mail: Ms. Paula V. Painter, U.S. EPA Region 4, SD–SEIMB, 61 Forsyth Street, SW., Atlanta, Georgia 30303. ''In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), *Attn:* Desk Officer for EPA, 725 17th St., NW., Washington, DC 20503.''

Instructions: Direct your comments to Docket ID No. EPA–R04–SFUND–2008–0500. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or e-mail. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *www.regulations.gov* your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.*

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the U.S. EPA Region 4 office located at 61 Forsyth Street, SW., Atlanta, Georgia 30303. The regional office is open from 7 a.m. until 6:30 p.m. Monday through Friday, excluding legal holidays.

Written comments may be submitted to Ms. Painter within 30 calendar days of the date of this publication.

FOR FURTHER INFORMATION CONTACT: Paula V. Painter at 404/562–8887.

Dated: June 12, 2008.

Anita L. Davis,

Chief, Superfund Enforcement & Information Management Branch, Superfund Division.

[FR Doc. E8–14797 Filed 6–27–08; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–8686–6]

Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health; Draft Technical Support Document, Volume 3: Development of Site-Specific Bioaccumulation Factors

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability of draft for scientific views.

SUMMARY: In 2000, EPA announced the availability of final revisions to the *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000)* (hereafter ''2000 Human Health Methodology'') published pursuant to section 304(a)(1) of the Clean Water Act (CWA). Along with the 2000 Human Health Methodology, EPA committed to publishing several technical support documents to provide additional detail to the Methodology document, including two documents that describe the development of bioaccumulation factors for use in ambient water quality criteria calculations. In 2003, EPA announced the release of the *Technical Support Document Volume 2: Development of National Bioaccumulation Factors* (hereafter ''National BAF TSD''). Today, the Agency is soliciting scientific views on the Draft *Technical Support Document, Volume 3: Development of Site-Specific Bioaccumulation Factors* (hereafter ''Draft Site-Specific BAF TSD'') that accompanies the Methodology and the National BAF TSD. The National BAF TSD contains technical details on how EPA develops national bioaccumulation factors for use in deriving national recommended ambient water quality criteria for protecting human health. The Draft Site-Specific BAF TSD contains technical details on how States and Tribes may develop site-specific bioaccumulation factors for use in deriving site-specific ambient water quality criteria for protecting human health. The goal in deriving site-specific BAFs is to determine the most accurate estimates of bioaccumulation feasible for each site.

DATES: Scientific views must be received on or before August 14, 2008. Scientific views postmarked after this date may not receive the same consideration.

ADDRESSES: Submit your scientific views, identified by Docket ID No. EPA–HQ–OW–2008–0494, by one of the following methods:

- *http://www.regulations.gov:* Follow the on-line instructions for submitting scientific views.
- *E-mail: OW-Docket@epa.gov.*
- *Mail:* U.S. Environmental Protection Agency; EPA Docket Center (EPA/DC) Water Docket, MC 2822T; 1200 Pennsylvania Avenue, NW., Washington, DC 20460.
- *Hand Delivery:* EPA Docket Center, 1301 Constitution Ave, NW., EPA West, Room 3334, Washington DC. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your scientific views to Docket ID No. EPA–HQ–OW–2008–0494. EPA's policy is that all scientific views received will be included in the public docket without change and may be made available online at *http://www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *http://www.regulations.gov* or e-mail. The *http://www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *http://www.regulations.gov* your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.*

Docket: All documents in the docket are listed in the *http://www.regulations.gov* index. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *http://www.regulations.gov* or in hard copy at the Office of Water Docket/EPA/DC, 1301 Constitution Ave, NW., EPA West, Room 3334, Washington, DC. This Docket Facility is open from 8:30 a.m. until 4:30 p.m., EST, Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Office of Water is (202) 566–2426.

FOR FURTHER INFORMATION CONTACT: Heidi L. Bethel, Health and Ecological Criteria Division (4304T), U.S. EPA, 1200 Pennsylvania Ave., NW., Washington, DC 20460; (202) 566–2054; *bethel.heidi@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does This Action Apply to Me?

The intended audience for the Draft Site-Specific BAF TSD includes State and Tribal water quality staff scientists or risk assessors (''investigators'') who are responsible for deriving State or Tribal water quality standards, stakeholders interested in developing site-specific BAFs, and other users interested in site-specific bioaccumulation issues for other applications.

B. What Should I Consider as I Prepare My Scientific Views for EPA?

EPA requests scientific views on all aspects of the Draft Site-Specific BAF TSD, including the soundness of the technical approaches described in the document, the usefulness of the document for States and Tribes in calculating BAFs, and the guidance's clarity of presentation.

1. *Submitting CBI.* Do not submit this information to EPA through *http://www.regulations.gov* or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for Preparing Your Scientific views.* When submitting scientific views, remember to:

- Identify the notice by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Follow directions—The agency may ask you to respond to specific questions or organize scientific views by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your scientific views by the deadline identified.

II. What are Water Quality Criteria?

Water quality criteria are scientifically derived numeric values that protect aquatic life or human health from the deleterious effects of pollutants in ambient water. Section 304(a)(1) of the Clean Water Act requires EPA to develop and publish and, from time to time, revise water quality criteria to accurately reflect the latest scientific knowledge. Water quality criteria developed under section 304(a) are based solely on data and scientific judgments on the relationship between pollutant concentrations and environmental and human health effects. Section 304(a) criteria do not reflect consideration of economic impacts or the technological feasibility of meeting the chemical concentrations in ambient water. Section 304(a) criteria provide guidance to States and authorized Tribes in adopting water quality standards that ultimately provide a basis for controlling discharges or releases of pollutants. The criteria also provide guidance to EPA when promulgating federal regulations under section 303(c) when such action is necessary.

The 2000 Human Health Methodology, along with the Technical Support Documents, provides States and authorized Tribes the necessary guidance to adjust water quality criteria developed under Section 304 to reflect local conditions or to develop their own water quality criteria using scientifically defensible methods. EPA believes that ambient water quality criteria inherently require several risk management decisions that are, in many cases, better made at the State, Tribal, or regional level. EPA encourages States and authorized Tribes to use the final Methodology and Technical Support Documents to develop site-specific water quality criteria to appropriately reflect local conditions. When final, the Draft Site-Specific BAF TSD, released for scientific views with today's announcement, will assist States and authorized Tribes in development of site-specific BAFs for use in site-specific ambient water quality criteria calculations.

III. Background Information on the Draft Bioaccumulation Factors Technical Support Document Volume III (Draft Site-Specific BAF TSD)

In order to prevent harmful exposures to chemicals in water through eating contaminated fish and shellfish, national 304(a) water quality criteria for protecting human health must address chemical bioaccumulation in aquatic organisms. Bioaccumulation occurs when aquatic organisms accumulate chemicals in their bodies when they are exposed to these chemicals through the surrounding media (water, food, sediment). The extent of bioaccumulation by aquatic organisms varies widely depending on the chemical and the species, but it can be extremely high for some highly persistent and lipid-soluble chemicals. For such highly bioaccumulative chemicals, concentrations in aquatic organisms may pose unacceptable human health risks from eating fish and shellfish even when concentrations in water are too low to cause unacceptable health risks from drinking the water.

EPA developed detailed procedures and guidelines described in the 2000 Human Health Methodology for estimating bioaccumulation factor (BAF) values for use in deriving or revising ambient water quality criteria. The National BAF TSD discusses the technical basis for developing national BAFs, the underlying assumptions and uncertainties inherent to the approach, and applying the bioaccumulation component of the 2000 Human Health Methodology. The Draft Site-Specific BAF TSD expands on the information presented in the National BAF TSD by providing users specific information on how to calculate site-specific BAFs for use in modifying the national 304(a) criteria and is available from EPA's Web site at *http://www.epa.gov/waterscience/criteria/humanhealth/method/index.html.* Both documents rely on a framework for selecting the appropriate procedure for deriving BAFs that is based on chemical properties, biological activity and scientific information. The Draft Site-Specific BAF TSD presents methods for States, Tribes and other interested parties to calculate BAFs that are specific to their site. The goal in deriving site-specific BAFs is to determine the most accurate estimates of bioaccumulation feasible for each site.

EPA requests scientific views on all aspects of the Draft Site-Specific BAF TSD, including the soundness of the technical approaches described in the document, the usefulness of the document for States and Tribes in calculating BAFs, and the guidance's clarity of presentation.

Dated: June 24, 2008.

Ephraim King,

Office Director, Office of Science and Technology.

[FR Doc. E8–14796 Filed 6–27–08; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

Public Information Collection Requirement Submitted to OMB for Review and Approval, Comments Requested.

June 24, 2008.

SUMMARY: The Federal Communications Commission, as part of its continuing effort to reduce paperwork burden, invites the general public and other Federal agencies to take this opportunity to comment on the following information collection, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. An agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act (PRA) that does not display a valid control number. Comments are requested concerning (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

DATES: Written Paperwork Reduction Act (PRA) comments should be submitted on or before July 30, 2008. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contacts listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Nicholas A. Fraser, Office of Management and Budget, via Internet at *Nicholas_A._Fraser@omb.eop.gov* or via fax at (202) 395–5167 and to Cathy Williams, Federal Communications Commission, Room 1–C823, 445 12th Street, SW., Washington, DC or via Internet at *Cathy.Williams@fcc.gov* or *PRA@fcc.gov.*

To view a copy of this information collection request (ICR) submitted to OMB: (1) Go to the Web page *http://www.reginfo.gov/public/do/PRAMain,* (2) look for the section of the Web page called ''Currently Under Review,'' (3) click on the downward-pointing arrow in the ''Select Agency'' box below the ''Currently Under Review'' heading, (4) select ''Federal Communications Commission'' from the list of agencies presented in the ''Select Agency'' box, (5) click the ''Submit'' button to the right of the ''Select Agency'' box, (6) when the list of FCC ICRs currently under review appears, look for the title of this ICR (or its OMB control number, if there is one) and then click on the ICR Reference Number to view detailed information about this ICR.''

FOR FURTHER INFORMATION CONTACT: For additional information or copies of the information collection(s), contact Cathy Williams at (202) 418–2918.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–0027.

Type of Review: Revision of a currently approved collection.

Title: Application for Construction Permit for Commercial Broadcast Station.

Form Number: FCC Form 301.

Respondents: Business or other for-profit entities; Not-for-profit institutions.

Number of Respondents/Responses: 4,278 respondents/4,278 responses.

Estimated Time per Response: 2 to 5 hours.

Frequency of Response: On occasion reporting requirement; Third party disclosure requirement.

Obligation to Respond: Required to obtain benefits—Statutory authority for this collection of information is contained in Sections 154(i), 303, and 308 of the Communications Act of 1934, as amended, and Section 204 of the Telecommunications Act of 1996.

Total Annual Burden: 11,072 hours.

Total Annual Costs: $51,802,197.

Nature and Extent of Confidentiality: There is no need for confidentiality with this information collection.

Privacy Act Impact Assessment: No impact(s).

Needs and Uses: On December 18, 2007, the Commission adopted a Report and Order and Order on Reconsideration in its 2006 Quadrennial Regulatory Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, MB Docket No. 06–121, FCC 07–216. Section 202 requires the Commission to review its broadcast ownership rules every four years and determine whether any of such rules are necessary in the public interest. Further, Section 202 requires the Commission to repeal or modify any regulation it determines to be no longer in the public interest.

Consistent with actions taken by the Commission in the 2006 Quadrennial Regulatory Review, the following changes are made to Form 301: The instructions to Form 301 are revised to include a reference to the 2006 Quadrennial Regulatory Review as a source of information regarding the Commission's multiple ownership attribution policies and standards. Also, the language in Section A, IV of Worksheet #2 in Form 301 is changed. This worksheet is used in connection with Section II, Item 4 of Form 301 to determine the applicant's compliance with the Commission's multiple ownership rules and cross-ownership rules set forth in 47 CFR 73.3555.

The revisions to the worksheet account for changes made by the Commission in the 2006 Quadrennial Review to 47 CFR 73.3555(d), the Daily Newspaper Cross-Ownership Rule. The revised rule changes the circumstances under which an entity may own a daily newspaper and a radio station or television station in the same designated market area. In conjunction with this same rule change, language from 47 CFR 73.3555(d) is added to Section B of Worksheet #2 to assist applicants in their determination of compliance with the Daily Newspaper Cross-Ownership Rule.

47 CFR 73.3555(d) (daily newspaper cross-ownership rule) states:

(1) No license for an AM, FM or TV broadcast station shall be granted to any party (including all parties under common control) if such party directly or indirectly owns, operates or controls a daily newspaper and the grant of such license will result in:

(i) The predicted or measured 2 mV/m contour of an AM station, computed in accordance with § 73.183 or § 73.186, encompassing the entire community in which such newspaper is published; or

(ii) The predicted 1 mV/m contour for an FM station, computed in accordance with § 73.313, encompassing the entire community in which such newspaper is published; or

(iii) The Grade A contour of a TV station, computed in accordance with § 73.684, encompassing the entire community in which such newspaper is published.

(2) Paragraph (1) shall not apply in cases where the Commission makes a finding pursuant to Section 310(d) of the Communications Act that the public interest, convenience, and necessity would be served by permitting an entity that owns, operates or controls a daily newspaper to own, operate or control an AM, FM, or TV broadcast station whose relevant contour encompasses the entire community in which such newspaper is published as set forth in paragraph (1).

(3) In making a finding under paragraph (2), there shall be a presumption that it is not inconsistent

with the public interest, convenience, and necessity for an entity to own, operate or control a daily newspaper in a top 20 Nielsen DMA and one commercial AM, FM or TV broadcast station whose relevant contour encompasses the entire community in which such newspaper is published as set forth in paragraph (1), provided that, with respect to a combination including a commercial TV station,

(i) The station is not ranked among the top four TV stations in the DMA, based on the most recent all-day (9 a.m.–midnight) audience share, as measured by Nielsen Media Research or by any comparable professional, accepted audience ratings service; and

(ii) At least 8 independently owned and operating major media voices would remain in the DMA in which the community of license of the TV station in question is located (for purposes of this provision major media voices include full-power TV broadcast stations and major newspapers).

(4) In making a finding under paragraph (2), there shall be a presumption that it is inconsistent with the public interest, convenience, and necessity for an entity to own, operate or control a daily newspaper and an AM, FM or TV broadcast station whose relevant contour encompasses the entire community in which such newspaper is published as set forth in paragraph (1) in a DMA other than the top 20 Nielsen DMAs or in any circumstance not covered under paragraph (3).

(5) In making a finding under paragraph (2), the Commission shall consider:

(i) Whether the combined entity will significantly increase the amount of local news in the market;

(ii) Whether the newspaper and the broadcast outlets each will continue to employ its own staff and each will exercise its own independent news judgment;

(iii) The level of concentration in the Nielsen Designated Market Area (DMA); and

(iv) The financial condition of the newspaper or broadcast station, and if the newspaper or broadcast station is in financial distress, the proposed owner's commitment to invest significantly in newsroom operations.

(6) In order to overcome the negative presumption set forth in paragraph (4) with respect to the combination of a major newspaper and a television station, the applicant must show by clear and convincing evidence that the co-owned major newspaper and station will increase the diversity of independent news outlets and increase competition among independent news sources in the market, and the factors set forth above in paragraph (5) will inform this decision.

(7) The negative presumption set forth in paragraph (4) shall be reversed under the following two circumstances:

(i) The newspaper or broadcast station is failed or failing; or

(ii) The combination is with a broadcast station that was not offering local newscasts prior to the combination, and the station will initiate at least seven hours per week of local news programming after the combination.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. E8–14786 Filed 6–27–08; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

Notice of Public Information Collection(s) Being Reviewed by the Federal Communications Commission for Extension Under Delegated Authority, Comments Requested

June 24, 2008.

SUMMARY: The Federal Communications Commission, as part of its continuing effort to reduce paperwork burden invites the general public and other Federal agencies to take this opportunity to comment on the following information collection(s), as required by the Paperwork Reduction Act of 1995, 44 U.S.C. 3501–3520. An agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act (PRA) that does not display a valid control number. Comments are requested concerning (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

DATES: Persons wishing to comment on this information collection should submit comments August 29, 2008. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Nicholas A. Fraser, Office of Management and Budget (OMB), (202) 395–5887, or via fax at 202–395–5167, or via the Internet at *Nicholas_A._Fraser@omb.eop.gov* and to *Judith-B.Herman@fcc.gov*, Federal Communications Commission (FCC). To submit your comments by e-mail send them to: *PRA@fcc.gov*.

To view a copy of this information collection request (ICR) submitted to OMB: (1) Go to the Web page *http://www.reginfo.gov/public/do/PRAMain*, (2) look for the section of the Web page called ''Currently Under Review'', (3) click the downward-pointing arrow in the ''Select Agency'' box below the ''Currently Under Review'' heading, (4) select ''Federal Communications Commission'' from the list of agencies presented in the ''Select Agency'' box, (5) click the ''Submit'' button to the right of the ''Select Agency'' box and (6) when the list of FCC ICRs currently under review appears, look for the title of this ICR (or its OMB Control Number, if there is one) and then click on the ICR Reference Number to view detailed information about this ICR.

FOR FURTHER INFORMATION CONTACT: For additional information, send an e-mail to Judith B. Herman at 202–418–0214.

SUPPLEMENTARY INFORMATION:

OMB Control No.: 3060–0881.

Title: Section 95.861, Interference.

Form No.: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit.

Number of Respondents: 563 respondents; 563 responses.

Estimated Time per Response: .50 hours.

Frequency of Response: On occasion reporting requirement, recordkeeping requirement and third party disclosure requirement.

Obligation to Respond: Required to obtain or retain benefits.

Total Annual Burden: 282 hours.

Annual Cost Burden: $16,890.

Privacy Act Impact Assessment: N/A.

Nature and Extent of Confidentiality: There is no need for confidentiality.

Needs and Uses: This collection will be submitted as an extension (no change in reporting, recordkeeping and/or third party disclosure requirements) after this 60 day comment period to Office of Management and Budget (OMB) in order to obtain the full three year clearance.

Section 95.861(c) requires that a 218–219 MHz Service licensee must provide a copy of the plan required by Section 95.815(a) to every TV Channel 13 station whose Grade B predicted contour overlaps the licensed service area for the 218–219 MHz Service system. The 218–219 MHz Service licensee must send the plan to the TV Channel 13 licensee(s) within 10 days from the date the 218–219 MHz Service submits the plan to the Commission, and the 218–219 MHz Service licensee must send updates to this plan to the TV Channel 13 licensee(s) within 10 days from the date that such updates are filed with the Commission pursuant to Section 95.815.

Additionally, each 218–219 MHz Service system licensee must investigate and eliminate harmful interference to television broadcasting and reception, from its component CTSs and RTSs, within 30 days of the time it is notified in writing, by either an affected television station, an affected viewer, or the Commission, of an interference complaint. Should the licensee fail to eliminate the interference within the 30-day period, the CTSs or RTUs causing the problem(s) must discontinue operation.

This information will be used to monitor the co- and adjacent channel interference potential of proposed systems in the 218–219 MHz service, to identify methods being used to minimize interference and show how the proposed systems will meet the service requirements set forth in Section 95.831 of the Commission's rules.

OMB Control No.: 3060–0325.

Title: Section 80.605, U.S. Coast Guard Coordination.

Form No.: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit.

Number of Respondents: 10 respondents; 10 responses.

Estimated Time per Response: 1.1 hours.

Frequency of Response: On occasion reporting requirement.

Obligation to Respond: Required to obtain or retain benefits.

Total Annual Burden: 11 hours.

Annual Cost Burden: N/A.

Privacy Act Impact Assessment: N/A.

Nature and Extent of Confidentiality: There is no need for confidentiality.

Needs and Uses: This collection will be submitted as an extension (no change in the reporting, requirement) after this 60 day comment period to Office of Management and Budget (OMB) in order to obtain the full three year clearance. However, the Commission is reporting a decrease in the number of respondents since this information was last submitted to the OMB. Therefore, we are also reporting a −41 hour adjustment in the total estimated burden hours.

Radionavigation coast stations operated to provide information to aid in the movement of any ship are private aids to navigation. Before submitting an application for a radionavigation station, an applicant must obtain written permission from the cognizant Coast Guard District Commander at the area in which the device will be located. The Commission may request an applicant to provide documentation as to this fact.

Note: Surveillance radar coast stations do not require U.S. Coast Guard approval.

Coast station transponders (i.e., radar beacons, or racons) operating in the band 2900–3100 or 9300–9500 MHz shall meet the requirements of ITU–R Recommendation M.824–2, ''Technical Parameters of Radar Beacons (RACONS),'' with Annexes, 1995. Applications for certification of these transponders must include a description of the technical characteristics of the equipment including the scheme of interrogation and the characteristics of the transponder response, and test results demonstrating the device meets each applicable requirement of this ITU–R recommendation. ITU–R Recommendation M.824–2 with Annexes is incorporated by reference. The Director of the **Federal Register** approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of this standard can be inspected at the Federal Communications Commission, 445 12th Street, SW., Washington, DC (Reference Information Center) or at the National Archives and Records Administration (NARA).

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. E8–14787 Filed 6–27–08; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

Notice of Public Information Collection(s) Being Submitted for Review to the Office of Management and Budget, Comments Requested

June 25, 2008.

SUMMARY: As part of its continuing effort to reduce paperwork burden and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the Federal Communications Commission invites the general public and other Federal agencies to comment on the following information collection(s). Comments are requested concerning (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. An agency may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act that does not display a valid OMB control number.

DATES: Written PRA comments should be submitted on or before July 30, 2008. If you anticipate that you will be submitting PRA comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the FCC contact listed below as soon as possible.

ADDRESSES: Submit your comments to Nicholas A. Fraser, Office of Management and Budget (e-mail address: *nfraser@omb.eop.gov*), and to the Federal Communications Commission's PRA mailbox (*e-mail address: PRA@fcc.gov*). Include in the e-mails the OMB control number of the collection as shown in the **SUPPLEMENTARY INFORMATION** section below or, if there is no OMB control number, the Title as shown in the **SUPPLEMENTARY INFORMATION** section. If you are unable to submit your comments by e-mail contact the person listed below to make alternate arrangements.

FOR FURTHER INFORMATION CONTACT: For additional information contact Jerry Cowden via e-mail at *PRA@fcc.gov* or at 202–418–0447. To view or obtain a copy of an information collection request (ICR) submitted to OMB: (1) Go to this OMB/GSA Web page: *http://www.reginfo.gov/public/do/PRAMain*, (2) look for the section of the Web page called ''Currently Under Review,'' (3) click on the downward-pointing arrow in the ''Select Agency'' box below the ''Currently Under Review'' heading, (4) select ''Federal Communications Commission'' from the list of agencies presented in the ''Select Agency'' box,

(5) click the ''Submit'' button to the right of the ''Select Agency'' box, and (6) when the list of FCC ICRs currently under review appears, look for the OMB control number of the ICR you want to view (or its title if there is no OMB control number) and then click on the ICR Reference Number. A copy of the FCC submission to OMB will be displayed.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–1080.

Title: Collections for the Prevention or Elimination of Interference and for the Reconfiguration of the 800 MHZ Band.

Form Number: N/A.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for-profit entities; and/or State, local or tribal governments.

Number of Respondents: 2,420 respondents; 6,269 responses.

Estimated Time per Response: 4.5104 hours (range of 30 minutes to 10 hours).

Frequency of Response: On occasion reporting requirement and third party disclosure requirement.

Obligation to Respond: Required to obtain or retain benefits.

Total Annual Burden: 28,276 hours.

Total Annual Cost: $62,400.

Privacy Impact Assessment: No impact.

Nature and Extent of Confidentiality: The Commission will work with respondents to ensure that their concerns regarding the confidentiality of any proprietary or public safety-sensitive information are resolved in a manner consistent with the Commission's rules. See 47 CFR 0.459.

Needs and Uses: The information sought will assist 800 MHz licensees in preventing or resolving interference and enable the Commission to implement its rebanding program. Under that program, certain licensees are being relocated to new frequencies in the 800 MHz band, with all rebanding costs to be paid by Sprint Nextel Corporation (Sprint). The Commission's overarching objective in this proceeding is to eliminate interference to public safety communications. The Commission's orders provided for the 800 MHz licensees in non-border areas to complete rebanding by June 26, 2008, but the Commission has allowed licensees to seek extension of that deadline through waiver requests. This collection is being revised to incorporate the waiver request information collection previously approved under OMB control number 3060–1114.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. E8–14788 Filed 6–27–08; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisition of Shares of Bank or Bank Holding Companies

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the office of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than July 14, 2008.

A. Federal Reserve Bank of Kansas City (Todd Offenbacker, Assistant Vice President) 1 Memorial Drive, Kansas City, Missouri 64198–0001:

1. Philip Eugene Jossi and Keith Weldon Carlson, both of Lincoln, Nebraska; and Marian Joanne Hardin, Kearney, Nebraska; to acquire voting shares of Riverdale Bancshares, Inc., and thereby indirectly acquire voting shares of State Bank of Riverdale, both in Riverdale, Nebraska.

Board of Governors of the Federal Reserve System, June 24, 2008.

Robert deV. Frierson,

Deputy Secretary of the Board.

[FR Doc. E8–14670 Filed 6–27–08; 8:45 am]

BILLING CODE 6210–01–S

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisition of Shares of Bank or Bank Holding Companies

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the office of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than July 15, 2008.

A. Federal Reserve Bank of Cleveland (Nadine Wallman, Vice President) 1455 East Sixth Street, Cleveland, Ohio 44101–2566:

1. The Reed Family Control Group, consisting of Theodore T. Reed, III; Kathy M. Reed; Robert D. Reed, all of Pomeroy, Ohio; Bruce J. Reed; Rita J. Reed; Tyler C. Reed; Justin Reed; Jordan Reed, all of Paris, Tennessee; Kristopher M. Jenkins, Goodlettsville, Tennessee; Paul M. Reed; Laurie F. Reed; Katie E. Reed; and Ben Reed, all of Middleport, Ohio, to acquire voting shares of Farmers Bancshares, Inc., and thereby indirectly acquire voting shares of The Farmers Bank and Savings Company, both of Pomeroy, Ohio.

Board of Governors of the Federal Reserve System, June 25, 2008.

Robert deV. Frierson,

Deputy Secretary of the Board.

[FR Doc. E8–14711 Filed 6–27–08; 8:45 am]

BILLING CODE 6210–01–S

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR Part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The applications also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the

nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States. Additional information on all bank holding companies may be obtained from the National Information Center website at *www.ffiec.gov/nic/*.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than July 24, 2008.

A. Federal Reserve Bank of San Francisco (Kenneth Binning, Director, Regional and Community Bank Group) 101 Market Street, San Francisco, California 94105–1579:

1. Crescent Capital VI LLC, Bellevue, Washington, to become a bank holding company by acquiring up to 30 percent of the voting shares of Cowliz Bancorporation, and its subsidary, Cowlitz Bank, both of Longview, Washington.

2. Sagebrush Partners LLLP, to become a bank holding company by acquiring up to 51.01 percent of the voting shares of Grand Valley Corporation, both of Grand Junction, Colorado, and its subsidiary, Grand Valley National Bank, Heber City, Utah.

In connection with this application, Applicant also has applied to indirectly engage *de novo* in extending credit and servicing loans, pursuant to section 225.28(b)(1) of Regulation Y.

Board of Governors of the Federal Reserve System, June 24, 2008.

Robert deV. Frierson,

Deputy Secretary of the Board.

[FR Doc. E8–14669 Filed 6–27–08; 8:45 am]

BILLING CODE 6210–01–S

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR Part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The applications also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States. Additional information on all bank holding companies may be obtained from the National Information Center website at *www.ffiec.gov/nic/*.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than July 25, 2008.

A. Federal Reserve Bank of Boston (Richard Walker, Community Affairs Officer) P.O. Box 55882, Boston, Massachusetts 02106–2204:

1. Eastern Bank Corporation, Boston, Massachusetts, to acquire 100 percent of the voting shares of MASSBANK Corp., and thereby indirectly acquire voting shares of MASSBANK, both of Reading, Massachusetts.

B. Federal Reserve Bank of New York (Anne MacEwen, Bank Applications Officer) 33 Liberty Street, New York, New York 10045–0001:

1. BNC Financial Group, Inc., New Canaan, Connecticut, to acquire 100 percent of the voting shares of The Bank of Fairfield, Fairfield, Connecticut (a de novo bank).

Board of Governors of the Federal Reserve System, June 25, 2008.

Robert deV. Frierson,

Deputy Secretary of the Board.

[FR Doc. E8–14710 Filed 6–27–08; 8:45 am]

BILLING CODE 6210–01–S

FEDERAL TRADE COMMISSION

[File No. 072 3206]

Aliyah Associates, LLC dd/b/a American Advance; Analysis of the Proposed Consent Order to Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed Consent Agreement.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair or deceptive acts or practices or unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the draft complaint and the terms of the consent order — embodied in the consent agreement — that would settle these allegations.

DATES: Comments must be received on or before July 24, 2008

ADDRESSES: Interested parties are invited to submit written comments. Comments should refer to ''Aliyah Associates, File No. 072 3206,'' to facilitate the organization of comments. A comment filed in paper form should include this reference both in the text and on the envelope, and should be mailed or delivered to the following address: Federal Trade Commission/ Office of the Secretary, Room 135-H, 600 Pennsylvania Avenue, N.W., Washington, D.C. 20580. Comments containing confidential material must be filed in paper form, must be clearly labeled ''Confidential,'' and must comply with Commission Rule 4.9(c). 16 CFR 4.9(c) (2005).[1] The FTC is requesting that any comment filed in paper form be sent by courier or overnight service, if possible, because U.S. postal mail in the Washington area and at the Commission is subject to delay due to heightened security precautions. Comments that do not contain any nonpublic information may instead be filed in electronic form by following the instructions on the web-based form at (*http://secure.commentworks.com/ftc-Aliyah*). To ensure that the Commission considers an electronic comment, you must file it on that web-based form.

The FTC Act and other laws the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. All timely and responsive public comments, whether filed in paper or electronic form, will be considered by the Commission, and will be available to the public on the FTC website, to the extent practicable, at *www.ftc.gov*. As a matter of discretion, the FTC makes every effort to remove home contact information for individuals from the public comments it receives before placing those comments on the FTC website. More information, including routine uses permitted by the Privacy Act, may be found in the FTC's privacy policy, at (*http://www.ftc.gov/ftc/privacy.shtm*).

[1] The comment must be accompanied by an explicit request for confidential treatment, including the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. The request will be granted or denied by the Commission's General Counsel, consistent with applicable law and the public interest. *See* Commission Rule 4.9(c), 16 CFR 4.9(c).

FOR FURTHER INFORMATION CONTACT: Cara Peterson or Quisaira Whitney, FTC Bureau of Consumer Protection, 600 Pennsylvania Avenue, NW, Washington, D.C. 20580, (202) 326-3224.

SUPPLEMENTARY INFORMATION: Pursuant to section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46(f), and § 2.34 of the Commission Rules of Practice, 16 CFR 2.34, notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC Home Page (for June 24, 2008), on the World Wide Web, at (*http://www.ftc.gov/os/2008/06/index.htm*). A paper copy can be obtained from the FTC Public Reference Room, Room 130-H, 600 Pennsylvania Avenue, NW, Washington, D.C. 20580, either in person or by calling (202) 326-2222.

Public comments are invited, and may be filed with the Commission in either paper or electronic form. All comments should be filed as prescribed in the **ADDRESSES** section above, and must be received on or before the date specified in the **DATES** section.

Analysis of Agreement Containing Consent Order to Aid Public Comment

The Federal Trade Commission has accepted, subject to final approval, an agreement containing a consent order from Aliyah Associates, LLC d/b/a American Advance (''respondent'').

The proposed consent order has been placed on the public record for thirty (30) days for receipt of comments by interested persons. Comments received during this period will become part of the public record. After thirty (30) days, the Commission will again review the agreement and the comments received, and will decide whether it should withdraw from the agreement or make final the agreement's proposed order.

Respondent engaged in practices that violate Section 144 of the Truth in Lending Act (''TILA''), 15 U.S.C. § 1664, and Section 226.24(c) of its implementing Regulation Z, 12 C.F.R. § 226.24(c). Respondent disseminated payday loan advertisements on the Internet stating the number of payments or period of repayment, or the amount of a finance charge, as terms for obtaining a payday loan. These advertisements failed, however, to disclose the ''annual percentage rate'' or ''APR'' for these loans as required by TILA and its implementing Regulation Z.

TILA and Regulation Z require that advertisers, including payday loan advertisers, disclose APRs on their loans to assist consumers in comparison shopping. The respondent's failure to disclose the APR for the payday loans it advertised undermined consumers' ability to compare these loans to those offered by other payday lenders. The respondent's failure to disclose the APR for the payday loans it advertised also frustrated consumers' ability to compare these loans to alternative forms of credit. Through its law enforcement actions the Commission intends to promote compliance with the APR disclosure requirements of TILA and Regulation Z, thereby promoting comparison shopping relating to payday loans.

The proposed consent order contains provisions designed to prevent respondent from failing to make disclosures required by TILA and Regulation Z in the future.

Part I.A. of the proposed order prohibits respondent, in connection with any advertisement of consumer credit, from stating the amount or percentage of any down payment, the number of payments or period of repayment, the amount of any payment, or the amount of any finance charge, without disclosing clearly and conspicuously all of the terms required by TILA and Regulation Z, including the amount or percentage of the down payment, the terms of repayment, and the annual percentage rate, using that term or the abbreviation ''APR.''

Part I.B. of the proposed order prohibits respondent from stating a rate of finance charge without stating the rate as an ''annual percentage rate'' or the abbreviation ''APR.''

Part I.C. of the proposed order prohibits respondent from failing to comply in any other respect with TILA or Regulation Z.

Part II of the proposed order contains a document retention requirement, the purpose of which is to ensure compliance with the proposed order. It requires that respondent maintain all records that will demonstrate compliance with the proposed order.

Part III of the proposed order requires respondent to distribute copies of the order to various principals, officers, directors, and managers, and all current and future employees, agents and representatives having responsibilities with respect to the subject matter of the order.

Part IV of the proposed order requires respondent to notify the Commission of any changes in its corporate structure that might affect compliance with the order.

Part V of the proposed order requires respondent to file with the Commission one or more reports detailing compliance with the order.

Part VI of the proposed order is a ''sunset'' provision, dictating the conditions under which the order will terminate twenty years from the date it is issued or twenty years after a complaint is filed in federal court, by either the United States or the FTC, alleging any violation of the order.

The purpose of this analysis is to facilitate public comment on the proposed order, and it is not intended to constitute an official interpretation of the agreement and proposed order or to modify in any way their terms.

By direction of the Commission.

Richard C. Donohue

Acting Secretary

[FR Doc. E8–14664 Filed 6–27–08: 8:45 am]

BILLING CODE 6750–01–S

FEDERAL TRADE COMMISSION

[File No. 072 3205]

We Give Loans, Inc.; Analysis of the Proposed Consent Order to Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed Consent Agreement.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair or deceptive acts or practices or unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the draft complaint and the terms of the consent order — embodied in the consent agreement — that would settle these allegations.

DATES: Comments must be received on or before July 24, 2008

ADDRESSES: Interested parties are invited to submit written comments. Comments should refer to ''We Give Loans, File No. 072 3205,'' to facilitate the organization of comments. A comment filed in paper form should include this reference both in the text and on the envelope, and should be mailed or delivered to the following address: Federal Trade Commission/Office of the Secretary, Room 135-H, 600 Pennsylvania Avenue, N.W., Washington, D.C. 20580. Comments containing confidential material must be filed in paper form, must be clearly

labeled ''Confidential,'' and must comply with Commission Rule 4.9(c). 16 CFR 4.9(c) (2005).[1] The FTC is requesting that any comment filed in paper form be sent by courier or overnight service, if possible, because U.S. postal mail in the Washington area and at the Commission is subject to delay due to heightened security precautions. Comments that do not contain any nonpublic information may instead be filed in electronic form by following the instructions on the web-based form at (*http://secure.commentworks.com/ftc-WeGiveLoans*). To ensure that the Commission considers an electronic comment, you must file it on that web-based form.

The FTC Act and other laws the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. All timely and responsive public comments, whether filed in paper or electronic form, will be considered by the Commission, and will be available to the public on the FTC website, to the extent practicable, at *www.ftc.gov.* As a matter of discretion, the FTC makes every effort to remove home contact information for individuals from the public comments it receives before placing those comments on the FTC website. More information, including routine uses permitted by the Privacy Act, may be found in the FTC's privacy policy, at (*http://www.ftc.gov/ftc/privacy.shtm*).

FOR FURTHER INFORMATION CONTACT: Cara Peterson or Quisaira Whitney, FTC Bureau of Consumer Protection, 600 Pennsylvania Avenue, NW, Washington, D.C. 20580, (202) 326-3224.

SUPPLEMENTARY INFORMATION: Pursuant to section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46(f), and § 2.34 of the Commission Rules of Practice, 16 CFR 2.34, notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC Home Page (for June 24, 2008), on the World Wide Web, at (*http://www.ftc.gov/os/2008/06/index.htm*). A paper copy can be obtained from the FTC Public Reference Room, Room 130-H, 600 Pennsylvania Avenue, NW, Washington, D.C. 20580, either in person or by calling (202) 326-2222.

Public comments are invited, and may be filed with the Commission in either paper or electronic form. All comments should be filed as prescribed in the **ADDRESSES** section above, and must be received on or before the date specified in the **DATES** section.

Analysis of Agreement Containing Consent Order to Aid Public Comment

The Federal Trade Commission has accepted, subject to final approval, an agreement containing a consent order from We Give Loans, Inc. (''respondent'').

The proposed consent order has been placed on the public record for thirty (30) days for receipt of comments by interested persons. Comments received during this period will become part of the public record. After thirty (30) days, the Commission will again review the agreement and the comments received, and will decide whether it should withdraw from the agreement or make final the agreement's proposed order.

Respondent engaged in practices that violate Section 144 of the Truth in Lending Act (''TILA''), 15 U.S.C. § 1664, and Section 226.24(c) of its implementing Regulation Z, 12 C.F.R. § 226.24(c). Respondent disseminated payday loan advertisements on the Internet stating the number of payments or period of repayment, or the amount of a finance charge, as terms for obtaining a payday loan. These advertisements failed, however, to disclose the ''annual percentage rate'' or ''APR'' for these loans as required by TILA and its implementing Regulation Z.

TILA and Regulation Z require that advertisers, including payday loan advertisers, disclose APRs on their loans to assist consumers in comparison shopping. The respondent's failure to disclose the APR for the payday loans it advertised undermined consumers' ability to compare these loans to those offered by other payday lenders. The respondent's failure to disclose the APR for the payday loans it advertised also frustrated consumers' ability to compare these loans to alternative forms of credit. Through its law enforcement actions the Commission intends to promote compliance with the APR disclosure requirements of TILA and Regulation Z, thereby promoting comparison shopping relating to payday loans.

The proposed consent order contains provisions designed to prevent respondent from failing to make disclosures required by TILA and Regulation Z in the future.

Part I.A. of the proposed order prohibits respondent, in connection with any advertisement of consumer credit, from stating the amount or percentage of any down payment, the number of payments or period of repayment, the amount of any payment, or the amount of any finance charge, without disclosing clearly and conspicuously all of the terms required by TILA and Regulation Z, including the amount or percentage of the down payment, the terms of repayment, and the annual percentage rate, using that term or the abbreviation ''APR.''

Part I.B. of the proposed order prohibits respondent from stating a rate of finance charge without stating the rate as an ''annual percentage rate'' or the abbreviation ''APR.''

Part I.C. of the proposed order prohibits respondent from failing to comply in any other respect with TILA or Regulation Z.

Part II of the proposed order contains a document retention requirement, the purpose of which is to ensure compliance with the proposed order. It requires that respondent maintain all records that will demonstrate compliance with the proposed order.

Part III of the proposed order requires respondent to distribute copies of the order to various principals, officers, directors, and managers, and all current and future employees, agents and representatives having responsibilities with respect to the subject matter of the order.

Part IV of the proposed order requires respondent to notify the Commission of any changes in its corporate structure that might affect compliance with the order.

Part V of the proposed order requires respondent to file with the Commission one or more reports detailing compliance with the order.

Part VI of the proposed order is a ''sunset'' provision, dictating the conditions under which the order will terminate twenty years from the date it is issued or twenty years after a complaint is filed in federal court, by either the United States or the FTC, alleging any violation of the order.

The purpose of this analysis is to facilitate public comment on the proposed order, and it is not intended to constitute an official interpretation of

[1] The comment must be accompanied by an explicit request for confidential treatment, including the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. The request will be granted or denied by the Commission's General Counsel, consistent with applicable law and the public interest. *See* Commission Rule 4.9(c), 16 CFR 4.9(c).

the agreement and proposed order or to modify in any way their terms.

By direction of the Commission.

Richard C. Donohue

Acting Secretary

[FR Doc. E8–14663 Filed 6–27–08: 8:45 am]

BILLING CODE 6750–01–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Agency for Healthcare Research and Quality

Meeting of the National Advisory Council for Healthcare Research and Quality

AGENCY: Agency for Healthcare Research and Quality (AHRQ).

ACTION: Notice of public meeting.

SUMMARY: In accordance with section 10(a) of the Federal Advisory Committee Act, 5 U.S.C. app. 2 10(a), this notice announces a meeting of the National Advisory Council for Healthcare Research and Quality.

DATES: The meeting will be held on Friday, July 25, 2008, from 9 a.m. to 3 p.m.

ADDRESSES: The meeting will be held at the Eisenberg Conference Center, Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, Maryland 20850.

FOR FURTHER INFORMATION CONTACT: Deborah Queenan, Coordinator of the Advisory Council, at the Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, Maryland 20850, (301) 427–1330. For press-related information, please contact Karen Migdail at (301) 427–1855.

If sign language interpretation or other reasonable accommodation for a disability is needed, please contact Mr. Donald L. Inniss, Director, Office of Equal Employment Opportunity Program, Program Support Center, on (301) 443–1144, no later than July 11, 2008. The agenda, roster, and minutes are available from Ms. Bonnie Campbell, Committee Management Officer, Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, Maryland 20850. Ms. Campbell's phone number is (301) 427–1554.

SUPPLEMENTARY INFORMATION:

I. Purpose

The National Advisory Council for Healthcare Research and Quality was established in accordance with section 921 (now section 931) of the Public Health Service Act (42 U.S.C. 299c). In accordance with its statutory mandate, the Council is to advise the Secretary of the Department of Health and Human Services and the Director, Agency for Healthcare Research and Quality (AHRQ), on matters related to actions of AHRQ to enhance the quality, improve the outcomes, and reduce the costs of health care services; improve access to such services through scientific research; and promote improvements in clinical practice and in the organization, financing, and delivery of health care services.

The Council is composed of members of the public, appointed by the Secretary, and Federal ex-officio members.

II. Agenda

On Friday, July 25, the Council meeting will convene at 9 a.m., with the call to order by the Council Chair and approval of previous Council minutes. The AHRQ director will present her update on current research, programs, and initiatives. The agenda will include a presentation on the National Healthcare Quality and Disparities Reports and a discussion on Employer Engagement in healthcare. The final agenda will be available on the AHRQ Web site at *http://www.ahrq.gov* no later than July 21, 2008.

Dated: June 18, 2008.

Carolyn M. Clancy,

Director.

[FR Doc. E8–14565 Filed 6–27–08; 8:45 am]

BILLING CODE 4160–90–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2008–N–0360]

Cooperative Agreement to Establish and Support the Western Center for Food Safety (U01)

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing a Request for Application (RFA) Number RFA–FD–08–004 and its intention to receive and consider a new sole source application for the award of a cooperative agreement in fiscal year 2008 (FY 2008) to establish and support the Western Center for Food Safety (WCFS). The WCFS will be located at the Western Institute for Food Safety and Security (WIFSS) on the University of California, Davis (UCD) campus in Davis, CA.

FOR FURTHER INFORMATION CONTACT:

Scientific/Programmatic Contact: Steven Gendel, Center for Food Safety and Applied Nutrition (HFS–006), Food and Drug Administration, 5100 Paint Branch Pkwy., College Park, MD 20740, 301–436–2290, e-mail: *steven.gendel@fda.hhs.gov*.

Financial or Grants Management Contact: Gladys M. Bohler, Division of Acquisition Support and Grants (HFA–500), Food and Drug Administration, 5630 Fishers Lane, rm. 2105, Rockville, MD 20857, 301–827–7168, FAX: 301–827–7101, e-mail: *gladys.melendez-bohler@fda.hhs.gov*.

SUPPLEMENTARY INFORMATION:

I. Funding Opportunity Description

A. Background

FDA intends to establish a cooperative agreement to create the WCFS to address these issues through the development of approaches and data critical to understanding the risks associated with the interface between production agriculture and food protection. Such knowledge is critical to the development of scientifically validated ''best practices'' for mitigating those risks at the production (versus processing) level. In establishing this cooperative agreement, FDA recognizes the importance of agricultural practices in the Western states, an increasingly important food producing region for fruits, vegetables, specialty crops, and dairy products; and a key point of entry for imported foods. The development of an integrated collaborative food protection research/education/outreach program in this region will benefit both consumers and producers nationwide.

B. Program Research Goals

A proposal is being solicited to establish and operate a collaborative center that is designed to meet the objectives of the RFA. The proposal should include information on both the structure and administration of the center and the approaches that will be used to establish robust and sustainable regional, national, and international research and outreach collaborations (including collaborations with the agency's other Centers of Excellence; other Centers at UCD, such as the Center for Produce Safety; and other components of the University of California system), as well as strategies for cultivating additional base support for the center.

1. Concept

FDA faces an increasing number of critical and complex food protection and public health challenges. FDA believes that these challenges can be addressed most efficiently by expanding the available science base through collaborative partnerships. Collaborative partnerships stimulate the integration of applied research, education, and outreach programs to enhance food protection and public health and address new and emerging issues. Collaborative partnerships provide opportunities to leverage resources and to stimulate interest among academics in solving pressing national food protection challenges. Accordingly, access to scientists and facilities associated with agriculture within the Western United States increases FDA's understanding of the unique challenges and practices that must be considered when developing risk management measures that are pertinent to agricultural production in this region.

2. Project Emphasis

The collaborative partnership with WCFS will focus on the interface between food protection and the agricultural production of commodities such as produce and dairy foods. This will include studies in areas such as pre- and post-harvest practices and environmental contamination (both from point sources and from distributed sources, e.g., perchlorate in ground water) for both domestic and imported commodities. WCFS will address ''real-world'' problems (such as the development of technologies and practices for food safety-related sampling of fresh produce or the impact of field practices on subsequent processing) and develop knowledge leading to practical solutions and approaches that are both feasible and protective of public health. WCFS will also generate and analyze data needed to provide a scientific basis for optimizing the interactions between potentially competing national concerns, e.g., safety of food production environments versus the protection of wildlife habitats in agricultural communities. The education and outreach components of the partnership will ensure that this knowledge is available for, and useful to, all stakeholders.

3. Summary of Objectives

The cooperative research, education, and outreach programs developed through the WCFS will address scientific issues related to the interface between food protection and agriculture for commodities such as produce, dairy foods, and seafood. These programs will include partnerships with academia, industry, non-governmental organizations, and international organizations. These partnerships will also promote and sustain collaborative domestic and international outreach and education.

The objectives of this cooperative agreement are to:

1. Carry out multidisciplinary applied research projects that address ''real world'' issues related to food protection, agricultural practices, and the impact of agricultural practices on subsequent food processing associated with FDA-regulated products;

2. Develop and implement outreach and communication programs with stakeholders to identify research needs and to facilitate utilization of the knowledge produced by the research program; and

3. Develop and implement education programs that address food protection problems and increase awareness of the role of science in food protection.

II. Award Information

A. Award Instrument/Mechanism of Support

This Funding Opportunity Announcement (FOA) will use the cooperative agreement award mechanism (U01). Support will be in the form of a cooperative agreement. Accordingly, FDA will have substantial involvement in the program activities of the project. FDA will support the collaboration covered by this notice under the authority of section 301 of the Public Health Service (PHS) Act (42 U.S.C. 241).

B. Award Amount and Length of Support

The estimated amount of support in FY 2008 will be for up to $1.5 million (direct plus indirect costs), with the possibility of 4 additional years of support for up to $2.6 million, subject to the availability of funds. This award will improve public health by creating an applied research, education, and outreach program related to the interface between food protection (i.e., food safety and food defense) and agriculture.

C. Funding Plan

The estimated amount of support in FY 2008 will be for up to $1.5 million (direct plus indirect costs), with the possibility of 4 additional years of support for up to $2.6 million, subject to the availability of funds.

D. Delineation of Substantive Involvement

A cooperative agreement involves substantial FDA programmatic involvement with the awardees is anticipated during the performance of the activities. Under the cooperative agreement, FDA's purpose is to support and stimulate the recipients' activities by involvement in and otherwise working jointly with the award recipients in a partnership role; it is not to assume direction, prime responsibility, or a dominant role in the activities. Consistent with this concept, the dominant role and prime responsibility resides with the awardees for the project as a whole, although specific tasks and activities may be shared among the awardees and FDA. Additional information on the role and responsibility of the grantee and FDA can be found in the full text announcement of the FOA posted on FDA's Center for Food Safety and Applied Nutrition (CFSAN) Web site: *http://www.cfsan.fda.gov/list.html*.

III. Eligibility Information

A. Eligible Institutions/Organizations

Competition is limited to the University of California. FDA believes that establishing the WCFS at WIFSS is appropriate because WIFSS is uniquely qualified to fulfill the objectives of the proposed cooperative agreement. It is an established partnership between academia, state and Federal agencies, and private industry focused on enhancing food protection using a variety of approaches that include basic and applied research; communication and connectivity with public and private partners; outreach programs that extend from farm to fork; and modern information management. WIFSS's location at the UCD facilitates interaction with numerous Centers and Departments within the School of Veterinary Medicine, School of Medicine, College of Agricultural and Environmental Sciences, and College of Engineering. The existing administrative structure at WIFSS can be readily leveraged for developing new food protection programs and fostering new partnerships. Existing collaborations with agricultural producers will promote the conduct of on-farm, pre-, and post-harvest food protection research. Such field-scale research is critical both for understanding how agricultural practice impacts food safety and for ensuring that new technologies are practical and effective.

Collaboration between the public and the private sectors has proven to be an efficient means for both FDA and

academia to remain current with scientific and technical advances associated with FDA-regulated products (e.g., foods, animal drugs and feed additives). The degree to which FDA nurtures, develops, and builds on these collaborations directly affects FDA's ability to enhance public health. The information and expertise that will be obtained through this partnership between FDA and WIFSS can be leveraged by all segments of the food protection and nutrition community, as well as by public health organizations, other Federal agencies, and academic institutions in the performance of their roles.

B. Cost Sharing

This cooperative agreement program requires that the applicant substantially share in the project costs if an award is made, including, but not limited to, partial salary support for administrative staff and in-kind support (e.g., faculty salaries and facilities costs).

IV. Application and Submission

A. Form and Content of Applications

Applications must be prepared using the most current PHS 398 research grant application instructions and forms. Applications must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number as the universal identifier when applying for Federal grants or cooperative agreements. The DUNS number can be obtained by calling 866–705–5711 or through the Web site at *http://www.dnb.com/us/*.[1] The DUNS number should be entered on line 11 of the face page of the PHS 398 form.

The PHS 398 application instructions are available at *http://grants.nih.gov/grants/funding/phs398/phs398.html* in an interactive format. Applicants must use the currently approved version of the PHS 398. For further assistance, contact Gladys M. Bohler, 301–827–7168, e-mail: *gladys.melendez-bohler@fda.hhs.gov*. Hearing Impaired—Telecommunications for the hearing impaired are available at: TTY 301–451–0088.

B. Address to Submit Application

Applications must be prepared using the forms found in the PHS 398 instructions for preparing a non-modular research grant application. Submit a signed, typewritten original of the paper application, including the checklist, three signed photocopies, and appendix material in one package to: Gladys M. Bohler, Grants Management Specialist, Division of Acquisition Support and Grants (HFA–500), Food and Drug Administration, 5630 Fishers Lane, rm. 2105, Rockville, MD 20857, 301–827–7168, e-mail: *gladys.melendez-bohler@fda.hhs*.

C. Key Dates

The application is due within 30 days after publication of the Funding Opportunity Announcement in the **Federal Register**. On-time submission requires that the application be successfully submitted to *http://www.grants.gov* no later than 5 p.m. local time (of the applicant institution/organization).

D. Other Submission Requirements

The total project period for an application submitted in response to this funding opportunity may not exceed 5 years.

Applicant may submit only one application. Resubmission applications are not permitted in response to this FOA. Renewal applications are not permitted in response to this FOA.

Consent forms, assent forms, and any other information given to a subject are part of the grant application and must be provided, even if in a draft form. The applicant is referred to the Department of Health and Human Services (HHS) regulations at 45 CFR 46.116 and 21 CFR 50.25 for details.

Awardee(s) must agree to the ''Cooperative Agreement Terms and Conditions of Award'' in section VI.2.A. of the full text of the FOA posted on the CFSAN Web site: (*http://www.cfsan.fda.gov*).

V. Application Review

Applications that are complete and responsive to the FOA will be evaluated for scientific and technical merit by an appropriate peer review group convened by FDA, CFSAN, and in accordance with FDA peer review procedures, using the review criteria stated in the following paragraph.

As part of the scientific peer review, a responsive complete application will: (1) Undergo a review process to determine their scientific and technical merit; (2) be assigned a priority score; (3) receive a written critique; and (4) receive a second level of review by the National Institutes of Health, National Cancer Institute National Cancer Advisory Board.

VI. Award Administrative Information

A. Reporting

Substantive involvement by the awarding agency is inherent in the cooperative agreement award. Accordingly, FDA will have substantial involvement in the program funded by the cooperative agreement. Substantive involvement includes, but is not limited to, the following:

1. FDA will have prior approval of the appointment of all key administrative and scientific personnel proposed by the grantee.

2. FDA will be directly involved in the guidance and development of the program.

3. FDA scientists will participate, with the grantee, in determining and carrying out scientific and technical activities. Collaboration will also include data analysis, interpretation of findings and, where appropriate, co-authorship of publications.

4. The original and two copies of the annual Financial Status Report (FSR) (SF–269) must be sent to FDA's Grants Management Specialist within 90 days of each budget period end date.

5. A final progress report, invention statement, and Financial Status Report are required when an award is relinquished when a recipient changes institutions or when an award is terminated and/or at the end of the project period.

B. Administrative Requirements

This agreement will be subject to all policies and requirements that govern the research grant programs of the PHS, including provisions of 42 CFR part 52 and 45 CFR Parts 74 and 92. All grants are subject to the terms and conditions, cost principles, and other considerations described in the HHS Grants Policy Statement (GPS), dated January 2007, which supersedes in its entirety the PHS GPS, dated April 1, 1994, and addendum dated January 24, 1995.

An award is subject to the requirements of the HHS GPS that are applicable based on the recipient type and the purpose of this award. This includes any requirements in Parts I and II of the HHS GPS (available at *http://www.hhs.gov/grantsnet/adminis/gpd/index.htm*) that apply to an award.

Although consistent with the HHS GPS, any applicable statutory or regulatory requirements, including 45 CFR parts 74 or 92, directly apply to this award apart from any coverage in the HHS GPS.

[1] (FDA has verified the Web site addresses throughout this document, but we are not responsible for any subsequent changes to the Web sites after this document publishes in the **Federal Register**.)

C. Other Information

Awardees will be required to submit the Non-Competing Continuation Grant Progress Report (PHS 2590) annually and financial statements, as required in the HHS GPS.

Dated: June 24, 2008.

Jeffrey Shuren,

Associate Commissioner for Policy and Planning.

[FR Doc. E8–14749 Filed 6–27–08; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2008–N–0357]

Food Protection Rapid Response Team and Program Infrastructure Improvement Prototype Project (U18); Availability of an Agreement of Limited Competition; Request for Applications: RFA Number: RFA FD08–007

I. Research Objectives

The Food and Drug Administration (FDA), Office of Regulatory Affairs (ORA), Division of Federal-State Relations (DFSR) in collaboration with the Center for Food Safety and Applied Nutrition (CFSAN) and Center for Veterinary Medicine (CVM), is announcing the availability of an Agreement of Limited Competition. Only States with current FDA Food Safety contracts to provide funding to State agency food protection regulatory programs are eligible for a 3-year cooperative agreement to develop and sustain an all Food Hazards Rapid Response Team, encompassing both food and feed protection programs, through a process to further enhance and build the infrastructure of State food protection programs.

The goal of FDA's ORA Cooperative Agreement Program is to enhance, complement, develop and improve State manufactured food protection regulatory and surveillance programs. This will be accomplished through the provision of funding for program assessment, additional equipment, supplies, funding for personnel, and training including Incident Command System (ICS), rapid response team development and coordination, and exercises of the response team. This will also require extensive cooperation and coordination with FDA District Offices to minimize duplication of inspections, an FDA contractor (the Western Institute for Food Safety and Security (WIFSS)) in the development of Rapid Response Teams (RRT), and other FDA program offices.

These cooperative agreements are intended to develop, implement and exercise an all hazards food and foodborne illness RRT concept within the food protection program in conjunction with other food and feed agencies within State programs, other State RRTs, FDA District Offices, and State Emergency Operations Centers (EOC) to respond to all food hazard incidents in the farm-to-table continuum using expandable ICS protocols and structures as needed. The infrastructure necessary to develop and sustain an RRT is accomplished through the assessment and continuous improvement to the infrastructure and equivalency of the State food regulatory program using the FDA Manufactured Food Regulatory Program Standards (MFRPS). State food program enhancements will also include the incorporation of the FDA Food Protection Plan to implement a strategy of prevention, intervention and response to build safety into every step of the food supply chain. The cooperative agreements will provide funding for additional personnel, equipment, supplies and training to support activities related to the FDA MFRPS and the RRT concept.

Under the cooperative agreement, the State would assess and implement a continuous program improvement/enhancement strategy (strategic plan) using the FDA MFRPS, and in addition, develop, train and implement a foodborne illness rapid response team that incorporates ICS concepts and conceptual elements outlined in this RFA. This standard applies to the surveillance, investigation, response and subsequent review of alleged food-related incidents and emergencies, either unintentional or deliberate that may result in illness, injury, and outbreaks.

Post assessment, these funds should be used to enhance or establish systems to:

1. Use epidemiological information supplied by local, State, or Federal agencies to detect incidents or outbreaks of foodborne illness or injury;
2. Investigate reports of illness, injury, and suspected outbreaks;
3. Correlate and analyze data;
4. Disseminate public information effectively;
5. Distribute outbreak reports and surveillance summaries to relevant agencies;
6. Disseminate current guidance to industry on food defense;
7. Provide guidance for immediate notification of law enforcement agencies when intentional food contamination or terrorism is suspected or threatened;
8. Collaborate as necessary with FDA and other Federal authorities under conditions of increased threat of intentional contamination.

The goal of developing and sustaining an RRT is in concert with long-term goals to enhance the food inspection and foodborne illness response programs, to increase the ability to inspect and obtain compliance for firms in their jurisdiction involved in the processing, manufacturing, distribution, transportation and warehousing of food, verify compliance with the State laws and regulations, good manufacturing practices, food defense, and other food protection requirements in support of the State program and the FDA Food Protection Plan (FPP), Action Plan for Import Safety (ISAP), and the Food and Drug Administration Amendments Act of 2007 (FDAAA).

Funds could be used to increase State personnel to support the RRT, team coordinators, technical experts and epidemiologist team members. Funds could also be used for supplies, training, and equipment for inspections and rapid response including investigational, GPS interface, communication and laboratory. The goal of enhancing State food programs is to ensure that the necessary infrastructure is available to support an RRT along with the States regulatory and food protection responsibilities of inspections and oversight of food processing, manufacture, distribution, transportation and warehousing.

These support project funds are intended to supplement, not replace, State funding for program improvement and activities. States funded under these cooperative agreements will be required to provide the previous years and subsequent years State funding to demonstrate that these funds have not replaced State allocations for the food protection program. The purpose of these cooperative agreements is the development and enhancement of existing State food regulatory programs in providing outbreak response capabilities. Funding will be provided for items such as: Supplies, lab equipment, surveillance, team development and exercise, sample collection, personnel, for the provision of training independently and with an FDA contract for RRT training, and meetings with FDA District response teams. Successful applications will be selected for funding to ensure a broad geographic distribution of the program. Size of the existing or new State/territory/tribal program and number of facilities to be covered under the

cooperative agreement will also be a determining factor. States with current food safety Inspection contracts from FDA can maintain these contracts at the discretion of the State and FDA. However, the facilities and work covered under the contract cannot be counted towards fulfillment of the cooperative agreement and must remain distinct and separate from the cooperative agreement. These cooperative agreements are not to fund licensed medicated feed or routine feed safety good manufacturing practice (GMP) inspections, or retail food or foodservice inspections.

Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. Although the financial plans of the FDA provide support for this program, awards under this funding opportunity are contingent upon the availability of funds and the receipt of a sufficient number of meritorious applications.

II. Authority and Regulations

This request for applications (RFA) is subject to intergovernmental review E.O. 12372. See *http://www.whitehouse.gov/omb/grants/spoc.html*. This program is described in the Catalog of Federal Domestic Assistance (93.103) at *http://www.cfda.gov/*[1] and it is subject to the intergovernmental review requirements of Executive Order 12372. Awards are made under the Bioterrorism Act, Subtitle A of Title III-Protection of Food Supply, Section 31—Grants to States for Inspections, amends the Federal Food, Drug, and Cosmetic (act) by adding section 909 to authorize the Secretary of Health and Human Services to award grants to States, territories, and Indian tribes that undertake examinations, inspections, and investigations, and related activities under Section 702 of the act. All awards are subject to the terms and conditions, cost principles, and other considerations described in the NIH Grants Policy Statement. The FDA Grants Policy Statement can be found at *http://www.hhs.gov/grantsnet/adminis/gpd/index.htm*.

See Section VIII, Other Information—Required Federal Citations, under the full text of the RFA for policies related to this announcement found in *http://www.grants.gov* and/or *http://web.ora.fda.gov/dfsr/detail.jsp?id=66*.

[1] FDA has verified the non-FDA Web site addresses throughout this document, but we are not responsible for any subsequent changes to the Web sites after this document publishes in the **Federal Register**.

III. Mechanism of Support

A. Background

This funding opportunity will use the cooperative agreement award mechanism(s) (U18).

The Project Director/Principal Investigator (PD/PI) will be solely responsible for planning, directing, and executing the proposed project.

This funding opportunity will use a cooperative agreement award mechanism. In the cooperative agreement mechanism, the PD/PI retains the primary responsibility and dominant role for planning, directing, and executing the proposed project, with FDA staff being substantially involved as a partner with the principal investigator, as described under the Section VI. 2. Administrative Requirements of the full RFA, under ''Cooperative Agreement Terms and Conditions of Award''.

Funding for an additional 3 years of noncompetitive support is contingent on cooperative agreement performance, program progress and the availability of funds.

B. Funds Available and Anticipated Number of Awards

The total amount of funding available in fiscal year (FY) 2008 is $3 million.

It is anticipated that FDA will make up to six awards in FY 2008. The number of projects funded will depend on the quality of the applications received and is subject to availability of Federal funds to support the projects. In addition, if a cooperative agreement is awarded, grantees will be informed if any additional documentation should be needed to support their award. Funds may be requested in the budget to travel to FDA for meetings with program staff about the progress of the project. The project office will have continuous interaction with the grantee through inspection field audits, collection of quarterly progress reports, and provision of training, joint inspections, and compliance, program standards audits, rapid response team exercises and coordination and others as needed in the development of the self assessment, strategic improvement plan and its implementation. There may be other regular meetings with grantees to assist in fulfilling the requirements of the cooperative agreement.

C. Budget and Project Period

The length of support is 3 years and the applicants must apply for 3 years of currently projected funding. The applicants must provide 3 years worth of budgets and program objectives. The initial competitive review and award process will provide all awardees with 1 year of funding. The second year and third years of funding of noncompetitive continuation of support will depend on performance during the preceding year and availability of Federal funds. Cooperative agreements will be awarded up to $500,000 in total (direct plus indirect) costs per year for up to 3 years and can be modified, depending on the availability of funds and review of prior year's accomplishments.

IV. Eligible Institutions/Organizations

This cooperative agreement program is only available to State food safety agencies and their manufactured food regulatory programs that currently have an FDA food safety inspection contract. All cooperative agreement prototype projects that are developed at State agency level must have existing food safety inspection and surveillance programs under contract to FDA for food safety inspections.

V. Applications

A. Number of Applicants:

Applicants may submit more than one application, provided they are scientifically distinct. Resubmission applications are not permitted in response to this Funding Opportunity Announcement (FOA). Renewal applications are not permitted in response to this FOA.

B. Application Materials:

The PHS 424/5161–1 application instructions are available at *http://www.hhs.gov/forms/PHS–5161–1.pdf*. Applicants must use the currently approved version of the PHS424. For further assistance contact GrantsInfo, Telephone: 301–435–0714, Email: *GrantsInfo@nih.gov*.

Telecommunications for the hearing impaired: TTY 301–451–0088. See Section IV.1 in the full text of the RFA available at *http://www.grants.gov* and the FDA/ORA Website for application materials: *http://web.ora.fda.gov/dfsr/detail.jsp?id=66*.

The title and number of this funding opportunity must be included on the face page of the application.

The applicant will be judged on, and must specifically address, the following in the cooperative agreement application:

1. Program goals as stated in the RFA
2. Demonstrate the availability of adequately trained food program staff including field staff, supervisory staff and support staff and the criteria to hire and/or train personnel to conduct food program activities including assessment and implementation.

3. Demonstrate the availability of adequately trained personnel to support the activities required under this cooperative agreement and agency commitment and support for this project including the development of the RRT.

4. Provide a detailed description of the current food regulatory program including types of inspections performed, and types and numbers of food establishments in the State inventory. Provide an indication of how many of each of these facilities would be covered each year under this agreement.

5. Provide a properly detailed budget (one for each of 3 years) that is intended to develop the RRT and enhance the food protection program in the State. Included will be the previous and current years State funding for the program including program staffing and costs.

6. Demonstrate the ability to satisfy the reporting requirements outlined in section VI.3.A of the full RFA notice.

7. Provide current funding level certification for their food safety program from State funding appropriations.

8. Outline detailed methodology for program assessment improvement or program development to accomplish the work.

9. Provide justification for hiring new staff, hiring qualifications, their training needs and any new equipment.

10. It is noted that the grantee should provide a clearly detailed description on how the State food program will follow procedures for notifying FDA of violative facilities for enforcement under FDA jurisdiction.

C. Dates

The application receipt date is August 15, 2008.

VI. Agency Contacts:

We encourage your inquiries concerning this funding opportunity and welcome the opportunity to answer questions from potential applicants. Inquiries may fall into two areas: Scientific/research, and financial or grants management issues:

A. Scientific/Research Contacts

Jennifer Gabb, Project Officer, Division of Federal-State Relations (HFC–150), Office of Regulatory Affairs, Food and Drug Administration, 5600 Fishers Lane, rm. 12–07, Rockville, MD 20857, telephone: 301–827–2899, e-mail: *Jennifer.gabb@fda.hhs.gov* or access the Internet at *http://www.fda.gov/ora/fedState/default.htm*.

B. Financial or Grants Management Contacts

Gladys M. Bohler, Grants Management Specialist, Division of Acquisition Support and Grants, Food and Drug Administration, 5630 Fishers Lane, rm. 2105, Rockville, MD 20857,telephone: 301–827–7168, e-mail: *gladys.melendez@fda.hhs.gov*.

Dated: June 24, 2008.

Jeffrey Shuren,

Associate Commissioner for Policy and Planning.

[FR Doc. E8–14735 Filed 6–27–08; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2008–N–0352]

Prescription Drug User Fee Act IV Information Technology Plan

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of the information technology (IT) Plan entitled ''Prescription Drug User Fee Act (PDUFA) IV Information Technology Plan'' to achieve the objectives defined in the PDUFA Performance Goals. This plan is intended to provide regulated industry and other stakeholders with information on FDA's vision and plan for improving the automation of business processes and maintaining information systems that support the review process of human drug applications.

DATES: Submit written or electronic comments on the plan at any time. These comments will be considered as the agency makes annual adjustments to the plan each fiscal year.

ADDRESSES: Submit written requests for single copies of the IT plan to the Office of the Chief Information Officer (HFA–080), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857. Send one self-addressed adhesive label to assist that office in processing your requests. Submit written comments on the IT plan to the Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. Submit electronic comments to *http://www.regulations.gov*. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the plan.

FOR FURTHER INFORMATION CONTACT: Suzanne Mitri, Office of the Chief Information Officer, Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–255–6700.

SUPPLEMENTARY INFORMATION:

I. Background

FDA is announcing the availability of the IT plan entitled ''Prescription Drug User Fee Act (PDUFA) IV Information Technology Plan.'' This plan is intended to provide regulated industry and other stakeholders with information on FDA's vision and plan for improving the automation of business processes and maintaining information systems that support the process for the review of human drug applications to achieve the objectives defined in section XIV, Information Technology Goals, of the PDUFA Performance Goals (*http://www.fda.gov/oc/pdufa4/pdufa4goals.html*).

On September 27, 2007, President Bush signed into law the Food and Drug Administration Amendments Act of 2007, which includes the reauthorization and expansion of PDUFA. The reauthorization of PDUFA will significantly broaden and upgrade the agency's drug safety program, increase resources for review of television drug advertising, and facilitate more efficient development of safe and effective new medications for the American public. The reauthorization also includes IT Goals that are divided into four subsections: Objectives, Communications and Technical Interactions, Standards and IT Plan, and Metrics and Measures. In addition, there are IT Goals associated with the upgrade of the agency's drug safety program in section VIII, Enhancement and Modernization of the FDA Drug Safety System of the PDUFA Performance Goals.

The objectives of the PDUFA IV IT Goals are to move FDA towards the long-term goal of an automated standards-based information technology environment for the exchange, review, and management of information supporting the process for the review of human drug applications throughout the product life cycle. As part of this process, FDA has developed and will periodically update the 5-year IT plan.

II. Electronic Access

Persons with access to the Internet may obtain the document at *http://www.regulations.gov*.

III. Comments

Interested persons may submit to the Division of Dockets Management (see **ADDRESSES**) written or electronic

comments regarding this document. Submit a single copy of electronic comments or two paper copies of any mailed comments, except that individuals may submit one paper copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

Please note that on January 15, 2008, the FDA Division of Dockets Management Web site transitioned to the Federal Dockets Management System (FDMS). FDMS is a Government-wide, electronic docket management system. Electronic comments or submissions will be accepted by FDA only through FDMS at *http://www.regulations.gov*.

Dated: June 23, 2008.

Jeffrey Shuren,

Associate Commissioner for Policy and Planning.

[FR Doc. E8–14744 Filed 6–27–08; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Mental Health; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of Mental Health Special Emphasis Panel; Fellowships and Dissertation Grants II.

Date: July 23, 2008.

Time: 2 p.m. to 3 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Neuroscience Center, 6001 Executive Boulevard, Rockville, MD 20852, (Telephone Conference Call).

Contact Person: Marina Broitman, PhD, Scientific Review Administrator, Division of Extramural Activities, National Institute of Mental Health, NIH, Neuroscience Center, 6001 Executive Blvd., Room 6153, MSC 9608, Bethesda, MD 20892–9608, 301–402–8152, *mbroitma@mail.nih.gov*.

(Catalogue of Federal Domestic Assistance Program Nos. 93.242, Mental Health Research Grants; 93.281, Scientist Development Award, Scientist Development Award for Clinicians, and Research Scientist Award; 93.282, Mental Health National Research Service Awards for Research Training, National Institutes of Health, HHS)

Dated: June 23, 2008.

Jennifer Spaeth,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. E8–14695 Filed 6–27–08; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Mental Health; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of Mental Health Special Emphasis Panel; Community Based Participatory Research.

Date: July 16, 2008.

Time: 1 p.m. to 4 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Neuroscience Center, 6001 Executive Boulevard, Rockville, MD 20852, (Telephone Conference Call).

Contact Person: Aileen Schulte, PhD, Scientific Review Administrator, Division of Extramural Activities, National Institute of Mental Health, NIH, Neuroscience Center, 6001 Executive Blvd., Room 6140, MSC 9608, Bethesda, MD 20892–9608, 301–443–1225, *aschulte@mail.nih.gov*.

(Catalogue of Federal Domestic Assistance Program Nos. 93.242, Mental Health Research Grants; 93.281, Scientist Development Award, Scientist Development Award for Clinicians, and Research Scientist Award; 93.282, Mental Health National Research Service Awards for Research Training, National Institutes of Health, HHS)

Dated: June 23, 2008.

Jennifer Spaeth,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. E8–14697 Filed 6–27–08; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of General Medical Sciences; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of General Medical Sciences Special Emphasis Panel; NRSA Institutional Research Training.

Date: July 22, 2008.

Time: 8:30 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: Hyatt Regency, One Bethesda Metro Center, Bethesda, MD 20814.

Contact Person: Brian R Pike, PhD, Scientific Review Officer, Office of Scientific Review, National Institute of General Medical Sciences, National Institutes of Health, 45 Center Drive, Room 3AN18, Bethesda, MD 20892, 301–594–3907, *pikbr@mail.nih.gov*.

Name of Committee: National Institute of General Medical Sciences Special Emphasis Panel; Short Courses in Integrative and Organ Systems Pharmacology.

Date: July 23, 2008.

Time: 8:30 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: Hyatt Regency, One Bethesda Metro Center, Bethesda, MD 20814.

Contact Person: Lisa Dunbar, PhD, Scientific Review Officer, Office of Scientific Review, National Institute of General Medical Sciences, National Institutes of Health, 45 Center Drive, Room 3AN12, Bethesda, MD 20892, 301–594–2849, *dunbarl@mail.nih.gov*.

(Catalogue of Federal Domestic Assistance Program Nos. 93.375, Minority Biomedical Research Support; 93.821, Cell Biology and Biophysics Research; 93.859, Pharmacology, Physiology, and Biological Chemistry Research; 93.862, Genetics and Developmental Biology Research; 93.88,

Minority Access to Research Careers; 93.96, Special Minority Initiatives, National Institutes of Health, HHS)

Dated: June 23, 2008.

Jennifer Spaeth,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. E8–14698 Filed 6–27–08; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1758–DR]

Arkansas; Amendment No. 3 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Arkansas (FEMA–1758–DR), dated May 20, 2008, and related determinations.

DATES: *Effective Date:* June 24, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3886.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Arkansas is hereby amended to include the following area among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of May 20, 2008.

Phillips County for Public Assistance (already designated for Individual Assistance.)

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14738 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1766–DR]

Indiana; Amendment No. 9 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Indiana (FEMA–1766–DR), dated June 8, 2008, and related determinations.

DATES: *Effective Date:* June 21, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3886.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Indiana is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of June 8, 2008.

Bartholomew, Brown, Clay, Daviess, Decatur, Greene, Henry, Jackson, Jennings, Johnson, Monroe, Morgan, Owen, Randolph, Rush, Shelby, Sullivan, Vermillion, and Vigo Counties for Public Assistance (already designated for Individual Assistance and emergency protective measures [Category B], limited to direct Federal assistance, under the Public Assistance program.)

Hancock, Knox, Parke, Pike, Putnam, and Washington Counties for Public Assistance (already designated for Individual Assistance.)

Madison County for Public Assistance.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households in Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14732 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1766–DR]

Indiana; Amendment No. 8 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Indiana (FEMA–1766–DR), dated June 8, 2008, and related determinations.

EFFECTIVE DATE: June 19, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–2705.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Indiana is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of June 8, 2008.

Grant, Huntington, Pike and Washington Counties for Individual Assistance.

Jefferson, Lawrence, and Ripley Counties for Individual Assistance (already designated for emergency protective measures [Category B], limited to direct Federal assistance, under the Public Assistance program.)

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster

Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14742 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1763–DR]

Iowa; Amendment No. 9 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Iowa (FEMA–1763–DR), dated May 27, 2008, and related determinations.

DATES: *Effective Date:* June 21, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3886.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Iowa is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of May 27, 2008.

Webster County for Individual Assistance (already designated for Public Assistance.)

Washington County for Public Assistance.

Hardin, Harrison, Louisa, and Scott Counties for Public Assistance (already designated for Individual Assistance.)

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14740 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1763–DR]

Iowa; Amendment No. 8 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Iowa (FEMA–1763–DR), dated May 27, 2008, and related determinations.

DATES: *Effective Date:* June 20, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3886.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Iowa is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of May 27, 2008.

Scott County for Individual Assistance.

Boone, Franklin, Hamilton, and Wright Counties for Individual Assistance (already designated for Public Assistance.)

Carroll, Jackson, and Keokuk Counties for Public Assistance.

Jasper, Mills, Monona, and Polk Counties for Public Assistance (already designated for Individual Assistance.)

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14752 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1763–DR]

Iowa; Amendment No. 7 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Iowa (FEMA–1763–DR), dated May 27, 2008, and related determinations.

DATES: *Effective Date:* June 19, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3886.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Iowa is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of May 27, 2008.

Lee County for Individual Assistance.

Wapello County for Individual Assistance and Public Assistance.

Hancock, Kossuth, Madison, and Marshall Counties for Individual Assistance (already designated for Public Assistance.)

Benton, Bremer, Cedar, Fremont, and Mahaska Counties for Public Assistance (already designated for Individual Assistance.)

Cass, Clinton, Decatur, Greene, Guthrie, Hamilton, Montgomery, and Poweshiek Counties for Public Assistance.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050 Presidential Declared Disaster Assistance to Individuals and

Households—Other Needs, 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14753 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1770–DR]

Nebraska; Major Disaster and Related Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This is a notice of the Presidential declaration of a major disaster for the State of Nebraska (FEMA–1770–DR), dated June 20, 2008, and related determinations.

DATES: *Effective Date:* June 20, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3886.

SUPPLEMENTARY INFORMATION: Notice is hereby given that, in a letter dated June 20, 2008, the President declared a major disaster under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206 (the Stafford Act), as follows:

I have determined that the damage in certain areas of the State of Nebraska resulting from severe storms, tornadoes, and flooding beginning on May 22, 2008, and continuing, is of sufficient severity and magnitude to warrant a major disaster declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206 (the Stafford Act). Therefore, I declare that such a major disaster exists in the State of Nebraska.

In order to provide Federal assistance, you are hereby authorized to allocate from funds available for these purposes such amounts as you find necessary for Federal disaster assistance and administrative expenses.

You are authorized to provide Individual Assistance and Public Assistance in the designated areas and Hazard Mitigation throughout the State. Consistent with the requirement that Federal assistance be supplemental, any Federal funds provided under the Stafford Act for Hazard Mitigation and Other Needs Assistance will be limited to 75 percent of the total eligible costs. Federal funds provided under the Stafford Act for Public Assistance also will be limited to 75 percent of the total eligible costs, except for any particular projects that are eligible for a higher Federal cost-sharing percentage under the FEMA Public Assistance Pilot Program instituted pursuant to 6 U.S.C. 777.

Further, you are authorized to make changes to this declaration to the extent allowable under the Stafford Act.

The time period prescribed for the implementation of section 310(a), Priority to Certain Applications for Public Facility and Public Housing Assistance, 42 U.S.C. 5153, shall be for a period not to exceed six months after the date of this declaration.

The Federal Emergency Management Agency (FEMA) hereby gives notice that pursuant to the authority vested in the Administrator, under Executive Order 12148, as amended, Willie G. Nunn, of FEMA is appointed to act as the Federal Coordinating Officer for this declared disaster.

The following areas of the State of Nebraska have been designated as adversely affected by this declared major disaster:

Buffalo, Butler, Colfax, Dawson, Douglas, Gage, Hamilton, Jefferson, Kearney, Platte, Richardson, Sarpy, and Saunders Counties for Individual Assistance.

Adams, Blaine, Boone, Boyd, Brown, Buffalo, Burt, Butler, Cass, Chase, Colfax, Cuming, Custer, Dawson, Douglas, Fillmore, Frontier, Furnas, Gage, Garfield, Gosper, Hall, Hamilton, Hayes, Holt, Howard, Jefferson, Keya Paha, Lancaster, Lincoln, Logan, Loup, Merrick, McPherson, Nance, Otoe, Phelps, Platte, Polk, Red Willow, Richardson, Rock, Saline, Saunders, Sarpy, Seward, Sherman, Stanton, Thayer, Thomas, Thurston, Webster, and York Counties for Public Assistance.

All counties within the State of Nebraska are eligible to apply for assistance under the Hazard Mitigation Grant Program.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households in Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14730 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1769–DR]

West Virginia; Major Disaster and Related Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This is a notice of the Presidential declaration of a major disaster for the State of West Virginia (FEMA–1769–DR), dated June 19, 2008, and related determinations.

EFFECTIVE DATE: June 19, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–2705.

SUPPLEMENTARY INFORMATION: Notice is hereby given that, in a letter dated June 19, 2008, the President declared a major disaster under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206 (the Stafford Act), as follows:

I have determined that the damage in certain areas of the State of West Virginia resulting from severe storms, tornadoes, flooding, mudslides, and landslides during the period of June 3–7, 2008, is of sufficient severity and magnitude to warrant a major disaster declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206 (the Stafford Act). Therefore, I declare that such a major disaster exists in the State of West Virginia.

In order to provide Federal assistance, you are hereby authorized to allocate from funds available for these purposes such amounts as you find necessary for Federal disaster assistance and administrative expenses.

You are authorized to provide Individual Assistance and Public Assistance in the designated areas and Hazard Mitigation throughout the State. Consistent with the requirement that Federal assistance be supplemental, any Federal funds provided under the Stafford Act for Hazard Mitigation and Other Needs Assistance will be limited to 75 percent of the total eligible costs. Federal funds provided under the Stafford Act for Public Assistance also will be limited to 75 percent of the total eligible costs, except for any particular projects that are eligible for a higher Federal cost-sharing percentage under the FEMA Public Assistance Pilot Program instituted pursuant to 6 U.S.C. 777.

Further, you are authorized to make changes to this declaration to the extent allowable under the Stafford Act.

The time period prescribed for the implementation of section 310(a), Priority to Certain Applications for

Public Facility and Public Housing Assistance, 42 U.S.C. 5153, shall be for a period not to exceed six months after the date of this declaration.

The Federal Emergency Management Agency (FEMA) hereby gives notice that pursuant to the authority vested in the Administrator, under Executive Order 12148, as amended, Ed Smith, of FEMA is appointed to act as the Federal Coordinating Officer for this declared disaster.

The following areas of the State of West Virginia have been designated as adversely affected by this declared major disaster:

Barbour, Doddridge, Gilmer, Harrison, Jackson, Jefferson, Marion, Taylor and Tyler Counties for Individual Assistance.

Barbour, Clay, Doddridge, Gilmer, Harrison, Marion, and Taylor Counties for Public Assistance.

All counties within the State of West Virginia are eligible to apply for assistance under the Hazard Mitigation Grant Program.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14748 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1768–DR]

Wisconsin; Amendment No. 5 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Wisconsin (FEMA–1768–DR), dated June 14, 2008, and related determinations.

DATES: *Effective Date:* June 21, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3886.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Wisconsin is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of June 14, 2008.

Dane, Juneau, and Ozaukee Counties for Individual Assistance.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households in Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14728 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1768–DR]

Wisconsin; Amendment No. 4 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Wisconsin (FEMA–1768–DR), dated June 14, 2008, and related determinations.

EFFECTIVE DATE: June 19, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–3886.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Wisconsin is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of June 14, 2008.

Grant, Kenosha, Rock, and Sheboygan Counties for Individual Assistance.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14743 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1768–DR]

Wisconsin; Amendment No. 3 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Wisconsin (FEMA–1768–DR), dated June 14, 2008, and related determinations.

EFFECTIVE DATE: June 19, 2008.

FOR FURTHER INFORMATION CONTACT: Peggy Miller, Disaster Assistance Directorate, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646–2705.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Wisconsin is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of June 14, 2008.

Fond du Lac, Iowa, and Marquette Counties for Individual Assistance.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidential Declared Disaster Areas; 97.049, Presidential Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidential Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

R. David Paulison,

Administrator, Federal Emergency Management Agency.

[FR Doc. E8–14746 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–10–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2008–0010]

National Fire Academy Board of Visitors

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Committee Management; Notice of Open Teleconference Federal Advisory Committee Meeting.

SUMMARY: The National Fire Academy Board of Visitors will meet by teleconference on July 22, 2008.

DATES: The teleconference will take place Tuesday, July 22, 2008, from 10 a.m. to 12 p.m., e.s.t. Comments must be submitted by Tuesday, July 29, 2008.

ADDRESSES: Members of the public who wish to obtain the call-in number, access code, and other information for the public teleconference may contact Teressa Kaas as listed in the **FOR FURTHER INFORMATION CONTACT** section by July 18, 2008, as the number of teleconference lines is limited and available on a first-come, first served basis. Members of the public may also participate by coming to the National Emergency Training Center, Building H, Room 300, Emmitsburg, Maryland. Members of the general public who plan to participate in the meeting should contact Teressa Kaas as listed in the **FOR FURTHER INFORMATION CONTACT** section, on or before July 18, 2008. Requests to have written material distributed to each member of the committee prior to the meeting should reach the contact person at the address below by July 18, 2008. Send written material to Teressa Kaas, 16825 South Seton Avenue, Emmitsburg, Maryland 21727. Comments must be identified by Docket ID FEMA–2008–0010 and may be submitted by *one* of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov*. Follow the instructions for submitting comments.
- *E-mail: FEMA-RULES@dhs.gov*. Include Docket ID in the subject line of the message.
- *Fax:* (866) 466–5370.
- *Mail:* Teressa Kaas, 16825 South Seton Avenue, Emmitsburg, Maryland 21727.

Instructions: All submissions received must include the Docket ID for this action. Comments received will be posted without alteration at *http://www.regulations.gov*, including any personal information provided.

Docket: For access to the docket to read background documents or comments received by the National Fire Academy Board of Visitors, go to *http://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Teressa Kaas, 16825 South Seton Avenue, Emmitsburg, Maryland 21727, telephone (301) 447–1117, fax (301) 447–1173, and e-mail *teressa.kaas@dhs.gov*.

SUPPLEMENTARY INFORMATION: Notice of this meeting is given under the Federal Advisory Committee Act, 5 U.S.C. App. (Pub. L. 92–463). The National Fire Academy Board of Visitors will be holding a teleconference for purposes of reviewing National Fire Academy Program activities, including the results of the Congressional Fire Services Institute activities, the status of campus maintenance and capital improvements, an update on the Realignment, the budget submission, the Academy update, and Board discussions and new items. This meeting is open to the public.

The Chairperson of the National Fire Academy Board of Visitors shall conduct the teleconference in a way that will, in his judgment, facilitate the orderly conduct of business. During its teleconference, the committee welcomes public comment; however, comments will be permitted only during the public comment period. The Chairperson will make every effort to hear the views of all interested parties. Please note that the teleconference may end early if all business is completed.

Information on Services for Individuals With Disabilities

For information on facilities or services for individuals with disabilities or to request special assistance at the meeting, contact Teressa Kaas as soon as possible.

Dated: June 20, 2008.

Denis G. Onieal,

Acting Fire Administrator, National Fire Academy, U.S. Fire Administration, Federal Emergency Management Agency.

[FR Doc. E8–14667 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–17–P

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

Extension of Agency Information Collection Activity Under OMB Review: Flight Crew Self-Defense Training—Registration and Evaluation

AGENCY: Transportation Security Administration, DHS.

ACTION: Notice.

SUMMARY: This notice announces that the Transportation Security Administration (TSA) has forwarded the Information Collection Request (ICR) abstracted below to the Office of Management and Budget (OMB) for review and approval of an extension of the currently approved collection under the Paperwork Reduction Act. The ICR describes the nature of the information collection and its expected burden. TSA published a **Federal Register** notice, with a 60-day comment period soliciting comments, of the following collection of information on April 16, 2008 (73 FR 20699). The collection permits TSA to collect identifying information from flight and cabin crewmembers who register for self-defense classes, and solicits voluntary feedback from participants on the quality of the training.

DATES: Send your comments by July 30, 2008. A comment to OMB is most effective if OMB receives it within 30 days of publication.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to Desk Officer, Department of Homeland Security/TSA, and sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

FOR FURTHER INFORMATION CONTACT: Joanna Johnson, Communications Branch, Business Management Office, Operational Process and Technology, TSA–11, Transportation Security

Administration, 601 South 12th Street, Arlington, VA 22202–4220; telephone (571) 227–3651; facsimile (703) 603–0822.

SUPPLEMENTARY INFORMATION:

Comments Invited

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. Therefore, in preparation for OMB review and approval of the following information collection, TSA is soliciting comments to—

(1) Evaluate whether the proposed information requirement is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, including using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Information Collection Requirement

Title: Flight Crew Self-Defense Training—Registration and Evaluation.

Type of Request: Extension of a currently approved collection.

OMB Control Number: 1652–0028.

Form(s): ''Level 1 End-of-Course Evaluation''; ''Community College Sign-In Sheet.''

Affected Public: Flight and cabin crewmembers on passenger and cargo flights.

Abstract: TSA is seeking to renew the ICR, currently approved under OMB number 1652–0028, to continue compliance with a statutory mandate. Specifically, under Section 603 of Vision 100—Century of Aviation Reauthorization Act (Pub. L. 108–176, 117 Stat. 2490, 2563, Dec. 12, 2003), TSA must develop and provide a voluntary advanced self-defense training program for flight and cabin crew members of air carriers providing scheduled passenger air transportation. See 49 U.S.C. 44918(b).

TSA requests this renewal so that TSA may collect limited biographical information from flight and cabin crew members to continue to confirm their eligibility to participate in this training program and to confirm their attendance. TSA confirms the eligibility of the participant by contacting the participant's employer, and confirms attendance by comparing the registration information against a sign-in sheet provided in the classroom. TSA also asks participants to complete an anonymous and voluntary evaluation form after participation in the training to assess the quality of the training.

Number of Respondents: 3,000.

Estimated Annual Burden Hours: An estimated 750 hours annually.

Issued in Arlington, Virginia, on June 20, 2008.

Kriste Jordan,

Program Manager, Business Improvements and Communication, Office of Information and Technology.

[FR Doc. E8–14661 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–05–P

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

Intent To Request Renewal From OMB of One Current Public Collection of Information: TSA Airspace Waiver Program

AGENCY: Transportation Security Administration, DHS.

ACTION: Notice.

SUMMARY: The Transportation Security Administration (TSA) invites public comment on one currently approved Information Collection Request (ICR) abstracted below that we will submit to the Office of Management and Budget (OMB) for renewal in compliance with the Paperwork Reduction Act. The ICR describes the nature of the information collection and its expected burden. This collection of information allows TSA to conduct security threat assessments on individuals on board aircraft operating in restricted airspace pursuant to an airspace waiver. This collection will enhance aviation security and protect assets on the ground that are within the restricted airspace.

DATES: Send your comments by August 29, 2008.

ADDRESSES: Comments may be mailed or delivered to Joanna Johnson, Communications Branch, Business Management Office, Operational Process and Technology, TSA–32, Transportation Security Administration, 601 South 12th Street, Arlington, VA 22202–4220.

FOR FURTHER INFORMATION CONTACT: Joanna Johnson at the above address, or by telephone (571) 227–3651 or facsimile (571) 227–3588.

SUPPLEMENTARY INFORMATION:

Comments Invited

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The ICR documentation is available at www.reginfo.gov. Therefore, in preparation for OMB review and approval of the following information collection, TSA is soliciting comments to—

(1) Evaluate whether the proposed information requirement is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, including using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Information Collection Requirement

OMB Control Number 1652–0033; TSA Airspace Waiver Program. TSA is seeking approval to renew this collection of information in order to operate the airspace waiver program. The airspace waiver program allows general aviation aircraft operators who undergo security threat assessments to apply for approval to operate in restricted airspace. TSA is requesting this approval to respond to the needs of the general aviation community and to allow freedom of movement and commerce throughout United States airspace. Applicants can apply for a waiver online and must submit the request electronically within 7–10 business days prior to the start date of the flight. TSA will transmit the waiver request form to applicants either electronically or by facsimile, if necessary.

To obtain a waiver, the aircraft operator must file a waiver request in advance of the flight containing information about all passengers and crew members on board the flight, so that TSA may perform a security threat assessment on each individual. The waiver request requires aircraft operators to provide information about the flight, passengers, and crew members. Specifically, waivers must include the purpose of the flight, the aircraft type and tail number, corporate information, including company name

and address, and the proposed itinerary. Additionally, aircraft operators must provide the names, dates and places of birth, and Social Security numbers or passport numbers of all passengers and crew members. The current estimated annual reporting burden is 9,000 hours (6,000 respondents × 1.5 hours per respondent).

Issued in Arlington, Virginia, on June 20, 2008.

Kriste Jordan,

Program Manager, Business Improvements and Communication, Office of Information and Technology.

[FR Doc. E8–14662 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–05–P

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

[Docket Nos. TSA–2006–24191; Coast Guard–2006–24196]

Transportation Worker Identification Credential (TWIC); Enrollment Dates for the Ports of Terminal Island, CA and Decatur, AL

AGENCY: Transportation Security Administration; United States Coast Guard; DHS.

ACTION: Notice.

SUMMARY: The Department of Homeland Security (DHS) through the Transportation Security Administration (TSA) issues this notice of the dates for the beginning of the initial enrollment for the Transportation Worker Identification Credential (TWIC) for the Ports of Terminal Island, CA and Decatur, AL.

DATES: TWIC enrollment begins in Terminal Island on June 26, 2008 and Decatur on July 16, 2008.

ADDRESSES: You may view published documents and comments concerning the TWIC Final Rule, identified by the docket numbers of this notice, using any one of the following methods.

(1) Searching the Federal Docket Management System (FDMS) Web page at *http://www.regulations.gov;*

(2) Accessing the Government Printing Office's Web page at *http://www.gpoaccess.gov/fr/index.html*; or

(3) Visiting TSA's Security Regulations Web page at *http://www.tsa.gov* and accessing the link for ''Research Center'' at the top of the page.

FOR FURTHER INFORMATION CONTACT: James Orgill, TSA–19, Transportation Security Administration, 601 South 12th Street, Arlington, VA 22202–4220. Transportation Threat Assessment and Credentialing (TTAC), TWIC Program, (571) 227–4545; *e-mail: credentialing@dhs.gov.*

Background

The Department of Homeland Security (DHS), through the United States Coast Guard and the Transportation Security Administration (TSA), issued a joint final rule (72 FR 3492; January 25, 2007) pursuant to the Maritime Transportation Security Act (MTSA), Public Law 107–295, 116 Stat. 2064 (November 25, 2002), and the Security and Accountability for Every Port Act of 2006 (SAFE Port Act), Public Law 109–347 (October 13, 2006). This rule requires all credentialed merchant mariners and individuals with unescorted access to secure areas of a regulated facility or vessel to obtain a TWIC. In this final rule, on page 3510, TSA and Coast Guard stated that a phased enrollment approach based upon risk assessment and cost/benefit would be used to implement the program nationwide, and that TSA would publish a notice in the **Federal Register** indicating when enrollment at a specific location will begin and when it is expected to terminate.

This notice provides the start date for TWIC initial enrollment at the Ports of Terminal Island, CA on June 26, 2008; and Decatur, AL on July 16, 2008. The Coast Guard will publish a separate notice in the **Federal Register** indicating when facilities within the Captain of the Port Zone Los Angeles/Long Beach, including those in the Port of Terminal Island; and Captain of the Port Zone Mobile, including those in the Port of Decatur must comply with the portions of the final rule requiring TWIC to be used as an access control measure. That notice will be published at least 90 days before compliance is required.

To obtain information on the pre-enrollment and enrollment process, and enrollment locations, visit TSA's TWIC Web site at *http://www.tsa.gov/twic.*

Issued in Arlington, Virginia, on June 24, 2008.

Rex Lovelady,

Program Manager, TWIC, Office of Transportation Threat Assessment and Credentialing, Transportation Security Administration.

[FR Doc. E8–14815 Filed 6–27–08; 8:45 am]

BILLING CODE 9110–05–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R4–R–2008–N0032; 40136–1265–0000–S3]

Santee National Wildlife Refuge, Clarendon County, SC

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability: Draft comprehensive conservation plan and environmental assessment; request for comments.

SUMMARY: We, the Fish and Wildlife Service, announce the availability of a draft comprehensive conservation plan and environmental assessment (Draft CCP/EA) for Santee National Wildlife Refuge for public review and comment. In this Draft CCP/EA, we describe alternatives, including our proposed alternative to manage this refuge for the 15 years following approval of the Final CCP.

DATES: To ensure consideration, we must receive your written comments by July 30, 2008.

ADDRESSES: Requests for copies of the Draft CCP/EA should be addressed to: Van Fischer, Natural Resource Planner, South Carolina Lowcountry Refuge Complex, 5801 Highway 17 North, Awendaw, South Carolina 29429. A copy of the Draft CCP/EA is available on both compact disc and hard copy. You may also access and download a copy of the Draft CCP/EA at the Service's Internet Site: *http://southeast.fws.gov/planning*. Comments on the Draft CCP/EA may be submitted to the above address or via electronic mail to: *van_fischer@fws.gov*.

FOR FURTHER INFORMATION CONTACT: Van Fischer at 843/928–3264.

SUPPLEMENTARY INFORMATION:

Introduction

With this notice, we continue the CCP process for Santee National Wildlife Refuge. We started the process through a notice in the **Federal Register** on January 3, 2007 (72 FR 143).

The primary purpose of this 15,000-acre refuge, which was established in 1942, is to alleviate the loss of natural waterfowl and other wildlife habitat caused by the construction of hydro-electric power and navigational projects on the Santee and Cooper Rivers. The refuge lies within the Atlantic Coastal Plain and consists of mixed hardwoods, mixed pine hardwoods, pine plantations, marsh, croplands, old fields, ponds, impoundments, and open water.

Background

The CCP Process

The National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd–668ee), which amended the National Wildlife Refuge System Administration Act of 1966, requires us to develop a CCP for each national wildlife refuge. The purpose in developing a CCP is to provide refuge managers with a 15-year plan for achieving refuge purposes and contributing toward the mission of the National Wildlife Refuge System, consistent with sound principles of fish and wildlife management, conservation, legal mandates, and our policies. In addition to outlining broad management direction on conserving wildlife and their habitats, CCPs identify wildlife-dependent recreational opportunities available to the public, including opportunities for hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation. We will review and update the CCP at least every 15 years in accordance with the Improvement Act and NEPA.

CCP Alternatives, Including Our Proposed Alternative

We developed three alternatives for managing the refuge and chose Alternative C as the proposed alternative.

Alternatives

A full description of each alternative is in the Draft CCP/EA. We summarize each alternative below.

Alternative A: Current Management (No Action)

There would be no change from current management of the refuge. Management emphasis would continue to focus on maintaining existing managed wetlands for wintering waterfowl. Primary management activities would include managing wetland impoundments, basic species monitoring, wood duck banding, and planting corn for waterfowl. Alternative A would represent the anticipated conditions of the refuge for the next 15 years, assuming current resources, policies, programs, and activities continue. The other two alternatives are compared to this alternative in order to evaluate differences in future conditions compared to baseline management.

This alternative would reflect actions that include managing habitat for resident and wintering waterfowl and nesting bald eagles, maintaining upland and wetland forests, and repairing wetland impoundment control structures. Habitat management actions would benefit waterfowl; however, there would be limited active management of other species and habitats.

Management coordination would occur between the refuge and the State. Coordination would remain focused on waterfowl management, hunting, and fishing. Hunting and fishing would continue to follow State regulations. Wildlife-dependent recreational uses would be allowed with all areas opened to the public, with some areas only seasonally opened.

The refuge would remain staffed at current levels. Researchers would be accommodated when projects benefit the refuge.

Alternative B: Targeted Habitat Management Primarily for Waterfowl

This alternative would expand on Alternative A with a greater amount of active habitat management on the refuge. The focus of this alternative would be to enhance and expand suitable habitat under species-specific management, targeted to attract greater numbers of wintering waterfowl and breeding areas for resident wood ducks. The acreage of managed wetlands and agricultural fields would be increased to accommodate larger waterfowl numbers. Some open fields and scrub-shrub areas would be converted to wetlands or crops. Management of habitats for neotropical migratory and breeding songbirds would be greater than under Alternative A, but limited to maintaining existing areas suitable for these migratory species. There would be an increased effort to control invasive exotic plants.

This alternative would propose to increase monitoring efforts to focus primarily on waterfowl, with less effort to address other species. Monitoring efforts would only occur based on available resources and academic research.

Wildlife-dependent recreational uses of the refuge would continue. Hunting and fishing would continue to be allowed and environmental education and interpretation would be enhanced. Interpretive signage would be increased or added to existing nature trails. There would be restricted access to some areas of the refuge that have waterfowl and threatened or endangered species sensitive to disturbance. Interpretation efforts would focus mostly on the primary objective of waterfowl management.

The refuge would be staffed at current levels plus the addition of three biological technicians to carry out the increased habitat management and monitoring needs. Researchers would be accommodated when projects benefit the refuge and focus mostly towards waterfowl habitat and management.

Alternative C: Wildlife and Habitat Diversity (Proposed Alternative)

This alternative would expand on Alternative A, with a greater amount of effort to increase overall wildlife and habitat diversity. Although waterfowl would remain a focus of management, wetland habitat manipulations would also consider the needs of multiple species, such as marsh and wading birds. Under this alternative, upland forests and fields would be more actively managed for neotropical migratory songbirds than under Alternative B. Landscape level consideration of habitat management would include a diversity of open fields, upland and wetland forests, and additional managed wetlands. Multiple species consideration would include species and habitats identified by the South Atlantic Migratory Bird Initiative and the State's Strategic Conservation Plan.

This alternative would expand the monitoring efforts of Alternative A to provide additional monitoring of neotropical migratory and breeding songbirds, as well as resident species. Monitoring efforts would be increased with the assistance of additional staff, trained volunteers, and academic researchers. Greater effort would be made to recruit academic researchers to the refuge to study and monitor refuge resources.

Wildlife-dependent recreational uses of the refuge would continue. Hunting and fishing would continue to be allowed. However, hunting would be managed with a greater focus on achieving the biological needs of the refuge, such as controlling the deer population. Education and interpretation would be the same as Alternative A, but with additional education and outreach efforts aimed at the importance of landscape and diversity. A much broader effort would be made with outreach to nearby developing urban communities.

The refuge would be staffed at current levels plus an additional three to four staff members to carry out the increased habitat management and monitoring needs. Greater emphasis would be placed on recruiting and training volunteers. Refuge biological programs would actively seek funding for studies dealing primarily with management-orientated research needs. Refuge staff would place greater emphasis on developing and maintaining active partnerships, including seeking grants

to assist the refuge in reaching primary objectives.

Next Step

After this comment period ends, we will analyze the comments and address them in the form of a Final CCP and Finding of No Significant Impact.

Public Availability of Comments

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Authority: This notice is published under the authority of the National Wildlife Refuge System Improvement Act of 1997, Public Law 105–57.

Editorial Note: This document was received at the Office of the Federal Register on June 25, 2008.

Dated: February 8, 2008.

Cynthia K. Dohner,

Acting Regional Director.

[FR Doc. E8–14745 Filed 6–27–08; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R2–ES–2008–N0144; 20124–1113–0000–F5]

Endangered and Threatened Species Permit Applications

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of receipt of applications.

SUMMARY: The following applicants have applied for scientific research permits to conduct certain activities with endangered species pursuant to section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended.

DATES: To ensure consideration, written comments must be received on or before July 30, 2008.

ADDRESSES: Written comments should be submitted to the Chief, Endangered Species Division, Ecological Services, P.O. Box 1306, Room 4102, Albuquerque, New Mexico 87103. Documents and other information submitted with these applications are available for review, subject to the requirements of the Privacy Act and Freedom of Information Act. Documents will be available for public inspection, by appointment only, during normal business hours at the U.S. Fish and Wildlife Service, 500 Gold Ave., SW., Room 4102, Albuquerque, New Mexico. Please refer to the respective permit number for each application when submitting comments.

FOR FURTHER INFORMATION CONTACT: Chief, Endangered Species Division, P.O. Box 1306, Room 4102, Albuquerque, New Mexico 87103, (505) 248–6920.

SUPPLEMENTARY INFORMATION:

Public Availability of Comments

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Permit TE–1817501

Applicant: Paul Stone, DeRidder, Louisiana.

Applicant requests a new permit for research and recovery purposes to conduct presence/absence surveys of red-cockaded woodpecker (*Picoides borealis*) within Texas, Louisiana, and Mississippi.

Permit TE–181762

Applicant: Jeffrey George, South Padre Island, Texas.

Applicant requests a new permit for research and recovery purposes to conduct presence/absence surveys of the following species: Kemp's Ridley sea turtle (*Lepidochelys kempii*), leatherback sea turtle (*Dermochelys coriacea*), and hawksbill sea turtle (*Eretmochelys imbricata*) within Texas and the Gulf of Mexico.

Permit TE–821356

Applicant: U.S. Geologic Survey, Southwest Biological Science Center, Grand Canyon Monitoring and Research Center, Flagstaff, Arizona.

Applicant requests an amendment to a current permit for research and recovery purposes to conduct presence/absence surveys of razorback sucker (*Xyrauchen texanus*) within Arizona.

Permit TE–814933

Applicant: Texas Parks and Wildlife Department, Austin, Texas.

Applicant requests an amendment to a current permit for research and recovery purposes to conduct presence/absence surveys of Rio Grande silvery minnow (*Hybognathus amarus*) within Texas.

Permit TE–183429

Applicant: Bureau of Land Management, Tulsa, Oklahoma.

Applicant requests a new permit for research and recovery purposes to conduct presence/absence surveys of the American burying beetle (*Nicrophorus americanus*) within Oklahoma.

Permit TE–056119

Applicant: Marlin Sawyer, San Antonio, Texas.

Applicant requests an amendment to a current permit for research and recovery purposes to conduct presence/absence surveys of the following species: whooping crane (*Grus americana*), northern aplomado falcon (*Falco femoralis septentrionalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), and interior least tern (*Sterna altillarum*) within Texas.

Authority: 16 U.S.C. 1531 *et seq.*

Dated: June 9, 2008.

Christopher Jones,

Acting Regional Director, Southwest Region, Fish and Wildlife Service.

[FR Doc. E8–14733 Filed 6–27–08; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Texas Chenier Plain National Wildlife Refuge Complex, Chambers, Jefferson, and Galveston Counties, TX, Consisting of Moody National Wildlife Refuge, Anahuac National Wildlife Refuge, McFaddin National Wildlife Refuge, and Texas Point National Wildlife Refuge

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability: Final environmental impact statement, comprehensive conservation plan, and land protection plan.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce the availability of our Final Environmental Impact Statement (EIS), Final Comprehensive Conservation Plan (CCP), and Final Land Protection Plan (LPP) for the Texas Chenier Plain National Wildlife Refuge (NWR) Complex. In this final EIS/CCP/LPP, we describe how we will manage this

Refuge Complex for the next 15 years and expand the refuge boundaries for each of the four refuges within the Refuge Complex.

DATES: We will sign a record of decision (ROD) no sooner than 30 days after publication of this notice.

ADDRESSES: You may view or obtain copies of the final EIS, CCP, and LPP by any of the following methods:

- *Agency Web Site:* Download a copy of the document at *http://www.fws.gov/southwest/refuges/Plan/docs/LINKS.pdf.*
- *Mail:* Doug St. Pierre, Division of Planning, P.O. Box 1306, Albuquerque, NM 87103.
- *In-Person Viewing or Pickup:* Call 409–267–3337 to make an appointment during regular business hours at Texas Chenier Plain NWR Complex Headquarters, 509 Washington Street, Anahuac, TX.
- *Local Libraries:* The final document is also available at the Public Libraries located in the project area of Chambers and Jefferson Counties, TX.

FOR FURTHER INFORMATION CONTACT: Doug St. Pierre, 505–248–6636 (phone); mail to: *doug_stpierre@fws.gov* (e-mail).

SUPPLEMENTARY INFORMATION:

Introduction

With this notice, we complete the CCP process, except for the ROD, for Texas Chenier Plain NWR Complex begun in our October 21, 1999, **Federal Register** notice (64 FR 56800). For more about the process, see that notice. We released the draft EIS/CCP/LPP to the public, announcing it and requesting comments in a notice of availability in the **Federal Register** (71 FR 61063; October 17, 2006).

The Texas Chenier Plain Refuge Complex is located along the upper Texas Gulf Coast between Houston, TX, and the Louisiana border. This coastal ecosystem includes important freshwater, estuarine marshes, tallgrass prairie with small depressional wetlands, and coastal woodlots. These habitats are an important part of the primary wintering area for Central Flyway ducks and geese, and, additionally, are critical staging areas for neotropical landbirds migrating to and from Central and South America.

With this notice, we announce our decision and the availability of the final EIS/CCP/LPP for Texas Chenier Plain NWR Complex in accordance with National Environmental Policy Act (NEPA) (40 CFR 1506.6(b)) requirements. We completed a thorough analysis of the environmental, social, and economic considerations, which we included in the final EIS/CCP/LPP.

The CCP will guide us in managing and administering Moody, Anahuac, McFaddin, and Texas Point Refuges for the 15 years following publication of the final CCP. Refuge Management Alternative D, as we described in the final EIS, is the foundation for the CCP.

Background

The CCP Process

The National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd–668ee), which amended the National Wildlife Refuge System Administration Act of 1966 (NWRSAA), requires us to develop a CCP for each national wildlife refuge. The purpose in developing a CCP is to provide refuge managers with a 15-year plan for achieving refuge purposes and contributing toward the mission of the National Wildlife Refuge System, consistent with sound principles of fish and wildlife management, conservation, legal mandates, and our policies. In addition to outlining broad management direction on conserving wildlife and their habitats, CCPs identify wildlife-dependent recreational opportunities available to the public, including opportunities for hunting, fishing, wildlife observation and photography, and environmental education and interpretation. We will review and update the CCP at least every 15 years in accordance with the NWRSAA, as amended, and NEPA.

Comments

We solicited comments on the draft EIS/CCP/LPP for Texas Chenier Plain NWR Complex from October 17, 2006, to January 16, 2007 (71 FR 61063). We received 18 written comments by mail or e-mail, in addition to the 5 comments we recorded at the Service's two public hearings held on November 28 and 30, 2006, in Port Arthur and Hankamer, TX. In Chapter 6 of the final EIS/CCP/LPP, we documented and responded to all of the substantive comments received and noted editorial changes to the final document in response to these comments where appropriate. All of the comments received were considered in the decision-making process to select the two preferred alternatives.

Our Preferred Alternatives

After considering the comments we received, we have chosen two Preferred Alternatives, one from each of the two separate sets of Alternatives analyzed and considered.

Preferred Refuge Management Alternative D—Emphasis on an integrated management approach combining: (1) Expanded habitat management and restoration programs, (2) New research and wildlife population monitoring, and (3) Increased efforts to address major threats to the ecosystem.

Preferred Refuge Boundary Expansion Alternative C—a 7,920 acre expansion of the Moody NWR boundary, a 47,750 acre expansion of the Anahuac NWR boundary, a 7,190 acre expansion of the McFaddin NWR boundary, and a 1,400 acre expansion of the Texas Point NWR boundary.

Dated: June 24, 2008.

Christopher Todd Jones,

Acting Regional Director, U.S. Fish and Wildlife Service, Albuquerque, New Mexico.

[FR Doc. E8–14741 Filed 6–27–08; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R9–IA–2008–N0158; 96300–1671–0000–P5]

Receipt of Applications for Permit

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of receipt of applications for permit.

SUMMARY: The public is invited to comment on the following applications to conduct certain activities with endangered species and/or marine mammals.

DATES: Written data, comments or requests must be received by July 30, 2008.

ADDRESSES: Documents and other information submitted with these applications are available for review, subject to the requirements of the Privacy Act and Freedom of Information Act, by any party who submits a written request for a copy of such documents within 30 days of the date of publication of this notice to: U.S. Fish and Wildlife Service, Division of Management Authority, 4401 North Fairfax Drive, Room 212, Arlington, Virginia 22203; fax 703/358–2281.

FOR FURTHER INFORMATION CONTACT: Division of Management Authority, telephone 703/358–2104.

SUPPLEMENTARY INFORMATION:

Endangered Species

The public is invited to comment on the following applications for a permit to conduct certain activities with endangered species. This notice is provided pursuant to Section 10(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Written data, comments, or requests for copies of these complete applications should be submitted to the Director (address above).

Applicant: Chattanooga Zoo, Chattanooga, TN, PRT–185779

The applicant requests a permit to import one captive-born female jaguar (*Panthera onca*) from Tatu Caretta, Casa Grande, Cordova, Argentina, for the purpose of enhancement of survival of the species.

Applicant: Laguna Vista Ranch Ltd, San Antonio, TX, PRT–180803

The applicant requests a permit authorizing take, interstate and foreign commerce of swamp deer (*Rucervus duvaucelii*), Eld's deer (*Rucervus eldii*) and lechwe (*Kobus leche*) from their captive herd for the purpose of enhancement of the survival of the species. This notification covers activities conducted by the applicant over a five-year period.

Applicant: James A. Badman, Mesa, AZ, PRT–180796

The applicant requests a permit to acquire from Wayne Hill, Winter Haven, FL, in interstate commerce 6 spotted pond turtles (*Geoclemys hamiltonii*) for the purpose of enhancement of propagation of the species.

Applicant: Cincinnati Zoo & Botanical Garden, Cincinnati, OH, PRT–184803

The applicant requests a permit to import one male captive-born Brazilian ocelot (*Leopardus pardalis mitis*) from the Granby Zoo, Quebec, Canada for the purpose of enhancement of the survival of the species through captive breeding.

Applicant: James A. Hall, Troy, PA, PRT–184468

The applicant requests a permit to import the sport-hunted trophy of one male bontebok (*Damaliscus pygargus pygargus*) culled from a captive herd maintained under the management program of the Republic of South Africa, for the purpose of enhancement of the survival of the species.

Applicant: Daniel L. Soliday, Perkasie, PA, PRT–185721

The applicant requests a permit to import the sport-hunted trophy of one male bontebok (*Damaliscus pygargus pygargus*) culled from a captive herd maintained under the management program of the Republic of South Africa, for the purpose of enhancement of the survival of the species.

Applicant: Richard R. Scott, Houston, TX, PRT–185800

The applicant requests a permit to import the sport-hunted trophy of one male bontebok (*Damaliscus pygargus pygargus*) culled from a captive herd maintained under the management program of the Republic of South Africa, for the purpose of enhancement of the survival of the species.

Applicant: Pat Crabtree, Weimar, TX, PRT–185760

The applicant requests a permit to import the sport-hunted trophy of one male bontebok (*Damaliscus pygargus pygargus*) culled from a captive herd maintained under the management program of the Republic of South Africa, for the purpose of enhancement of the survival of the species.

Endangered Marine Mammals and Marine Mammals

The public is invited to comment on the following applications for a permit to conduct certain activities with endangered marine mammals and/or marine mammals. The applications were submitted to satisfy requirements of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) and/or the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et seq.*), and the regulations governing endangered species (50 CFR part 17) and/or marine mammals (50 CFR part 18). Written data, comments, or requests for copies of the complete applications or requests for a public hearing on these applications should be submitted to the Director (address above). Anyone requesting a hearing should give specific reasons why a hearing would be appropriate. The holding of such a hearing is at the discretion of the Director.

Applicant: USGS Alaska Science Center, Anchorage, AK, PRT–690038

The applicant has requested amendment of the permit to take polar bears (*Ursus maritimus*) in Alaska for the collection of additional biological samples for the purpose of scientific research. This notification covers activities to be conducted by the applicant over the remainder of their five-year permit.

Concurrent with the publication of this notice in the **Federal Register**, the Division of Management Authority is forwarding copies of the above applications to the Marine Mammal Commission and the Committee of Scientific Advisors for their review.

Applicant: Peter E. Seda, Kennewick, WA, PRT–186019

The applicant requests a permit to import a polar bear (*Ursus maritimus*) sport hunted from the Gulf of Boothia polar bear population in Canada prior to February 18, 1997, for personal, noncommercial use.

Dated: June 13, 2008.

Lisa J. Lierheimer,

Senior Permit Biologist, Branch of Permits, Division of Management Authority.

[FR Doc. E8–14777 Filed 6–27–08; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Bureau of Indian Education, Adult Education Annual Report Form, Submission to the Office of Management and Budget

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of Submission of Information Collections.

SUMMARY: This notice announces that the Information Collection Request for Adult Education Annual Report Form OMB #1076–0120 is submitted to the Office of Management and Budget (OMB) for review, as required by the Paperwork Reduction Act of 1995. The Bureau of Indian Education is soliciting public comments on the subject proposal.

DATES: Written comments must be submitted on or before July 30, 2008.

ADDRESSES: Comments are to be mailed to the Desk Officer for the Department of the Interior at the Office of Management and Budget, by facsimile at (202)–395–6566 or you may send an e-mail to: *OIRA_DOCKET@omb.eop.gov*.

Copies of any comments should be submitted to Kevin Skenandore, Acting Director, Bureau of Indian Education, Department of the Interior, 1849 C Street, NW., MS 3609 MIB, Washington, DC 20240, or hand delivered to room 3610 at the above address.

FOR FURTHER INFORMATION CONTACT: Keith Neves, Bureau of Indian Education, Department of the Interior, 1849 C Street, NW., MS 3609 MIB, Washington, DC 20240 or at 202–208–3601.

SUPPLEMENTARY INFORMATION:

I. Abstract

The information collection is necessary to assess the need for adult education programs in accordance with 25 CFR part 46, subpart A, sections

46.20 ''Program Requirements'' and 46.30 ''Records and Reporting Requirements of the Adult Education Program.'' The Adult Education Program regulations under 25 CFR part 46, subpart 46 contain the program requirements which govern the program. Information collected from the contractors will be used for administrative planning, setting long and short-term goals, and analyzing and monitoring the use of funds.

II. Request for Comments

The Department of the Interior invites comments on:

(a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(b) The accuracy of the agency's estimate of the burden (including the hours and cost) of the proposed collection of information, including the validity of the methodology and assumption used;

(c) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(d) Ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other collection techniques or other forms of information technology.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; to search data sources; to complete and review the collection of information; and to transmit or otherwise disclose the information.

It is our policy to make all comments available to the public for review at the location listed in the **ADDRESSES** section, room 3610, during the hours of 8 a.m. to 5 p.m., Eastern Time, Monday through Friday except for legal holidays. Before including your address, telephone number, e-mail address or other personally identifiable information, be advised that your entire comment including your personally identifiable information may be made public at any time. While you may request that we withhold your personally identifiable information, we cannot guarantee that we will be able to do so. We do not consider anonymous comments. All comments from representatives of businesses or organizations will be made public in their entirety. We may withhold comments from review for other reasons.

Comments submitted in response to this notice will become a matter of public record.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information, unless it displays a currently valid Office of Management and Budget control number.

III. Data

Title of the Collection of Information: Bureau of Indian Education, Adult Education Program Annual Report Form. *OMB Number:* 1076–0120; *Expiration Date:* June 30, 2008.

Type of Review: Renewal of a currently approved information collection.

Summary of the Collection of Information: The collection of information provides pertinent data concerning the adult education programs.

Description of the Need for the Information and Proposed Use of the Information: Submission of this information is necessary to assess the need for adult education programs. The information is needed for the utilization and management of program resources to provide education opportunities for adult American Indians and Alaska Natives to complete high school requirements and to gain new skills and knowledge for individual student self enhancement. The information collected with the annual report will be used by the Bureau of Indian Education or tribally controlled programs for fiscal accountability and appropriate direct services documentation. The results of the data are used for administrative planning.

Affected Entities: Tribal adult education contractors.

Estimated Number of Respondents: 70 Respondents are Tribal adult education program administrators.

Estimated Time per Response: 4 hours.

Proposed Frequency of Responses: Annually.

Burden: The estimate of total annual reporting and recordkeeping burden that will result from the collection of information: Reporting 4 hours per response × 70 respondents = 280 hours. Also included are minimal support services estimated at $200.00 per year.

Christine Cho,

Acting Chief Information Officer—Indian Affairs.

[FR Doc. E8–14904 Filed 6–27–08; 8:45 am]

BILLING CODE 4310–6W–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[F–19571–A, F–19571–A2; AK–965–1410–KC–P]

Alaska Native Claims Selection

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of decision approving lands for conveyance.

SUMMARY: As required by 43 CFR 2650.7(d), notice is hereby given that an appealable decision approving the surface and subsurface estates in certain lands for conveyance pursuant to the Alaska Native Claims Settlement Act will be issued to Chuloonawick Corporation. The lands are in the vicinity of Chuloonawick, Alaska, and are located in:

Seward Meridian, Alaska

T. 33 N., R. 78 W.,
Secs. 6, 8, 9, and 16;
Secs. 17, 20, 21, and 22;
Secs. 27, 28, and 29.
Containing approximately 6,115 acres.

T. 31 N., R. 79 W.,
Secs. 14, 15, 22, 23, and 24.
Containing approximately 2,497 acres.

T. 34 N., R. 79 W.,
Sec. 32 to 36, inclusive.
Containing approximately 1,989 acres.
Aggregating approximately 10,601 acres.

A portion of the subsurface estate in these lands will be conveyed to Calista Corporation when the surface estate is conveyed to Chuloonawick Corporation. The remaining lands lie within Clarence Rhode National Wildlife Range, established January 20, 1969. The subsurface estate in the refuge lands will be reserved to the United States at the time of conveyance. Notice of the decision will also be published four times in the Tundra Drums.

DATES: The time limits for filing an appeal are:

1. Any party claiming a property interest which is adversely affected by the decision shall have until July 30, 2008 to file an appeal.

2. Parties receiving service of the decision by certified mail shall have 30 days from the date of receipt to file an appeal.

Parties who do not file an appeal in accordance with the requirements of 43 CFR Part 4, Subpart E, shall be deemed to have waived their rights.

ADDRESSES: A copy of the decision may be obtained from: Bureau of Land Management, Alaska State Office, 222 West Seventh Avenue, #13, Anchorage, Alaska 99513–7504.

FOR FURTHER INFORMATION CONTACT: The Bureau of Land Management by phone at 907–271–5960, or by e-mail at *ak.blm.conveyance@ak.blm.gov*. Persons who use a telecommunication device (TTD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8330, 24 hours a day, seven days a week, to contact the Bureau of Land Management.

Robert Childers,

Land Law Examiner, Land Transfer Adjudication II.

[FR Doc. E8–14729 Filed 6–27–08; 8:45 am]

BILLING CODE 4310–JA–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[WY–920–09–1320–EL, WYW176465]

Coal Lease Exploration License, WY

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of Invitation for Coal Exploration License, Bridger Coal Co., WYW176465, Wyoming.

SUMMARY: Pursuant to section 2(b) of the Mineral Leasing Act of 1920, as amended by section 4 of the Federal Coal Leasing Amendments Act of 1976, 90 Stat. 1083, 30 U.S.C. 201(b), and to the regulations adopted as 43 CFR 3410, all interested parties are hereby invited to participate with Bridger Coal Co. on a pro rata cost sharing basis in its program for the exploration of coal deposits owned by the United States of America in the following-described land in Sweetwater County, WY:

T. 21 N., R. 100 W., 6th P.M., Wyoming
Sec. 2: Lots 5–8, S½N½, S½;
Sec. 4: Lots 5–8, S½N½, S½;
Sec. 8: All;
Sec. 10: All;
Sec. 14: All;
Sec. 24: All;
T. 22 N., R. 100 W., 6th P.M., Wyoming
Sec. 28: All;
Sec. 32: All;
Sec. 34: All;
T. 22 N., R. 101 W., 6th P.M., Wyoming
Sec. 22: Lots 1–16;
Sec. 24: Lots 1–15, NW¼NE¼.

Containing 7050.90 acres, more or less.

DATES: Any party electing to participate in this exploration program must send written notice to both the Bureau of Land Management and Bridger Coal Co. as provided in the **ADDRESSES** section below, which must be received within 30 days after publication of this Notice of Invitation in the **Federal Register**.

ADDRESSES: Copies of the exploration plan are available for review during normal business hours in the following offices (serialized under number WYW176465): Bureau of Land Management, Wyoming State Office, 5353 Yellowstone Road, P.O. Box 1828, Cheyenne, WY 82003; and, Bureau of Land Management, Rock Springs Field Office, 280 Highway 191 North, Rock Springs, WY 82901. The written notice should be sent to the following addresses: Bridger Coal Co., c/o Interwest Mining Co., Attn: Scott M. Child, 1407 West North Temple, Suite 310, Salt Lake City, UT 84116, and the Bureau of Land Management, Wyoming State Office, Branch of Solid Minerals, *Attn:* Julie Weaver, P.O. Box 1828, Cheyenne, WY 82003.

SUPPLEMENTARY INFORMATION: All of the coal in the above-described land consists of unleased Federal coal within the Red Desert and Rock Springs Known Recoverable Coal Resource Areas. The purpose of the exploration program is to obtain information on the coal bearing seams and geological formations in addition to obtaining the following characteristics: coal quality, quantity, Btu content, percent ash, percent moisture, percent sulfur and percent sodium.

This notice of invitation will be published in *Rocket-Miner* of Rock Springs, WY once each week for two consecutive weeks beginning the week of June 30, 2008, and in the **Federal Register**.

The foregoing is published in the **Federal Register** pursuant to 43 CFR 3410.2–1(c)(1).

Dated: June 19, 2008.

Pamela J. Lewis,

Acting Deputy State Director, Minerals and Lands.

[FR Doc. E8–14473 Filed 6–26–08; 8:45 am]

BILLING CODE 4310–22–P

DEPARTMENT OF THE INTERIOR

Minerals Management Service

[Docket No. MMS–2007–OMM–0078]

MMS Information Collection Activity: 1010–0041 Oil and Gas Production Rates, Extension of a Collection; Submitted for Office of Management and Budget (OMB) Review; Comment Request

AGENCY: Minerals Management Service (MMS), Interior.

ACTION: Notice of extension of an information collection (1010–0041).

SUMMARY: To comply with the Paperwork Reduction Act of 1995 (PRA), we are notifying the public that we have submitted to OMB an information collection request (ICR) to renew approval of the paperwork requirements in the regulations under 30 CFR part 250, subpart K, Oil and Gas Production Rates, and related documents. This notice also provides the public a second opportunity to comment on the paperwork burden of these regulatory requirements.

DATES: Submit written comments by July 30, 2008.

ADDRESSES: You should submit comments directly to the Office of Information and Regulatory Affairs, OMB, Attention: Desk Officer for the Department of the Interior (1010–0041), either by fax (202) 395–6566 or e-mail (*OIRA_DOCKET@omb.eop.gov*).

Please also send a copy to MMS by either of the following methods:

- *http://www.regulations.gov.* Under the tab ''More Search Options,'' click Advanced Docket Search, then select ''Minerals Management Service'' from the agency drop-down menu, then click ''submit.'' In the Docket ID column, select MMS–2007–OMM–0078 to submit public comments and to view supporting and related materials available for this rulemaking. Information on using *Regulations.gov*, including instructions for accessing documents, submitting comments, and viewing the docket after the close of the comment period, is available through the site's ''User Tips'' link. The MMS will post all comments.
- Mail or hand-carry comments to the Department of the Interior; Minerals Management Service; *Attention:* Cheryl Blundon; 381 Elden Street, MS–4024; Herndon, Virginia 20170–4817. Please reference ''Information Collection 1010–0041'' in your subject line and mark your message for return receipt. Include your name and return address in your message text.

FOR FURTHER INFORMATION CONTACT: Cheryl Blundon, Regulations and Standards Branch, (703) 787–1607. You may also contact Cheryl Blundon to obtain a copy, at no cost, of the regulations and forms that require the subject collection of information.

SUPPLEMENTARY INFORMATION:

Title: 30 CFR part 250, subpart K, Oil and Gas Production Rates.

Forms: MMS–126, MMS–127, MMS–128, and MMS–140.

OMB Control Number: 1010–0041.

Abstract: The Outer Continental Shelf (OCS) Lands Act, as amended (43 U.S.C. 1331 *et seq*. and 43 U.S.C. 1801 *et seq*.), authorizes the Secretary of the Interior (Secretary) to prescribe rules and regulations to administer leasing of the OCS. Such rules and regulations will apply to all operations conducted under a lease. Operations on the OCS must preserve, protect, and develop oil and natural gas resources in a manner that is consistent with the need to make such resources available to meet the Nation's energy needs as rapidly as possible; to balance orderly energy resource development with protection of human, marine, and coastal environments; to ensure the public a fair and equitable return on the resources of the OCS; and to preserve and maintain free enterprise competition.

Section 5(a) of the OCS Lands Act requires the Secretary to prescribe rules and regulations ''to provide for the prevention of waste, and conservation of the natural resources of the Outer Continental Shelf, and the protection of correlative rights therein'' and to include provisions ''for the prompt and efficient exploration and development of a lease area.''

Section 1334(g)(2) states '' * * * the lessee shall produce such oil or gas, or both, at rates * * * to assure the maximum rate of production which may be sustained without loss of ultimate recovery of oil or gas, or both, under sound engineering and economic principles, and which is safe for the duration of the activity covered by the approved plan.''

In addition, MMS also issues various Notices to Lessees (NTLs) and Operators to clarify and provide additional guidance on some aspects of the regulations, as well as various forms to capture the data and information. The current subpart K regulations specify the use of forms MMS–126 (Well Potential Test Report), MMS–127 (Sensitive Reservoir Information Report), MMS–128 (Semiannual Well Test Report) and form MMS–140 (Bottomhole Pressure Survey Report). Form MMS–140 is used in the Gulf of Mexico OCS Region (GOMR) for submitting the results of static bottomhole pressure surveys required under § 250.1104(c).

Regulations implementing these responsibilities are under 30 CFR part 250. Responses are mandatory or are required to obtain or retain a benefit. No questions of a ''sensitive'' nature are asked. The MMS protects information considered proprietary under the Freedom of Information Act (5 U.S.C. 552) and its implementing regulations (43 CFR 2), and under regulations at 30 CFR part 250.197, ''Data and information to be made available to the public or for limited inspection,'' 30 CFR part 252, ''OCS Oil and Gas Information Program.'' Proprietary information concerning geological and geophysical data will be protected according to 43 U.S.C. 1352.

The information collected under subpart K is used in our efforts to conserve natural resources, prevent waste, and protect correlative rights, including the Government's royalty interest. Specifically, MMS uses the information to:

- Evaluate requests to burn liquid hydrocarbons and vent and flare gas to ensure that these requests are appropriate;
- To determine if a maximum production or efficient rate is required; and,
- To review applications for downhole commingling to ensure that action does not result in harm to ultimate recovery.

Forms are also submitted to MMS and their purposes are:

Form 126—Well Potential Test Report—The MMS uses this information for reservoir, reserves, and conservation analyses, including the determination of maximum production rates (MPRs) when necessary for certain oil and gas completions. This requirement implements the conservation provisions of the OCS Lands Act and 30 CFR part 250. The information obtained from the well potential test is essential to determine if an MPR is necessary for a well and to establish the appropriate rate. It is not possible to specify an MPR in the absence of information about the production rate capability (potential) of the well.

Form MMS–127, Sensitive Reservoir Information Report—The MMS uses this information to determine whether a rate-sensitive reservoir is being prudently developed. This represents an essential control mechanism that MMS may use to regulate production rates from sensitive reservoirs. Occasionally, the information available on a reservoir, early in its producing life, may indicate it to be non-sensitive, while later and more complete information would establish the reservoir as being sensitive. Production from a well completed in the gas cap of a sensitive reservoir requires approval from the Regional Supervisor. The information submitted on this form provides reservoir parameters that are revised at least annually or sooner if reservoir development results in a change in reservoir interpretation. The engineers and geologists use the information for rate control and reservoir studies

Form MMS–128, Semiannual Well Test Report—The MMS uses this information to evaluate the results of well tests to determine if reservoirs are being depleted in a manner that will lead to the greatest ultimate recovery of hydrocarbons. This information is collected to determine the capability of hydrocarbon wells and to evaluate and verify an operator's approved maximum production rate if assigned. The form was designed to present current well data on a semiannual basis to permit the updating of permissible producing rates, and to provide the basis for estimates of currently remaining recoverable gas reserves.

Form MMS–140, Bottomhole Pressure Survey Report—The MMS uses the information to effectively manage reservoirs in our efforts to conserve natural resources, prevent waste, and protect correlative rights, including the Government's royalty interest. Specifically, MMS uses the information in reservoir evaluations to determine maximum production and efficient rates; and to review applications for downhole commingling to ensure that action does not result in harm to ultimate recovery or undervalued royalties.

Frequency: On occasion, monthly, semi-annually, annually, and as a result of situations encountered.

Estimated Number and Description of Respondents: Approximately 130 Federal oil and gas lessees.

Estimated Reporting and Recordkeeping ''Hour'' Burden: The estimated annual ''hour'' burden for this information collection is a total of 41,511 hours. The following chart details the individual components and estimated hour burdens. In calculating the burdens, we assumed that respondents perform certain requirements in the normal course of their activities. We consider these to be usual and customary and took that into account in estimating the burden.

Citation 30 CFR 250 Subpart K	Reporting and recordkeeping requirement	Hour burden	Average No. of annual responses	Annual burden hours
		Non-Hour cost burdens		
	REQUESTS			
1101(b)	Request approval to produce within 500 feet of a lease line.	5	33 requests	165
		$3,300 fee × 33 requests = $108,900		
1101(c)	Request approval to produce gas cap of a sensitive reservoir.	12	51 requests	612
		$4,200 fee × 51 requests = $214,200		
1102(b)(6)	Request extension of time to submit results of semi-annual well test.	.5	37 requests	19
1103(a)	Request approval of test periods of less than 4 hours and pretest stabilization periods of less than 6 hours.	.5	37 requests	19
1105(a), (b)	Request special approval to flare or vent oil-well gas	.5	1,007 requests	504
1105(c)	Request approval to burn produced liquid hydrocarbons.	.5	60 requests	30
Subtotal			1,225 responses	1,349
			$323,100 non-hour cost burden	
	Submittals			
1102	Submit form MMS–126	3	1,325 forms	3,975
	Submit form MMS–127	2.2	2,189 forms	4,816
	Submit form MMS–128 *	0.5–3	13,000 forms in GOM 1,336 *.	1,336 *
			600 forms in POCS	
1102(a)(5)	Submit alternative plan for overproduction status—MMS is not currently collecting this information—this is minimal burden requirement.	1	1 plan	1
1103(c)	Provide advance notice of time and date of well tests.	.5	10 notices	5
1104(c)	Submit results of all static bottomhole pressure surveys obtained by lessee. Information is submitted on form MMS–140 in the Gulf of Mexico Region.	14	1,270 surveys	17,780
1105(f)	Submit monthly reports of flared or vented gas containing H_2S.	2	3 operators × 12 mos. = 36.	72
1105(f)	H_2S Contingency, Exploration, or Development and Production Plans—burden covered under 1010–0141 and 1010–0049			0
1106	Submit application to downhole commingle hydrocarbons.	6	48 applications	288
		$4,900 fee × 48 applications = $235,200		
1107(b)	Submit proposed plan for enhanced recovery operations.	12	14 plans	168
1107(c)	Submit periodic reports of volumes of oil, gas, or other substances injected, produced, or reproduced.	2	77 reports	154
1100–1107	General departure or alternative compliance requests not specifically covered elsewhere in subpart K, including bottomhole pressure survey waivers and reservoir reclassification requests.	1	120 survey waivers	120

Citation 30 CFR 250 Subpart K	Reporting and recordkeeping requirement	Hour burden	Average No. of annual responses	Annual burden hours
		Non-Hour cost burdens		
		6	20 requests	120
Subtotal			18,710 responses	28,835
			$235,200 non-hour cost burden	
Recordkeeping				
1105(d), (e)	Maintain records for 2 years detailing gas flaring or venting.	13	869 platforms	11,297
1105(d), (e)	Maintain records for 2 years detailing liquid hydrocarbon burning.	.5	60 occurrences	30
Subtotal			929 responses	11,327
Total Burden			20,864 responses	41,511
			$558,300 Non-Hour Cost Burdens	

*Reporting burden for this form is estimated to average 0.5 to 3 hours per form depending on the number of well tests reported, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. See breakdown for form MMS–128 above.

Estimated Reporting and Recordkeeping ''Non-Hour Cost'' Burden: We have identified three non-hour cost burdens. Section 250.1101(b) requires a fee for a gas cap production request. Section 250.1101(c) requires a fee to produce within 500 feet of a lease line. Section 250.1106 requests a fee for a downhole commingling request. We estimate a total reporting ''non-hour cost'' burden of $558,300 and we have not identified any other ''non-hour cost'' burdens associated with this collection of information.

Public Disclosure Statement: The PRA (44 U.S.C. 3501, *et seq.*) provides that an agency may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. Until OMB approves a collection of information, you are not obligated to respond.

Comments: Section 3506(c)(2)(A) of the PRA (44 U.S.C. 3501, *et seq.*) requires each agency '' * * * to provide notice * * * and otherwise consult with members of the public and affected agencies concerning each proposed collection of information * * * '' Agencies must specifically solicit comments to: (a) Evaluate whether the proposed collection of information is necessary for the agency to perform its duties, including whether the information is useful; (b) evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) enhance the quality, usefulness, and clarity of the information to be collected; and (d) minimize the burden on the respondents, including the use of automated collection techniques or other forms of information technology.

To comply with the public consultation process, on January 15, 2008, we published a **Federal Register** notice (73 FR 2522) announcing that we would submit this ICR to OMB for approval. The notice provided the required 60-day comment period. In addition, § 250.199 provides the OMB control number for the information collection requirements imposed by the 30 CFR part 250 regulations and forms. The regulation also informs the public that they may comment at any time on the collections of information and provides the address to which they should send comments. We have received no comments in response to these efforts.

If you wish to comment in response to this notice, you may send your comments to the offices listed under the **ADDRESSES** section of this notice. The OMB has up to 60 days to approve or disapprove the information collection but may respond after 30 days. Therefore, to ensure maximum consideration, OMB should receive public comments by July 30, 2008.

Public Availability of Comments: Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

MMS Information Collection Clearance Officer: Arlene Bajusz (202) 208–7744.

Dated: June 16, 2008.

E.P. Danenberger,

Chief, Office of Offshore Regulatory Programs.

[FR Doc. E8–14768 Filed 6–27–08; 8:45 am]

BILLING CODE 4310–MR–P

DEPARTMENT OF THE INTERIOR

National Park Service

General Management Plan, Environmental Impact Statement, John Fitzgerald Kennedy National Historic Site, Massachusetts

AGENCY: National Park Service, Department of the Interior.

ACTION: Notice of Intent to prepare an Environmental Impact Statement for the General Management Plan, John Fitzgerald Kennedy National Historic Site (NHS).

SUMMARY: Pursuant to the National Environmental Policy Act of 1969, 42 U.S.C. 4332(2)(C), the National Park Service is preparing an Environmental Impact Statement (EIS) for the General Management Plan (GMP) for the John Fitzgerald Kennedy NHS, Massachusetts. In cooperation with the Town of Brookline, MA, attention will be given to resources outside the boundaries that affect the integrity of the John Fitzgerald Kennedy NHS. The plan will identify management alternatives for the site. Major issues

include the need to provide fundamental management guidance and to enable the park to strategically plan its long term resource management, visitor use, and partnership goals and objectives. This would be the first GMP for the John F. Kennedy NHS since its establishment in 1969. GMP issues include: (1) Creating strategies for resolving critical facility and visitor experience issues related to the small size of the site; (2) addressing the needs and expectations of a rapidly changing demographic audience; (3) developing a comprehensive resource management strategy for the site; (4) addressing alternative outreach and partnership program options, including interpreting the historic neighborhood where the Kennedy home is located; (5) improving the park's relationships with other presidential sites and other John F. Kennedy sites.

The Draft EIS/General Management Plan is expected to be available for public review in early 2010. After public and interagency review of the draft document, comments will be considered and a final GMP/EIS will be prepared that contains a preferred alternative for management of the John Fitzgerald Kennedy NHS (the GMP), followed by a Record of Decision.

DATES: The NPS will hold a public scoping meeting, which will provide opportunities to ask questions and raise issues concerning the General Management Plan for the John Fitzgerald Kennedy National Historic Site. Information on the time and place of the public scoping meeting will be publicized through the local news media serving the region around the park.

Further Information and Addresses: Persons who wish to comment orally or in writing, or who require further information are invited to contact James O'Connell, Project Manager, National Park Service, Northeast Region Boston Office, 15 State Street, Boston, MA 02109–3572; (617) 223–5222; fax –5164; e-mail at *Jim_O'Connell@nps.gov*.

Michael T. Reynolds,

Deputy Regional Director, Northeast Region.

[FR Doc. E8–14751 Filed 6–27–08; 8:45 am]

BILLING CODE 4312–08–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Proposed Consent Decree Under the Comprehensive Environmental Response, Compensation, and Liability Act

Notice is hereby given that on June 18, 2008, a Consent Decree in *United States of America* v. *Avco Corporation*, Civil Action No. 3:08–cv–1161–ARC, was lodged with the United States District Court for the Middle District of Pennsylvania.

The consent decree resolves the claims of the United States under Section 107(a) of the Comprehensive Environmental Response, Compensation and Liability Act (''CERCLA''), 42 U.S.C. 9607(a), for reimbursement of its past response costs incurred in connection with the Avco-Lycoming Superfund Site, located in Williamsport, Pennsylvania. The consent decree obligates Avco Corporation to reimburse $340,000 of the United States' past response costs paid through July 3, 2007, and all future response costs paid after that date.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to this proposed Consent Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and either e-mailed to *pubcomment-ees.enrd@usdoj.gov* or mailed to P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611, Attention: Nancy Flickinger (EES), and should refer to *United States of America* v. *Avco Corporation*, Civil Action No. 3:08–cv–1161–ARC, DOJ # 90–11–3–06903/1.

The proposed Consent Decree may be examined at the Office of the United States Attorney for the Middle District of Pennsylvania, Federal Building, 228 Walnut Street, Suite 220, Harrisburg, PA 17108–1754. During the public comment period, the consent decree may also be examined on the following Department of Justice Web site, *http://www.usdoj.gov/enrd/Consent_Decrees.html.* A copy of the proposed Consent Decree may also be obtained by mail from the Consent Decree Library, P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611 or by faxing or e-mailing a request to Tonia Fleetwood (*tonia.fleetwood@usdoj.gov*), fax no. (202) 514–0097, phone confirmation number (202) 514–1547. In requesting a copy from the Consent Decree Library, please enclose a check in the amount of $32.50 (25 cents per page reproduction cost for a full copy) payable to the U.S. Treasury.

Robert D. Brook,

Assistant Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. E8–14712 Filed 6–27–08; 8:45 am]

BILLING CODE 4410–CW–P

DEPARTMENT OF JUSTICE

Notice of Lodging Proposed Consent Decree

In accordance with Departmental Policy, 28 CFR 50.7, notice is hereby given that a proposed Consent Decree in *United States* v. *Fabian*, Civil Action No. 2:02–CV–495, was lodged with the United States District Court for the Northern District of Indiana on June 20, 2008.

This proposed Consent Decree concerns a complaint filed by the United States against Rowland A. Fabian pursuant to 33 U.S.C. 1319(b) and (d), to obtain injunctive relief from and impose civil penalties against him for violating the Clean Water Act by discharging pollutants without a permit into waters of the United States. The court found Mr. Fabian liable as alleged in the United States' complaint. *See United States* v. *Fabian*, 522 F. Supp. 2d 1078 (ND, Ind. 2007). The proposed Consent Decree requires payment of a civil penalty and the performance of injunctive relief.

The Department of Justice will accept written comments relating to this proposed Consent Decree for thirty (30) days from the date of publication of this Notice. Please address comments to Andrew J. Doyle, P.O. Box 23986, Washington, DC 20026–3986, and refer to *United States* v. *Fabian*, DJ #90–5–1–1–1–05741.

The proposed Consent Decree may be examined at the Clerk's Office, United States District Court for the Northern District of Indiana, 5400 Federal Plaza, Hammond, Indiana, or through the court's document filing system (with a PACER account) at *https://ecf.innd.uscourts.gov*, document number 131. In addition, the proposed Consent Decree may be viewed at *http://www.usdoj.gov/enrd/open.html.*

Dated: June 24, 2008.

Scott A. Schachter,

Assistant Chief, Environmental Defense Section, Environment & Natural Resources Division.

[FR Doc. E8–14696 Filed 6–27–08; 8:45 am]

BILLING CODE 4410–15–M

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Under Comprehensive Environmental Response, Compensation and Liability Act

Notice is hereby given that on June 10, 2008, a proposed Consent Decree in *United States* v. *ExxonMobil Corporation,* C.A. No. 1:08–CV–00124–IMK (N.D.W.Va.), was lodged with the United States District Court for the Northern District of West Virginia. The Consent Decree resolves the United States' claim for response costs against the ExxonMobil Corporation, pursuant to Section 107(a)(2) of the Comprehensive Environmental Response, Compensation and Liability Act (''CERCLA''), 42 U.S.C. 9607(a)(2). The claim relates to response costs incurred by the U.S. Environmental Protection Agency (''EPA'') in connection with clean-up activities performed at the Big John's Salvage Site, located in Marion County, West Virginia. Under the Consent Decree, defendant ExxonMobil Corporation will pay EPA $3,000,000 in reimbursement of a portion of the response costs incurred by EPA in connection with the Site.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to the Consent Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and either e-mailed to *pubcomment-ees.enrd@usdoj.gov*, or mailed to P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611, and should refer to *United States* v. *ExxonMobil Corporation,* DOJ Reference No. 90–11–3–08499. Commenters may request an opportunity for a public meeting in the affected area, in accordance with Section 7003(d) of RCRA, 42 U.S.C. 6973(d).

The Consent Decree may be examined at the Office of the United States Attorney, 1125 Chapline Street, Wheeling, West Virginia 26003, and at U.S. EPA Region 3, 1650 Arch Street, Philadelphia, Pennsylvania 19103. During the public comment period, the Consent Decree may also be examined on the following Department of Justice Web site: *http://www.usdoj.gov/enrd/Consent_ Decrees.html.* A copy of the Consent Decreed may also be obtained by mail from the Consent Decree Library, P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611, or by faxing or e-mailing a request to Tonia Fleetwood (*tonia.fleetwood@usdoj.gov*), fax no. (202) 514–0097, phone confirmation number (202) 514–1547. In requesting a copy of the Consent Decree, without one Appendix, from the Consent Decree Library, please enclose a check in the amount of $6.25 (25 cents per page production costs), payable to the U.S. Treasury or, if by e-mail or fax, forward a check in that amount to the Consent Decree Library at the stated address. In requesting a copy, with one Appendix (a reduced size map of a portion of the Big John's Salvage Site), please enclose a check in the amount of $6.75 (25 cents per page reproduction cost) payable to the U.S. Treasury.

If the requester wants a copy of the Appendix in the form of the full size map, please contact U.S. EPA Region 3, 1650 Arch Street, Philadelphia, Pennsylvania 19103, to determine the cost of reproducing the map.

Robert D. Brook,

Assistant Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. E8–14634 Filed 6–27–08; 8:45 am]

BILLING CODE 4410–15–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Second Amendment to Consent Decree Under the Clean Air Act

Under 28 CFR 50.7, notice is hereby given that on June 24, 2008, a Second Amendment to the Consent Decree entered in the case of *United States, et al.* v. *ConocoPhillips Company,* Civil Action No. H–05–0258, was lodged with the United States District Court for the Southern District of Texas.

Under the original Consent Decree, the ConocoPhillips Company (''COPC'') agreed to implement innovative pollution control technologies to reduce emissions of nitrogen oxides, sulfur dioxide, and particulate matter from refinery process units at nine refineries owned and operated by COPC. COPC also agreed to adopt facility-wide enhanced benzene waste monitoring and fugitive emission control programs. Subsequently, under a First Amendment that was entered in May of 2007, COPC agreed, *inter alia,* to install additional pollution control technology in consideration for deadline extensions.

COPC still is obligated to comply with the Consent Decree as amended. However, under the Second Amendment, COPC will: (i) Add new controls to its sewer system and a wastewater lift station at its refinery in Ferndale, Washington, to ensure compliance with the Benzene Waste Operations NESHAP (''BWON''); (ii) install controls on the guidepoles of five tanks at its refinery in Linden, New Jersey, in exchange for a deadline extension there; and (iii) install a wet gas scrubber instead of an electrostatic precipitator as the control device for a major process unit at its refinery in Sweeny, Texas. Additional minor modifications also are included in the Second Amendment. COPC will pay a civil penalty of $60,000 and perform two Supplemental Environmental Projects valued at $100,000 each near its Ferndale refinery in exchange for a liability release for alleged BWON violations there. COPC also will pay a stipulated penalty of $80,500 for a flaring incident at its refinery in Trainer, Pennsylvania.

In the Second Amendment, the United States is joined by the State of Illinois, the State of Louisiana, the State of New Jersey, the Commonwealth of Pennsylvania, and the Northwest Clean Air Agency in the State of Washington.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to the Second Amendment. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and either e-mailed to *pubcomment-ees.enrd@usdoj.gov* or mailed to P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611, and should refer to *United States, et al.* v. *ConocoPhillips Company,* D.J. Ref. No. 90–5–2–1–06722/1.

The Second Amendment may be examined at the Office of the United States Attorney, 919 Milam St., Suite 1500, Houston, Texas 77208, and at U.S. EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733. During the public comment period, the Second Amendment may also be examined on the following Department of Justice Web site: *http://www.usdoj.gov/enrd/Consent_Decrees.html* . A copy of the Second Amendment may also be obtained by mail from the Consent Decree Library, P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611, or by faxing or e-mailing a request to Tonia Fleetwood (*tonia.fleetwood@usdoj.gov*), fax number (202) 514–0097, phone confirmation number (202) 514–1547. In requesting a copy from the Consent Decree Library, please enclose a check in the amount of $11.25 (25 cents per page reproduction cost) payable to the U.S. Treasury, or, if by e-mail or fax, forward a check in that

amount to the Consent Decree Library at the stated address.

Robert D. Brook,

Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. E8–14675 Filed 6–27–08; 8:45 am]

BILLING CODE 4410–15–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Under the Comprehensive Environmental Response, Compensation, and Liability Act

Pursuant to 42 U.S.C. 9622(d)(2) and 28 CFR 50.7, notice is hereby given that, on June 20, 2008, a proposed Amended Consent Decree in *United States and the State of Wisconsin* v. *P.H. Glatfelter Co. and WTM I Co.,* Civil Action No. 03–C–0949 (E.D. Wis.) was lodged with the United States District Court for the Eastern District of Wisconsin. The Amended Consent Decree concerns polychlorinated biphenyl (''PCB'') contamination in a particular area of the Lower Fox River and Green Bay Site, known as Operable Unit 1 (Little Lake Butte des Morts).

The original Consent Decree in this matter required the Defendants to implement the cleanup remedy for Operable Unit 1 that was selected in a December 2002 Record of Decision issued jointly by the U.S. Environmental Protection Agency (''EPA'') and the Wisconsin Department of Natural Resources (''WDNR''). That Decree provided that the Defendants would pay for performance of that work using a specially-dedicated $60 million fund established by the potentially-responsible parties, plus interest earned on the money placed in that fund. In light of that limited funding commitment, the Decree included corresponding ''cost reopener'' provisions that allowed termination of the Decree (with reservations of rights) if the actual costs of the work exceeded that funding commitment. The Amended Consent Decree would eliminate the ''cost reopener'' provisions of the original Decree and it would require the Defendants to complete the Operable Unit 1 cleanup without any pre-defined funding limitation. The Amended Decree also would accommodate adjustments to the Operable Unit 1 remedy that are reflected in a Record of Decision Amendment that EPA and WDNR issued on June 12, 2008. The work under the original Decree and the proposed Amended Decree currently is estimated to cost approximately $102 million. Like the original Decree, the Amended Decree would not resolve the Defendants' liability for additional cleanup work that will be required elsewhere at the Site.

The Department of Justice will receive comments relating to the Amended Consent Decree for a period of thirty (30) days from the date of this publication. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and mailed either electronically to *pubcomment-ees.enrd@usdoj.gov* or in hard copy to P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611. Comments should refer to *United States and the State of Wisconsin* v. *P.H. Glatfelter Co. and WTM I Co.,* Civil Action No. 03–C–0949 (E.D. Wis.) and D.J. Ref. No. 90–11–2–1045/2.

The Amended Consent Decree may be examined at: (1) The offices of the United States Attorney, 517 E. Wisconsin Avenue, Room 530, Milwaukee, Wisconsin; and (2) the offices of the U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, 14th Floor, Chicago, Illinois. During the public comment period, the Consent Decree may also be examined on the following Department of Justice Web site: *http://www.usdoj.gov/enrd/Consent_Decrees.html.* A copy of the Consent Decree may also be obtained by mail from the Department of Justice Consent Decree Library, P.O. Box 7611, Washington, DC 20044–7611 or by faxing or e-mailing a request to Tonia Fleetwood (*tonia.fleetwood@usdoj.gov*), fax no. (202) 514–0097, phone confirmation number (202) 514–1547. In requesting a copy from the Consent Decree Library, please enclose a check in the amount of $49.25 (197 pages at 25 cents per page reproduction cost) payable to the U.S. Treasury. For a copy of the Consent Decree alone, without appendices, please enclose a check in the amount of $26.25 (105 pages at 25 cents per page reproduction cost) payable to the U.S. Treasury.

William D. Brighton,

Assistant Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. E8–14725 Filed 6–27–08; 8:45 am]

BILLING CODE 4410–15–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Stipulation and Order Under the Comprehensive Environmental Response, Compensation and Liability Act and the Clean Water Act

Notice is hereby given that on June 17, 2008, a proposed Stipulation and Order (''Stipulation'') in *In re Dana Corporation, et al.,* Civil Action No. 07–8160 (SAS) (Jointly Administered Bankruptcy Case No. 06–10354) was lodged with the United States District Court for the Southern District of New York.

In this action, the United States filed proofs of claim in the bankruptcy proceedings of debtor Dana Corporation and 40 of its affiliates (''Dana'') seeking reimbursement of response costs incurred and to be incurred under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601, *et seq.* (''CERCLA''); civil penalties under CERCLA and the Clean Water Act, 33 U.S.C. 1251, *et seq.*; and natural resource damages under CERCLA.

The Stipulation settles these claims on behalf of the Environmental Protection Agency (''EPA'') for response costs at the following six Superfund sites: (1) The Cornell-Dubilier Electronics, Inc. Site, located in South Plainfield, New Jersey (the ''CDE Site''); (2) the West Highway 6 and Highway 281 Site, located in Hastings, Nebraska; (3) the Lakeland Landfill Disposal Services, Inc. Site, located near Claypool, Indiana; (4) the Main Street Well Field Site, East Side, located in Elkhart, Indiana; (5) the Solvents Recovery Service of New England, Inc. Site, located in Southington, Connecticut; and (6) the Tremont City Barrel Fill Site, located in Tremont City, Ohio.

The Stipulation also settles EPA's claims against Dana for civil penalties under the Clean Water Act at Dana's former facility located in Muskegon, Michigan; and under sections 103(a) and 109 of CERCLA, 42 U.S.C. 9603(a) and 9609, at Dana's former facility located in Bellefontaine, Ohio. Finally, the Stipulation settles claims on behalf of the Department of the Interior (''Interior'') and the National Oceanic and Atmospheric Administration (''NOAA'') pursuant to CERCLA, 42 U.S.C. 9607(a)(4)(c) and 9607(f), for natural resource damages with respect to the CDE Site.

Under this settlement, EPA, NOAA, and Interior will receive allowed general unsecured claims in Dana's bankruptcy totaling $125,670,252. Pursuant to the

terms of Dana's court-approved plan of reorganization, the United States will receive a distribution of stock in Dana Holding Corp. The United States will sell all stock it receives in connection with the settlement. Thus, the amount actually recovered by the United States as a result of the settlement will be determined in part by the market value of the shares at the time of the sale.

The Department of Justice will receive, for a period of thirty (30) days from the date of this publication, comments relating to the Stipulation. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and either e-mailed to *pubcomment-ees.enrd@usdoj.gov* or mailed to P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611, and should refer to *In re Dana Corporation, et al.,* D.J. Ref. 90–11–3–531/4.

The Stipulation may be examined at the Office of the United States Attorney, 86 Chambers Street, 3rd Floor, New York, New York 10007, at U.S. EPA Region 2, Office of Regional Counsel, 290 Broadway, New York, New York 10007–1866, and EPA Region 7, Office of Regional Counsel, 901 N. 5th Street, Kansas City, KS 66101. During the public comment period, the Stipulation may also be examined on the following Department of Justice Web site, *http://www.usdoj.gov/enrd/Consent__Decrees.html.* A copy of the Stipulation may also be obtained by mail from the Consent Decree Library, P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044–7611 or by faxing or e-mailing a request to Tonia Fleetwood (tonia.fleetwood@usdoj.gov), fax no. (202) 514–0097, phone confirmation number (202) 514–1547. In requesting a copy from the Consent Decree Library, please enclose a check in the amount of $4.75 (25 cents per page reproduction cost) payable to the U.S. Treasury or, if by e-mail or fax, forward a check in that amount to the Consent Decree Library at the stated address.

Ronald Gluck,

Assistant Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

FR Doc. E8–14704 Filed 6–27–08; 8:45 am]

BILLING CODE 4410–CW–P

DEPARTMENT OF LABOR

Employee Benefits Security Administration

Advisory Council on Employee Welfare and Pension Benefit Plans; Nominations for Vacancies

Section 512 of the Employee Retirement Income Security Act of 1974 (ERISA), 88 Stat. 895, 29 U.S.C. 1142, provides for the establishment of an Advisory Council on Employee Welfare and Pension Benefit Plans (the Council), which is to consist of 15 members to be appointed by the Secretary of Labor (the Secretary) as follows: Three representatives of employee organizations (at least one of whom shall be a representative of an organization whose members are participants in a multiemployer plan); three representatives of employers (at least one of whom shall be a representative of employers maintaining or contributing to multiemployer plans); one representative each from the fields of insurance, corporate trust, actuarial counseling, investment counseling, investment management, and accounting; and three representatives from the general public (one of whom shall be a person representing those receiving benefits from a pension plan). No more than eight members of the Council shall be members of the same political party.

Members shall be persons qualified to appraise the programs instituted under ERISA. Appointments are for terms of three years. The prescribed duties of the Council are to advise the Secretary with respect to the carrying out of his or her functions under ERISA, and to submit to the Secretary, or his or her designee, recommendations with respect thereto. The Council will meet at least four times each year.

The terms of five members of the Council expire on November 14, 2008. The groups or fields they represent are as follows: (1) Employee organizations; (2) employers; (3) corporate trust; (4) investment management; and (5) the general public. The Department of Labor is committed to equal opportunity in the workplace and seeks a broad-based and diverse ERISA Advisory Council.

Accordingly, notice is hereby given that any person or organization desiring to recommend one or more individuals for appointment to the Advisory Council on Employee Welfare and Pension Benefit Plans, to represent any of the groups or fields specified in the preceding paragraph, may submit recommendations to Larry Good, ERISA Advisory Council Executive Secretary, Frances Perkins Building, U.S. Department of Labor, 200 Constitution Avenue, NW., Suite N–5623, Washington, DC 20210. Recommendations must be delivered or mailed on or before September 1, 2008. Recommendations may be in the form of a letter, resolution or petition, signed by the person making the recommendation or, in the case of a recommendation by an organization, by an authorized representative of the organization. Recommendations should include the position for which the nominee is recommended and the nominee's contact information. The recommendation also must state that the candidate will accept appointment to the Council if offered and commit to attend meetings and to actively participate in the Council's work to carry out its responsibilities under ERISA. Historically, this has meant a commitment of 15–20 days per year.

Signed at Washington, DC,

This 24th day of June, 2008.

Bradford P. Campbell,

Assistant Secretary, Employee Benefits Security Administration.

[FR Doc. E8–14699 Filed 6–27–08; 8:45 am]

BILLING CODE 4510–29–P

DEPARTMENT OF LABOR

Employee Benefits Security Administration

Advisory Council on Employee Welfare and Pension Benefit Plans, Working Group on Spend Down of Defined Contribution Assets at Retirement; Notice of Meeting

Pursuant to the authority contained in Section 512 of the Employee Retirement Income Security Act of 1974 (ERISA), 29 U.S.C. 1142, the Working Group assigned by the Advisory Council on Employee Welfare and Pension Benefit Plans to study the issue of spending down defined contribution assets at retirement will hold an open public meeting on July 16, 2008.

The session will take place in C5515, Room 4, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. The purpose of the open meeting, which will run from 9 a.m. to approximately 6 p.m., with a one hour break for lunch, is for Working Group members to hear testimony from invited witnesses. The Working Group will study the issues and barriers facing plan fiduciaries, plan sponsors, and plan participants as they attempt to evaluate approaches that guarantee periodic income levels at retirement.

Organizations or members of the public wishing to submit a written statement pertaining to the topic may do so by submitting 25 copies on or before July 9, 2008 to Larry Good, Executive Secretary, ERISA Advisory Council, U.S. Department of Labor, Suite N–5623, 200 Constitution Avenue, NW., Washington, DC 20210. Statements also may be submitted electronically to *good.larry@dol.gov*. Statements received on or before July 9 will be included in the record of the meeting. Individuals or representatives of organizations wishing to address the Working Group should forward their requests to the Executive Secretary or telephone (202) 693–8668. Oral presentations will be limited to 20 minutes, time permitting, but an extended statement may be submitted for the record. Individuals with disabilities, who need special accommodations, should contact Larry Good by July 9 at the address indicated. All individuals who plan to attend the meeting should contact Larry Good by July 14 to expedite building access.

Signed at Washington, DC this 24th day of June, 2008.

Bradford P. Campbell,

Assistant Secretary, Employee Benefits Security Administration.

[FR Doc. E8–14700 Filed 6–27–08; 8:45 am]

BILLING CODE 4510–29–P

DEPARTMENT OF LABOR

Employee Benefits Security Administration

Advisory Council on Employee Welfare and Pension Benefit Plans; Working Group on Phased Retirement; Notice of Meeting

Pursuant to the authority contained in Section 512 of the Employee Retirement Income Security Act of 1974 (ERISA), 29 U.S.C. 1142, the Working Group assigned by the Advisory Council on Employee Welfare and Pension Benefit Plans to study the issue of phased retirement will hold an open public meeting on July 17, 2008.

The session will take place in C5515, Room 4, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. The purpose of the open meeting, which will run from 9 a.m. to approximately 5 p.m., with a one hour break for lunch, is for Working Group members to hear testimony from invited witnesses. The Working Group will study the issues facing employers who wish to create phased retirement plans as well as the issues facing employees who wish to take part in phased retirement programs, and whether there are any legal impediments that discourage American workers from continuing to work in their retirement years.

Organizations or members of the public wishing to submit a written statement pertaining to the topic may do so by submitting 25 copies on or before July 9, 2008 to Larry Good, Executive Secretary, ERISA Advisory Council, U.S. Department of Labor, Suite N–5623, 200 Constitution Avenue, NW., Washington, DC 20210. Statements also may be submitted electronically to *good.larry@dol.gov*. Statements received on or before July 9 will be included in the record of the meeting. Individuals or representatives of organizations wishing to address the Working Group should forward their requests to the Executive Secretary or telephone (202) 693–8668. Oral presentations will be limited to 20 minutes, time permitting, but an extended statement may be submitted for the record. Individuals with disabilities, who need special accommodations, should contact Larry Good by July 9 at the address indicated. All individuals who plan to attend the meeting should contact Larry Good by July 14 to expedite building access.

Signed at Washington, DC this 24th day of June, 2008.

Bradford P. Campbell,

Assistant Secretary, Employee Benefits Security Administration.

[FR Doc. E8–14701 Filed 6–27–08; 8:45 am]

BILLING CODE 4510–29–P

DEPARTMENT OF LABOR

Employee Benefits Security Administration

Advisory Council on Employee Welfare and Pension Benefit Plans; Working Group on Hard to Value Assets/Target Date Funds; Notice of Meeting

Pursuant to the authority contained in Section 512 of the Employee Retirement Income Security Act of 1974 (ERISA), 29 U.S.C. 1142, the Working Group assigned by the Advisory Council on Employee Welfare and Pension Benefit Plans to study the issues of hard to value assets and target date funds will hold an open public meeting on July 15, 2008.

The session will take place in C5515, Room 4, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. The purpose of the open meeting, which will run from 9 a.m. to approximately 5 p.m., with a one hour break for lunch, is for Working Group members to hear testimony from invited witnesses. The Working Group will study potential risks and the roles of fiduciaries, trustees, investment managers, accountants/auditors and participants when employee benefit plans invest in hard to value assets, a review of regulatory policy involving assets for which there is not a generally recognized market, and challenges and risks associated with plans' use of Target Date Funds.

Organizations or members of the public wishing to submit a written statement pertaining to the topic may do so by submitting 25 copies on or before July 9, 2008 to Larry Good, Executive Secretary, ERISA Advisory Council, U.S. Department of Labor, Suite N–5623, 200 Constitution Avenue, NW., Washington, DC 20210. Statements also may be submitted electronically to *good.larry@dol.gov*. Statements received on or before July 9 will be included in the record of the meeting. Individuals or representatives of organizations wishing to address the Working Group should forward their requests to the Executive Secretary or telephone (202) 693–8668. Oral presentations will be limited to 20 minutes, time permitting, but an extended statement may be submitted for the record. Individuals with disabilities, who need special accommodations, should contact Larry Good by July 9 at the address indicated. All individuals who plan to attend the meeting should contact Larry Good by July 14 to expedite building access.

Signed at Washington, DC this 24th day of June, 2008.

Bradford P. Campbell,

Assistant Secretary, Employee Benefits Security Administration.

[FR Doc. E8–14702 Filed 6–27–08; 8:45 am]

BILLING CODE 4510–29–P

DEPARTMENT OF LABOR

Employee Benefits Security Administration

Advisory Council on Employee Welfare and Pension Benefit Plans; 142nd Full Council Meeting; Notice of Meeting

Pursuant to the authority contained in Section 512 of the Employee Retirement Income Security Act of 1974 (ERISA), 29 U.S.C. 1142, the 142nd open meeting of the full Advisory Council on Employee Welfare and Pension Benefit Plans will be held on July 16, 2008.

The session will take place in C5515, Room 4, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. The purpose of the open meeting, which will run from 8:30 a.m. to approximately 9 a.m., is for members to be updated on activities of the

Employee Benefits Security Administration and for chairs of this year's Working Groups to provide progress reports on their individual study topics.

Organizations or members of the public wishing to submit a written statement may do so by submitting 25 copies on or before July 9, 2008 to Larry Good, Executive Secretary, ERISA Advisory Council, U.S. Department of Labor, Suite N–5623, 200 Constitution Avenue, NW., Washington, DC 20210. Statements also may be submitted electronically to *good.larry@dol.gov*. Statements received on or before July 9 will be included in the record of the meeting. Oral presentations will be limited to 10 minutes, time permitting, but an extended statement may be submitted for the record. Individuals with disabilities, who need special accommodations, should contact Larry Good by July 9 at the address indicated. All individuals who plan to attend the meeting should contact Larry Good by July 14 to expedite building access.

Signed at Washington, DC this 24th day of June, 2008.

Bradford P. Campbell,

Assistant Secretary, Employee Benefits Security Administration.

[FR Doc. E8–14703 Filed 6–27–08; 8:45 am]

BILLING CODE 4510–29–P

DEPARTMENT OF LABOR

Proposed Extension With Revisions of a Currently Approved Information Collection for Registered Apprenticeship Program Data (ETA Form 671)

AGENCY: Employment and Training Administration.

ACTION: Notice.

SUMMARY: The U.S. Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden conducts a preclearance consultation program to provide the general public and federal agencies with an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995 (PRA95) [44 U.S.C. 3506(c)(2)(A)]. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. Currently, the Employment and Training Administration is soliciting comments concerning the proposed revision of the collection of information on the registered apprenticeship program (ETA Form 671) under Title 29 CFR Part 29 (Labor Standards for the Registration of Apprenticeship Programs).

A copy of the proposed information collection request (ICR) can be obtained by contacting the office listed below in the addressee section of this notice or by accessing: *http://www.doleta.gov/OMBCN/OMBControlNumber.cfm.*

DATES: Written comments must be submitted to the office listed in the addressee's section below on or before August 29, 2008.

ADDRESSES: Submit written comments to the Employment and Training Administration, U.S. Department of Labor, 200 Constitution Avenue, NW., Room N–5311, Washington, DC 20210, *Attention:* John V. Ladd, *Telephone number:* 202–693–2796 (this is not a toll-free number). *Fax:* 202–693–2808. *E-mail: ladd.john@dol.gov*.

SUPPLEMENTARY INFORMATION:

I. Background

The National Apprenticeship Act of 1937 authorizes and directs the Secretary of Labor to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices, to extend the application of such standards by encouraging the inclusion thereof in contracts of apprenticeship, to bring together employers and labor for the formulation of programs of apprenticeship, to cooperate with State agencies engaged in the formulation and promotion of standards of apprenticeship, and to cooperate with the Secretary of Education (29 U.S.C. 50). Section 50a of the Act authorizes the Secretary of Labor to publish information relating to existing and proposed labor standards of apprenticeship, and to appoint national advisory committees (29 U.S.C. 50a).

Title 29 CFR Part 29 sets forth labor standards to safeguard the welfare of apprentices, and to extend the application of such standards by prescribing policies and procedures concerning registration, for certain Federal purposes, of acceptable apprenticeship programs with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (formerly known as the Office of Apprenticeship Training, Employers and Labor Services and previously as the Bureau of Apprenticeship and Training). These labor standards, policies and procedures cover: Registration of apprenticeship programs and apprenticeship agreements; the recognition of a State agency as the appropriate agency for registering local apprenticeship programs for certain Federal purposes; and matters relating thereto.

Title 29 CFR Part 30 sets forth policies and procedures to promote equality of opportunity in apprenticeship programs registered with the U.S. Department of Labor and recognized State Apprenticeship Agencies. These policies and procedures apply to recruitment and selection of apprentices, and to all conditions of employment and training during apprenticeship. The procedures provide for review of apprenticeship programs, for registering apprenticeship programs, for processing complaints, and for deregistering non-complying apprenticeship programs. This part also provides policies and procedures for continuation or withdrawal of recognition of State agencies which register apprenticeship programs for Federal purposes.

The information collection instrument for this request is ETA Form 671 (ETA Program Registration, section I, and Apprentice Registration, section II). The Apprentice Registration section II electronic instrument has been widely accepted, used by more than 50 percent of new apprentice registrations. With the redesign of the Registered Apprenticeship Partners Information Data System (RAPIDS), formerly known as the Registered Apprenticeship Information System (RAIS), Program Registration section I provides for electronic program registration by the program sponsor. Therefore the Office of Apprenticeship *seeks to revise* these two sections of ETA Form 671 to facilitate the registration of programs and apprentices. This ICR seeks a three-year approval.

II. Review Focus

The Department of Labor is particularly interested in comments which:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are to respond, including through the

use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.

III. Current Actions

Recordkeeping and data collection activities regarding registered apprenticeship are by-products of the registration system. Organizations which apply for apprenticeship sponsorship enter into an agreement with the Federal Government or cognizant State government to operate their proposed programs consistent with 29 CFR Parts 29 and 30. Apprenticeship sponsors are not required to file reports regarding their apprentices other than to register individuals and to update information as an apprentice moves through their program. This revision request *includes* the request to collect the employer identification number (EIN) of the program sponsor (on a voluntary basis) when registering a program. The EIN is an Internal Revenue Service Federal tax identification number that is used to identify a business entity. Including this number during the program registration ensures that the business is legitimate with the intention of maintaining a registered program and safeguards the welfare and training of apprentices. The additional program information requested meets the requirements for apprenticeship program registration in accordance with Title 29 CFR Parts 29 and 30. The primary headings are as follows: Program Sponsor Information; Program Registration Information, Program-related Sponsor Contact Information, Occupation Information, Wage Record Under Journeyworkers Employed, Related Technical Instruction Information (RTI) and RTI Source Information. The additions to the currently approved Program Registration in Section I are mostly routine information such as the identification of the entities, their addresses, telephone numbers, e-mail addresses, fax numbers and Web site addresses. Definitions and instructions are also included. Where necessary, this information will be repopulated electronically from the apprenticeship database to the revised Apprentice Registration section II, Part B: Sponsor field area. Other additions or changes to Apprentice Registration section II include the following: Added under Career Linkage or Direct Entry, the data fields Trade Adjustment and YouthBuild Programs and updated the justification for requesting the Apprentice Social Security Number. These sections, Program Registration and Apprentice Registration, are used at different times, for different purposes, and with different individuals or entities. The information is not duplicative. The Apprenticeship and Training Representative will be available upon request to provide full technical assistance and services to those program sponsors and apprentices who do not have computer technology available. The decrease of 34,535 burden hours (from 55,632 to 26,757) reported in the previous ICR is due to the response time change from 15 minutes to 5 minutes in the Apprentice Registration section II instrument.

Finally, OMB's October 27, 2005 approval for this ICR requested that the database incorporate the latest classification systems as soon as practicable. It also directed that future ICRs for this collection must explain the actions taken to move in that direction. In response, the Office of Apprenticeship incorporated the North American Industry Classification System in its re-engineered database, RAPIDS, formerly known as RAIS, on February 2, 2008.

Type of Review: Revisions to ETA Form 671.

Agency: Employment and Training Administration.

Title: Labor Standards for the Registration of Apprenticeship Programs.

OMB Number: 1205–0223.

Recordkeeping: Data retention is consistent with 5 CFR 1320.5. However, a records retention requirement of five years is necessary. The duration of many apprenticeship programs is four years or more, and it is important to keep the records for a period of time after an apprentice has left the program.

Affected Public: Program Sponsors, State Apprenticeship Councils or Agencies, Applicants, Apprentices, Tribal Governments.

Form: ETA Form 671, Program Registration section I and Apprentice Registration section II.

Total Respondents: 248,728.

Estimated Total Burden Hours: 26,757.

Total Burden Cost: 0.

SUMMARY TABLE

Requirement ETA Form 671	Sec.	Total respondents	Frequency	Annual responses	Average response time	Burden hours
Section I	29.3	1,500	1-time basis	1,500	.166 hr/sponsor	249
Section II	29.3	144,000	1-time basis	144,000	.083 hr/apprentice	11,952
	29.6	100,000	1-time basis	100,000	.083 hr/apprentice	8,300
	29.5	1,500	1-time basis	1,500	2 hrs/sponsor 2 hrs/SAC	3,000
		1,600	1-time basis	1,600	2 hrs/SAC	3,200
	29.12	(30)	1-time basis	(30)	0 hrs	0
	29.12	Accomplished in 1977; no new state agency expected in 2008.				
	29.12	28	1-time basis	28	2 hrs. SAC	56
	29.13	0	1-time basis	0	0	0
Total		248.728	.....	248.728	.....	26.757

Comments submitted in response to this comment request will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

Dated: June 19, 2008.

John V. Ladd,

Administrator, Office of Apprenticeship, Employment and Training Administration.

[FR Doc. E8–14707 Filed 6–27–08; 8:45 am]

BILLING CODE 4510–FR–P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

[Docket No. OSHA–2008–0019]

On-site Consultation Programs; Extension of the Office of Management and Budget's (OMB) Approval of Information Collection (Paperwork) Requirements

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Request for public comment.

SUMMARY: OSHA solicits comments concerning its proposal to extend OMB approval of the information collection requirements contained in the Standard on Consultation Agreements (hereinafter, the On-site Consultation Program regulations) (29 CFR part 1908). The Consultation Program regulations specify services to be provided, and practices and procedures to be followed by the State On-site Consultation Programs. Information collection requirements set forth in the On-site Consultation Program regulations are in two categories: *State Responsibilities* and *Employer Responsibilities*. Eight regulatory provisions require information collection activities by the State. The Federal government provides 90 percent of funds for on-site consultation services delivered by the States, which result in the collection of information. Four requirements apply to employers and specify conditions for receiving the free on-site consultation services.

DATES: Comments must be submitted (postmarked, sent, or received) by August 29, 2008.

ADDRESSES:

Electronically: You may submit comments and attachments electronically at *http://www.regulations.gov*, which is the Federal eRulemaking Portal. Follow the instructions online for submitting comments.

Facsimile: If your comments, including attachments, are not longer than 10 pages, you may fax them to the OSHA Docket Office at (202) 693–1648.

Mail, hand delivery, express mail, messenger, or courier service: When using this method, you must submit three copies of your comments and attachments to the OSHA Docket Office, Docket No. OSHA–2008–0019, U.S. Department of Labor, Occupational Safety and Health Administration, Room N–2625, 200 Constitution Avenue, NW., Washington, DC 20210. Deliveries (hand, express mail, messenger, and courier service) are accepted during the Department of Labor's and Docket Office's normal business hours, 8:15 a.m. to 4:45 p.m., e.t.

Instructions: All submissions must include the Agency name and OSHA docket number for the ICR (OSHA–2008–0019). All comments, including any personal information you provide, are placed in the public docket without change, and may be made available online at *http://www.regulations.gov*. For further information on submitting comments see the ''Public Participation'' heading in the section of this notice titled ''**SUPPLEMENTARY INFORMATION**.''

Docket: To read or download comments or other material in the docket, go to *http://www.regulations.gov* or the OSHA Docket Office at the address above. All documents in the docket (including this **Federal Register** notice) are listed in the *http://www.regulations.gov* index; however, some information (e.g., copyrighted material) is not publicly available to read or download through the Web site. All submissions, including copyrighted material, are available for inspection and copying at the OSHA Docket Office. You may also contact Larry Liberatore at the address below to obtain a copy of the ICR.

FOR FURTHER INFORMATION CONTACT: Larry Liberatore, Acting Director, Office of Small Business Assistance, Directorate of Cooperative and State Programs, OSHA, U.S. Department of Labor, Room N–3660, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–2220.

SUPPLEMENTARY INFORMATION:

I. Background

The Department of Labor, as part of its continuing effort to reduce paperwork and respondent (*i.e.*, employer) burden, conducts a preclearance process to provide the public with an opportunity to comment on proposed and continuing information collection requirements in accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)). This program ensures that information is in the desired format, reporting burden (time and costs) is minimal, collection instruments are clearly understood, and OSHA's estimate of the information collection burden is accurate. The Occupational Safety and Health Act of 1970 (the OSH Act) (29 U.S.C. 651 *et seq.*) authorizes information collection by employers as necessary or appropriate for enforcement of the Act or for developing information regarding the causes and prevention of occupational injuries, illnesses, and accidents (29 U.S.C. 657). The OSH Act also requires that OSHA obtain such information with minimum burden upon employers, especially those operating small businesses, and to reduce to the maximum extent feasible unnecessary duplication of efforts in obtaining information (29 U.S.C. 657).

Section 7(c)(1) of the OSH Act authorizes the Secretary of Labor to, ''with the consent of any State or political subdivision thereof, accept and use the services, facilities, and personnel of any agency of such State or subdivision with reimbursement.'' Section 21(C) of the Act authorizes the Secretary of Labor (Secretary) to, ''consult with and advise employers and employees * * * as to effective means of preventing occupational illnesses and injuries.''

Additionally, Section 21(d) of the OSH Act instructs the Secretary to ''establish and support cooperative agreements with the States under which employers subject to the Act may consult with State personnel with respect to the application of occupational safety and health requirements under the Act or under State plans approved under section 18 of the Act.'' This gives the Secretary authority to enter into agreements with the States to provide on-site consultation services, and establish rules under which employers may qualify for an inspection exemption. To satisfy the intent of these and other sections of the OSH Act, OSHA codified the terms that govern cooperative agreements between OSHA and State governments whereby State agencies provide on-site consultation services to private employers to assist them in complying with the requirements of the OSH Act. The terms were codified as the Consultation Program regulations (29 CFR Part 1908).

The Consultation Program regulations specify services to be provided, and practices and procedures to be followed by the State On-site Consultation Programs. Information collection requirements set forth in the On-site Consultation Program regulations are in two categories: State Responsibilities and Employer Responsibilities. Eight regulatory provisions require information collection activities by the State. The Federal government provides 90 percent of funds for on-site consultation services delivered by the States, which result in the information collection. Four requirements apply to employers and specify conditions for receiving the free consultation services.

II. Special Issues for Comment

OSHA has a particular interest in comments on the following issues:

- Whether the proposed information collection requirements are necessary for the proper performance of the Agency's functions, including whether the information is useful;
- The accuracy of OSHA's estimate of the burden (time and costs) of the information collection requirements, including the validity of the methodology and assumptions used;
- The quality, utility, and clarity of the information collected; and
- Ways to minimize the burden on employers who must comply; for example, by using automated or other technological information collection and transmission techniques.

III. Proposed Actions

OSHA is requesting that OMB extend its approval of the information collection requirements contained in the Standard on On-site Consultation Agreements (29 CFR part 1908). The Agency is requesting to increase its current burden hour estimate associated with this Program from 21,771 hours to 231,207 hours, a total increase of 209,436 hours. The increase is a result of the following:

- Previously, a large percentage (over 90%) of all On-site Consultation Programs visits were deemed to be limited in scope. Over half of all such visits are now comprehensive in nature due to the States continued emphasis on providing comprehensive advice on safety and health management systems.
- We had previously estimated that only visits that were comprehensive in nature would provide a written report. Now all visits, whether comprehensive or limited in scope provide a written report to the employer, in accordance with our Consultation Policies and Procedures Manual.
- We had previously estimated that it took only 0.5 hours to complete a written report. As we have received input from our stakeholders in updating the Consultation Program policies and procedures, our small employers requested specific guidelines and information in order to implement the recommended safety and health improvements noted during our On-site Consultation visits. A recent survey of our Consultation Projects indicated that approximately 7.5 hours are spent on these technical assistance reports (a range of 6–9 hours).

The Agency will summarize the comments submitted in response to this notice and will include this summary in the request to OMB.

Type of Review: Extension of a currently approved collection.

Title: Consultation Agreements (29 CFR part 1908).

OMB Number: 1218–0110.

Affected Public: State Government, Local or Tribal Government, Federal Government, Not-for-profit institutions, Business or other for-profits.

Number of Respondents: 27,854.

Frequency: Ranges from each visit to every other year.

Average Time per Response: Ranges from 5 minutes (.08 hour) to 7.5 hours.

Estimated Total Burden Hours: 231,207.

Estimated Cost (Operation and Maintenance): $0.

IV. Public Participation—Submission of Comments on This Notice and Internet Access to Comments and Submissions

You may submit comments in response to this document as follows: (1) Electronically at *http://www.regulations.gov*, which is the Federal eRulemaking Portal; (2) by facsimile (FAX); or (3) by hard copy. All comments, attachments, and other material must identify the Agency name and the OSHA docket number for the ICR (Docket No. OSHA–2008–0019). You may supplement electronic submissions by uploading document files electronically. If you wish to mail additional materials in reference to an electronic or facsimile submission, you must submit them to the OSHA Docket Office (see the section of this notice titled **ADDRESSES**). The additional materials must clearly identify your electronic comments by your name, date, and the docket number so the Agency can attach them to your comments.

Because of security procedures, the use of regular mail may cause a significant delay in the receipt of comments. For information about security procedures concerning the delivery of materials by hand, express delivery, messenger, or courier service, please contact the OSHA Docket Office at (202) 693–2350 (TTY (877) 889–5627).

Comments and submissions are posted without change at *http://www.regulations.gov*. Therefore, OSHA cautions commenters about submitting personal information such as social security numbers and date of birth. Although all submissions are listed in the *http://www.regulations.gov* index, some information (e.g., copyrighted material) is not publicly available to read or download through this Web site. All submissions, including copyrighted material, are available for inspection and copying at the OSHA Docket Office. Information on using the *http://www.regulations.gov* Web site to submit comments and access the docket is available at the Web site's ''User Tips'' link. Contact the OSHA Docket Office for information about materials not available through the Web site, and for assistance in using the Internet to locate docket submissions.

V. Authority and Signature

Edwin G. Foulke, Jr., Assistant Secretary of Labor for Occupational Safety and Health, directed the preparation of this notice. The authority for this notice is the Paperwork Reduction Act of 1995 (44 U.S.C. 3506 *et seq.*) and Secretary of Labor's Order No. 5–2007 (72 FR 31159).

Signed at Washington, DC, on June 23, 2008.

Edwin G. Foulke, Jr.

Assistant Secretary of Labor, for Occupational Safety and Health.

[FR Doc. E8–14671 Filed 6–27–08; 8:45 am]

BILLING CODE 4510–26–P

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

Records Schedules; Availability and Request for Comments

AGENCY: National Archives and Records Administration (NARA).

ACTION: Notice of availability of proposed records schedules; request for comments.

SUMMARY: The National Archives and Records Administration (NARA) publishes notice at least once monthly of certain Federal agency requests for records disposition authority (records schedules). Once approved by NARA, records schedules provide mandatory instructions on what happens to records when no longer needed for current Government business. They authorize the preservation of records of continuing value in the National Archives of the United States and the destruction, after a specified period, of records lacking administrative, legal, research, or other value. Notice is published for records schedules in which agencies propose to destroy records not previously authorized for disposal or reduce the retention period of records already authorized for disposal. NARA invites public comments on such records schedules, as required by 44 U.S.C. 3303a(a).

DATES: Requests for copies must be received in writing on or before July 30, 2008. Once the appraisal of the records is completed, NARA will send a copy of the schedule. NARA staff usually

prepare appraisal memorandums that contain additional information concerning the records covered by a proposed schedule. These, too, may be requested and will be provided once the appraisal is completed. Requesters will be given 30 days to submit comments.

ADDRESSES: You may request a copy of any records schedule identified in this notice by contacting the Life Cycle Management Division (NWML) using one of the following means:

Mail: NARA (NWML), 8601 Adelphi Road, College Park, MD 20740–6001.

E-mail: requestschedule@nara.gov.

FAX: 301–837–3698.

Requesters must cite the control number, which appears in parentheses after the name of the agency which submitted the schedule, and must provide a mailing address. Those who desire appraisal reports should so indicate in their request.

FOR FURTHER INFORMATION CONTACT: Laurence Brewer, Director, Life Cycle Management Division (NWML), National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740–6001. *Telephone:* 301–837–1539. *E-mail: records.mgt@nara.gov.*

SUPPLEMENTARY INFORMATION: Each year Federal agencies create billions of records on paper, film, magnetic tape, and other media. To control this accumulation, agency records managers prepare schedules proposing retention periods for records and submit these schedules for NARA's approval, using the Standard Form (SF) 115, Request for Records Disposition Authority. These schedules provide for the timely transfer into the National Archives of historically valuable records and authorize the disposal of all other records after the agency no longer needs them to conduct its business. Some schedules are comprehensive and cover all the records of an agency or one of its major subdivisions. Most schedules, however, cover records of only one office or program or a few series of records. Many of these update previously approved schedules, and some include records proposed as permanent.

The schedules listed in this notice are media neutral unless specified otherwise. An item in a schedule is media neutral when the disposition instructions may be applied to records regardless of the medium in which the records are created and maintained. Items included in schedules submitted to NARA on or after December 17, 2007, are media neutral unless the item is limited to a specific medium. (See 36 CFR 1228.24(b)(3).)

No Federal records are authorized for destruction without the approval of the Archivist of the United States. This approval is granted only after a thorough consideration of their administrative use by the agency of origin, the rights of the Government and of private persons directly affected by the Government's activities, and whether or not they have historical or other value.

Besides identifying the Federal agencies and any subdivisions requesting disposition authority, this public notice lists the organizational unit(s) accumulating the records or indicates agency-wide applicability in the case of schedules that cover records that may be accumulated throughout an agency. This notice provides the control number assigned to each schedule, the total number of schedule items, and the number of temporary items (the records proposed for destruction). It also includes a brief description of the temporary records. The records schedule itself contains a full description of the records at the file unit level as well as their disposition. If NARA staff has prepared an appraisal memorandum for the schedule, it too includes information about the records. Further information about the disposition process is available on request.

Schedules Pending

1. Department of Agriculture, Farm Service Agency (N1–145–05–1, 4 items, 4 temporary items). Records relating to tobacco programs involving loss assistance, direct payment, transition payment, and transition payment assessments. Included are eligibility and appeal records, payment registers, individual producer folders, payment certification, compliance records, base quota levels, proof of ownership, tobacco assessment statements, invoices, collection records, and appeals. The proposed disposition instructions are limited to paper records.

2. Department of Agriculture, Farm Service Agency (N1–145–05–2, 3 items, 3 temporary items). Records relating to emergency relief administered under the Crop Disaster Program and Disaster Assistance Program. The files include eligibility forms, reports, payment records, nonpayment and overpayment registers, crop information, and appeals. The proposed disposition instructions are limited to paper records.

3. Department of Agriculture, Food Safety and Inspection Service (N1–462–04–12, 1 item, 1 temporary item). Master file associated with an electronic information system used to test animal tissues for antimicrobial residues. The proposed disposition instructions are limited to electronic records.

4. Department of Homeland Security, National Protection Programs Directorate (N1–563–08–14, 1 item, 1 temporary item). Master file associated with an electronic information system containing asset and facility data used to conduct vulnerability and threat assessments. More complete information on facilities can be found in the United States Census Bureau Economic Census and business surveys which are scheduled for permanent retention.

5. Department of the Interior, United States Geological Survey (N1–57–08–1, 69 items, 68 temporary items). Records associated with such administrative housekeeping functions as administrative management and support, information resources management, telecommunications, security and protective services, and human capital management. Included are information technology files, computer security program support records, library management records, physical fitness program records, learning management system records, and natural science network program records. Proposed for permanent retention is the correspondence control system for correspondence received in and sent from the Office of the Director. The proposed disposition instructions are limited to electronic records for a number of items and to paper records for other items.

6. Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives (N1–436–08–11, 1 item, 1 temporary item). Master file for a discontinued electronic information system used to record threats against agents and persons of interest.

7. Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives (N1–436–08–13, 1 item, 1 temporary item). Master file of an electronic information system which tracks the hiring process for investigators and special agents.

8. Department of Justice, Criminal Division (N1–60–08–11, 2 items, 2 temporary items). Case files and an electronic tracking system for the International Prisoner Transfer Program. The program reviews requests for transfer of prisoners to serve sentences in their home countries under treaty agreements.

9. Department of Justice, Criminal Division (N1–60–08–15, 1 item, 1 temporary item). Master file for an electronic information system which tracks requests for agency authorization of electronic surveillance activities.

10. Department of Justice, Criminal Division (N1–60–08–16, 1 item, 1 temporary item). Master file for an electronic information system which tracks requests for witness immunity in criminal cases.

11. Department of Justice, Federal Bureau of Investigation (N1–65–08–7, 4 items, 4 temporary items). Master file, outputs, management reports, and related records of the Foreign Disclosure Data Capture System.

12. Department of Justice, Federal Bureau of Investigation (N1–65–08–9, 3 items, 3 temporary items). Master file and source documents of an electronic information system which documents terrorist watch list encounters.

13. Department of Justice, National Drug Intelligence Center (N1–523–08–1, 2 items, 2 temporary items). Master files and reports associated with the Real-time Analytical Intelligence Database (RAID), which is used for document exploitation and analysis.

14. Department of Justice, National Drug Intelligence Center (N1–523–08–2, 1 item, 1 temporary item). Schedule is an exception to General Records Schedule 18, Items 1–5. Records relating to the possession, handling, transfer, and destruction of classified information.

15. Department of State, Bureau of Diplomatic Security (N1–59–07–11, 19 items, 18 temporary items). Files documenting all aspects of cyber security programs, such as activities relating to cyber security threat assessment and response, computer security technical standards and guidelines, and cyber threat research and analysis. Included are inputs, master file, and outputs for an electronic computer security incident tracking system and an electronic computer security resource reporting system. Proposed for permanent retention are cyber threat research reports. The proposed disposition instructions are limited to paper records for certain items and to electronic records for other items.

16. Department of State, Bureau of Near East Affairs (N1–59–08–8, 5 items, 3 temporary items). Records maintained by the Office of Regional Affairs, including Congressional correspondence, munitions control case files, and National Disclosure Policy Committee records. Proposed for permanent retention are program files and records relating to the Multinational Force and Observers. The proposed disposition instructions are limited to paper records for permanent items.

17. Department of State, Overseas Buildings Operations (N1–59–08–2, 12 items, 11 temporary items). Project planning files and associated records documenting all aspects of long-range facility planning and project development activities, including capital construction projects, major renovations, and upgrade projects for overseas facilities. Included are the inputs, database, and outputs for an electronic project management tracking system. Proposed for permanent retention is the annual report on the Department's long-range overseas building plans. The proposed disposition instructions are limited to paper records for selected items, including the long-range overseas building plan, cost estimate project files, capital projects files, real property files, and travel vouchers, and to electronic records for the project management database.

18. Department of State, Overseas Buildings Operations (N1–59–08–5, 18 items, 4 temporary items). Dedication speeches, photographs documenting properties lacking historical significance and routine aspects of construction progress, and outputs from an electronic information system. Proposed for permanent retention are stewardship reports, bureau newsletters, photographs of culturally significant properties, representational properties, and construction progress for historically significant buildings, and the master file, database index, and documentation for the digital media photo library. The proposed disposition instructions are limited to paper records for stewardship reports and bureau newsletters, and to electronic records for digital media photo library records.

19. Department of Transportation, Federal Highway Administration (N1–406–08–3, 7 items, 7 temporary items). Records relating to programs of the Office of Professional and Corporate Development and the National Highway Institute, including session records files, Eisenhower Transportation Fellowship Program grant files, Garrett A. Morgan Technology and Transportation Education grant files, transportation education development pilot program grant files, local technical assistance program files, tribal technical assistance program files, and national program review and evaluation files. Permanent policy records, directives and reports are scheduled in other Federal Highway Administration schedules.

20. Department of Transportation, Federal Railroad Administration (N1–399–08–5, 2 items, 2 temporary items). Master file and outputs associated with computer models and expert systems used in the evaluation, scoring, or interpretation of data relating to the American railroad system.

21. Federal Communications Commission, Media Bureau (N1–173–08–8, 2 items, 2 temporary items). Outputs and master file for an electronic information system containing cable price survey data used to publish an annual report on average rates for cable service and equipment.

22. National Aeronautics and Space Administration, Agency-wide (N–255–07–2, 5 items, 5 temporary items). Records relating to criminal investigations and other law enforcement actions, including incident case files, routine case files, and background material.

23. Nuclear Regulatory Commission, Office of Human Resources (N1–431–08–9, 2 items, 2 temporary items). Electronic databases used to store and manage information about the skill sets of the agency's employees.

24. Nuclear Regulatory Commission, Office of Small Business and Civil Rights (N1–431–08–10, 4 items, 4 temporary items). Master file and outputs of an electronic information system used to track the agency's progress toward equal employment opportunity goals.

Dated: June 24, 2008.

Michael J. Kurtz,

Assistant Archivist for Records Services—Washington, DC.

[FR Doc. E8–14776 Filed 6–27–08; 8:45 am]

BILLING CODE 7515–01–P

NATIONAL ENDOWMENT FOR THE ARTS

RIN 3135AA22

Privacy Act of 1974: Republication of Notice of Systems of Records

AGENCY: National Endowment for the Arts.

ACTION: Notice of republication of systems of records, proposed systems of records, and new routine uses.

SUMMARY: The National Endowment for the Arts (Endowment) is publishing a notice of its systems of records with descriptions of the systems and the ways in which they are maintained, as required by the Privacy Act of 1974, 5 U.S.C. 552a(e)(4). This notice reflects administrative changes that have been made at the Endowment since the last publication of a notice of its systems of records. This notice also will enable individuals who wish to access information maintained in Endowment systems to make accurate and specific requests for such information.

DATES: In accordance with 5 U.S.C. 552a(r), on June 19, 2008, the

Endowment filed a report as to the changes proposed in this notice with the Committee on Oversight and Government Reform of the House of Representatives; the Senate Committee on Homeland Security and Governmental Affairs; and the Administrator, Office of Information and Regulatory Affairs, Office of Management and Budget (OMB). The proposed changes to the Endowment's systems of records will become effective 40 days from the date the report was submitted to Congress and the OMB, or 30 days from the date of this publication in the **Federal Register**, whichever is later.

ADDRESSES: Karen Elias; Acting General Counsel, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Room 518; Washington, DC 20506; telefax at (202) 682–5572 or by electronic mail at *eliask@arts.endow.gov*.

FOR FURTHER INFORMATION CONTACT: Karen Elias, (202) 682–5418.

SUPPLEMENTARY INFORMATION: In accordance with 5 U.S.C. 552a(e)(4), the Endowment is today republishing a notice of the existence and character of its systems of records in order to make available in one place in the **Federal Register** the most up-to-date information regarding these systems. This republication has become necessary to reflect administrative changes, such as agency restructuring and the increased use of electronic technology, that have been made at the Endowment since the last publication of a notice of its systems of records.

Statement of General Routine Uses

The following general routine uses are incorporated by this reference into each system of records set forth herein, unless specifically limited in the system description.

1. A record may be disclosed as a routine use to a Member of Congress or his or her staff, when the Member of Congress or his or her staff requests the information on behalf of and at the request of the individual who is the subject of the record.

2. A record may be disclosed as a routine use to designated officers and employees of other agencies and departments of the Federal government having an interest in the subject individual for employment purposes (including the hiring or retention of any employee; the issuance of a security clearance; the letting of a contract; or the issuance of a license, grant, or other benefit by the requesting agency) to the extent that the information is relevant and necessary to the requesting agency's decision on the matter involved.

3. In the event that a record in a system of records maintained by the Endowment indicates, either by itself or in combination with other information in the Endowment's possession, a violation or potential violation of the law (whether civil, criminal, or regulatory in nature, and whether arising by statute or by regulation, rule, or order issued pursuant thereto), that record may be referred, as a routine use, to the appropriate agency, whether Federal, state, local, or foreign, charged with the responsibility of investigating or prosecuting such violation, or charged with enforcing or implementing the statute, rule, regulation, or order issued pursuant thereto. Such referral shall be deemed to authorize: (1) Any and all appropriate and necessary uses of such records in a court of law or before an administrative board or hearing; and (2) Such other interagency referrals as may be necessary to carry out the receiving agencies' assigned law enforcement duties.

4. The names, Social Security numbers, home addresses, dates of birth, dates of hire, quarterly earnings, employer identifying information, and State of hire of employees may be disclosed as a routine use to the Office of Child Support Enforcement, Administration for Children and Families, Department of Health and Human Services, as follows:

(a) For use in the Federal Parent Locator System (FPLS) and the Federal Tax Offset System for the purpose of locating individuals to establish paternity, establishing and modifying orders of child support, identifying sources of income, and for other child support enforcement actions as required by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Pub. L. 104–193);

(b) For release to the Social Security Administration for the purpose of verifying Social Security numbers in connection with the operation of the FPLS; and

(c) For release to the U.S. Department of the Treasury (Treasury) for the purpose of payroll, savings bonds, and other deductions; administering the Earned Income Tax Credit Program (Section 32, Internal Revenue Code of 1986); and verifying a claim with respect to employment on a tax return, as required by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Pub. L. 104–193).

5. A record may be disclosed as a routine use in the course of presenting evidence to a court, magistrate, or administrative tribunal of appropriate jurisdiction, and such disclosure may include disclosures to opposing counsel in the course of settlement negotiations.

6. Information from any system of records may be used as a data source for management information, for the production of summary descriptive statistics and analytical studies in support of the function for which the records are collected and maintained, or for related personnel management functions or manpower studies. Information may also be disclosed to respond to general requests for statistical information (without personal identification of individuals) under the Freedom of Information Act.

7. A record may be disclosed as a routine use to a contractor, expert, or consultant of the Endowment (or an office within the Endowment) when the purpose of the release is to perform a survey, audit, or other review of the Endowment's procedures and operations.

8. A record from any system of records may be disclosed as a routine use to the National Archives and Records Administration in records management inspections conducted under authority of 44 U.S.C. 2904 and 2906.

9. A record may be disclosed to a contractor, grantee, or other recipient of Federal funds when the record to be released reflects serious inadequacies with the recipient's personnel, and disclosure of the record is for the purpose of permitting the recipient to effect corrective action in the government's best interests.

10. A record may be disclosed to a contractor, grantee, or other recipient of Federal funds when the recipient has incurred an indebtedness to the government through its receipt of government funds, and release of the record is for the purpose of allowing the debtor to effect a collection against a third party.

11. Information in a system of records may be disclosed as a routine use to the Treasury; other Federal agencies; ''consumer reporting agencies'' (as defined in the Fair Credit Reporting Act, 15 U.S.C. 168 la(f), or the Federal Claims Collection Act of 1966, 31 U.S.C. 3701(a)(3)); or private collection contractors for the purpose of collecting a debt owed to the Federal government as provided in the regulations promulgated by the Endowment and published at 45 CFR 1150.

Table of Contents

This document gives notice that the following Endowment systems of records are in effect:

NEA–1

SYSTEM NAME:

Panelists Automated Panel Bank System (APBS).

SYSTEM LOCATION:

Information & Technology Management Division, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals whom the Endowment may ask or has asked to serve on application review panels.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, telephone number, Social Security number, and other data concerning potential and actual panelists, including information about areas of artistic expertise and prior panel service.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To provide a central repository for information about art experts who could be or have been called upon to serve on application review panels and make recommendations on grant awards.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system is used for identification of panelists and their activities in this capacity. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in an electronic database.

RETRIEVABILITY:

Records in this system are retrieved by name or Social Security number.

SAFEGUARDS:

This system is maintained in a locked computer room that can be accessed only by authorized employees of the Endowment or the National Endowment for the Humanities. Access to records in this system is further controlled by password, with different levels of modification rights assigned to individuals and offices at the Endowment based on their specific job functions.

RETENTION AND DISPOSAL:

Records in this system are maintained and updated on a continuing basis, as new information is received by the Office of Guidelines and Panel Operations. Endowment staff will periodically request updated information from individuals who are registered in the APBS. Endowment staff will also periodically purge the APBS of records pertaining to individuals who have been in the APBS for three to five years, but who have not served on a panel or had their records updated. Records will be removed only with the concurrence of the appropriate discipline directors.

SYSTEM MANAGER(S) AND ADDRESS:

Chief Information Officer, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, as well as from Endowment employees and other individuals nominating potential panelists.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–2

SYSTEM NAME:

Panelists, Paper Files.

SYSTEM LOCATION:

1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals whom the Endowment may ask or has asked to serve on application review panels.

CATEGORIES OF RECORDS IN THE SYSTEM:

Additional information about potential and actual panelists. This system includes materials such as resumes and panelist profile forms.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To supplement the APBS with information well suited for maintenance in hard copy form.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system is used for identification of panelists and their activities in this capacity. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in filing cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name.

SAFEGUARDS:

Rooms containing the records in this system are kept locked during non-working hours.

RETENTION AND DISPOSAL:

The Office of Guidelines and Panel Operations maintains paper files that are expanded as individuals, or discipline directors who are proposing individuals for service on panels, submit resumes. Resumes and profile forms are removed from these files only when they are replaced by more recent information or when individuals are purged from the APBS, as described above. Discipline offices may also maintain paper files about individuals who have served on panels for their divisions. The Endowment's Finance

Office maintains copies of panelist contracts. Each Discipline office destroys its panelist contracts after the conclusion of the panel.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Guidelines and Panel Operations, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, as well as from Endowment employees and other individuals nominating potential panelists.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–3

SYSTEM NAME:

National Council on the Arts (Council).

SYSTEM LOCATION:

Office of Council Operations, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Past and present members of the National Council on the Arts.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, telephone number, Social Security number, and other information concerning past and present members of the Council, such as press clippings and correspondence.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To provide a central repository for information about past and present members of the Council.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system is used for identification of members of the Council and their activities in this capacity. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained both electronically and in paper files kept in file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name.

SAFEGUARDS:

Rooms containing the paper records in this system are kept locked during non-working hours. The electronic records in this system are maintained on the office hard drive which is password-protected.

RETENTION AND DISPOSAL:

Records in this system are maintained on an indefinite basis for reference purposes.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Council Operations, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, as well as from Endowment employees involved with the activities of the Council.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–4

SYSTEM NAME:

Grants, Grants Management System (GMS).

SYSTEM LOCATION:

Information and Technology Management Division, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have applied to the Endowment for financial assistance in the form of grants.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, telephone number, date of birth, Social Security number, identification numbers assigned by the Endowment, National Standard and agency-established codes, and grant action dates. Financial and banking information is not maintained in the GMS.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To provide a central repository for information about grant applicants, recipients, and awards.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system may be used for general administration of the grant review and award process, statistical research, and Congressional oversight and analysis of trends. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in an electronic database.

RETRIEVABILITY:

Records in this system are retrieved by name, application number, grant number, or constituent identification number.

SAFEGUARDS:

This system is maintained in a locked computer room that can be accessed only by authorized employees of the Endowment and the National Endowment for the Humanities. Access to records in this system is further controlled by password, with different levels of modification rights assigned to individuals and offices at the Endowment based on their specific job functions.

RETENTION AND DISPOSAL:

Records in this system are maintained on an indefinite basis for reference purposes.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Grants and Contracts and/or Director of Information and Technology Management, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, as well as from Endowment employees involved in the administration of grants.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–5

SYSTEM NAME:

Grants, Paper Files.

SYSTEM LOCATION:

1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have applied to the Endowment for financial assistance in the form of grants.

CATEGORIES OF RECORDS IN THE SYSTEM:

Additional information concerning Endowment decisions to award grants, disburse funds, and close out grants. Materials include grant applications, samples of work, award notification letters and any approved amendments, payment requests, correspondence, and final reports.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*)

PURPOSE(S):

To supplement the GMS with information well suited for maintenance in hard copy form.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system may be used for general administration of the grant review and award process, statistical research, and Congressional oversight and analysis of trends. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name, application number, or grant number.

SAFEGUARDS:

Rooms containing records in this system are kept locked during non-working hours.

RETENTION AND DISPOSAL:

The Grants and Contracts Office maintains grant paper files, which are retired and destroyed after seven years. Discipline offices also maintain paper files about grants in their divisions. When the final descriptive and financial status reports are received and accepted, the discipline office files are retired first to the Federal Records Center, and then to the National Archives and Records Administration.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Grants and Contracts and/or Director of Administrative Services, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, as well as from Endowment employees involved in the administration of grants.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–6

SYSTEM NAME:

Contracts and Cooperative Agreements.

SYSTEM LOCATION:

1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have entered into administrative contracts or cooperative agreements with the Endowment.

CATEGORIES OF RECORDS IN THE SYSTEM:

Relevant information concerning the contract or cooperative agreement, such as copies of the signed document and requests for payment/invoices.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To maintain a record of contracts and cooperative agreements entered into by the Endowment.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system may be used for General Accounting Office audits and Congressional oversight. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

The Grants and Contracts Office maintains records in this system in an electronic database, word processing files, and file cabinets. The Finance office also maintains paper files in this system in file cabinets.

RETRIEVABILITY:

Database files are retrieved by name or by contract or cooperative agreement number. Word processing files are retrieved by contract or cooperative agreement number. Paper files maintained by the Grants and Contracts Office are retrieved by name. Paper files maintained by the Finance Office are retrieved by name, Social Security number, or vendor number.

SAFEGUARDS:

Database and word processing files are protected by a password available to Grants and Contracts Office staff. Rooms containing paper files are kept locked during non-working hours.

RETENTION AND DISPOSAL:

Database and word processing files are maintained on an indefinite basis for reference purposes. Paper files maintained by the Grants and Contracts Office are shipped to the National Archives and Records Administration after the contract or cooperative agreement is physically completed, and they are destroyed six years and three months later. Paper files maintained by the Finance Office are also maintained for six years and three months, and then destroyed.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Grants and Contracts and/or Director of Finance/CFO, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, as well as from Endowment employees involved in contract development, administration, and execution.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–7

SYSTEM NAME:

Payroll/Personnel System.

SYSTEM LOCATION:

1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Employees of the Endowment.

CATEGORIES OF RECORDS IN THE SYSTEM:

Payroll and personnel information, such as time and attendance data, statements of earnings and leave, training data, wage and tax statements, and payroll and personnel transactions. This system includes data that is also maintained in the Endowment's official personnel folders, which are managed in accordance with Office of Personnel Management (OPM) regulations. The OPM has given notice of its system of records covering official personnel folders in OPM/GOVT–1.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*); Federal Personnel Manual and Treasury Fiscal Requirements Manual.

PURPOSE(S):

To document the Endowment's personnel processes and to calculate and process payroll.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system may be transmitted to the U.S. Departments of Agriculture and Treasury, and employee-designated financial institutions to effect issuance of paychecks to employees and distributions of pay according to employee directions for authorized purposes. Data in this system may also be used to prepare payroll, meet government recordkeeping and reporting requirements, and retrieve and apply payroll and personnel information as required for agency needs. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Electronic records in this system are maintained off-site by the Department of Agriculture's National Finance Center (NFC) but can be accessed by individuals in the Office of Human Resources and by timekeepers for each of the Endowment's offices. Paper records generated through the NFC are maintained in file cabinets by the Office of Human Resources. The Office of Human Resources also maintains paper records of security folders, training folders, and health records in file cabinets. Office timekeepers maintain paper time and attendance records for three years in file cabinets in their offices. Discipline offices also may use file cabinets to maintain paper records concerning performance reviews and other personnel actions.

RETRIEVABILITY:

Records in this system are retrieved by name, Social Security number, or date of birth.

SAFEGUARDS:

Access to the electronic records in this system is controlled by password on the limited number of Endowment computers that can be used to draw information from the NFC. File cabinets containing the paper records in this system are kept locked.

RETENTION AND DISPOSAL:

The Office of Human Resources maintains paper records in this system in accordance with the General Services Administration's General Records Schedule 2. Division offices may maintain paper records concerning performance reviews and other personnel actions in their divisions for the duration of an individual's employment with the Endowment or another indefinite period.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Human Resources, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, as well as from Endowment employees involved in the administration of personnel and payroll processes.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–8

SYSTEM NAME:

Government Purchasing Card Holders.

SYSTEM LOCATION:

1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Endowment employees who have been issued credit cards to make official purchases.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, office, account number, and spending limits.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To maintain a record of Endowment employees authorized to use government purchasing cards.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

See the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

The Grants and Contracts Office maintains records in this system in an electronic database and in paper records in file cabinets. The Finance Office maintains additional paper records in this system in file cabinets.

RETRIEVABILITY:

Electronic records in this system are retrieved by name, office, account number, or spending limit. Paper records in this system are retrieved by name or social security number.

SAFEGUARDS:

Access to electronic records in this system is controlled by a password, which is available only to the Coordinator of Contracts and Cooperative Agreements. Rooms containing paper records in this system are kept locked during non-working hours.

RETENTION AND DISPOSAL:

Records in this system are maintained on an indefinite basis for reference purposes. Records concerning individuals not issued credit cards are destroyed.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Grants and Contracts and/or Director of Finance/CFO, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, as well as from Endowment employees involved in administration and oversight of government purchasing cards.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–9

SYSTEM NAME:

DELPHI (the Department of Transportation's Oracle Federal Financial System that cross-services the Endowment).

SYSTEM LOCATION:

Information and Technology Management Division, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Grant recipients, Endowment employees, vendors, and other individuals involved in financial transactions with the Endowment.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, Social Security number, object class, category code, discipline code, office code, sub-object class code, bank information, Common Accounting Number, Council meeting number, document number, schedule number, tax/employee identification number, vendor number, funding fiscal year, transaction processing dates, and fund type.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To promote effective fund control and financial management; to provide a central repository for information about the Endowment's financial transactions; and to enable the Budget and Finance offices to share a common system for entering allocation, commitment, and obligation information.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

See the list of General Routine Uses contained in the Preliminary Statement. In addition, this system interfaces with the Grants Management System (GMS) (see NEA–4) and extracts data from a magnetic tape containing Payroll/Personnel information generated by the Department of Agriculture's National Finance Center (NFC).

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in computer processible storage media.

RETRIEVABILITY:

Records in this system are retrieved by name, Social Security number, tax/employee identification number, or vendor number.

SAFEGUARDS:

This system is maintained in a locked computer room that can be accessed only by authorized employees of the Endowment and the National Endowment for the Humanities. Access to records in this system is further controlled by password, available to the Budget, Finance, and Information and Technology Management Offices. Different levels of modification rights are assigned to these three offices and Endowment employees therein, based on their specific job functions.

RETENTION AND DISPOSAL:

Records in this system are maintained on an indefinite basis for reference purposes.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Finance/CFO, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system and from Endowment employees who are involved with the Endowment's fund control and financial management.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–10

SYSTEM NAME:

Finance, Subsidiary Tracking Systems.

SYSTEM LOCATION:

Finance Office, 1100 Pennsylvania Avenue, Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Grant recipients, Endowment employees, vendors, and other individuals involved in financial transactions with the Endowment.

CATEGORIES OF RECORDS IN THE SYSTEM:

Files contain payment information for processing all payments.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To supplement DELPHI with electronic records that cannot be maintained within that system.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

See the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in electronic databases.

RETRIEVABILITY:

Records in the Secure Payment System (SPS) are retrieved by name, Social Security number, taxpayer identification number, or supplier number.

SAFEGUARDS:

Access to records in this system is controlled by password.

RETENTION AND DISPOSAL:

Records in this system are maintained on an indefinite basis for reference purposes.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Finance/CFO, National Endowment for the Arts, 1100

Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system and from Endowment employees who are involved with the management of these subsidiary tracking systems.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–11

SYSTEM NAME:

Finance, Paper Files.

SYSTEM LOCATION:

Finance Office, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Grant recipients, Endowment employees, vendors, and other individuals involved in financial transactions with the Endowment.

CATEGORIES OF RECORDS IN THE SYSTEM:

(1) The Accounts Receivables Files contain data concerning the type and amount of debts owed to the Endowment, as well as debt collection efforts. These files contain, as appropriate, the name and address of the debtor; taxpayer's identification number; basis of the debt; date a debt became delinquent; amounts accrued for interest, penalties, administrative costs, and payment on account; date the debt was referred to the Treasury for offset; and basis for termination of debt. These files also include copies of bills for collection; invoices; correspondence between the Endowment and the debtor relating to the debt; and documents required to refer accounts to the Treasury, other Federal agencies, or private collection contractor for debt collection.

(2) The Donations to Gift Fund Files contain copies of checks and letters submitted by donors.

(3) The 1099 Files contain data concerning expenses over $600 per calendar year that are reported to the Internal Revenue Service.

(4) The Travel Credit Cards Files contain applications for credit cards and credit score reports.

(5) The Travel Authorizations Files contain employee data for travel duty.

(6) The Travel Vouchers Files contain employee expense data from travel duty.

(7) The Employee Reimbursement Files contain data concerning local taxi and similar reimbursements to Endowment employees for authorized Endowment expenses.

(8) The Star Awards Files contain data concerning awards for Endowment employees.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*). In addition, the maintenance of debt collection records in the Accounts Receivables Files is authorized by the Debt Collection Act of 1982, Public Law 97–365; the Cash Management Improvement Act Amendments of 1992; and the Debt Collection Improvement Act of 1996 (Pub. L. 104–134).

PURPOSE(S):

To supplement DELPHI with information well suited for maintenance in hard copy form.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

See the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name, Social Security number, taxpayer identification number, or contract number of the employee, contractor, or grantee.

SAFEGUARDS:

Rooms containing the records in this system are kept locked during non-working hours.

RETENTION AND DISPOSAL:

The retention and disposal of debt collection records in the Accounts Receivables Files are covered by the General Services Administration's General Records Schedule 6. Other records in this system are retained on site or in storage for six years and three months, and then destroyed.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Finance/CFO, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system, Endowment employees, creditor agencies, collection agencies, credit bureaus, Federal employing agencies, and other Federal agencies furnishing identifying information.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–12

SYSTEM NAME:

Equal Employment Opportunity Complaint Case Files.

SYSTEM LOCATION:

Civil Rights Office, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Endowment employees and applicants for employment at the Endowment who have filed formal complaints of discrimination against the Endowment.

CATEGORIES OF RECORDS IN THE SYSTEM:

Relevant information concerning the complaint of discrimination, such as correspondence and documentation concerning the filing of the complaint and stages leading to its disposition.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.).*

PURPOSE(S):

To enable the Endowment to investigate and adjudicate internal complaints of discrimination.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system may be disclosed as necessary to enforce or implement the statute, rule, regulation, or order under which the charge of discrimination has been filed. This authorization includes disclosures of data to a Federal, state, or local agency charged with the responsibility of investigating, enforcing, or implementing such a statute, rule, regulation, or order. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained on computer diskettes and in file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name.

SAFEGUARDS:

Diskettes are kept in a locked file. Paper files are kept in a locked file cabinet.

RETENTION AND DISPOSAL:

Complaint files are destroyed four years after resolution of the case.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Civil Rights, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system and from Endowment employees who are involved with the claim or proceeding.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–13

SYSTEM NAME:

Civil Rights Complaint Case Files.

SYSTEM LOCATION:

Civil Rights Office, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have filed formal complaints of discrimination against the Endowment. However, this system does not include complaints made by either Endowment employees or applicants for employment at the Endowment, which are covered as described above.

CATEGORIES OF RECORDS IN THE SYSTEM:

Relevant information concerning the complaint of discrimination, including correspondence and documentation concerning the filing of the complaint and stages leading to its disposition.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE(S):

To enable the Endowment to investigate and adjudicate external complaints of discrimination.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system may be disclosed as necessary to enforce or implement the statute, rule, regulation, or order under which the charge of discrimination has been filed. This authorization includes disclosures of data to a Federal, state, or local agency charged with the responsibility of investigating, enforcing, or implementing such a statute, rule, regulation, or order. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained on computer diskettes and in file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name or a control number assigned to each external complaint of discrimination.

SAFEGUARDS:

Diskettes are kept in a locked file. Paper files are kept in a locked file cabinet.

RETENTION AND DISPOSAL:

Complaint files are destroyed four years after resolution of the case.

SYSTEM MANAGER(S) AND ADDRESS:

Director of Civil Rights, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system and from Endowment employees who are involved with the claim or proceeding.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–14

SYSTEM NAME:

Office of the Inspector General Investigative Files.

SYSTEM LOCATION:

Office of the Inspector General, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals and entities who are or have been the subject of investigations by the Office of the Inspector General, or who provide information in connection with such investigations. These individuals include, but are not limited to, former and present Endowment employees; former and present Endowment grant recipients; former and present contractors and subcontractors, and their employees; former and present consultants; and other individuals and entities that had, have, or are seeking to obtain business relationships with the Endowment.

CATEGORIES OF RECORDS IN THE SYSTEM:

Correspondence relevant to the investigation; working papers of the staff, investigative notes, internal staff memoranda, and other documents and records relating to the investigation; information about criminal, civil, or administrative referrals; information provided by subjects of the investigation, individuals with whom the subjects are associated, complainants, or witnesses; information provided by Federal, State, or local governmental investigative or law enforcement agencies, or other organizations; copies of subpoenas issued during the investigation; and opening reports, progress reports, and closing reports, with recommendations for corrective action.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Inspector General Act of 1978, as amended (5 U.S.C. app. 3).

PURPOSE(S):

To maintain files of investigative and reporting activities carried out by the Office of the Inspector General.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Data in this system may be disclosed to any source, either private or governmental, to the extent necessary to secure from such source information relevant to, and sought in furtherance of, a legitimate investigation or audit.

Data in this system may also be disclosed to the Office of the Inspector General's or the Endowment's legal representative, including the U.S. Department of Justice and other outside legal counsel, when the Office of the Inspector General or the Endowment is a party in actual or anticipated litigation or has an interest in such litigation. See also the list of General Routine Uses contained in the Preliminary Statement.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name, report number, or chronological ordering.

SAFEGUARDS:

Work papers for allegation and other investigative reviews conducted by or for the Office of the Inspector General are kept in a locked file cabinet. All records in this system are kept in rooms that are locked during non-working hours and are accessible to the Inspector General only.

RETENTION AND DISPOSAL:

Records in this system are maintained on-site until eligible for destruction. Workpapers used in evaluating grantees' audit reports and financial statements are destroyed on a three-year cycle. Workpapers and correspondence prepared and/or obtained during the clearance process of audit recommendations are destroyed on a six-year cycle from the date that the recommendations are cleared. All other records in this system are destroyed on a seven-year cycle.

SYSTEM MANAGER(S) AND ADDRESS:

Inspector General, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

The major part of this system is exempted from this requirement pursuant to 5 U.S.C. 552a(j)(2) or (k)(2). To the extent that this system is not subject to exemption, it is subject to access. A determination as to exemption shall be made at the time a request for access is received. Access requests must be sent to the Office of the General Counsel in accordance with the procedures published at 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

The major part of this system is exempted from this requirement pursuant to 5 U.S.C. 552a(j)(2) or (k)(2). To the extent that this system is not subject to exemption, it is subject to access and contest. A determination as to exemption shall be made at the time a request for access is received. Access requests must be sent to the Office of the General Counsel in accordance with the procedures published at 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals who are covered by the system, as well as from individuals with whom the subjects are associated; Federal, State, or local governmental investigative or law enforcement agencies; and other organizations.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

This system is exempted from 5 U.S.C. 552a except subsections (b); (c)(1) and (2); (e)(4)(A) through (F); (e)(6), (7), (9), (10), and (11); and (i) under 552a(j)(2) to the extent that the system pertains to enforcement of criminal laws. This system is exempted from 5 U.S.C. 552a(c)(3); (d); (e)(1); (e)(4)(G), (H), and (1); and (f) under 5 U.S.C. 552a(k)(2) to the extent that the system consists of investigatory material compiled for law enforcement purposes, other than material within the scope of the exemption at 5 U.S.C. 552a(j)(2). These exemptions are contained in 45 CFR Part 1159.

NEA–15

SYSTEM NAME:

Senate Nomination Files—National Council on the Arts

SYSTEM LOCATION:

Office of General Counsel, 1100 Pennsylvania Avenue, NW., Suite 518, Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Members of the National Council on the Arts (NCA).

CATEGORIES OF RECORDS IN THE SYSTEM:

Confidential Financial Disclosure Reports (SF–450), and clearance letters to the U.S. Senate for nominees to the NCA.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*) 5 CFR 2634.901 *et seq.*

PURPOSE(S):

To maintain a record of the members of the NCA's financial disclosure reports upon nomination.

ROUTINE USES:

Data in this system is used by the Designated Agency Ethics Officer only.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records in this system are maintained in paper format in locked file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name.

SAFEGUARDS:

This system is maintained in a locked file cabinet within an office that is locked during non-business hours.

RETENTION AND DISPOSAL:

Records in this system are maintained for a period of six years after the member rotates off of the NCA.

SYSTEM MANAGER(S) AND ADDRESS:

Designated Agency Ethics Officer, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–16

SYSTEM NAME:

Jazz Masters Recipients.

SYSTEM LOCATION:

Arts Education/Music/Opera/Presenting Division, 1100 Pennsylvania Avenue, NW., Suite 703, Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals nominated to receive a Jazz Masters award from the Endowment and recipients of the award.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, telephone number, biographical information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE:

To create a central repository for information about individuals who have been nominated to receive a Jazz Masters award and to create a record of Jazz Masters recipients.

ROUTINE USES:

Information in this system is used to compile nominee packages for review by a panel in selecting the recipients of Jazz Masters award.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

All records in this system are maintained in paper format in locked file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name of nominee or by name of recipient.

SAFEGUARDS:

Records in this system are maintained in a locked file cabinet located within an office that is kept locked during non-business hours.

RETENTION AND DISPOSAL:

Records pertaining to nominees are maintained for five years. After five years have passed, nominee records are shredded. Records pertaining to recipients are maintained permanently at the Endowment.

SYSTEM MANAGER(S) AND ADDRESS:

Division Coordinator, Arts Education/Music/Opera/Presenting Division, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–17

SYSTEM NAME:

National Heritage Fellowship Recipients.

SYSTEM LOCATION:

Folk & Traditional/Musical Theater/Theater Division, 1100 Pennsylvania Avenue, NW., Suite 720, Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals nominated to receive a National Heritage Fellowship from the Endowment and recipients of the fellowship.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, telephone number, biographical information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE:

To create a central repository for information about individuals who have been nominated to receive a National Heritage Fellowship and to create a record of National Heritage Fellowship recipients.

ROUTINE USES:

Information in this system is used to compile nominee packages for review by a panel in selecting the recipients of National Heritage Fellowships.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

All records in this system are maintained in paper format in locked file cabinets and in electronic form in a database accessible only to division staff.

RETRIEVABILITY:

Records in this system are retrieved by name of nominee or by name of recipient.

SAFEGUARDS:

Papers in this system are maintained in a locked file cabinet located within an office that is kept locked during non-business hours. Electronic records in this system are password protected and accessible only to division staff.

RETENTION AND DISPOSAL:

Records pertaining to nominees are maintained for five years. After five years have passed, nominee records are shredded. Records pertaining to recipients are maintained permanently at the Endowment.

SYSTEM MANAGER(S) AND ADDRESS:

Division Coordinator, Folk & Traditional/Musical Theater/Theater, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–18

SYSTEM NAME:

Literature Fellowship Recipients.

SYSTEM LOCATION:

Literature Division, 1100 Pennsylvania Avenue, NW., Suite 722, Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individual applicants for a Literature Fellowship from the Endowment and recipients of the fellowship.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, telephone number, biographical information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE:

To create a central repository for information about individuals who have been nominated to receive a Literature Fellowship and to create a record of Literature Fellowship recipients.

ROUTINE USES:

Information in this system is used to compile nominee packages for review by a panel in selecting the recipients of Literature Fellowships.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

All records in this system are maintained in paper format in locked file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name of nominee or by name of recipient.

SAFEGUARDS:

Records in this system are maintained in a locked file cabinet.

RETENTION AND DISPOSAL:

Records pertaining to unsuccessful applicants are shredded. Records pertaining to recipients are maintained permanently at the Endowment.

SYSTEM MANAGER(S) AND ADDRESS:

Division Coordinator; Literature Division, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

NEA–19

SYSTEM NAME:

Opera Honor Award Recipients.

SYSTEM LOCATION:

Arts Education/Music/Opera/Presenting Division, 1100 Pennsylvania Avenue, NW., Suite 703, Washington, DC 20506.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals nominated to receive an Opera Honor Award from the Endowment and recipients of the award.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, telephone number, biographical information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

National Foundation on the Arts and the Humanities Act of 1965, as amended (20 U.S.C. 951 *et seq.*).

PURPOSE:

To create a central repository for information about individuals who have been nominated to receive an Opera Honor Award and to create a record of Opera Honor Award recipients.

ROUTINE USES:

Information in this system is used to compile nominee packages for review by a panel in selecting the recipients of the Opera Honor Awards.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

All records in this system are maintained in paper format in locked file cabinets.

RETRIEVABILITY:

Records in this system are retrieved by name of nominee or by name of recipient.

SAFEGUARDS:

Records in this system are maintained in a locked file cabinet located within an office that is kept locked during non-business hours.

RETENTION AND DISPOSAL:

Records pertaining to nominees are maintained for five years. After five years have passed, nominee records are shredded. Records pertaining to recipients are maintained permanently at the Endowment.

SYSTEM MANAGER(S) AND ADDRESS:

Division Coordinator; Arts Education/Music/Opera/Presenting Division, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

NOTIFICATION PROCEDURE:

See 45 CFR Part 1159.

RECORD ACCESS PROCEDURES:

See 45 CFR Part 1159.

CONTESTING RECORD PROCEDURES:

See 45 CFR Part 1159.

RECORD SOURCE CATEGORIES:

Data in this system is obtained from individuals covered by the system.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

Kathleen Edwards,

Director, Administrative Services, National Endowment for the Arts.

[FR Doc. E8–14680 Filed 6–27–08; 8:45 am]

BILLING CODE 7537–01–P

NATIONAL SCIENCE FOUNDATION

Record of Decision: United States Implementing Organization's Participation in the Integrated Ocean Drilling Program

AGENCY: National Science Foundation.

ACTION: Record of Decision: United States Implementing Organization's Participation in the Integrated Ocean Drilling Program

FOR FURTHER INFORMATION CONTACT: Dr. James Allan, Program Director, Ocean Drilling Program, Division of Ocean Sciences, National Science Foundation, 4201 Wilson Boulevard, Suite 725, Arlington, VA 22230. *Telephone:* (703) 292–8581. *E-mail: jallan@nsf.gov*.

SUMMARY: The National Science Foundation (NSF) has decided to proceed with funding the United States Implementing Organization's (USIO) participation in the Integrated Ocean Drilling Program (IODP), an international research program that explores the history and structure of the earth as recorded in seafloor sediments, fluids, and rocks. The planned action will result in the United States providing and operating a light, riserless drilling vessel, the modernized and retrofitted *JOIDES Resolution*, also referred to as the Scientific Ocean Drilling Vessel (SODV). The Consortium for Ocean Leadership, Inc. (COL) and its partners, Lamont-Doherty Earth Observatory of Columbia University (LDEO) and Texas A&M University (TAMU) through the Texas A&M Research Foundation (TAMRF) have been selected by NSF to be the IODP–USIO for the light drilling vessel and related activities.

Alternative B has been selected as the preferred alternative. In reaching this decision, the Director of the NSF Ocean Drilling Program has considered the potential environmental impacts addressed in the Programmatic Environmental Impact Statement (PEIS) for proposed IODP–USIO activities. The National Marine Fisheries Service (NMFS), a part of the National Oceanic and Atmospheric Administration (NOAA), was a cooperating agency in the preparation of the PEIS. The Director has also sought input from Federal agencies, research institutions, private organizations, and individuals. A Notice of Availability for public review of the draft PEIS was published in the **Federal Register** and copies of the document were made available for review to all interested parties including international and U.S. Federal agencies, research institutions, private organizations, and individuals. Two public meetings were conducted. No comments were received.

NSF will distribute this Record of Decision (ROD) to all known interested and affected persons and agencies and will publish a notice of its availability in the **Federal Register**.

SUPPLEMENTARY INFORMATION:

Decision

Background

The NSF proposes to fund the USIO's participation in the IODP, which involves the operation of a light,

riserless drilling vessel, the *JOIDES Resolution* (SODV) and the performance of related activities to support earth sciences research throughout the world's oceans where riserless drilling is optimally suited. Proposed activities to be conducted by the *JOIDES Resolution* include the mechanical operation of the vessel, riserless ocean drilling, core sampling, and onboard research activities.

The IODP is an integrated, multi-drilling platform scientific research program with objectives identified in the IODP Science Plan (ISP), which provides fundamental guidance as to the scientific and technical objectives. IODP studies will lead to a better understanding of the deep biosphere and the sub-seafloor ocean; environmental change, processes, and impacts; and solid earth cycles and geodynamics. The specific IODP initial drilling initiatives require the IODP to deploy closely linked drilling platform types simultaneously. A riserless drillship such as the *JOIDES Resolution* will enable the IODP to reach the ocean's greatest depths more effectively than the other two available drilling IODP platforms. Additionally, the *JOIDES Resolution* will serve as a state-of-the-art riserless drilling research platform that is critical for achieving the program's scientific goals, particularly as IODP drilling progresses into harsher environments, where the challenge of recovering biologically, chemically and physically intact samples continues to increase.

Alternatives Considered

The PEIS focused on the evaluation of all SODV operations and research activities independent of specific geographic locations and considered the following alternatives:

Alternative A—Conduct Riserless Ocean Drilling Based Solely on Scientific Research Needs

In Alternative A, riserless ocean drilling expeditions would be designed and conducted to meet site-specific scientific objectives as developed by the proponents of the research. In this alternative, the primary focus during the planning and implementation of riserless drilling expeditions would be on achieving the proposed scientific objectives and avoiding unsafe working conditions. Figure 1 identifies the process features and the environmental components of this alternative.

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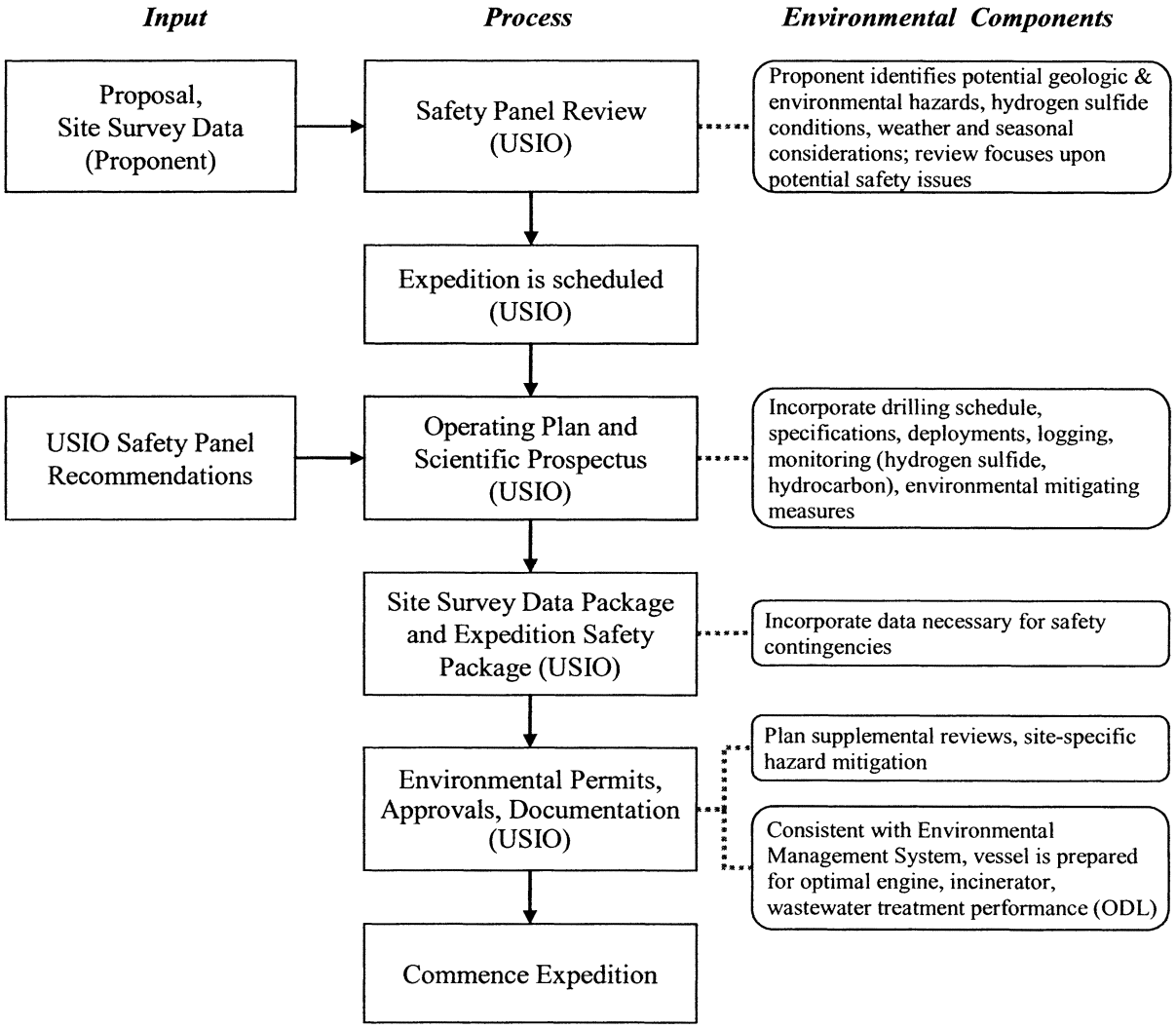
Figure 1. Expedition Review and Planning Process for Alternative A



Legend

ODL Overseas Drilling Limited
USIO United States Implementing Organization

In this alternative, TAMU and LDEO, the IODP–USIO's science support contractors, would maintain a distinct, independent panel of safety experts (Safety Panel) to advise the USIO on safety issues and drilling hazards. The Safety Panel would review all site-specific data pertaining to each expedition and render a final decision regarding site safety. No additional review and advisory support would be provided such as guidance from the IODP.

Prior to each expedition, a detailed Scientific Prospectus would be prepared by key operations and research personnel which reflects the agreed upon priorities and implementation strategies for each expedition. The Site Survey Package consisting of data required for an expedition would be published in the Scientific Prospectus. The Expedition Safety Package would then be prepared which would be a collection of all data and documentation (including the Site Survey Package) necessary to support a safe and environmentally compliant operation. Both the Site Safety and the Expedition Safety Packages would contain pertinent information on the potential geological or environmental hazards that would be used to determine appropriate contingencies during drilling.

Prior to the vessel departure, the IODP–USIO would obtain necessary approvals for the areas in which the vessel would operate including permits and other regulatory notifications. In parallel, the vessel operator (ODL/Transocean) would ensure that vessel systems such as engines, incinerators, and wastewater treatment devices are functioning properly per regulatory requirements (e.g., MARPOL).

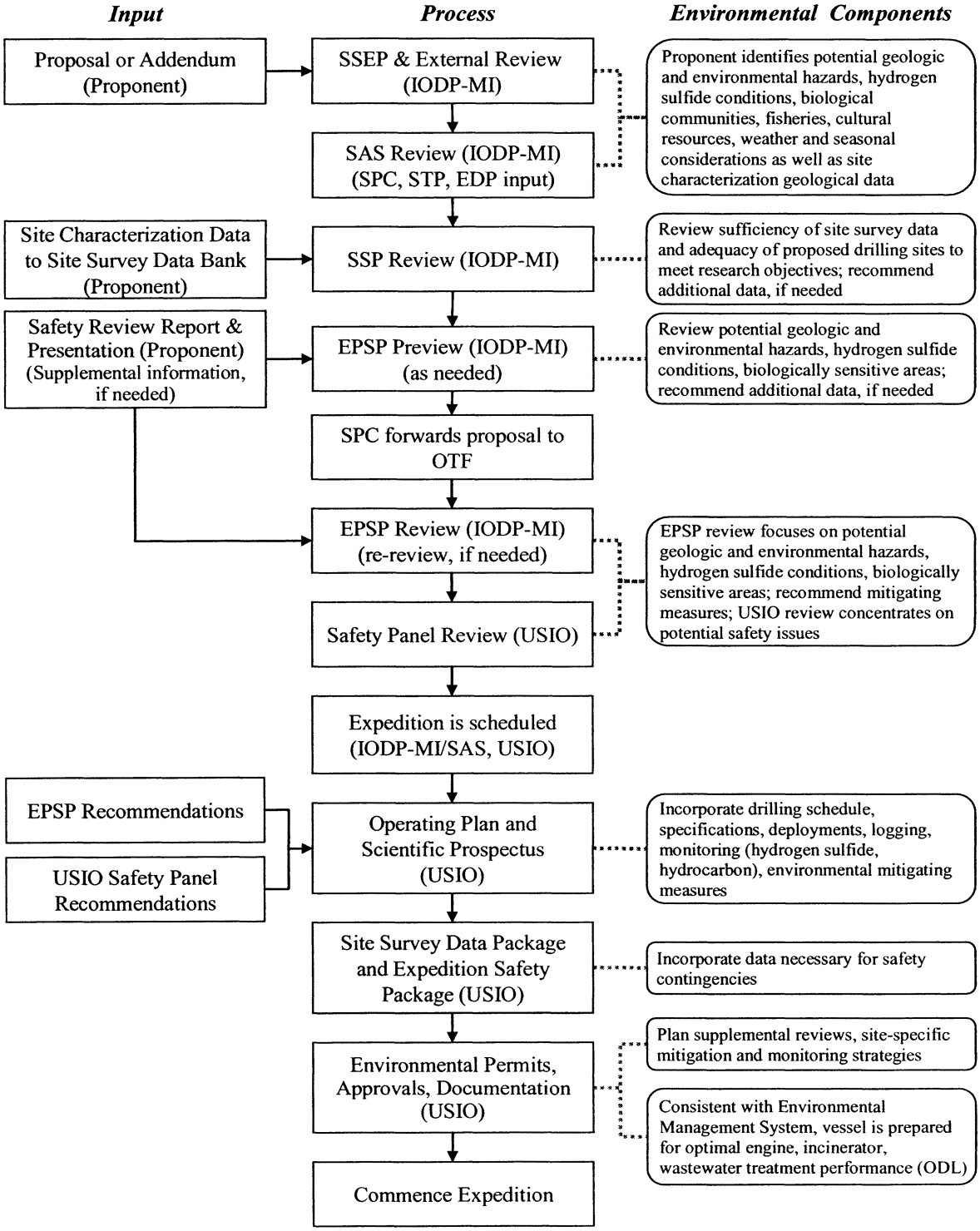
Alternative B—Conduct Riserless Ocean Drilling Based on Specific Scientific Research Needs and IODP Support

In Alternative B, riserless ocean drilling expeditions would be designed and conducted to meet site-specific scientific objectives as presented by the proponents of the research and would incorporate advisory input from the IODP as well as the USIO's Safety Panel guidance as described in Alternative A.

In this alternative, the value of the potential scientific results of any drilling proposal would be balanced against the possible hazards so that IODP–USIO riserless operations can achieve valuable scientific results without jeopardizing the health of individuals, the environment, or the future of the program. Figure 2 depicts the combined IODP and USIO review processes which would be used to select safe drilling locations and methods and identify site-specific environmental conditions that could be adversely affected by riserless drilling activities before an expedition is included in the drilling program.

Proposals and associated data packages would then be reviewed by the Environmental Protection and Safety Panel (EPSP), an advisory panel comprised of multi-disciplinary experts drawn from industry, government, and academia to provide independent advice to IODP regarding potential safety and environmental hazards that may exist because of general or specific geology of the seafloor, as a consequence of human activities, or the potential impact on the marine life and their environment. During the EPSP review process, a representative proponent would make a presentation consisting of a project overview followed by an appraisal of each proposed drill site and a description of the key safety and environmental issues. The purpose of the presentation would be to provide the panel with information on the proposed drilling activities, environmental conditions at each drill site, and other site-specific features that would allow the panel to identify operational hazards and potential environmental impacts.

Figure 2. Expedition Review and Planning Process for Alternative B



Legend

EDP	Engineering Development Panel
EMS	Environmental Management System
EPSP	Environmental Protection and Safety Panel
IODP-	Integrated Ocean Drilling Program - Management
MI	International
ODL	Overseas Drilling Limited
OTF	Operations Task Force
SAS	Science Advisory Structure
SPC	Science Planning Committee
SSEP	Science Steering and Evaluation Panel
SSP	Site Survey Panel
STP	Science and Technology Panel
USIO	United States Implementing Organization

Following their review, the EPSP would provide guidance on site selection and data processing to improve imaging of the sites, and on modification of site locations, so that the proposed sites would be safe to drill and will meet the scientific objectives. Final EPSP recommendations for each site may include approval as requested, approval with conditions regarding drill sites, drilling order, depths, associated monitoring requirements, or site-specific mitigating measures. In concert with EPSP advice, the IODP–USIO Safety Panel would review all site-specific data pertaining to a particular expedition and render a final decision regarding site safety.

Prior to each expedition, a detailed Scientific Prospectus would be prepared by key operations and research personnel which reflects the agreed upon priorities and implementation strategies for each expedition. The Site Survey Package consisting of data required for an expedition would be published in the Scientific Prospectus. The Expedition Safety Package would then be prepared which would be a collection of all data and documentation (including the Site Survey Package) necessary to support a safe and environmentally compliant operation. Both the Site Safety and the Expedition Safety Packages would contain pertinent information on the potential geological or environmental hazards that would be used to determine appropriate contingencies during drilling.

Prior to the vessel departure, the IODP–USIO would obtain necessary approvals for the areas in which the vessel would operate including permits and other regulatory notifications. In Alternative B, site-specific environmental assessments, Incidental Harassment Authorizations (IHA), mitigating measures, monitoring strategies, and contingencies for alternate drill sites, would be developed based on conditions or requirements identified during the comprehensive review process, reviewed by the appropriate authorities, and incorporated into the operating plan. In parallel, the vessel operator (ODL/Transocean) would ensure that vessel systems such as engines, incinerators, and wastewater treatment devices are functioning properly per regulatory requirements (e.g., MARPOL).

Alternative C—Do Not Conduct Ocean Drilling (No Action Alternative)

In Alternative C, the IODP–USIO would not operate the SODV and would not provide the riserless ocean drilling capability to the IODP. Unless the riserless drilling resources are realized from other sources, the IODP's goal to integrate multiple drilling platforms, exploratory tools, and diverse strategies to resolve outstanding research questions as identified in the ISP may not be achieved. The long-term U.S. commitment and expertise to support earth sciences research using riserless ocean drilling technologies would be lost.

Preferred Alternative

Alternative B has been selected as the preferred alternative. As shown in Figure 2, critical environmental components will be identified during the review process and necessary contingencies and site-specific mitigating measures planned accordingly. For example, some common environmental issues addressed during IODP reviews include:

- Potential for encountering a pressurized section of the sub-seafloor while drilling;
- Indications of active (or previously active) vent systems or hydrocarbon seeps in the area of proposed drilling;
- Probability of encountering H_2S (hydrogen sulfide) or hydrates during coring or core recovery activities;
- Presence of any biological communities within 100 meters of any proposed drill sites, their type (e.g., vents, deep-water reefs), and evidence for their existence (e.g., sampling, visual);
- Presence of a nearby fishery (species, typical gear), known local breeding ground, consistent feeding area, migration route, or habitat to threatened or endangered species; and
- Availability of alternative sites in the event that weather, currents, ice, sensitive biological communities prevent drilling.

In addition, the site survey data required as a result of the comprehensive review process will characterize the area in the immediate vicinity (within 1 km) of each proposed drill site for the purpose of evaluating seafloor conditions (water depth, seafloor topography and stability) and identifying potential hazards and environmental concerns while allowing flexibility in the use of alternate drill sites if unexpected field conditions prevent drilling at primary locations. Benefits derived from the collaboration of USIO riserless drilling planning efforts and IODP SAS review processes will effectively contribute to minimizing adverse environmental impacts and include:

- Selecting the optimum drilling platform based upon site-specific conditions and research objectives;
- Ensuring that site characterization data is adequate to support the proposed research objectives and identify potentially sensitive environmental conditions for protection;
- Selecting the most appropriate drilling locations and minimal number of boreholes to be drilled based on

research needs and local environmental conditions;

• Developing plans and procedures to limit vessel and drilling related discharges in environmentally sensitive areas to the minimum needed to support the intended research; and

• Minimizing the use of acoustic sources (e.g., transducer-based equipment, seismic sources) in environments containing organisms sensitive to outputs from these sources.

By contrast, the nominal planning and review process for riserless drilling expeditions that would be implemented by selecting Alternative A (i.e., to only meet proposed scientific objectives and avoiding unsafe working conditions) would not provide the mechanisms to identify sensitive environmental conditions and avoid potential impacts.

Impacts

The findings of the PEIS indicate that a majority of the outputs associated with the performance of the preferred alternative will have minor and transitory effects on the environment. This alternative incorporates the IODP SAS review and advisory process to identify potentially sensitive environments and recommends the use of best management practices (BMPs) and site-specific mitigating measures to reduce environmental outputs associated with drilling and coring operations.

A majority of the impacts resulting from the preferred alternative will be localized and will disappear once the vessel completes drilling activities at a particular site and leaves the area. Many of the outputs and resulting impacts associated with the operation of the SODV such as wastewater discharges, air emissions, and the propagation of underwater noise from propulsion equipment and transducer-based equipment are common to most merchant marine vessels. Some outputs associated with riserless drilling activities (seafloor disturbance, deposition of sediment drill cuttings, deployment of equipment or materials) may remain evident on the seafloor for extended periods of time after borehole drilling is complete; however, the effects on the benthic environment will be minor. Further details describing these impacts of the preferred alternative are provided below.

Marine Water Quality

The impacts to water quality resulting from the mechanical operation of the SODV will include:

• Localized, short-term impacts resulting from SODV discharges of treated wastewater, greywater, treated bilgewater, deck drainage, ballast water, and treated lab discharges; and

• Localized disturbances resulting from mixing of the water column surrounding the SODV during thruster operation.

Impacts to water quality associated with drilling and coring operations and borehole completion activities will include:

• Localized effects near a borehole resulting from the discharge of seawater drilling fluid, sediment displaced from the borehole, drilling mud, cement, and tracers.

Sea Bottom and Sediment Quality

The impacts to the seafloor environment and sediment quality resulting from drilling and coring operations and borehole completion activities will include:

• Localized disturbances to the seafloor derived from the installation of boreholes and the introduction of naturally occurring drilling muds and cement;

• Localized deposition of drill cuttings and drilling mud particles, and alteration of seafloor topography;

• Displacement or smothering of benthic organisms in the immediate vicinity of the borehole; and

• Localized disturbances to the seafloor derived from the installation of permanent structures.

Air Quality

The emissions resulting from SODV operations, including engine exhaust and incinerator combustion byproducts, are expected to be transitory and will not adversely impair local air quality. Fuel evaporative emissions resulting from SODV operations are not expected to be detectable or adversely affect local air quality. Similarly, emissions from volatile or gaseous chemicals used onboard the SODV for operations or in the laboratories are expected to be minimal. Because the chemicals are used on an intermittent basis and in small quantities, the resulting air emissions are expected to be minimal.

Acoustic Environment

During transit, sound and vibration produced by the SODV engines, propulsion systems, and transducer-based instruments may be noticeable to nearby marine organisms. It is expected that many potential receptors will perceive the continuous noise produced by the approaching vessel and will deviate from the path of the vessel thereby avoiding exposure to peak and potentially harmful noise levels. For several reasons, it is unlikely that the transducer-based equipment on the SODV would cause a marine organism to be exposed to sound levels greater than the 180 dB re 1 μPa (rms) level which NMFS considers to be potentially harmful. First, most sound sources emit energy in narrowly focused beams directed toward the seafloor and would only affect organisms directly beneath the vessel. Second, at a typical cruising speed of 11 knots (20 km/hr), it is expected that if an organism were exposed to noise from the vessel, it would only be for a short period of time. Finally, the short pulse duration from the transducer devices reduces the risk of hearing impairment or other injury to exposed organisms.

The noise created by the SODV while it is dynamically positioned over a drill site and the physical turbulence in the water caused by the vessel's thrusters are likely to deter many marine organisms from approaching the drillship and becoming exposed to potentially intense sound levels. Because most drill sites will be located in deep open ocean areas that are not densely populated by marine organisms, the potential that an individual or a population of animals may be exposed to continuous noise levels that could cause behavioral changes is very low.

Similarly, the short-term increase in the ambient noise created by vessel operations or drilling and coring may deter some organisms from a particular area, resulting in temporary displacement and possible disturbance to an animals' feeding or spawning behavior. In general, the SODV will only occupy a drill site for a relatively short period of time (*i.e.*, hours or days) allowing displaced organisms to repopulate the area when drilling ceases and the vessel departs.

In most areas where the SODV is expected to operate, the range of potential effects to biological receptors resulting from riserless ocean drilling operations and related research activities are expected to be minimal. Generally, it is expected that expeditions will avoid sensitive marine environments such as native hunting areas, migratory routes, consistent feeding grounds, or local breeding grounds that concentrate cetaceans or other sensitive species in critical areas, thereby reducing the risk of exposure to acoustical outputs from the SODV operations. In the preferred alternative, mitigating measures may include modifying the schedule for an expedition, selecting alternate sites, or limiting the types of activities performed to avoid or minimize exposing sensitive marine organisms to potentially disturbing or harmful acoustic levels.

At drill sites where marine organisms that are potentially sensitive to acoustic sources may be densely populated or the proposed research activities may result in more intense or prolonged acoustic exposures, a supplemental environmental review may be prepared to evaluate the site-specific risks and develop recommendations for additional mitigating measures. Therefore, the extent of acoustical source impacts in the preferred alternative for all receptors including cetaceans and other sensitive organisms is expected to be minimal for IODP–USIO ocean drilling expeditions.

Seismic surveys or vertical seismic profiling may be periodically performed and will incorporate BMPs to prevent marine biota from being exposed to sound levels that could result in injury (= 180 dB re 1 μPa rms) or significant behavioral changes (= 160 dB re 1 μPa rms). Additional detail pertaining to the impact assessment of seismic sources is being prepared in a separate document, to be entitled the *Draft Programmatic Environmental Impact Statement/ Overseas Environmental Impact Statement for National Science Foundation-Funded Marine Seismic Research*. This document will be released for comment in mid-2008.

Marine Biological Resources (Near-Coastal and Deep Sea)

Potential impacts to marine biological resources resulting from the operation of the SODV and riserless ocean drilling activities are discussed below. Because the scope of the PEIS provided a general assessment of IODP–USIO riserless drilling and related research activities independent of specific geographic locations and time periods, the impact assessment focused on a qualitative analysis regarding the potential range of effects on these biological resources and their anticipated significance. Using the preferred alternative, these activities would be planned and performed following advisory support provided by the IODP SAS taking into consideration biological resources present at each specific drill site and potential impacts of the research.

Plankton

The intensity, extent, and duration of potential impacts to plankton communities resulting from the discharges from SODV operations are expected to include:

- Localized, short-term impacts to zooplankton respiration resulting from increased turbidity associated with SODV discharges of treated wastewater, greywater, and other liquid wastes;
- Localized, short-term impacts to phytoplankton and zooplankton community structure due to increased salinity from brinewater discharges;
- Localized, short term, and reversible redistribution of phytoplankton and zooplankton communities within 100 m of the SODV as a result of turbulence created by thruster operations; and
- Interference with shallow or deepwater zooplankton feeding and respiratory activities due to the increased suspended solids concentrations within several hundred meters of the borehole.

Fish

It is expected that most fish will avoid the area and the continuous output of noise generated by drilling and coring operations, the transponder beacon deployed near the drill site, and the turbulence created by the vessel's thrusters. The intensity, extent, and duration of potential impacts to fish communities resulting from the discharges from SODV operations and drilling activities include:

- Localized, short-term disturbances to fish resulting from turbulence created by the thrusters when the vessel is dynamically positioned at a drill site; and
- Localized, short-term disturbances to fish derived from the acoustic outputs generated by the vessel's thrusters, drilling/coring operations, and transponder beacons deployed near the drill site.

Overall, impacts to fish associated with IODP–USIO riserless drilling activities are expected to be minimal. Expeditions with longer durations will have the potential for greater cumulative noise and vibration impacts on fish species than those with shorter durations, but no significant behavioral changes or long-term loss or degradation to biological populations or communities or functional habitat value is expected.

Cephalopods

It is expected that the discharge of liquids from the SODV will rapidly disperse minimizing contact and impact to cephalopods. No impacts are anticipated as a result of the release of the drill cuttings or drilling mud on most cephalopod species, due to their mobility and ability to temporarily leave an affected area. Significant impacts to cephalopod eggs, whether on substrates or suspended in the water column, are not expected, because of the limited dispersal area of material discharged focused around the borehole.

Similar to fish, it is possible that some cephalopods may be deterred from an area by incidental noise from the SODV. The impacts associated with this deterrence may include a temporary disturbance in feeding and spawning behavior in the general vicinity of the vessel. Expeditions with longer durations at one particular drill site will have the potential for greater cumulative noise impacts on cephalopod species than those with shorter durations at each drill site. No significant long-term loss or degradation to biological populations or communities or functional habitat value is expected.

Benthos

In general, the resulting impacts to benthos from riserless drilling expeditions may include:

- Localized alteration of benthic communities caused by physical changes in the substrate;
- Localized interference with benthic organism feeding and respiration due to suspended particles of drill cuttings and drilling mud; and
- Localized impacts to the benthic community derived from smothering effects of drill cuttings and drilling mud particles deposited on the seafloor.

Overall, impacts to benthic organisms resulting from riserless drilling activities in the preferred alternative are not expected to be significant. Potentially sensitive benthic communities unique to a particular area will be identified during the IODP SAS planning and review process. As needed, drill site locations or particular operations may be modified to avoid significant adverse effects to these sensitive benthic organisms. For prospective drill sites where benthic organisms that are especially sensitive to the deposition of sediment from a borehole are densely populated, or the proposed research activities may result in more intense or prolonged exposure, a supplemental environmental review may be prepared to evaluate the site-specific impacts, if any, and, if necessary, develop recommendations for additional mitigating measures.

Marine Mammals

The presence of the drillship, whether in transit or at a drill site, is unlikely to interfere with the movement of marine mammals. Close approaches of the vessel to marine mammals (or vice versa) are expected to be rare, considering that the proposed action will only involve one vessel and that the average density of marine mammals in the open ocean is very low. When close approaches occur, the mobility of marine animals and their ability to

detect the ship would permit them to easily avoid contact, especially since the cruise speed of the ship is generally 11 knots or less. Therefore, collisions between the drilling ship and marine mammals are not expected to occur. Detours made by marine animals to avoid the ship will be a temporary response.

Discharges from the drillship could potentially disturb marine mammals or their food sources. Effects on water quality from drillship discharges are expected to be minimal and localized near the ship. Because of rapid mixing and the assimilative capacity of the sea, marine mammals are not expected to be exposed to the discharges. Wake and disturbance effects such as turbulence created by the dynamic positioning thrusters are likely to deter most mammals from approaching the vessel, and instead will likely remain outside the small area where an adverse effect from discharges might occur. Direct physical or toxicological effects of various vessel discharges on marine mammals are therefore unlikely and few animals will be affected.

Acoustic outputs from SODV operations have the potential to affect marine mammals exposed to the underwater sounds. No significant physiological effects to individual animals or marine mammal populations are expected to result from noise produced by the SODV. As previously noted, the noise produced by SODV operations may result in temporary displacement or disturbance of some marine organisms, including marine mammals, but the organisms are expected to return to the area after the vessel departs. The single-channel seismic surveys or vertical seismic profiling, which may be occasionally performed by the SODV at selected sites, represent an additional noise source. These activities will generally involve small seismic sources (1 or 2 airguns) operated for short durations (less than 12 hours). Resulting effects to marine mammals, if any, will be minimal and temporary due to the consistent implementation of mitigating measures to prevent exposure to harmful sound levels or sound levels that may initiate adverse behavioral effects.

Though infrequent, helicopter operations represent another noise source that may occur during SODV operations. Helicopter overflights will temporarily affect the surface environment at a given location. The noise from helicopter operations can cause a startle response and interrupt whales and dolphins while resting, feeding, breeding, or migrating. Both the noise and shadow cast by the helicopter can elicit a response from nearby cetaceans. These occurrences will be temporary and will pass within seconds, having no long-term impact on cetaceans. The greatest potential effect from helicopters is disturbance of pinnipeds breeding rookeries although such overflights would be severely limited through the use of mitigating measures.

As prompted by the IODP SAS review and planning process for each expedition, the IODP–USIO will obtain necessary approvals for the areas in which the vessel will operate including permits and other regulatory notifications. As necessary, the IODP–USIO will consult with National Marine Fisheries Service with respect to rare or endangered species (e.g., North Atlantic right whale, Northeast Atlantic bowhead whale) listed in the Endangered Species Act to prevent harassment or interference to those species. In the event that a proposed expedition that has the potential to cause significant adverse behavioral effects or disturbances to marine mammals, the IODP–USIO will apply for an IHA as required by the Marine Mammal Protection Act. Mitigating measures and operating conditions developed in response to these requirements and notifications will be incorporated into the Operating Plan and Scientific Prospectus for the expedition accordingly.

Marine Reptiles

The potential for exposure of marine reptiles to SODV wastewater discharges is expected to be minimal since water column disturbances (e.g., turbulence) caused by the SODV's presence at a drill site is likely to deter the animals from approaching the vessel and coming in contact with discharged wastewater.

Although sea turtles are generally not sufficiently mobile to avoid a moving ship in case of an imminent collision, such situations are expected to be relatively rare because the density of turtles in the open ocean is very low. Therefore, very few, if any, sea turtles are likely to be involved in collisions with the drillship, and the resulting effects on turtle populations will be minimal. Sea snakes, because of their greater mobility, are unlikely to be victims of a collision.

Based on limited available data on sea turtles hearing abilities and effects relating to exposure to acoustical outputs, it is unlikely that sea turtles will exhibit behavioral changes as a result of acoustic outputs from SODV operations. If a sea turtle approaches the SODV during drilling, it is likely the animal will exhibit an avoidance reaction. Any effects on sea turtles will generally be short term, reversible, and are not expected to displace the animals from their preferred habitats, foraging, or breeding areas.

Unless the SODV is operating in a concentrated area used by sea turtles for breeding, it is unlikely that sea turtles will be encountered during riserless drilling expeditions. Based on IODP SAS advice and guidance, mitigating measures will be developed to prevent significant adverse effects to marine reptiles by addressing site-specific factors or seasonal variations that could affect the organisms near proposed drill sites. Overall, the resulting impacts to marine reptiles are expected to be minimal, with no significant loss or degradation of marine reptile communities or functional habitats, or seasonal migration patterns.

Birds

No impacts to birds are expected as a result of air emissions generated during SODV operations, including the continuous release of fuel combustion byproducts when the SODV is in transit and is present at drill sites, intermittent use of the SODV's incinerators and the periodic release of vapors and gases from the vessels laboratories. The emissions from all sources are expected to disperse rapidly in the surrounding atmosphere.

The SODV operations will result in discharge of wastewater and victual wastes each day the vessel is at sea. These discharges could potentially affect marine birds either directly while the birds are in the water or indirectly through the ingestion of fish or plankton. Since the points of discharge for liquid wastes from the drillship will occur very close to the vessel, there should be no significant direct physical or toxicological effects on marine bird populations.

The SODV contains numerous sources of noise including the ship's diesel-electric engines, mechanical equipment, and various transducer-based devices. The sounds from these sources will propagate in air and be transmitted through the vessel and into the water. It is anticipated that the impacts to bird communities as a result of the drillship and associated equipment operation will be minimal. SODV activities could affect marine birds through disturbances caused by helicopter overflights. However, these disturbances are expected to be very infrequent and temporary. Therefore, only minimal, short-term impacts on bird populations and their flying patterns are expected.

Based on IODP SAS advice and guidance, mitigating measures will be developed to prevent significant adverse effects to sensitive bird species that may be present at specific drill sites. Overall, the resulting impacts to birds in the preferred alternative are expected to be minimal.

Threatened and Endangered Species

As indicated above, activities associated with the proposed action will have minimal impacts on marine organisms including plankton, cephalopods, fish, marine mammals, marine reptiles, and birds. This conclusion also generally applies to endangered and threatened species of those groups; however, any impacts to diminished populations or limited ranges of threatened or endangered species will be greater than impacts to non-endangered species.

The SODV will comply with all regulatory requirements pertaining to threatened species such as the Endangered Species Act. The IODP SAS review process will ensure that sufficient data is available to identify critical species near the proposed drill sites and recommends for implementation measures to mitigate potentially adverse impacts. If a riserless drilling expedition is planned in an area where endangered or threatened species may be adversely impacted or harmed, a supplemental site-specific environmental review will be performed to evaluate the risks of proceeding with the proposed action and to develop recommendations to mitigate unacceptable risks.

SODV activities are generally not expected to result in substantial loss or degradation of the functional habitats that may be used by threatened and endangered species, nor are IODP riserless drilling activities expected to result in the impedance of fish or wildlife migration routes. Because of the sensitivity of some endangered populations to the loss of even just one individual, if endangered species, habitats or other critical breeding, feeding, or migratory areas are not identified in advance, some impacts resulting from the riserless drilling expeditions may have the potential to be significant. Therefore, drilling will be avoided at locations where outputs such as wastewater discharges, seafloor alteration, or acoustical outputs have a greater potential to adversely impact local biota, habitats, or disrupt behavior.

Biologically Sensitive Areas

Despite the deep locations that the SODV will operate, a majority of the outputs associated with the operation of the vessels will occur near the surface and hundreds of meters away from sensitive communities and structures on the seafloor, such as coral reefs, hydrothermal vent (chemosynthetic) communities, and seamounts. Therefore, these types of outputs are not expected to result in significant impacts to these resources. Noise and vibrations generated by the operation of the SODV are expected to attenuate sufficiently with distance from the source to prevent most aquatic organisms from being exposed to noise levels that would result in adverse physiological effects. Although noise produced by the SODV during riserless drilling activities has the potential to displace sensitive marine organisms from their community, it is anticipated that these effects would only be realized during the relatively short period of time the vessel is on-site and drilling. Because affected organisms in biologically sensitive areas are expected to return once the vessel leaves the area, the resulting behavioral effects are considered minimal and short term in duration.

Similar to threatened or endangered species, the IODP SAS review process will ensure that sufficient data is available to identify biological resources in sensitive ecosystems that may be adversely affected by the proposed drilling activities and will recommend appropriate site-specific restrictions or best management practices accordingly. For example, chemosynthetic communities may be unlikely to recover rapidly from drilling mud deposition, increased turbidity, or changes to substrates in the localized area surrounding the borehole. If the appropriate restrictions are not implemented, long-term impacts to these deepwater communities may potentially occur, with recovery times as long as 200 years for mature tube worm communities. Similarly, prolonged exposure of coral reefs to sediment build-up, at any depth, would have a negative impact on growth and long-term survival.

Due to the diverse characteristics associated with seamounts, the potential impacts from the drilling operation in or near these structures could vary quite widely. Certain portions of the seamount would likely be less susceptible to severe impacts from the drilling of a borehole. The potential impacts associated with drilling on or near seamounts are very similar to those described for benthic organisms. Nonetheless, because seamounts represent such a diverse and in many cases slow growing ecosystem, the drilling impacts could be significant if they result in substantial alteration or destruction of habitat that prevents re-establishment of biologically significant communities.

If a riserless drilling expedition is planned in an area where biologically sensitive organisms may be adversely impacted or harmed, a supplemental site-specific environmental review will be performed to evaluate the risks of proceeding with the proposed action and recommendations to mitigate unacceptable risks or select alternate sites will be developed.

Commercial and Native Fisheries and Aquaculture

To the extent that impacts to marine fish species resulting from the proposed riserless drilling operations affect the subsistence value of fish used by individuals as a food source or the commercial harvesting of important species, there will be an impact to fisheries and aquaculture. However, the potential for impacts to open ocean and coastal marine fish resulting from both the presence of the SODV and the riserless drilling activities are not expected to be significant regardless of location.

Due to the mobility of fish and thus their ability to avoid disturbances in their habits, impact to fisheries will be limited primarily to impacts such as disturbances to schooling fish or the smothering of food sources (e.g., plankton) or demersal eggs with drilling sediments. Considering the temporary nature of the drilling activity and the small area of the sea affected, overall impacts to marine fisheries and aquaculture are expected to be minimal.

Appropriate best management practices will be implemented to protect fishery resources. For example, permanent structures installed on the seafloor such as observatories will be designed to be trawl-resistant to prevent damage to fishing nets in areas where extensive bottom trawling occurs. If a riserless drilling expedition is planned in an area where fisheries or aquaculture may be adversely impacted or harmed, a supplemental site-specific environmental review will be performed to evaluate the risks and develop recommendations to mitigate unacceptable risks or select alternate sites.

Marine Vessel Transport and Trade Routes

Because ship traffic within a geographic area is generally related to the region's proximity to trade routes between the world's major ports, the potential impacts associated with SODV

operations will be variable and dependent on the drilling location.

Through normal expedition planning or vessel operations, potential interferences with marine transportation at any given site are expected to be minimal. When transiting or stationary at a drill site, the SODV will comply with all international conventions and regulations pertaining to navigational safety. When dynamically positioned at a drill site, the SODV, by nature of the activity, will be required to remain stationary and essentially ''tethered'' to the seafloor by the drilling equipment. All approaching large maritime vessels will be able to establish radar and/or visual contact with the SODV well in advance of any potential collision. When the SODV is positioned at a drill site, it will be the responsibility of the approaching vessel to choose a course which avoids a collision. However, the SODV will maintain visual and radar vigilance of pending traffic conflicts and communicate accordingly via radio and other means. In addition, the SODV will display universally-recognized maritime signal flags while drilling, indicating the vessel has restricted ability to maneuver.

Cultural Resources

A majority of IODP–USIO riserless drilling activities will be conducted in water depths greater than 500 m. Therefore, most of the mapped historical and cultural resources, which are generally located in relatively shallow coastal waters, will in all likelihood not be affected by the proposed activity. However, there are undoubtedly untold numbers of undiscovered shipwrecks and other culturally significant artifacts lying at great depth throughout the world's oceans, particularly along historic trade routes.

The comprehensive review and planning process involving the IODP SAS, the EPSP, and other review panels will evaluate each proposed riserless drilling expedition. The site characterization data in the site survey data packages will include information on known (mapped) cultural resources. If proposed drill sites are located near known or suspected cultural resource sites, recommendations will be made to either select alternate drill sites or implement mitigating measures to prevent damaging or destroying these resources.

Catastrophic Events

The primary output resulting from a catastrophic event related to the SODV itself or drilling into a geological source would be the uncontrolled release of petroleum hydrocarbons to the marine environment. Based on IODP–USIO riserless drilling experience, the probability of a major spill or catastrophic release of petroleum from the SODV or a geological source is very low. This is readily demonstrated by 21 years of ODP/IODP experience involving riserless drilling of more than 1,900 boreholes without a major spill of fuel from the vessel or accidental release of hydrocarbons from a geologic source.

Building further upon this experience, it is anticipated that this record of preventing catastrophic releases will continue with future SODV expeditions. The IODP SAS comprehensive review and advisory process combined with the stringent program of continuous real-time monitoring of hydrocarbon potential while drilling will further reduce the risk of an uncontrolled release of hydrocarbons from a geologic source to an extremely low level. Input from the IODP SAS review process may also include recommendations for site-specific mitigating measures such as additional detection tools (e.g., logging while drilling, measurement while drilling) and the availability of resources to respond to signs of geologic hazards. For example, the IODP SAS may recommend the availability of heavy drilling mud at certain drills sites which could quickly be deployed to abandon a borehole or seal specific stratigraphic intervals, thereby ensuring a maximum level of protection from potential petroleum releases.

Severe weather represents a significant condition that could threaten vessel operations and contribute to a catastrophic release of petroleum. For example, if the ship were to be blown off a drill site during a severe storm without ample time to retrieve the drill string, the drill string could be lost and the ship may be severely damaged if it grounded in shallow water or onshore. Through best management practices including the operational planning process for each expedition and continuously monitoring ever-changing weather conditions, the SODV will be able to avoid environmental conditions which could contribute to the catastrophic release of petroleum from the vessel.

During drilling, if conditions suggesting the possible release of petroleum hydrocarbons or other gasses (e.g., hydrogen sulfide) are detected during SODV operations, drilling will immediately cease and a series of pre-defined control measures will be implemented to stabilize and seal the borehole thereby avoiding an uncontrolled release to the marine environment. It is possible, though unlikely, that riserless drilling may penetrate a thin, relatively undetectable petroleum layer, resulting in its release from the borehole to the marine environment. In this instance, the amount of material released would be minimal.

Impact Summary

The majority of identified potential environmental impacts are short term in duration, of local extent, and minimal intensity, with most impacts unlikely to occur. Unavoidable impacts focus around the effects of the drilling activity itself, and include drill cuttings deposited on the seafloor around the borehole and fine grained particles suspended in the water column or deposited on the seafloor in the borehole vicinity. Drilling locations will be sited so as to minimize these unavoidable impacts. Impacts with the most severe consequences—oil and gas releases from either a fuel spill from the drilling vessel or from a blowout caused by drilling into a pressurized geological source—have not occurred in 40 years of DSDP, ODP, or IODP operations (1968–2008), and are judged highly unlikely to occur. Table 1 identifies the outputs associated with the preferred alternative and summarizes the significance of each potential impact.

Impact Mitigation

During each riserless drilling expedition, Best Management Practices (BMPs) and site-specific mitigating measures will be implemented that are intended to effectively reduce or avoid impacts to the environment. The IODP–USIO will be responsible for implementing these measures and assuring compliance by all applicable IODP–USIO participants (e.g., contractors, field personnel, researchers). Additionally, using 30 years of riserless drilling experience, the IODP–USIO will continue to refine and implement various BMPs and mitigating measures to reduce or avoid adverse impacts to marine organisms and the physical environment.

BMPs represent routine actions that may be performed during riserless drilling expeditions including measures that involve every phase of IODP–USIO operations. Many of the BMPs have already been incorporated into the operating procedures that will be used by the IODP–USIO, and have been designed to complement the IODP's core environmental principles to (1) Protect marine life and environment, (2) dispose waste materials consistent with applicable standards, (3) store and transport samples in such a way as to prevent contamination of the

environment, and (4) keeping the public informed such as through the dissemination of the PEIS.

TABLE 1.—SUMMARY OF POTENTIAL IMPACTS FROM IODP–USIO RISERLESS OCEAN DRILLING

Process/activity	Output	Affected environment	Environmental impacts				
			Duration	Extent	Intensity	Probability of an impact	Severity rating
Operate the SODV (vessel in transit and at a drill site using thrusters for dynamic positioning; note: Impacts associated with drilling and coring activities are summarized below).	Discharges (treated wastewater, greywater, treated bilgewater, deck drainage, ballast water, treated lab discharges).	Water Quality Seafloor.	Short term	Local	Minimal	Unlikely	1
		No environmental impacts					0
		Biological Resources					
	Physical Disturbances.	Typical	Short term	Local	Minimal	Unlikely	2
		Sensitive Areas	Short term	Local	Minimal	Unlikely	2
		Fisheries	Short term	Local	Minimal	Unlikely	1
		Water Quality	Short term	Local	Minimal	Unlikely	1
		Seafloor	No environmental impacts				0
	Underwater Noise (operation of vessel engines, generators, thrusters, mechanical systems, instruments, transponder beacons).	Marine Traffic	Short term	Local	Minimal	Unlikely	1
		Acoustical Environment.	Short term	Local	Minimal	Unlikely	2
		Biological Resources					
		Typical	Short term	Local	Minimal	Unlikely	1
		Sensitive Areas	Short term	Local	Minimal	Unlikely	1
		Fisheries	Short term	Local	Minimal	Unlikely	1
	Air Emissions:						
	• Exhaust & vapors	Air Quality	Short term	Local	Minimal	Unlikely	1
	• Laboratory	Air Quality	Short term	Local	Minimal	Unlikely	1
	Hazardous Materials (storage & use).	Vessel Crew & Resources.	Continuous.	(Not Applicable)	Minimal	Unlikely	0
	Solid & Hazardous Waste (handle, store, incinerate).	Vessel Crew & Resources.	Continuous.	(Not Applicable)	Minimal	Unlikely	0
Conduct Riserless Drilling and Coring (in addition to impacts associated with the operation of the SODV).	Discharges (seawater drilling fluid, sediment displaced from the borehole, drilling mud, cement, tracers).	Water Quality	Short term	Local; seawater drilling fluid injected into the borehole at ≤1,900 L/min; fine grain particles suspended in the water column may extend 100+ m from the borehole.	Minimal	Certain	2
		Seafloor	Short term	Local; fine grain particles deposited within 100+ m of the borehole.	Minimal	Certain	2
		Biological Resources					
		Typical	Moderate	Local; benthos & fish eggs/larva may be displaced.	Minimal	Possible	2

TABLE 1.—SUMMARY OF POTENTIAL IMPACTS FROM IODP–USIO RISERLESS OCEAN DRILLING—Continued

Process/activity	Output	Affected environment	Environmental impacts				
			Duration	Extent	Intensity	Probability of an impact	Severity rating
		Sensitive Areas	Long term	Local; habit may be disturbed.	Moderate	Unlikely	3
		Fisheries	Short term	Local; fish may be displaced.	Minimal	Unlikely	2
		Cultural Resources	Long term	Local; deposition of sediment.	Minimal	Highly Unlikely.	3
	Physical Disturbances.	Water Quality	No environmental impacts				0
		Seafloor	Long term	Local; drill cuttings mound within ~5 m of borehole.	Minimal	Certain	3
		Biological Resources					
		Typical	Moderate	Local; benthos may be displaced or smothered.	Minimal	Possible	3
		Sensitive Areas	Moderate	Local; benthos may be displaced or smothered.	Moderate	Unlikely	3
		Fisheries	Moderate	Local	Minimal	Unlikely	3
		Marine Traffic	Short term	Local	Minimal	Unlikely	1
		Cultural Resources	Long term	Local; damage or alteration.	Minimal	Highly Unlikely.	3
	Underwater Noise (operation of vessel engines, generators, thrusters, mechanical systems, instruments, transponder beacons, drilling/coring).	Acoustical Environment.	Short term	Local	Minimal	Unlikely	2
		Biological Resources					
		Typical	Short term	Local	Minimal	Unlikely	1
		Sensitive Areas	Short term	Local	Minimal	Unlikely	1
		Fisheries	Short term	Local	Minimal	1.	
Conduct Research Activities (geophysical logging, downhole measurements).	Discharges (none)	Water Quality	No environmental impacts				0
		Seafloor	No environmental impacts				0
		Biological Resources					
		Typical	No environmental impacts				0
		Sensitive Areas	No environmental impacts				0
		Fisheries	No environmental impacts				0
	Underwater Noise (small seismic sources).	Acoustical Environment.	Short term	Local	Minimal	Unlikely	2
		Biological Resources					
		Typical	Short term	Local	Minimal	Possible	1
		Sensitive Areas	Short term	Local	Minimal	Unlikely	1
		Fisheries	Short term	Local	Minimal	Unlikely	1

TABLE 1.—SUMMARY OF POTENTIAL IMPACTS FROM IODP–USIO RISERLESS OCEAN DRILLING—Continued

Process/activity	Output	Affected environment	Environmental impacts				
			Duration	Extent	Intensity	Probability of an impact	Severity rating
Complete Boreholes and Install Equipment.	Releases/Discharges (heavy drilling mud for borehole closure, cement for casings and borehole seal, deployment of reentry devices, observatories and instruments).	Water Quality	Short term	Local	Unlikely	Minimal	2
		Seafloor	Long term	Local	Minimal	Likely	3
		Biological Resources					
		Typical	No environmental impacts				0
		Sensitive Areas	No environmental impacts				0
		Fisheries	No environmental impacts				0
Accidental Events	Discharges (petroleum hydrocarbons from major fuel spill from the vessel; liquids and/or gases from blowout caused by drilling into geological source).	Air Quality	Short term	Local (petroleum vapors, gasses).	Severe	Highly Unlikely.	2
		Water Quality	Long term	Major	Severe	Highly Unlikely.	4
		Seafloor	Long Term.	Major	Severe	Highly Unlikely.	4
		Acoustical Environment.	No environmental impacts				0
		Biological Resources					
		Typical	Long term	Major	Severe	Highly Unlikely.	4
		Sensitive Areas	Long term	Major	Severe	Highly Unlikely.	4
		Fisheries	Long term	Major	Severe	Highly Unlikely.	4
		Marine Traffic	Long term	Major	Severe	Highly Unlikely.	4

Notes: Severity Ratings: 0 = no impact; 1 = minimal local effect that ceases immediately after the vessel leaves a particular drill site; 2 = minimal local effect that continues for a limited period of time after the vessel has left a particular drill site; 3 = minimal local long-term effect; 4 = substantial effects that may be realized on a major (regional) and long-term basis.

Current Status of the IODP–USIO Activities and Schedule

The *JOIDES Resolution* is in the process of being modernized and is expected to be completed in fall 2008 (see *http://www.joiscience.org/sodv*). The first expedition using the modernized *JOIDES Resolution* is scheduled to begin in November 2008. Table 2 summarizes the expedition schedule as of April 2008 (see *http://iodp.tamu.edu/scienceops*) and provides links to specific pre-cruise information such as expedition proposal, Scientific Prospectus, location, and other data.

TABLE 2.—USIO RISERLESS VESSEL EXPEDITION SCHEDULE

Expedition name	Exp No.	Port of origin	Dates [1 2]	Total days (port/sea)	Days at sea [3] (transit/ops)	Co-chief scientists	USIO contact
Canterbury Basin [*more information*].	317	TBD	Nov '08–Jan '09.	TBD	TBD	*C. Fulthorpe, K. Hoyanagi.*	*J. Geldmacher.*

TABLE 2.—USIO RISERLESS VESSEL EXPEDITION SCHEDULE—Continued

Expedition name	Exp No.	Port of origin	Dates [1] [2]	Total days (port/sea)	Days at sea [3] (transit/ops)	Co-chief scientists	USIO contact
Wilkes Land [3] [*more information*].	320	TBD	Jan–Mar '09 ...	TBD	TBD	*C. Escutia, H. Brinkhuis.*	*A. Klaus.*
Pacific Equatorial Age Transect [4] [*more information*]/ Juan de Fuca [*more information*].	TBD	TBD	TBD	TBD	TBD	*N. Ahagon, H. Pälike, M. Lyle, I. Raffi.*	*K. Gamage.*

Notes:
[1] Dates for expeditions may be adjusted pending final vessel delivery date from shipyard.
[2] The start date reflects the initial port call day. The vessel will sail when ready.
[3] Wilkes Land Activities include completion of the Adelie Drift APL.
[4] The schedule after Wilkes Land is dependent upon available funding and logistical possibilities.

Conclusion

Alternative B has been selected as the preferred alternative, judged as providing the most scientific return while being most effective at minimizing environmental, health, and safety risks. Importantly, this Alternative provides two separate reviews of scientific drilling proposals, independent of the drillship operator, that examine not only drilling safety but also environmental impacts and mitigation measures. Review of safety issues and drilling hazards of drilling proposals by the IODP–USIO's Safety Panel occurs in parallel with review by the IODP Environmental Protection and Safety Panel (EPSP). The EPSP examines potential environmental hazards in addition to those of drilling safety, and, importantly, recommends mitigation procedures to reduce environmental impact.

On behalf of NSF, I hereby authorize the decision to move forward with funding the United States Implementing Organization's participation in the Integrated Ocean Drilling Program.

Dr. Julie Morris,
Director, Division of Ocean Sciences, National Science Foundation.

Submitted for the National Science Foundation on June 25, 2008.

Suzanne H. Plimpton,

Reports Clearance Officer, National Science Foundation.

[FR Doc. E8–14772 Filed 6–27–08; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. NRC–2008–0358]

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: U.S. Nuclear Regulatory Commission (NRC).

ACTION: Notice of pending NRC action to submit an information collection request to the Office of Management and Budget (OMB) and solicitation of public comment.

SUMMARY: The NRC invites public comment about our intention to request the OMB's approval for renewal of an existing information collection that is summarized below. We are required to publish this notice in the **Federal Register** under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35).

Information pertaining to the requirement to be submitted:

1. *The title of the information collection:* Voluntary Reporting of Performance Indicators.

2. *Current OMB approval number:* 3150–0195.

3. *How often the collection is required:* Quarterly.

4. *Who is required or asked to report:* Power reactor licensees.

5. *The number of annual respondents:* 104.

6. *The number of hours needed annually to complete the requirement or request:* Approximately 84,500 hours (83,200 reporting hours plus 1,300 recordkeeping hours for 26 recordkeepers).

7. *Abstract:* As part of a joint industry-NRC initiative, the NRC receives information submitted voluntarily by power reactor licensees regarding selected performance attributes known as performance indicators (PIs). PIs are objective measures of the performance of licensee systems or programs. The NRC's reactor oversight process uses PI information, along with the results of inspections, as the basis for NRC conclusions regarding plant performance and necessary regulatory response. Licensees transmit PIs electronically to reduce burden on themselves and the NRC.

Submit, by August 29, 2008, comments that address the following questions:

1. Is the proposed collection of information necessary for the NRC to properly perform its functions? Does the information have practical utility?

2. Is the burden estimate accurate?

3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?

4. How can the burden of the information collection be minimized, including the use of automated collection techniques or other forms of information technology?

A copy of the draft supporting statement may be viewed free of charge at the NRC Public Document Room, One White Flint North, 11555 Rockville Pike, Room O–1 F21, Rockville, MD 20852. OMB clearance requests are available at the NRC worldwide Web site: *http://www.nrc.gov/public-involve/doc-comment/omb/index.html.* The document will be available on the NRC home page site for 60 days after the signature date of this notice. Comments submitted in writing or in electronic form will be made available for public inspection. Because your comments will not be edited to remove any identifying or contact information, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed. Comments submitted should reference Docket No. NRC–2008–0358. You may submit your comments by any of the following methods. Electronic comments: Go to *http://www.regulations.gov* and search for Docket No. NRC–2008–0358. Mail comments to NRC Clearance Officer, Margaret A. Janney (T–5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001. Questions about the information collection requirements may be directed to the NRC Clearance Officer, Margaret A. Janney (T–5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, by telephone at 301–415–7245, or by e-mail to *INFOCOLLECTS.Resource@NRC.GOV.*

Dated at Rockville, Maryland, this 23rd day of June 2008.

For the Nuclear Regulatory Commission.

Gregory Trussell,

Acting NRC Clearance Officer, Office of Information Services.

[FR Doc. E8–14716 Filed 6–27–08; 8:45 am]

BILLING CODE 7590–01–P

PRESIDENT'S COUNCIL ON INTEGRITY AND EFFICIENCY

Notice of Continuing Need for Quality Federal Auditor Training

AGENCY: The President's Council on Integrity and Efficiency is an interagency committee.

ACTION: Notice of Continuing Need for Quality Federal Auditor Training.

SUMMARY: The President's Council on Integrity and Efficiency (PCIE) with the Executive Council on Integrity and Efficiency (ECIE) recognizes a continuing need to provide quality training to personnel employed by the Federal Offices of Inspectors General (OIG). Accordingly, those who may be interested in developing and/or delivering courses/curriculum focused on the continuing educational needs of the Federal OIG Audit Community are encouraged to visit the Inspector General Community Auditor Training Web site at *http://www.ignet.gov/pande/igcats/index.htm.* Among other things, this Web site contains information on the types of courses that had been offered by the Inspectors General Auditor Training Institute in the past, PCIE sponsored assessments of many of those courses, as well as general information about the Federal OIG Community.

FOR FURTHER INFORMATION CONTACT: Kim Geier, Department of Education, Office of Inspector General, 400 Maryland Avenue, SW., Washington, DC 20202; *telephone:* (202) 245–7020; *fax:* (202) 245–7088; *e-mail: kim.geier@ed.gov*.

SUPPLEMENTARY INFORMATION: The PCIE is authorized by Executive Order 12805 to address integrity, economy, and effectiveness issues that transcend individual Government agencies, and to increase the professionalism and effectiveness of OIG personnel throughout the Government.

Note: The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available on GPO Access at: *http://www.gpoaccess.gov/nara/index.html.*

John P. Higgins, Jr.,

PCIE Audit Committee and Department of Education Inspector General.

[FR Doc. E8–14705 Filed 6–27–08; 8:45 am]

BILLING CODE 4000–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–58003; File No. SR–OCC–2008–11]

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing and Order Granting Accelerated Approval of a Proposed Rule Change Relating to Range Options

June 23, 2008.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 (''Act''),[1] notice is hereby given that on June 2, 2008, The Options Clearing Corporation (''OCC'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change described in Items I, II, and III below, which items have been prepared primarily by OCC. The Commission is publishing this notice and order to solicit comments from interested persons and to grant approval of the proposal.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The proposed rule change would permit OCC to clear and settle range options proposed to be listed by the Chicago Board Options Exchange, Incorporated (''CBOE'').

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, OCC included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. OCC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.[2]

[1] 15 U.S.C. 78s(b)(1).

[2] The Commission has modified the text of the summaries prepared by OCC.

(A) Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

The purpose of this rule change is to permit OCC to clear and settle range options proposed to be listed by CBOE.[3] General characteristics of range options are described below, followed by an explanation of the specific rule changes being proposed to clear them.

Description of Range Options

Range options are European-style, cash-settled options that have a payout if the underlying interest value falls within a specific range of values (*i.e.* , the ''range length'') at expiration. Range options may be listed on any index eligible for options trading on the listing exchange.

At the time a series of range options is opened for trading, the listing exchange will specify the range length. The exchange will also specify the ''range interval,'' which is a value (*e.g.*, 10 index points) used to divide the range length into three segments, the ''low range,'' ''middle range'' and ''high range.'' The low range starts from the lower value end of the range length and ends at the position on the range length where the value is one range interval higher. The high range is a segment of equal length located at the higher value end of the range length. The middle range is the segment of values between the low range and the high range.

Expiration months for range options would be equivalent to those for options on the same underlying index. The expiration date for a series of range options would be the same as for conventional index options. At expiration, range options would be in the money if the underlying interest value fell anywhere within the range length; otherwise the options would be out of the money.

Range options are similar in some respects to binary options.[4] Unlike binary options, however, range options would be of a single type rather than consisting of a put class and a call class. Moreover, the payout structure of range options would not be ''all or nothing'' throughout the range length. Rather, the payout amount (*i.e.*, the ''exercise settlement amount'') would vary depending on where the underlying

[3] File No. SR–CBOE–2007–104. The Commission recently issued an order granting approval of SR–CBOE–2007–104 that allows CBOE to list and trade range options. Securities Exchange Act Release No. 57376 (February 25, 2008), 73 FR 11689 (March 4, 2008).

[4] *See* Securities Exchange Act Release No. 56875 (November 30, 2007), 72 FR 69274 (December 7 2007) [SR–OCC–2007–08].

interest value falls within the range length. At the time a series of range options is opened for trading, the listing exchange will set a ''maximum range exercise value'' and a ''contract multiplier,'' the product of which would be the maximum exercise settlement amount for that series. This maximum exercise settlement amount would be payable if the underlying interest value fell anywhere within the middle range. If the underlying interest value fell within the low range, the exercise settlement amount would, in accordance with applicable exchange rules, increase from zero to the maximum exercise settlement amount as the underlying interest value increased within the low range. Finally, if the underlying interest value fell within the high range, the exercise settlement amount would, in accordance with applicable exchange rules, decrease from the maximum exercise settlement amount to zero as the value of the underlying index decreased within the high range. Range options are subject to the ''exercise-by-exception'' expiration date exercise procedures set forth in applicable OCC Rules.

By-Law and Rule Amendments Applicable to Range Options

1. Terminology—Article I, Section 1 and Article XIV, Section 1

OCC proposes to define ''range option'' in Article XIV, Section 1 of the By-Laws and to cross-reference the definition in Article I of the By-Laws. OCC also proposes to add ''range length,'' ''range interval,'' ''high range,'' ''middle range,'' and ''low range'' as new defined terms in Article XIV, Section 1.

OCC proposes to amend the definitions of ''option contract'' and ''type of option'' in Article I of the By-Laws to include range options.[5]

OCC proposes to redefine the term ''class'' in Article XIV, Section 1 so that it will apply to range options. To be within the same class, range options must cover the same underlying interest.

In respect of range options, OCC proposes to replace the definition of ''exercise price'' in Article I with a revised definition in Article XIV, Section 1 which clarifies that the exercise price for a series of range options is the range length. The exercise price (*i.e.*, range length) of a range option is not, as defined in Article I, an amount that is paid in exchange for an underlying interest; rather, it is used to determine whether such option is in the money and the exercise settlement amount upon exercise.

OCC proposes to redefine the term ''exercise settlement amount'' in Article XIV, Section 1 so that it will apply to range options. When used in respect of range options, exercise settlement amount means the amount of cash to be paid to the holder of an in-the-money option upon exercise. As described above, the exercise settlement amount will be the function of a maximum range exercise value and a contract multiplier, and will vary depending on where the underlying interest value falls within the range length at expiration. The manner in which the exercise settlement amount varies along the range length is set forth in applicable listing exchange rules.

Other defined terms in Article XIV that were created for binary options are proposed to be modified accordingly so that they will apply to range options.

2. Terms of Cleared Contracts—Article VI, Section 10(f)

OCC proposes to add a new paragraph (f) in Article VI Section 10 to clarify that the listing exchange will specify the variable terms for each series of range options at or before the time such series is first opened for trading.

3. General Rights and Obligations—Article XIV, Section 2C

OCC proposes to add a new Section 2C to Article XIV to define the general rights and obligations of holders and writers of range options. As noted above, range options are subject to the exercise-by-exception procedures set forth in applicable OCC Rules. The holder of an exercised range option has the right to receive the exercise settlement amount from OCC and the assigned writer has the obligation to pay that amount to OCC.

4. Adjustments of Range Options—Article XIV, Section 3A(b); Unavailability or Inaccuracy of Final Underlying Interest Value—Article XIV, Section 5; Determination of Final Underlying Interest Value—Article XIV, Section 6

Article XIV, Section 3A(b) governs adjustments of binary options (other than credit default options and credit default basket options) for which the underlying interest is an index of securities. OCC believes that such procedures are sufficient to support adjustments of range options. Therefore, OCC proposes to amend Section 3A(b) so that it will apply to range options as well. OCC also proposes to amend Article XIV, Section 5 to give OCC the authority to fix the underlying interest value for an expiring series of range options, and to rely on that value for determining whether such options are in the money. Additional changes are proposed to be made to Section 5 to reflect the fact that range options are subject to the exercise-by-exception procedures set forth in Rule 805 and applicable rules in Chapter XV. Finally, Article XIV, Section 6 is proposed to be amended to provide that, as with binary options, the underlying interest value of a series of range options will be determined by the exchange or exchanges on which such options are traded, subject to any overriding provision of OCC's By-Laws and Rules. If a series of range options is traded on more than one exchange, OCC may use the underlying interest value received from the exchange deemed by OCC to be the principal exchange, or OCC may employ a procedure to derive a single value based on some or all of the values received.

For purposes of deleting surplus words, OCC proposes to delete the word ''equity'' from Sections 3(A)(b)(2) and 5(a).

5. Exercise and Settlement—Rule 1501A, 1502A and 1503–1505

Range options will be subject to the exercise-by-exception procedures applicable to most other options under OCC Rules. Proposed procedures for exercise of in-the-money range options, as well as assignment and settlement of exercises (including provisions applicable to suspended clearing members), are set forth in amended rules and new rules in Chapter XV.

6. Deposits in Lieu of Margin Prohibited—Rule 1506

Escrow deposits will be prohibited for range options as well as binary options.

The proposed changes to OCC's By-Laws and Rules are consistent with the purposes and requirements of Section 17A of the Act because they are designed to promote the prompt and accurate clearance and settlement of transactions in, including exercises of, range options, and to foster cooperation and coordination with persons engaged in the clearance and settlement of such transactions, to remove impediments to and perfect the mechanism of a national system for the prompt and accurate

[5] OCC further proposes to remove a provision from the definition of ''option contract'' which provided that classes of fund shares as designated by OCC would be treated as non-equity securities for purposes of Article VIII and Chapters VI and X of the Rules. Such provision is no longer necessary because STANS, OCC's margin system, covers both equity and non-equity securities. Securities Exchange Act Release No. 53322 (February 15, 2006), 71 FR 9403 (February 23, 2006) [SR–OCC–2004–20].

clearance and settlement of such transactions, and, in general, to protect investors and the public interest. They accomplish this purpose by applying substantially the same rules and procedures to these transactions as OCC applies to similar transactions in other cash-settled options except to the extent that special rules and procedures are required in order to accommodate unique features of range options. The proposed rule change is not inconsistent with the existing rules of OCC, including any rules proposed to be amended.

(B) Self-Regulatory Organization's Statement on Burden on Competition

OCC does not believe that the proposed rule change would impose any burden on competition.

(C) Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were not and are not intended to be solicited with respect to the proposed rule change, and none have been received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Section 17A(b)(3)(F) of the Act requires, among other things, that the rules of a clearing agency be designed to promote the prompt and accurate clearance and settlement of securities transactions.[6] The purpose of the proposed rule change is to amend OCC's By-Laws and Rules so that OCC may clear and settle range options. Accordingly, the proposed rule change should result in the prompt and accurate clearance and settlement of securities transactions, specifically transactions in range options.

OCC has requested that the Commission approve the proposed rule prior to the thirtieth day after publication of the notice of filing. The Commission finds good cause for approving the proposed rule change prior to the thirtieth day after publication of notice because such approval will allow CBOE to commence trading of range options without any unnecessary delay.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*) or
- Send an e-mail to *rule-comments@sec.gov*. Please include File Number SR–OCC–2008–11 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–OCC–2008–11. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room, 100 F Street, NE., Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of such filing also will be available for inspection and copying at the principal office of OCC and on OCC's Web site at *http://www.theocc.com/publications/rules/proposed_changes/sr_occ_08_11.pdf*. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–OCC–2008–11 and should be submitted on or before July 21, 2008.

IV. Conclusion

On the basis of the foregoing, the Commission finds that the proposed rule change is consistent with the requirements of the Act and in particular Section 17A of the Act and the rules and regulations thereunder.[7]

It is therefore ordered, pursuant to Section 19(b)(2) of the Act, that the proposed rule change (File No. SR–OCC–2008–11) be and hereby is approved on an accelerated basis.

For the Commission by the Division of Trading and Markets, pursuant to delegated authority.[8]

Florence E. Harmon,

Acting Secretary.

[FR Doc. E8–14657 Filed 6–27–08; 8:45 am]

BILLING CODE 8010–01–P

[6] 15 U.S.C. 7q–1(b)(3)(F).

[7] In approving the proposed rule change, the Commission considered the proposal's impact on efficiency, competition and capital formation. 15 U.S.C. 78c(f).

[8] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–57994; File No. SR–CBOE–2008–63]

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Regarding Fees for the CBOE Stock Exchange

June 20, 2008.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'')[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on June 13, 2008, the Chicago Board Options Exchange, Incorporated (''CBOE'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been substantially prepared by the Exchange. The Exchange filed the proposed rule change pursuant to Section 19(b)(3)(A) of the Act[3] and Rule 19b–4(f)(2) thereunder,[4] which renders the proposal effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

CBOE proposes to amend its CBOE Stock Exchange (''CBSX'') Fees Schedule to include a CBSX Direct Connectivity Charge for a new facility of the Exchange that will enable CBOE Market-Makers to transmit orders directly to CBSX. The text of the proposed rule change is available at CBOE's principal office, the

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 15 U.S.C. 78s(b)(3)(A).

[4] 17 CFR 240.19b–4(f)(2).

Commission's Public Reference Room, and *http://www.cboe.com.*

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

CBSX is CBOE's stock trading facility. One of the aims of CBSX is to provide an effective and efficient platform for CBOE members to execute stock trades. This includes the hedging activity of CBOE option Market-Makers. Many CBOE option Market-Makers generate stock orders using systems from third-party technology providers that integrate options pricing and position management functions with functionality that generates stock orders for hedging purposes. The practice has typically been for these Market-Maker hedging orders to be routed to a stock broker for further routing to an exchange, including CBSX, or other venue for execution. To better facilitate the ability of CBOE Market-Makers to access CBSX, CBOE and CBSX are now making available to CBOE Market-Makers a direct connection between CBSX and the most prevalent of the market-making systems in use on CBOE that will enable the Market-Makers using that system to transmit stock orders directly to CBSX in their capacity as CBSX members.[5] Similar to member connectivity fees charged by CBOE, CBSX is establishing a connectivity charge for members that desire to utilize this connection (and any similar connection that CBOE/CBSX may make available in the future) to directly route orders to CBSX. CBSX intends to charge $50 per calendar quarter; however, to promote usage, the fee will be waived through the first quarter of 2009.

[5] Since CBSX is a facility of CBOE, CBOE members are eligible to trade on CBSX as ''members.''

2. Statutory Basis

The proposed rule change is consistent with the requirements of Section 6(b) of the Act,[6] in general, and Section 6(b)(4) of the Act,[7] in particular, in that it is designed to provide for the equitable allocation of reasonable dues, fees, and other charges among CBOE members and other persons using its facilities.

B. Self-Regulatory Organization's Statement on Burden on Competition

CBOE does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing proposed rule change is effective upon filing pursuant to Section 19(b)(3)(A)(ii) of the Act [8] and Rule 19b–4(f)(2) thereunder,[9] because it establishes or changes a due, fee, or other charge applicable only to a member imposed by the Exchange. At any time within 60 days of the filing of the proposed rule change, the Commission may summarily abrogate such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an e-mail to *rule-comments@sec.gov.* Please include File Number SR–CBOE–2008–63 on the subject line.

[6] 15 U.S.C. 78f(b).

[7] 15 U.S.C. 78f(b)(4).

[8] 15 U.S.C. 78s(b)(3)(A)(ii).

[9] 17 CFR 240.19b–4(f)(2).

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–CBOE–2008–63. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro/shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room, on official business days between the hours of 10 a.m. and 3 p.m. Copies of such filing will also be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File No. SR–CBOE–2008–63 and should be submitted on or before July 21, 2008.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[10]

Florence E. Harmon,

Acting Secretary.

[FR Doc. E8–14761 Filed 6–27–08; 8:45 am]

BILLING CODE 8010–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–57996; File No. SR–CBOE–2008–59]

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing of Proposed Rule Change To Amend CBOE Rule 8.7 Related to the Obligations of Market-Makers

June 20, 2008.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934

[10] 17 CFR 200.30–3(a)(12).

(''Act'')[1] and Rule 19b–4[2] thereunder, notice is hereby given that on June 11, 2008, the Chicago Board Options Exchange, Incorporated (the ''Exchange'' or ''CBOE'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been substantially prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend CBOE Rule 8.7 (Obligations of Market-Makers). The text of the proposed rule change is available on the Exchange's Web site (*http://www.cboe.org/Legal*), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, CBOE included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. CBOE has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to add an interpretation to CBOE Rule 8.7 (Obligations of Market-Makers) to clarify that the in-person requirements set forth in CBOE 8.7.03B may be satisfied by market-makers either individually or collectively with market-makers of the same member organization. The Exchange recently amended CBOE Rule 8.1 (Market-Maker Defined) expanding the definition of market-maker to include member organizations.[3] In view of the recent amendment of CBOE Rule 8.1, the Exchange believes that the in-person requirements set forth in CBOE Rule 8.7.03B may be satisfied by market-makers either individually or collectively with market-makers of the same member organization. The Exchange notes that CBOE Rule 8.7.03B only applies to Hybrid 3.0 option classes.[4] Currently, there are three Hybrid 3.0 option classes: Standard & Poor's 500 Index (SPX), Standard & Poor's 100 Index (OEX) and Morgan Stanley Retail Index (MVR).

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[5] in general, and furthers the objectives of Section 6(b)(5) of the Act,[6] in particular, in that it would promote just and equitable principles of trade, facilitate transactions in securities, remove impediments to and perfect the mechanisms of a free and open market and a national market system, and protect investors and the public interest. Specifically, the Exchange believes that the proposed rule change will strengthen its ability to carry out its oversight responsibilities as a self-regulatory organization and reinforce its surveillance and enforcement functions.

B. Self-Regulatory Organization's Statement on Burden on Competition

CBOE does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which CBOE consents, the Commission will:

(A) By order approve such proposed rule change; or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or send an e-mail to *rule-comments@sec.gov*. Please include File Number SR–CBOE–2008–59 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–CBOE–2008–59. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site at (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room, 100 F Street, NE., Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR–CBOE–2008–59 and should be submitted on or before July 21, 2008.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 57615 (April 3, 2008), 73 FR 19537 (April 10, 2008) (SR–CBOE–2007–120).

[4] CBOE Rule 8.7.03B applies to both non-Hybrid and Hybrid 3.0 option classes. However, there currently are not any non-Hybrid options classes. Telephone conference between Andrew Spiwak, Assistant Corporate Secretary, CBOE and Ronesha A. Butler, Special Counsel, Division of Trading and Markets, Commission dated June 19, 2008.

[5] 15 U.S.C. 78f(b).

[6] 15 U.S.C. 78f(b)(5).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[7]

Florence E. Harmon,

Acting Secretary.

[FR Doc. E8–14762 Filed 6–27–08; 8:45 am]

BILLING CODE 8010–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–57997; File No. SR–CBOE–2008–30]

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing of Proposed Rule Change Relating to the Hybrid Opening System

June 20, 2008.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'')[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on June 5, 2008, Chicago Board Options Exchange, Incorporated (''CBOE'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been substantially prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to revise its Hybrid Opening System (''HOSS'') procedures. The text of the proposed rule change is available at the Exchange, on the Exchange's Web site (*http://www.cboe.org/Legal*), and in the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

[7] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

CBOE proposes to amend CBOE Rule 6.2B, *Hybrid Opening System (''HOSS''),* which pertains to trading rotations for series trading on the CBOE Hybrid Trading System (''Hybrid''), in order to allow the Exchange to permit Hybrid Agency Liaison (''HAL'') functionality to be available on the openings in designated classes.[3]

The current HOSS method for opening chooses a single ''market clearing'' price that will leave bids and offers which cannot trade with each other.[4] *However, one or more series of a class may not open if one of the following conditions is met:*

• If no opening quote that complies with the legal width quote requirements of Rule 8.7(b)(iv) has been entered by at least one Market-Maker appointed to the class (or by the Designated Primary Market-Maker or Lead Market-Maker, if applicable for the particular class) (the ''opening quote condition'');

• The opening price is not within an acceptable range (as applicable for the particular class) compared to the lowest quote offer and the highest quote bid (the ''acceptable opening range condition''); or

• The opening trade would leave a market order imbalance (*i.e.*, there are more market orders to buy or to sell for the particular series than can be satisfied by the limit orders, quotes and market orders on the opposite side) (the ''market order imbalance condition'').

Under the current HOSS procedures, if the open quote condition or acceptable opening range condition is present, the senior official in the Exchange's control room may authorize the opening of the affected series where necessary to ensure a fair and orderly market. If the opening range condition is present, HOSS will not open the series but will send a notification to market participants indicating the reasons. If the market order imbalance condition is present, a notification will be sent to market participants indicating the size and direction (buy or sell) of the market order imbalance. HOSS will not open the series until the condition causing the delay is satisfied. HOSS will repeat the process until the series is open.

Under the proposed rule change, the Exchange could designate the classes in which HAL would be activated for HOSS openings. For such designated classes, additional steps would be automatically taken using HAL functionality to address the opening quote, acceptable opening range, and market order imbalance conditions discussed above, as well as to address instances where CBOE's opening trade would be at a price that is not the current national best bid or offer (the ''NBBO condition''). In particular, in classes where HAL is activated for HOSS openings, the following procedures would apply if one of the following conditions is met:

• If the opening quote condition is present, HOSS would check to see if there is an NBBO quote on another market that falls within the acceptable opening range. If such an NBBO quote is present, the series would open and expose the marketable order(s) at the NBBO price. If such an NBBO quote is not present, HOSS would not open the series and would send a notification to market participants indicating the reason.[5]

• If the acceptable opening range condition is present, HOSS would match orders and quotes to the extent possible at a single clearing price[6] within the acceptable opening range and then expose the remaining marketable order(s) at the widest price point within the acceptable opening range or the NBBO price, whichever is better.[7]

[3] *See* CBOE Rule 6.14, governing the operation of HAL.

[4] In determining the priority of orders and quotes to be traded, HOSS gives priority to market orders first, then to limit orders and quotes whose price is better than the opening price, and then to resting orders and quotes at the opening price. *See* Rule 6.2B(c)(iv).

[5] For example, if there is no Market-Maker quote present but an NBBO market is present that meets CBOE's acceptable opening range parameter (*e.g.*, the NBBO is $2.50–$2.80 25 x 25, while CBOE's pre-opening BBO is $1.00–$5.00 25 x 25 and there is a market order to buy 10 contracts), HOSS will open without a trade and expose the market order to buy 10 contracts at $2.80.

[6] In determining the priority of orders and quotes to be traded on the opening trade or through the subsequent exposure process, HOSS would give priority to public customer market orders first (with multiple orders ranked based on time priority), then to non-public customer market orders second (with multiple orders being ranked based on time priority), then to limit orders and quotes whose price is better than the opening price (with multiple orders and quotes being ranked in accordance with the allocation algorithm in effect for the option class pursuant to Rule 6.45A, *Priority and Allocation of Equity Option Trades on the CBOE Hybrid System,* or 6.45B, *Priority and Allocation of Trades in Index Options and Options on ETFs on the CBOE Hybrid System),* and then to limit orders and quotes at the opening price (with multiple orders and quotes being ranked in accordance with the allocation algorithm in effect for the option class pursuant to Rule 6.45A or 6.45B). *See* proposed Interpretation and Policy .03(c)(i) to Rule 6.2B.

[7] For example, if the opening price would be outside of CBOE's acceptable opening range

Continued

• If the market order imbalance condition is present, HOSS would match orders and quotes to the extent possible at a single clearing price and then expose the remaining marketable order(s) at the widest price point within the acceptable opening range or the NBBO price, whichever is better.[8]

• If the NBBO condition is present, HOSS would match orders and quotes to the extent possible at a single clearing price within the acceptable opening range or the NBBO price, whichever is better, and then expose the remaining marketable order(s) at the NBBO price.[9]

The order exposure process would be conducted pursuant to Rule 6.14, *Hybrid Agency Liaison (HAL).* Under the HAL process, marketable orders would be electronically exposed to all Market-Makers appointed to the relevant option class if not executed at a single clearing price.[10] For HOSS openings where HAL is used, this exposure period would afford Market-Makers appointed to the class an opportunity to match the widest price point within the opening range or the NBBO price, whichever is better. Assuming at least one Market-Maker committed to trade any portion of the exposed marketable order(s) during the exposure period, the exposure period would end and an allocation period would commence. The Exchange would determine on a class-by-class basis the applicable exposure period (which would not exceed 1.5 seconds) and allocation period (which, when combined with the designated exposure period time—as opposed to an exposure period that is terminated early [11]—would not exceed a total of 3 seconds) that would be applicable where HAL is activated for HOSS openings.

At the conclusion of the allocation period, the order(s) would be filled in accordance with the allocation algorithm in effect for the class pursuant to Rule 6.45A, *Priority and Allocation of Equity Option Trades on the CBOE Hybrid System,* or 6.45B, *Priority and Allocation of Trades in Index Options and Options on ETFs on the CBOE Hybrid System.* There is no participation entitlement applicable to exposed orders, and response sizes are limited to the size of the exposed order for allocation purposes. If no responses are received or if there remains an unexecuted marketable order (or portion thereof), then the balance of the order would be booked if it is a limit order that is not marketable or processed in one of the following ways:

• If the remaining order balance is for the account of a public customer and is marketable against another exchange that is a participant in the Intermarket Options Linkage, then HAL would route a Principal Acting as Agent Linkage Order (''P/A Order'') on behalf of the remaining order balance through the Linkage and any resulting execution of the P/A Order shall be allocated to that order.

• If the remaining order balance is marketable against another exchange that is a participant in the Intermarket Options Linkage but is not for the account of a public customer, then HAL would route a Principal Linkage Order (''P Order'') on behalf of the Remaining Order through the Linkage and any resulting execution of the P Order shall be allocated to the remaining order.

• In either situation above, if the Linkage order cannot be transmitted from the Exchange because the price of the Linkage order (or a better price) is no longer available on any market, then HAL would, pursuant to normal order allocation processing, execute the remaining order balance against the Exchange's existing quote (provided such execution would not cause a trade-through) or, if the Exchange's quote is inferior to the Exchange's best bid or offer at the time the order was received by HAL (''Exchange Initial BBO''),[12] against the Market-Makers that constituted the Exchange Initial BBO at a price equal to the Exchange Initial BBO.

• For all classes, any remaining balance of opening contingency orders not executed via HAL on the opening would be automatically cancelled.

• For single list classes, any remaining balance of marketable orders (other than opening contingency orders) not executed via HAL on the opening would route as determined by the Exchange on a class-by-class basis to PAR, BART, or at the order entry firm's discretion to the order entry firm's booth printer.

Last, the Exchange notes that all transactions executed via HOSS, including through the new proposed HAL exposure period, must be in compliance with Section 11(a) of the Act [13] and the rules promulgated thereunder. Section 11(a)(1) prohibits a member of a national securities exchange from effecting transactions on that exchange for its own account, the account of an associated person, or an account over which it or its associated person exercises investment discretion (collectively referred to herein as ''proprietary accounts'') unless an exception applies. In this regard, the Exchange notes its belief that orders for proprietary accounts submitted into HOSS, including any such orders submitted as a response through the proposed HAL exposure period, would qualify for an exception under Rule 11a2–2(T),[14] commonly referred to as the ''effect versus execute'' exception, provided the member: (i) Must transmit the order from off the exchange floor; [15]

parameter (*e.g.*, CBOE's pre-opening BBO is $2.40–$2.80 25 x 25, the next best CBOE pre-opening offer is $5.00 x 25, and there is a market order to buy 50 contracts), HOSS will trade 25 contracts at $2.80 and then expose 25 contracts at $2.80 (assuming the $2.80 acceptable opening range price is better than the NBBO price).

[8] 8 For example, if there is an order imbalance and CBOE is at the NBBO (*e.g.*, the NBBO is $1.00–$1.25 25 x 25, CBOE's pre-opening BBO $1.00–$1.20 25 x 25 and CBOE has a market order to buy 50 contracts), HOSS would open with a trade of 25 contracts at $1.20 and then expose 25 contracts at the NBBO price of $1.25 (assuming the $1.25 NBBO price is better than the acceptable opening range price).

[9] For example, if an away exchange is open and posting an NBBO better than CBOE's anticipated opening price (*e.g.,* the away exchange's BBO is $1.00–$1.15 25 x 25, while CBOE's pre-opening BBO is $1.00–$1.20 25 x 25, and CBOE also has a market order to buy 10 contracts), HOSS would open with no trade and expose 10 contracts at a price of $1.15.

[10] On an intra-day basis, orders are normally exposed through HAL to Market-Makers appointed to the relevant option class as well as members acting as agent for orders at the top of CBOE's book (''Qualifying Members'') in the relevant series. *See* Rule 6.14(b). For HOSS openings where HAL is used, the exposure to Qualifying Members would not be applicable because there would not be an established ''top of CBOE's book'' at the time. The Exchange notes that, as part of a separate rule filing, it recently modified Rule 6.14 to permit electronic exposure of HAL orders on a class-by-class basis to all members that elect to receive HAL messages (not just Market-Makers appointed to the relevant option class and Qualifying Members) and to permit such members to participate in the HAL process. See Securities Exchange Act Release No. 57837 (May 20, 2008), 73 FR 30431 (May 27, 2008) (SR–CBOE–2008–46). In classes where all members that elect to receive HAL messages are eligible to participate in the HAL process for a particular class on an intra-day basis, all such members would also be eligible to participate in any HAL process that occurs as part of the HOSS opening in that class.

[11] In addition to the receipt of a response to trade any portion of the exposed order(s), the exposure period would also terminate early under the circumstances described in Rule 6.14(d).

[12] With respect to new proposed HAL exposure period, ''Exchange Initial BBO'' means the best bid (or offer) that exists in the system at the time the auction begins. This takes into account orders and quotes on the relevant side of the market that exist in the system at that time (including orders and quotes that may have been entered up until the beginning of the HAL auction). *See e-mail* from Jennifer Lamie, Assistant General Counsel, CBOE, to Sara Gillis, Special Counsel, Commission, dated June 19, 2008.

[13] 15 U.S.C. 78k(a).

[14] 17 CFR 240.11a2–2(T).

[15] In the context of other automated trading systems, the Commission has found that the off-floor transmission requirement is met if an order for a proprietary account is transmitted from a remote location directly to an exchange's floor by electronic means. *See, e.g.*, Securities Exchange Act Release No. 57478 (March 12, 2008), 73 FR 14521, 14538 (March 18, 2008) (SR–NASDAQ–2007–004 and SR–NASDAQ–2007–080) (''NASDAQ Options Market Approval Order''). The Exchange believes

(ii) must not participate in the execution of the transaction once it has been transmitted to the member performing the execution; [16] (iii) must not be affiliated with the executing member; [17] and (iv) with respect to an account over which the member has investment discretion, neither the member nor its associated person may retain any compensation in connection with effecting the transaction except as provided in the rule. To the extent a member submits an order for a proprietary account into HOSS from on the floor (including an order for a proprietary account initiated from off the floor and routed to the member or an affiliated member on the floor for submission into HOSS), such an order would not qualify for the effect versus execute exception.

The Exchange believes the proposed rule change should serve to further enhance the efficiency of HOSS opening rotations because it will further automate the process for addressing opening quote, acceptable opening range, and market order imbalance conditions that may occur on the openings, as well as address NBBO condition scenarios where the Exchange's opening trade might occur at a price when there is a better away market.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with Section 6(b) of the Act,[18] in general, and furthers the objectives of Section 6(b)(5) of the Act,[19] in particular, in that it is designed to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. In particular, the Exchange believes that the proposed rule change should serve to enhance the efficiency of HOSS opening rotations.

B. Self-Regulatory Organization's Statement on Burden on Competition

CBOE does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission will:

(A) By order approve such proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an e-mail to *rule-comments@sec.gov.* Please include File Number SR–CBOE–2008–30 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, Station Place, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–CBOE–2008–30. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room on official business days between the hours of 10 a.m. and 3 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the CBOE. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–CBOE–2008–30 and should be submitted on or before July 21, 2008.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[20]

Florence E. Harmon,

Acting Secretary.

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this requirement is met if an order for a proprietary account is transmitted from a remote location directly into the HOSS system by electronic means.

[16] The Exchange states that given HOSS's existing and proposed automated matching and execution services, no Exchange member enjoys any special control or influence over the timing of execution or special order handling advantages for orders executed via HOSS (including as proposed to be amended), as all orders will be centrally processed for execution by computer, rather than being handled by a member through bids or offers made on the trading floor. The member may, however, participate in clearing and settling the transaction.

[17] The Commission has recognized in the past that this requirement is not applicable where automated exchange facilities are used, as long as the design of these systems ensures that members do not possess any special or unique trading advantages in handling their orders after transmitting them to the exchange. *See, e.g.*, NASDAQ Options Market Approval Order, 73 FR at 14539, and Securities Exchange Act Release No. 15533 (January 29, 1979), 44 FR 6084 (January 31, 1979). The Exchange believes that this principle is directly applicable to HOSS, including through the proposed new exposure period, due to HOSS's open, electronic structure that is designed to prevent any Exchange members from gaining any time and place advantages. Therefore, the Exchange believes that an Exchange member effecting a transaction through HOSS (including as proposed to be amended) satisfies the requirement for execution through an unaffiliated member.

[18] 15 U.S.C. 78f(b).

[19] 15 U.S.C. 78f(b)(5).

[20] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–58005; File No. SR–ISE–2008–45]

Self-Regulatory Organizations; International Securities Exchange, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to the Definition of Qualified Contingent Trade

June 23, 2008.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934

(''Act'')[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on June 12, 2008, the International Securities Exchange, LLC (''ISE'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I and II below, which Items have been substantially prepared by the Exchange. The ISE designated the proposed rule change as ''non-controversial'' under Section 19(b)(3)(A)(iii) of the Act[3] and Rule 19b–4(f)(6) thereunder,[4] which renders the proposal effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The ISE is proposing to amend its rules to delete from the definition of Qualified Contingent Trade the requirement that such transactions are for a minimum size of 10,000 shares or $200,000 in transaction value. The text of the proposed rule change is available at the Exchange, the Commission's Public Reference Room, and *http://www.ise.com*.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The ISE has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange's rules currently define the term ''Qualified Contingent Trade'' according to the definition included in an exemptive order issued by the Commission on August 31, 2006.[5] Pursuant to the Exemptive Order, Qualified Contingent Trades are exempt from the trade-through restrictions of Regulation NMS.[6] The Exchange has incorporated an identical definition of Qualified Contingent Trades into ISE Rule 2107(c) so that such trades could be exempted from Exchange rules restricting intermarket trade-throughs.[7]

On April 4, 2008, the Commission issued a revised exemptive order eliminating one of the elements of the original Qualified Contingent Trade definition.[8] Based upon a request from the Chicago Board Options Exchange, Incorporated, the Revised Exemptive Order deleted the minimum size conditions of 10,000 shares or $200,000, which were part of the original definition. The Exchange proposes to eliminate these size conditions from its own definition of Qualified Contingent Trade in order to operate its marketplace in a manner consistent with the Revised Exemptive Order.

Accordingly, the Exchange proposes to amend its Rule 2107(c)(4)(ii) to eliminate any minimum size conditions in its definition of the term Qualified Contingent Trade.

2. Statutory Basis

The Exchange believes that the proposal is consistent with Section 6(b) of the Act,[9] in general, and Section 6(b)(5) of the Act,[10] in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

B. Self-Regulatory Organization's Statement on Burden on Competition

The proposed rule change does not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange has not solicited, and does not intend to solicit, comments on this proposed rule change. The Exchange has not received any unsolicited written comments from members or other interested parties.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days after the date of filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest, the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act[11] and subparagraph (f)(6) of Rule 19b–4 thereunder.[12] As required under Rule 19b–4(f)(6)(iii),[13] the ISE provided the Commission with written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change.

A proposed rule change filed under Rule 19b–4(f)(6) normally may not become operative prior to the 30th day after the date of filing.[14] However, Rule 19b–4(f)(6)(iii)[15] permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The ISE requested that the Commission waive the 30-day operative delay for ''non-controversial'' proposals under Rule 19b–4(f)(6)[16] and make the proposed rule change effective and operative upon filing. The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest. The Commission notes that the proposed language is identical to language contained in the Revised Exemptive Order.[17] In addition, the Commission notes that the Chicago Stock Exchange, Inc. recently made identical changes to its qualified

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 15 U.S.C. 78s(b)(3)(A)(iii).

[4] 17 CFR 240.19b–4(f)(6).

[5] *See* Securities Exchange Act Release No. 54389 (August 31, 2006), 71 FR 52829 (September 7, 2006) (Order Granting an Exemption for Qualified Contingent Trades from Rule 611(a) of Regulation NMS) (''Exemptive Order'').

[6] *See* Exemptive Order and 17 CFR 242.611.

[7] *See* Securities Exchange Act Release No. 56671 (October 18, 2007), 72 FR 60400 (October 24, 2007) (SR–ISE–2007–88).

[8] *See* Securities Exchange Act Release No. 57620 (April 4, 2008), 73 FR 19271 (April 9, 2008) (Order Modifying the Exemption for Qualified Contingent Trades from Rule 611(a) of Regulation NMS) (''Revised Exemptive Order'').

[9] 15 U.S.C. 78f.

[10] 15 U.S.C. 78f(b)(5).

[11] 15 U.S.C. 78s(b)(3)(A).

[12] 17 CFR 240.19b–4(f)(6).

[13] 17 CFR 240.19b–4(f)(6)(iii).

[14] *Id.*

[15] *Id.*

[16] *Id.*

[17] *See supra* note 8.

contingent trade definition.[18] Accordingly, the Commission designates the proposed rule change operative upon filing with the Commission.[19]

At any time within 60 days of the filing of the proposed rule change, the Commission may summarily abrogate the rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an e-mail to *rule-comments@sec.gov*. Please include File Number SR–ISE–2008–45 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–ISE–2008–45. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room, 100 F Street, NE., Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the ISE. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–ISE–2008–45 and should be submitted on or before July 21, 2008.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[20]

Florence E. Harmon,

Acting Secretary.

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[18] *See* Securities Exchange Act Release No. 57767 (May 2, 2008), 73 FR 26174 (May 8, 2008) (SR–CHX–2008–06).

[19] For purposes only of waiving the 30-day operative delay, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[20] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–58006; File No. SR–NYSEArca–2008–64]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Amending its Schedule of Fees and Charges for Exchange Services

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 (''Act''),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on June 19, 2008, NYSE Arca, Inc. (''NYSE Arca'' or the ''Exchange''), through its wholly owned subsidiary NYSE Arca Equities, Inc. (''NYSE Arca Equities''), filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been substantially prepared by the Exchange. The Exchange filed the proposed rule change pursuant to section 19(b)(3)(A) of the Act [3] and Rule 19b–4(f)(2) thereunder,[4] which renders it effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange, through its wholly-owned subsidiary NYSE Arca Equities, Inc. (''NYSE Arca Equities''), proposes to amend the section of its Schedule of Fees and Charges for Exchange Services (the ''Schedule'') that applies to orders submitted by ETP Holders and Market Makers.[5] The changes to the Schedule pursuant to this proposal are effective upon filing; however the changes will become operative on July 1, 2008. The text of the proposed rule change is available on the Exchange's Web site at *http://www.nyse.com,* at the Exchange's Office of the Secretary and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, NYSE Arca included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The Exchange has prepared summaries set forth in sections A, B, and C below of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend the Schedule and introduce unified volume tiers for NYSE Arca equities pricing in Tape A, B, and C securities. Currently, ETP Holders and Market Makers must meet volume tiers independently in each Tape to qualify for a volume discount. Pursuant to this proposal, an ETP Holder's and Market Maker's volume in each Tape will be aggregated for purposes of attaining the applicable fee or credit associated with the tier attained. The Exchange believes these integrated volume tiers offer highly attractive volume-based incentives with the best rate combinations in NYSE-listed and Nasdaq-listed securities among major liquidity venues.

The Exchange proposes to amend the Schedule as it applies to ETP Holders and Market Makers as follows:

Tier 1:

For customers who transact average daily share volume per month greater than 90 million shares in total Tape A, B, and C volume, including adding liquidity of more than 45 million shares, the rates are as follows:

- For Tape A and C securities, a $0.0028 per share credit for orders that add liquidity and a fee of $0.0027 per share for orders that remove liquidity.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 15 U.S.C. 78s(b)(3)(A).

[4] 17 CFR 240.19b–4(f)(2).

[5] *See* NYSE Arca Equities Rule 1.1(n) and (u).

• For Tape B securities, a $0.0023 per share credit for orders that add liquidity and a fee of $0.0028 for orders that remove liquidity.

• For Tape A, B, or C securities, a routing fee of $0.0029 per share for orders routed to and executed by another market center or participant, except on the NYSE, where the routing fee is $0.0008 or $0.0006 for customers using the Primary Sweep Order.

Tier 2:

For customers who transact average daily share volume per month greater than 60 million shares in total Tape A, B, and C volume, including adding liquidity of more than 30 million shares, the rates are as follows:

• For Tape A and C securities, a $0.0027 per share credit for orders that add liquidity and a fee of $0.0029 per share for orders that remove liquidity.

• For Tape B securities, a $0.0022 per share credit for orders that add liquidity and a fee of $0.0028 per share for orders that remove liquidity.

• For Tape A, B, and C securities, a routing fee of $0.0029 per share for orders routed to and executed by another market center or participant, except on the NYSE, where the routing fee is $0.0008 or $0.0006 for customers using the Primary Sweep Order.

As described above, these two tiers replace the previously applicable, but non-unified tiers for Tape A and C securities as well as the only available tier for Tape B securities. In addition, these changes will further the Exchange's objective to narrow the margins between fees received and credits paid. In comparison to the present model, for example, the pricing for the new top tier offers ETP Holders and Market Makers (i) reduced take and routing fees for Tape A securities, (ii) an increased rebate for Tape B and C securities, and (iii) an increased take fee for Tape C securities. Also, in comparison to the present model, the pricing for the new lowest tier offers ETP Holders and Market Makers (i) reduced take and routing fees for Tape A securities, (ii) an increased rebate for Tape C securities, and (iii) an increased take fee for Tape C securities.

Take Tier:

For customers who transact average daily share volume per month greater than 85 million shares in removed and routed Tape A, B, and C volume, including routed volume of more than 2 million shares, the rates are as follows:

• For Tape A and C securities, a $0.0023 per share credit for orders that add liquidity and a fee of $0.0029 per share for orders that remove liquidity.

• For Tape B securities, a $0.0022 per share credit for orders that add liquidity and a fee of $0.0029 per share for orders that remove liquidity.

• For Tape A, B, and C securities, a routing fee of $0.00285 per share for orders routed to and executed by any away market center or participant, except on the NYSE, where the routing fee is $0.0008 or $0.0006 for customers using the Primary Sweep Order.

The Exchange introduces this Take Tier as a means of offering an attractive volume-based incentive to ETP Holders and Market Makers who participate on our market primarily as liquidity takers. Currently, the Exchange does not offer a Take Tier and believes that by doing so, ETP Holders and Market Makers will be motivated to participate on our market for purposes of accessing our liquidity.

Basic Rates:

For ETP Holders or Market Makers who do not attain any of the available tiers, the rates are as follows:

• For Tape A and C securities, a $0.0023 per share credit for orders that add liquidity and a fee of $0.0029 per share for orders that remove liquidity.

• For Tape B securities, a $0.0022 per share credit for orders that add liquidity and a fee of $0.0030 per share for orders that remove liquidity.

• For Tape A securities, a routing fee of $0.0030 per share for orders routed to and executed by any away market center or participant, except on the NYSE where the routing fee is $0.0010 or $0.0006 for customers using the Primary Sweep Order.

• For Tape B and C securities, a routing fee of $0.0035 per share for orders routed to and executed by any away market center or participant.

These basic rates shall replace the previously applicable basic rates for Tape A, B, and C securities. In comparison to the present model, the amended basic rates offer ETP Holders and Market Makers (i) a reduced rebate and take fee for Tape A securities, (ii) an increased rebate for Tape B securities, and (iii) an increased rebate and take fee for Tape C securities.

Market Data Revenue Sharing:

Presently, the Exchange offers its ETP Holders various market data revenue sharing credits in Tape A, B, and C securities. According to this proposal, the Exchange is eliminating the Liquidity Provider Credit and Directed Order credit offered to ETP Holders for purposes of market data revenue sharing in Tape B securities.[6] Instead, as described above, the Exchange is now offering ETP Holders increased rebates for transactions in Tape B securities, from the basic rate of $0.0020 to $0.0022 and the volume-based tier rate of $0.0020 to $0.0023.

Format Changes and Clarifying Text:

In conjunction with this proposed rate change, the Exchange is also reformatting the schedule to make it clearer and more user-friendly. The newly integrated tiers represent a significant change in how the Exchange applies its fees and credits compared to the Tape specific thresholds presently in place. By reformatting the Schedule, the Exchange will be able to clearly present the new, unified volume tiers and the applicable ''add/remove'' rate combinations. The proposed reformatting also allows the Exchange to remove previously redundant entries that in the past only confused customers and required multiple changes to the Schedule per each amendment.

For example, the Exchange proposes to eliminate a significant portion of the Schedule identifying fees and credits applicable to Market Makers. Under both the current Schedule and the amended Schedule, the fees and credits applicable to Market Makers conducting round lot transactions are the same as those that apply to ETP Holders generally. As such, there is no need to include a separate section detailing Market Maker round lot transactions. Accordingly, the section titled ''Round Lots'' under the heading ''Market Maker Transactions Fees and Credits'' is hereby deleted. Eliminating this duplicative section will eliminate any confusion as well as the need for multiple changes per amendment to the Schedule. To further clarify this point, the Exchange is adding the term Market Maker to the revised ETP Holder section of the Schedule. The new section will be titled: ''Exchange Transactions, ETP Holders and Market Makers.''

The Exchange is also eliminating the section titled ''ETP Holder Transaction Credit'' under the heading ''Other Fees and Charges.'' This section is generally duplicative and unnecessary in that all ETP transaction credits are now described in the ''Trade Related Charges'' section of the revised Schedule under the revised heading ''Exchange Transactions, ETP Holders and Market Makers.'' Deleting this wholly duplicative section will eliminate any confusion as well as the need for repetitive changes for every single amendment to the Schedule.

In addition, for purposes of odd lot fees and credits, the Exchange proposes to add clarifying language where necessary to make it clear that the designated odd lot fees and credits are applicable to transactions in shares priced above $1.00 as opposed to fees

[6] The Exchange will continue to offer the Cross Order credit in Tapes A, B, and C securities.

and credits currently identified as applicable to transactions in shares priced below $1.00.

Further, the Exchange will amend footnote 1 within the Schedule to explain that trade activity that occurs on days when the market closes early will not count towards volume tiers. In this manner, the Exchange will not unintentionally penalize an ETP Holder when it calculates its average daily volume by including a singularly low total stemming from a short trading day.

The Exchange will also renumber the footnotes within the Schedule where necessary.[7]

While changes to the Schedule pursuant to this proposal will be effective upon filing, the changes will become operative on July 1, 2008.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with section 6(b) of the Act,[8] in general, and furthers the objectives of section 6(b)(4),[9] in particular, in that it is intended to provide for the equitable allocation of reasonable dues, fees, and other charges among its members and other persons using its facilities. The Exchange believes that the proposed fees and credits are reasonable. The proposed rates are part of the Exchange's effort to attract and enhance participation on the Exchange, by offering volume-based incentives. The Exchange also believes that the proposed changes to the Schedule are equitable in that they apply uniformly to their customers.

B. Self Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

Written comments on the proposed rule change were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing proposed rule change is subject to section 19(b)(3)(A)(ii) of the Act[10] and subparagraph (f)(2) of Rule 19b–4 thereunder because it establishes or changes a due, fee, or other charge applicable only to a member imposed by a self-regulatory organization. Accordingly, the proposal is effective upon Commission receipt of the filing. At any time within 60 days of the filing of the proposed rule change, the Commission may summarily abrogate such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.[11]

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an e-mail to *rule-comments@sec.gov.* Please include File Number SR–NYSEArca–2008–64 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEArca–2008–64. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room, 100 F Street, NE., Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of such filing also will be available for inspection and copying at the principal office of NYSE Arca. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEArca–2008–64 and should be submitted on or before July 21, 2008.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[12]

Florence E. Harmon,

Acting Secretary.

[FR Doc. E8–14766 Filed 6–27–08; 8:45 am]

BILLING CODE 8010–01–P

[7] As part of the reformatting, the Exchange is also proposing to add grid lines to the Schedule for ease of review.

[8] 15 U.S.C. 78f(b).

[9] 15 U.S.C. 78f(b)(4).

[10] 15 U.S.C. 78s(b)(3)(A)(ii).

[11] 15 U.S.C. 78s(b)(3)(C).

[12] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–58008; File No. SR–NYSEArca–2008–61]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Order Granting Accelerated Approval of Proposed Rule Change To List and Trade Options on Reduced Values of the FTSE 100 Index and the FTSE 250 Index

June 24, 2008.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'')[1] and Rule 19b–4 thereunder,[2] notice is hereby given that, on June 19, 2008, NYSE Arca, Inc. (''NYSE Arca'' or the ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I and II below, which Items have been substantially prepared by the Exchange. This order provides notice of the proposed rule change and approves it on an accelerated basis.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend certain Exchange rules to trade options on reduced values of the FTSE 100 Index and the FTSE 250 Index. The Exchange also proposes to list and trade long-term options on reduced values of the FTSE 100 Index and the FTSE 250 Index. Options on these indexes will be a.m. cash-settled and will have European-style exercise provisions.

The text of the proposed rule change is available on the Exchange's Web site at *http://www.nyse.com*, at the

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

Exchange's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of, and basis for, the proposed rule change. The text of these statements may be examined at the places specified in Item III below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to list and trade on the Exchange a.m. cash-settled, European-style, index options on the FTSE 100 Index and the FTSE 250 Index (collectively, ''FTSE Indexes''). Specifically, the Exchange proposes to list options based upon one-tenth of the value of the FTSE Indexes (''Mini FTSE Indexes''). In addition to regular options on the Mini FTSE Indexes, the Exchange may list long-term options on such Indexes (''FTSE LEAPS'').[3]

The Exchange states that the FTSE 100 Index and the FTSE 250 Index are internationally recognized, capitalization-weighted indexes based on the prices of the most highly capitalized British stocks traded on the London Stock Exchange (''LSE''), a Recognized Investment Exchange under the Financial Services and Markets Act 2000 of the U.K and regulated by the Financial Services Authority (''FSA'') of the U.K. The LSE's Stock Exchange Electronic Trading Service (''SETS'') is a fully electronic order book trading service. SETS is the central price formation and trading service for the securities comprising the FTSE 100 Index, the most liquid FTSE 250 securities, and equities that underlie EuronextLIFFE (''LIFFE'') traded equity options. SETS market maker (''SETSmm'') is the LSE's trading service for, among others, the FTSE 250 securities that are not traded on SETS.

Currently, LIFFE lists equity options on the FTSE 100 Index and futures and futures options on the FTSE 250 Index. The Exchange notes that the Commission previously approved for the Chicago Board Options Exchange (''CBOE'') to list reduced-value options on the FTSE 100 Index, and for the International Securities Exchange (''ISE'') to list reduced value options on both the FTSE 100 and the FTSE 250.[4]

Index Design and Composition

The FTSE 100 and 250 Indexes were created in the 1980s by the International Stock Exchange of the United Kingdom and the Republic of Ireland (the predecessor to the LSE) in conjunction with the Financial Times and a committee of U.K. financial institutions, including LIFFE. The Indexes are administered and maintained by FTSE International Limited (''FTSE'').[5] To qualify for inclusion in a FTSE Index, a company must satisfy, among others, the following conditions: (1) It must have a full listing on the London Stock Exchange; (2) it must not be a subsidiary of another FTSE Index constituent; and (3) it must be sufficiently liquid to be traded.[6] The FTSE 100 Index consists of the largest 100 U.K. companies ranked by unadjusted market value, and the FTSE 250 consists of the next largest 250 U.K. companies ranked by unadjusted market value.[7] The FTSE EMEA Committee conducts a quarterly review of the FTSE Indexes to ensure that its component stocks are representative of the state of the equity market for the largest U.K. companies.

As of August 31, 2007, the following were the characteristics of the FTSE 100 Index:[8] (i) The total capitalization of all of the components in the Index is £1.50 trillion; (ii) regarding component capitalization, (a) the highest capitalization of a component is £107.14 billion (BP Plc), (b) the lowest capitalization of a component is £861.13 million (Schroders NV), (c) the average capitalization of the components is 14.70 billion, and (d) the median capitalization of the components is £6.02 billion; (iii) regarding component price per share, (a) the highest price per share of a component is £44.19 (Rio Tinto), (b) the lowest price per share of a component is 101 pence (ITV), (c) the mean price per share of a component is £8.60, and (d) the median price per share of a component is £7.16; (iv) regarding component weightings, (a) the highest weighting of a component is 7.14% (BP Plc), (b) the lowest weighting of a component is 0.04% (Schroders NV), (c) the mean weighting of the components is 0.99%, (d) the median weighting of the components is 0.45%, and (e) the total weighting of the top five highest weighted components is 29.36% (BP Plc, HSBC Holdings, Vodafone Group, GlaxoSmithKline, Royal Dutch Shell); (v) regarding component available shares, (a) the most available shares of a component is 5.03 billion (Vodafone Group), (b) the least available shares of a component is 66.90 million (Schroders NV), (c) the mean available shares of the components is 2.97 billion, and (d) the median available shares of the components is 1.24 billion; (vi) regarding the three-month average daily volumes of the components, (a) the highest three-month average daily volume of a component is 291.648 million (Vodafone Group), (b) the lowest three-month average daily volume of a component is 307,521 (Schroders NV), (c) the mean three-month average daily volume of the components is 15.77 million, (d) the median three-month average daily volume of the components is 8.01 million, (e) the average of three-month average daily volumes of the five most heavily traded components is 579.50 million (Vodafone Group, BP Plc, Corus Group, BT Group, Tesco), and (f) 100% of the components had a three-month average daily volume of at least 50,000.

As of August 31, 2007, the following were the characteristics of the FTSE 250 Index[9]: (i) The total capitalization of all of the components in the Index is £260.34 billion; (ii) regarding component capitalization, (a) the highest capitalization of a component is £3.97 billion (Taylor Wimpey), (b) the lowest capitalization of a component is

[3] Under NYSE Arca Rule 5.19(b)(1) ''Index LEAPS Options Series,'' the Exchange may list long-term options that expire from 12 to 60 months from the date of issuance.

[4] *See* Securities Exchange Act Release No. 29722 (September 23, 1991), 56 FR 49807 (October 1, 1991) (order approving SR–CBOE–91–07); Securities Exchange Act Release No. 53484 (March 14, 2006) 71 FR 14268 (March 21, 2006) (order approving SR–ISE–2005–25).

[5] The FTSE Europe, Middle East and Africa (''EMEA'') Committee is responsible for, among other things, establishing rules to determine, review, and modify the composition of the FTSE Indexes, as well as how the FTSE Indexes are calculated. The FTSE EMEA Committee is comprised of representatives from various financial institutions including, among others, FTSE, Barclays Global Investors, Goldman Sachs, and LIFFE.

[6] *See* ''Ground Rules for the Management of the UK Series of the FTSE Actuaries Share Indices,'' at *http://www.ftse.com* for complete eligibility criteria.

[7] Unadjusted market capitalization (as opposed to a ''free-float'' index methodology) refers to the total number of shares outstanding multiplied by the share price. A ''free-float'' index methodology usually excludes shares held by strategic investors by way of cross ownership, government ownership, private ownership, and restricted share ownership.

[8] The Exchange deems information regarding characteristics of the FTSE 100 accurate as per data available from various sources, including the FTSE 100 Fact Sheet published by FTSE International Ltd. and the Bloomberg Financial Web sites.

[9] The Exchange deems information regarding characteristics of the FTSE 250 accurate as per data available from various sources, including the FTSE 250 Fact Sheet published by FTSE International Ltd. and Bloomberg Financial Web sites.

£369.09 million (JPM European), (c) the average capitalization of the components is £1.03 billion, and (d) the median capitalization of the components is £830 million; (iii) regarding component price per share, (a) the highest price per share of a component is £52.93 (Greggs), (b) the lowest price per share of a component is 28 pence (PartyGaming), (c) the mean price per share of a component is £4.60, and (d) the median price per share of a component is £5.97; (iv) regarding component weightings, (a) the highest weighting of a component is 1.53% (Taylor Wimpey), (b) the lowest weighting of a component is 0.06% (JP Morgan European), (c) the mean weighting of the components is 0.41%, (d) the median weighting of the components is 0.30%, and (e) the total weighting of the top five highest weighted components is 6.13% (Taylor Wimpey, Tulow Oil, First Group, Ladbrokes, Invensys); (v) regarding component available shares, (a) the most available shares of a component is 3.96 billion (PartyGaming), (b) the least available shares of a component is 16.41 million (Daejan), (c) the mean available shares of the components is 367.10 million, and (d) the median available shares of the components is 211.60 million; (vi) regarding the three-month average daily volumes of the components, (a) the highest three-month average daily volume of a component is 30.80 million (PartyGaming), (b) the lowest three-month average daily volume of a component is 10,900 (Daejan), (c) the mean three-month average daily volume of the components is 2.41 million, (d) the median three-month average daily volume of the components is 769,801, (e) the average of three-month average daily volumes of the five most heavily traded components is 97.29 million (PartyGaming, Bradford & Bingley, Debenhams, LogicaCMG, and Hays), and (f) 98% of the components had a three-month average daily volume of at least 50,000.

Index Calculation and Index Maintenance

The base index value of the FTSE 100 Index and the FTSE 250 Index, was 1000, as of December 31, 1983, and 1412.60, as of December 31, 1985, respectively. As of April 17, 2008, the index value of the FTSE 100 Index and the FTSE 250 Index was 5980.4 and 10,089.4, respectively. The Exchange believes that these levels are too high for successful options trading. As a result, the premiums for options on the full values of the FTSE Indexes are high, which may deter retail investors. Accordingly, the Exchange proposes to base trading in options on a fraction of the full size FTSE Indexes. In particular, the Exchange proposes to list Mini FTSE Index options that are based on one-tenth of the value of each of the FTSE Indexes.[10] The Exchange believes that listing options on reduced values will attract a greater source of customer business than if options were based on the full value of the FTSE Indexes. The Exchange further believes that listing options on reduced values will provide an opportunity for investors to hedge, or speculate on, the market risk associated with the stocks comprising the FTSE Indexes. Additionally, by reducing the values of the FTSE Indexes, investors will be able to use this trading vehicle while extending a smaller outlay of capital. The Exchange believes that this should attract additional investors, and, in turn, create a more active and liquid trading environment.[11]

Index levels for options on the Mini FTSE Indexes are calculated by FTSE, and are currently disseminated by ISE every 15 seconds during the Exchange's regular trading hours to market information vendors via the Options Price Reporting Authority (''OPRA'').[12] In the event ISE no longer disseminates such index levels, the Exchange will cause such index levels to be disseminated via OPRA, the Consolidated Tape Association, or one or more major market data vendors. The methodology used to calculate the value of the FTSE Indexes is similar to the methodology used to calculate the value of other well-known market-capitalization weighted indexes. The level of each FTSE Index reflects the total market value of the component stocks relative to a particular base period and is computed by dividing the total market value of the companies in each index by its respective index divisor.[13]

The FTSE Indexes are updated on a real-time basis from 8 a.m. to 4:30 p.m. (London time), which corresponds to 3 a.m. to 11:30 a.m. (New York time). After 11:30 a.m. (New York time), OPRA disseminates a static value of the FTSE Indexes until the close of trading each day. The FTSE Indexes are calculated using the last traded price of the component securities. If a component security does not open for trading, the price of that security at the close or the index on the previous day is used in the calculation.[14]

The FTSE Indexes will be monitored and maintained by FTSE. FTSE will be responsible for making all necessary adjustments to the indexes to reflect component deletions, share changes, stock splits, stock dividends (other than an ordinary cash dividend), and stock price adjustments due to restructuring, mergers, or spin-offs involving the underlying components. Some corporate actions, such as stock splits and stock dividends, require simple changes to the available shares outstanding and the stock prices of the underlying components. Other corporate actions, such as share issuances, that change the market value would require changing the index divisor to effect adjustments.

The FTSE Indexes are reviewed each quarter in March, June, September, and December based on market capitalization. Based on information submitted by FTSE, the FTSE EMEA Committee approves the new index components and a reserve list of six companies for the FTSE 100 Index. If a company is deleted from the FTSE 100 Index between reviews as a result of a merger, takeover, or other corporate action, the highest ranking company from the reserve list will replace it in the index.

Although the Exchange is not involved in the maintenance of any of the FTSE Indexes, the Exchange represents that it will monitor each FTSE Index on a quarterly basis. The Exchange will not list any additional series for trading and will limit all transactions in such options to closing transactions only if, with respect to any FTSE Index: (i) The number of securities in a FTSE Index drops by one-third or more; (ii) 10% or more of the weight of a FTSE Index is represented by component securities having a market

[10] As noted above, the Exchange also proposes to list LEAPS on the Mini FTSE Indexes.

[11] The concept of listing reduced value options on an index is not a novel one. For example, the Commission has previously approved the listing of reduced value options on the S&P 500 Index, the NASDAQ 100 Index, and the NYSE Composite Index. *See* Securities Exchange Act Release Nos. 32893 (September 14, 1993), 58 FR 49070 (September 21, 1993) (S&P 500 Index); and 48681 (October 22, 2003), 68 FR 62337 (November 3, 2003) (NYSE Composite Index). *See also* Securities Exchange Act Release No. 43000 (June 30, 2000), 65 FR 42409 (July 10, 2000) (relating to a reduction in the value of the NASDAQ 100 Index).

[12] The FTSE Indexes will be published daily through major quotation vendors, such as Reuters.

[13] A divisor is an arbitrary number chosen at the starting date of an index to fix the index starting value. The divisor is adjusted periodically when capitalization amendments are made to the constituents of the index in order to allow the index value to remain comparable over time. Without a divisor the index value would change when corporate actions took place and would not reflect the true value of an underlying portfolio upon which the index is based.

[14] The FTSE Indexes are published daily in the Financial Times and are available in real-time on Reuters, Bloomberg, and other market information systems which disseminate information on a real-time basis.

value of less than $50 million; (iii) 10% or more of the weight of a FTSE Index is represented by component securities trading less than 20,000 shares per day; or (iv) the largest component security accounts for more than 15% of the weight of a FTSE Index or the largest five components in the aggregate account for more than 50% of the weight of a FTSE Index. As of May 15, 2008, the FTSE Indexes comply with these criteria.

In the event the FTSE Indexes cease to be maintained or calculated, or their values are not disseminated every 15 seconds by a widely available source, the Exchange will not list any additional series for trading and will limit all transactions in such options to closing transactions only for the purpose of maintaining a fair and orderly market and protecting investors.

Exercise and Settlement Value

Options on the FTSE Indexes will expire on the Saturday following the third Friday of the expiration month. Trading in the FTSE Indexes will normally cease at 4:15 p.m. (New York time) on the Thursday preceding an expiration Saturday. The index value for exercise of the FTSE Index options will be calculated based on the LSE's Exchange Delivery Settlement Price (''EDSP'') intra-day auction, which was introduced by LSE in November of 2004. The EDSP is a settlement value calculated by Euronext-LIFFE for FTSE index futures and options contracts traded on its exchange. The EDSP value is calculated using an intra-day auction process administered by the LSE for all the component stocks of the FTSE 100 Index and the FTSE 250 Index. The intra-day auction occurs between 10:10 a.m. and 10:29 a.m. (London time) for the FTSE 100 Index, and between 10:10 a.m. and 10:31 a.m. (London time) for the FTSE 250 Index on the third Friday of the expiration month. Therefore, because trading in the expiring contract months will normally cease on a Thursday at 4:15 p.m. (New York time), the EDSP for exercise will be determined the day after trading has ceased, *i.e.*, during the Friday morning LSE trading session, by 5:31 a.m. (New York time). The last automated traded price prior to the EDSP auction or the previous day's closing price will be used to calculate the final EDSP if a security did not participate in the auction. During the auction process, indications of the settlement price for each index are widely disseminated every 15 seconds via special indexes called Expiry Indexes. The purpose of the Expiry Indexes is to disseminate expected settlement values as the auction progresses. When the auction is finished, the final values of the Expiry Indexes are disseminated as the EDSP values. The Expiry Indexes and subsequent EDSP values are widely disseminated through major market data vendors including Reuters, Bloomberg, and Thomson.

If the LSE is closed on the Friday before expiration, but the Exchange remains open, then the last trading day for expiring FTSE Index options will be moved earlier to Wednesday as if the Exchange had had a Friday holiday. The settlement index value used for exercise will be calculated during LSE's EDSP intra-day auction on Thursday morning.

Contract Specifications

The contract specifications for options on the FTSE Indexes are set forth in Exhibits 3–1 and 3–2 to the proposed rule change. The FTSE Indexes are broad-based indexes, as defined in NYSE Arca Rule 5.12. Options on the FTSE Indexes are European-style and a.m. cash-settled. The Exchange's standard trading hours for broad-based index options (6:30 a.m. to 1:15 p.m., Pacific time), as set forth in Rule 7.1, will apply to the FTSE Indexes. Exchange rules that are applicable to the trading of options on broad-based indexes will apply to the reduced values of the FTSE Indexes.[15] Specifically, the trading of reduced values of the FTSE Indexes will be subject to, among others, Exchange rules governing margin requirements and trading halt procedures for index options. Options shall be quoted and traded in U.S. dollars.

For options on the Mini FTSE Indexes, the Exchange proposes to amend Rule 5.15 to state that all broad-based index options contracts shall be subject to a contract limitation fixed by the Exchange, which shall not be larger than the limits provided in the chart included in Rule 5.15. The proposed amended Rule 5.15 would establish aggregate position limits for options on the Mini FTSE Indexes at 250,000 contracts on the same side of the market, provided no more than 150,000 of such contracts are in the nearest expiration month series. Additionally, the Exchange proposes to amend NYSE Arca Rule 5.17 relating to the availability of an index option hedge exemption for public customers. The proposed rule change would specify that, for options on broad-based indexes other than for those that do not have any position limits, the hedge exemption is 75,000 contracts in addition to the standard limit.[16] Furthermore, proprietary accounts of members may receive an exemption of up to 500,000 contracts for the purpose of facilitating public customer orders.[17]

The Exchange proposes to apply broad-based index margin requirements for the purchase and sale of options on the Mini FTSE Indexes. Accordingly, purchases of put or call options with 9 months or less until expiration must be paid for in full. Writers of uncovered put or call options must deposit/maintain 100% of the option proceeds, plus 15% of the aggregate contract value (current index level x $100), less any out-of-the-money amount, subject to a minimum of the option proceeds plus 10% of the aggregate contract value for call options and a minimum of the option proceeds plus 10% of the aggregate exercise price amount for put options.

The Exchange proposes to set strike price intervals at least 2½ points for certain near-the-money series in near-term expiration months when the index level of the FTSE Indexes is below 200, and 5-point strike price intervals for other options series with expirations up to one year, and at least 10-point strike price intervals for longer-term options. The minimum tick size for series trading below $3 shall be $0.05, and for series trading at or above $3, the minimum tick size shall be $0.10.

The Exchange proposes to list options on reduced values of the FTSE Indexes in the three consecutive near-term expiration months plus up to three successive expiration months in the March cycle. For example, consecutive expirations of January, February, March, plus June, September, and December expirations would be listed.[18] In addition, long-term option series having up to sixty months to expiration may be traded.[19] The trading of long-term FTSE Indexes shall be subject to the same rules that govern the trading of all the Exchange's index options, including sales practice rules, margin requirements, and trading rules.

Options on the Mini FTSE Indexes shall be subject to the same rules that presently govern the trading of Exchange index options, including sales practice rules, margin requirements, trading rules, and position and exercise limits.

The Exchange proposes to amend Rule 5.19(a)(7)(A) to specify Mini FTSE

[15] *See* NYSE Arca Rule 5.12.

[16] The same limits that apply to position limits shall apply to exercise limits for these products.

[17] *See* NYSE Arca Rule 6.8, Commentary .08.

[18] *See* NYSE Arca Rule 5.19(a)(3).

[19] *See* NYSE Arca Rule 5.19(b)(1). The Exchange is not listing reduced value LEAPS on the FTSE Indexes pursuant to NYSE Arca Rule 5.19(b)(2).

Index options as a.m.-settled options approved for trading on the Exchange. The Exchange also proposes to add Commentary .01 to Rule 5.22 (Disclaimers) to specify that FTSE International Limited is the reporting authority for the FTSE 100 and 250 Indexes.

Surveillance and Capacity

The Exchange represents that it has an adequate surveillance program in place for options traded on the FTSE Indexes and intends to apply those same program procedures that it applies to the Exchange's other index options. Additionally, the Exchange has provided the Commission, on a confidential basis, a representation made by FTSE to the Exchange regarding FTSE's insider trading policies, as they pertain to the broker-dealer members of FTSE's EMEA Committee who are charged with the selection of component securities that comprise the FTSE Indexes. The FTSE EMEA Committee members are also required to maintain in confidence, including non-disclosure to another party, any information that they may be given by virtue of their membership of the FTSE EMEA Committee, unless such information is already in the public domain or where disclosure is required by law. NYSE Arca is also a member of the Intermarket Surveillance Group (ISG). The members of the ISG include all of the U.S. registered stock and options markets. In addition, the LSE and LIFFE are members of ISG. ISG members work together to coordinate surveillance and investigative information sharing in the stock and options markets. In addition, the major futures exchanges are members of the ISG, which allows for the sharing of surveillance information for potential intermarket trading abuses.

The Exchange has the necessary systems capacity to support new options series that will result from the introduction of reduced values of the FTSE Indexes, including LEAPS. The Exchange has provided the Commission system capacity information that supports its system capacity representations.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with and furthers the objectives of Section 6(b)(5) of the Act,[20] in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to, and perfect the mechanism of, a free and open market and a national market system, and, in general, to protect investors and the public interest. The Exchange believes that the proposed rule change will provide for additional competition in the U.S. options markets in trading FTSE Index options, to the benefit of the investing public.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an e-mail to *rule-comments@sec.gov.* Please include File Number SR–NYSEArca–2008–61 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEArca–2008–61. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room, 100 F Street, NE., Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEArca–2008–61 and should be submitted on or before July 21, 2008.

IV. Commission's Findings and Order Granting Accelerated Approval of the Proposed Rule Change

After careful consideration, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange.[21] In particular, the Commission finds that the proposed rule change is consistent with Section 6(b) of the Act,[22] in general, and furthers the objectives of Section 6(b)(5),[23] in particular, in that it is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest.

Because the FTSE 100 and FTSE 250 Indexes are broad-based indexes of actively traded, well-capitalized stocks, the trading of the proposed Index options on the Exchange does not raise unique regulatory concerns. The options on the Mini FTSE Indexes will be traded under NYSE Arca's existing regulatory regime for index options, which includes among other things, positions and exercise limits and margin requirements. Additionally, the Exchange has represented that it has adequate system capacity and surveillance for these Index options and that the index value will be disseminated at least every 15 seconds. In addition, as ISG members, NYSE Arca, LSE, and LIFFE work together to coordinate surveillance and investigate information sharing in the stock and options markets.

[20] 15 U.S.C. 78f(b)(5).

[21] In approving this proposal, the Commission notes that it has considered the proposal's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[22] 15 U.S.C. 78f(b).

[23] 15 U.S.C. 78f(b)(5).

Under Section 19(b)(2) of the Act,[24] the Commission may not approve any proposed rule change prior to the thirtieth day after publication of the notice of the filing thereof, unless the Commission find good cause for so doing and publishes its reasons for so finding. The Commission believes that the proposed rule filing does not raise any new, unique or substantive issues from those raised in similar proposals previously approved the Commission,[25] allowing other exchanges to list and trade reduced value index options on the FTSE Indexes. Accordingly, the Commission hereby finds good cause for approving the proposed rule change thereto prior to thirtieth day after the date of publication of notice of filings thereof in the **Federal Register**.

V. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[26] that the proposed rule change (SR–NYSEArca–2008–61) be, and it hereby is, approved on an accelerated basis.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[27]

Florence E. Harmon,

Acting Secretary.

[FR Doc. E8–14767 Filed 6–27–08; 8:45 am]

BILLING CODE 8010–01–P

SMALL BUSINESS ADMINISTRATION

Community Express Pilot Program

AGENCY: U.S. Small Business Administration (SBA).

ACTION: Notice of Plan to Extend and Restructure the Community Express Pilot Program.

SUMMARY: This notice extends the Community Express Pilot Program in its current form through September 30, 2008 and announces SBA's plan to restructure the program. The restructured Community Express will be effective October 1, 2008 to provide SBA's lending partners a transition period to implement the changes and to accommodate any Community Express loan applications lenders may have in process. This notice also extends the Community Express Pilot Program through December 31, 2009. Finally, this notice reminds SBA's participating lenders of the statutory limitation on the number of loans SBA can process under a pilot program.

DATES: The Community Express Pilot Loan Program is extended in its current form through September 30, 2008. The effective date of the changes to Community Express is October 1, 2008, and SBA is extending the restructured Community Express as a pilot program through December 31, 2009.

FOR FURTHER INFORMATION CONTACT: Charles Thomas, Office of Financial Assistance, U.S. Small Business Administration, 409 Third Street, SW., Washington, DC 20416; Telephone (202) 205–6490; *charles.thomas@sba.gov.*

SUPPLEMENTARY INFORMATION: The Community Express Pilot Program was established in 1999 based on the Agency's SBA Express Program. Lenders approved for participation in Community Express are authorized to use the expedited loan processing procedures in place for SBA Express, but the loans approved under Community Express must be to distressed or underserved markets. In addition, participating lenders must arrange and, when necessary, pay for appropriate management and technical assistance for their Community Express borrowers. To encourage lenders to make these loans, SBA provides its standard 75–85 percent guaranty, which contrasts with the 50 percent guaranty the Agency provides under SBA Express. The maximum loan amount under this pilot program is $250,000.

Following extensive internal analysis and discussion, as well as discussions with SBA's lending partners, SBA is restructuring and enhancing the Community Express Pilot Program to improve its management, administration, oversight, and delivery. Through this notice, SBA is extending the Community Express Pilot Program in its current form through September 30, 2008. Also, SBA is providing its lending partners with advance notification of the key features of the restructured Community Express Pilot Program and SBA's plans for implementing the restructured program, including the publication of procedural guidance and the availability of a transition period for lenders.

Under the restructured Community Express Pilot Program, borrower eligibility will be more clearly defined. First, small businesses whose principal office (as defined in 13 CFR 126.103) is located in a HUBZone or Community Reinvestment Act (CRA) area will be eligible for Community Express. These geographic areas are easily identifiable and searchable through Web-based facilities available through the Internet. Second, loans of $25,000 or less regardless of where the principal office of the business is located will be eligible for Community Express. Third, loans made under SBA Headquarters approved special market initiatives designed to support local community/economic development will be eligible for Community Express.

In addition, SBA is retaining the technical assistance (T/A) requirement of Community Express, but giving lenders the option to use SBA's new online Small Business Training Network (SBTN) and other SBA T/A resources to meet the program's requirements. Lenders will continue to be required to document in their loan file the T/A received by the borrower.

With the availability of SBA's SBTN and SBA's other T/A resources and with the Agency's higher 75–85 percent guaranty, the maximum interest rate lenders may charge for Community Express loans will be limited to the rate applicable under standard 7(a). Under standard 7(a), lenders may charge interest rates up to Prime plus 2.25 percent for loans with maturities of less than seven years and Prime plus 2.75 percent for loans with maturities that are seven years or greater. Lenders may charge rates 2 percent higher for loans of $25,000 or less and 1 percent higher for loans between $25,000 and $50,000.

SBA will publish detailed procedural guidance on the program's changes in coming weeks, which will be followed by lender support and training through its district offices. To assist lenders in understanding and implementing the restructured Community Express Pilot Program and to accommodate Community Express loan applications that lenders may already have in process, SBA will delay implementation of the changes until October 1, 2008. But, as of October 1, 2008, all Community Express loans must conform to the requirements and procedures of the restructured Community Express Pilot Program.

Community Express is being extended as a pilot program until December 31, 2009, which will allow SBA time to fully evaluate the results of these changes.

Because Community Express is a pilot program, SBA must ensure that it complies with Section 7(a)(25) of the Small Business Act, which prohibits the Agency from approving under any 7(a) pilot loan program more than 10 percent of the total number of 7(a) loans SBA approves in any fiscal year. During the early months of Fiscal Year 2008, SBA received loan guaranty requests under Community Express at a volume that

[24] 15 U.S.C. 78s(b)(2).

[25] *See* Securities Exchange Act Release No. 29722 (September 23, 1991), 56 FR 49807 (October 1, 1991) (order approving SR–CBOE–91–07); 53484 (March 14, 2006), 71 FR 14268 (March 21, 2006) (order approving SR–ISE–2005–25).

[26] 15 U.S.C. 78s(b)(2).

[27] 17 CFR 200.30–3(a)(12).

would have exceeded this statutory limit by year end, if unchecked. As a result, during Fiscal Year 2008, the SBA has taken steps to limit the number of Community Express loans it will accept each month. In addition to keeping the number of Community Express loans within the statutory limitation, this action will help enhance competition, diversify SBA lending, and control SBA's risk under the pilot program. SBA will continue to closely monitor the number of Community Express loans approved and make further adjustments as needed.

Authority: 13 CFR 120.3.

Eric R. Zarnikow,

Associate Administrator for Capital Access.

[FR Doc. E8–14846 Filed 6–27–08; 8:45 am]

BILLING CODE 8025–01–P

DEPARTMENT OF STATE

[Delegation of Authority 313]

Delegation by the Deputy Secretary of State to the Assistant Secretary of State for International Organization Affairs, and the Deputy Assistant Secretary for Economic and Global Affairs, Bureau of International Organization Affairs, of Authorities Under 39 U.S.C. 407(c)(1) and (2)

By virtue of the authority vested in the Secretary of State, including the authority of section 1 of the State Department Basic Authorities Act, as amended (22 U.S.C. 2651a), and delegated to the Deputy Secretary by Delegation of Authority 245 dated April 23, 2001, I hereby delegate to the Assistant Secretary of State for International Organization Affairs and the Deputy Assistant Secretary for Economic and Global Affairs, Bureau of International Organization Affairs, to the extent authorized by law, the authority and functions of the Secretary under 39 U.S.C. 407(c)(1) and (2).

Notwithstanding this delegation of authority, the Secretary and the Deputy Secretary may exercise any function or authority covered by this delegation.

This delegation of authority shall be published in the **Federal Register**.

Dated: June 20, 2008.

John D. Negroponte,

Deputy Secretary of State, Department of State.

[FR Doc. E8–14778 Filed 6–27–08; 8:45 am]

BILLING CODE 4710–10–P

DEPARTMENT OF STATE

[Public Notice 6256]

International Security Advisory Board (ISAB) Meeting Notice

Closed Meeting

In accordance with section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App § 10(a)(2), the Department of State announces a meeting of the International Security Advisory Board (ISAB) to take place on July 29, 2008, at the Department of State, Washington, DC.

Pursuant to section 10(d) of the Federal Advisory Committee Act, 5 U.S.C. App § 10(d), and 5 U.S.C. 552b(c)(1), it has been determined that this Board meeting will be closed to the public in the interest of national defense and foreign policy because the Board will be reviewing and discussing matters properly classified in accordance with Executive Order 12958.

The purpose of the ISAB is to provide the Department with a continuing source of independent advice on all aspects of arms control, disarmament, political-military affairs, and international security and related aspects of public diplomacy. The agenda for this meeting will include classified discussions related to the Board's ongoing studies on current U.S. policy and issues regarding international security, nuclear proliferation, and diplomacy.

For more information, contact Thelma Jenkins-Anthony, Deputy Executive Director of the International Security Advisory Board, Department of State, Washington, DC 20520, telephone: (202) 647–8436.

Dated: June 20, 2008.

Brandon A. Buttrick,

Executive Director, International Security Advisory Board, Department of State.

[FR Doc. E8–14783 Filed 6–27–08; 8:45 am]

BILLING CODE 4710–27–P

DEPARTMENT OF TRANSPORTATION

Office of the Secretary

Notice of Applications for Certificates of Public Convenience and Necessity and Foreign Air Carrier Permits Filed Under Subpart B (Formerly Subpart Q) During the Week Ending June 13, 2008

The following Applications for Certificates of Public Convenience and Necessity and Foreign Air Carrier Permits were filed under Subpart B (formerly Subpart Q) of the Department of Transportation's Procedural Regulations (See 14 CFR 301.201 *et seq.*). The due date for Answers, Conforming Applications, or Motions to Modify Scope are set forth below for each application. Following the Answer period DOT may process the application by expedited procedures. Such procedures may consist of the adoption of a show-cause order, a tentative order, or in appropriate cases a final order without further proceedings.

Docket Number: DOT–OST–2008–0187.

Date Filed: June 11, 2008.

Due Date for Answers, Conforming Applications, or Motion to Modify Scope: July 2, 2008.

Description: Application of Prescott Support Company, Inc. requesting a certificate of public convenience and necessity authorizing it to conduct foreign all-cargo air transportation of property and mail on a charter basis.

Docket Number: DOT–OST–2008–0188.

Date Filed: June 11, 2008.

Due Date for Answers, Conforming Applications, or Motion to Modify Scope: July 2, 2008.

Description: Application of Prescott Support Company, Inc. requesting a certificate of public convenience and necessity authorizing it to engage in interstate all-cargo air transportation of property and mail, on a charter basis.

Renee V. Wright,

Program Manager, Docket Operations, Federal Register Liaison.

[FR Doc. E8–14737 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–9X–P

DEPARTMENT OF TRANSPORTATION

Office of the Secretary

Aviation Proceedings, Agreements Filed the Week Ending June 6, 2008

The following Agreements were filed with the Department of Transportation under the Sections 412 and 414 of the Federal Aviation Act, as amended (49 U.S.C. 1382 and 1384) and procedures governing proceedings to enforce these provisions. Answers may be filed within 21 days after the filing of the application.

Docket Number: DOT–OST–2008–0183.

Date Filed: June 3, 2008.

Parties: Members of the International Air Transport Association.

Subject:

Mail Vote 569—Resolution 010a.

TC3 Within South East Asia.

Special Passenger Amending Resolution from Vietnam to South East Asia.

Intended effective date: 16 June 2008. (Memo 1209.)

Renee V. Wright,

Program Manager, Docket Operations, Federal Register Liaison.

[FR Doc. E8–14739 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–9X–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Executive Committee of the Aviation Rulemaking Advisory Committee; Meeting

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of meeting.

SUMMARY: The FAA is issuing this notice to advise the public of a meeting of the Executive Committee of the Aviation Rulemaking Advisory Committee.

DATES: The meeting will be on July 23, 2008, at 10 a.m.

ADDRESS: The meeting will take place at the General Aviation Manufacturers Association (GAMA), 1400 K Street, NW., Suite 801, Washington, DC 20005.

FOR FURTHER INFORMATION CONTACT: Gerri Robinson, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591, telephone (202) 267–9678; fax (202) 267–5075; e-mail *Gerri.Robinson@faa.gov*.

SUPPLEMENTARY INFORMATION: Under section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. App. 2), we are giving notice of a meeting of the Executive Committee of the Aviation Rulemaking Advisory Committee taking place on July 23, 2008, at the General Aviation Manufacturers Association (GAMA), 1400 K Street, NW., Suite 801, Washington, DC 20005. The agenda includes:

- Introduction of new Assistant Chair
- Continuous Improvement (Committee Process)
- Part 147 Working Group Report
- Fall Regulatory Agenda
- Rulemaking Harmonization
- Issue Area Status Reports from Assistant Chairs
- Remarks from other EXCOM members

Attendance is open to the interested public but limited to the space available. The FAA will arrange teleconference service for individuals wishing to join in by teleconference if we receive notice by July 16. Arrangements to participate by teleconference can be made by contacting the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Callers outside the Washington metropolitan area are responsible for paying long-distance charges.

The public must arrange by July 16 to present oral statements at the meeting. The public may present written statements to the executive committee by providing 25 copies to the Executive Director, or by bringing the copies to the meeting.

If you are in need of assistance or require a reasonable accommodation for this meeting, please contact the person listed under the heading **FOR FURTHER INFORMATION CONTACT**.

Issued in Washington, DC, June 24, 2008.

Pamela Hamilton-Powell,

Executive Director, Aviation Rulemaking Advisory Committee.

[FR Doc. E8–14573 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. PE–2008–27]

Petition for Exemption; Summary of Petition Received

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of petition for exemption received.

SUMMARY: This notice contains a summary of a petition seeking relief from specified requirements of 14 CFR. The purpose of this notice is to improve the public's awareness of, and participation in, this aspect of FAA's regulatory activities. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of the petition or its final disposition.

DATES: Comments on this petition must identify the petition docket number involved and must be received on or before July 10, 2008.

ADDRESSES: You may send comments identified by Docket Number FAA–2008–0611 using any of the following methods:

- *Government-wide rulemaking Web site:* Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.
- *Mail:* Send comments to the Docket Management Facility; U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590.
- *Fax:* Fax comments to the Docket Management Facility at 202–493–2251.
- *Hand Delivery:* Bring comments to the Docket Management Facility in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Privacy: We will post all comments we receive, without change, to *http://www.regulations.gov*, including any personal information you provide. Using the search function of our docket Web site, anyone can find and read the comments received into any of our dockets, including the name of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477–78).

Docket: To read background documents or comments received, go to *http://www.regulations.gov* at any time or to the Docket Management Facility in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Jan Thor, ANM–113, (425) 227–2127, Federal Aviation Administration, 1601 Lind Avenue, SW., Renton, WA 98057–3356, or Frances Shaver, (202) 267–9681, Office of Rulemaking, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591.

This notice is published pursuant to 14 CFR 11.85.

Issued in Washington, D.C., on June 24, 2008.

Pamela Hamilton-Powell,

Director, Office of Rulemaking.

Petition for Exemption

Docket No.: FAA–2008–0611.

Petitioner: Virgin Blue International Airlines Pty. Limited, dba. V Australia.

Section of 14 CFR Affected: 25.853(d).

Description of Relief Sought: To permit V Australia to operate three Boeing Model 777 airplanes with business-class seats that include large, non-metallic panels that do not comply with the heat release and smoke emission requirements of part 25, appendix F, parts IV and V.

[FR Doc. E8–14572 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: Stark, Columbiana, and Carroll Counties, OH

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of Project Being Placed on Hold.

SUMMARY: The FHWA is issuing this notice to advise the public that the preparation of the Environmental Impact Statement (EIS) for a proposed transportation project in Stark, Columbiana, and Carroll Counties, Ohio is being placed on hold.

FOR FURTHER INFORMATION CONTACT: Mr. Dennis A. Decker, Division Administrator, Federal Highway Administration, 200 North High Street, Suite 328, Columbus, Ohio 43215, Telephone (614) 280–6896.

SUPPLEMENTARY INFORMATION: The FHWA is placing on hold the preparation of an EIS for a proposal to construct a highway improvement in Stark, Columbiana, and Carroll Counties, Ohio. The original notice of intent was issued on March 24, 1999. The project proposed transportation improvements to the U.S. 30 corridor from Trump Road in Stark County to State Route 11 in Columbiana County, Ohio. The project is being placed on hold because the Ohio Department of Transportation has decided not to pursue this project at this time. The project is expected to resume in the future, at which time FHWA will issue a notice alerting the public that the environmental process has resumed.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: June 23, 2008.

Dennis A. Decker,

Division Administrator, Federal Highway Administration, Columbus, Ohio.

[FR Doc. E8–14666 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: Butler County, OH

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Rescind Notice of Intent.

SUMMARY: The FHWA is issuing this notice to advise the public that the Notice of Intent published on October 6, 2000 to prepare an Environmental Impact Statement (EIS) for a proposed transportation project in Butler County, Ohio is being rescinded.

FOR FURTHER INFORMATION CONTACT: Mr. Dennis A. Decker, Division Administrator, Federal Highway Administration, 200 North High Street, Suite 328, Columbus, Ohio 43215, Telephone (614) 280–6896.

SUPPLEMENTARY INFORMATION: The FHWA is rescinding the notice of intent to prepare an EIS on a proposal to construct a highway improvement in the vicinity of Trenton, Ohio. The project termini are approximately US–127, north of the Village of Seven Mile, and the SR–63/SR–4 interchange. The project is being rescinded because the Ohio Department of Transportation has decided not to pursue this project at this time.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: June 23, 2008.

Dennis A. Decker,

Division Administrator, Federal Highway Administration, Columbus, Ohio.

[FR Doc. E8–14665 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

Request for Applications for the Federal Motor Carrier Safety Administration Medical Review Board

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Request for applications for the Medical Review Board.

SUMMARY: FMCSA solicits applications from interested physicians to serve on the Agency's Medical Review Board (MRB). The MRB, authorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU), provides scientific advice to the Secretary of Transportation (the Secretary) and the FMCSA Administrator on medical issues relating to the physical qualification standards for commercial motor vehicle (CMV) drivers. In 2006, the Secretary appointed five physicians for 2-year terms to serve on the MRB. In 2008, the Secretary reappointed the physicians to the MRB, with the chairperson currently serving a 2-year term, and the other four members serving staggered 1-year terms. In 2009, the Secretary will appoint three new members to a 2-year term, and reappoint one of the current members to a 1-year term to ensure the MRB will operate continuously with five active members. As a result, the chairperson's and one of the members' terms will expire in 2010 and the other three members' terms will expire in 2011.

DATES: Applications must be received by July 30, 2008. FMCSA will periodically call for applications as deemed necessary.

FOR FURTHER INFORMATION CONTACT: Dr. Mary D. Gunnels, Director, Medical Programs, 202–366–4001, FMCSA, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., Washington, DC 20590. Office hours are from 8 a.m. to 5 p.m., E.T., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

I. Background

FMCSA has current statutory authority under 49 U.S.C. 31502 and 31136 to determine the physical qualifications of interstate CMV drivers. The physical qualifications regulations for commercial motor vehicle (CMV) drivers in interstate commerce are found in 49 CFR 391.41. Section 391.43 contains instructions to medical examiners for performing physical examinations of CMV drivers. FMCSA medical standards and guidelines are critical medical program components in accomplishing FMCSA's mission to reduce crashes, injuries, and fatalities involving large trucks and buses.

In 2005, Congress passed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU) (Pub. L. 109–59). Section 4116(a) of SAFETEA–LU (codified at 49 U.S.C. 31149) required FMCSA to establish the MRB to provide scientific advice on matters related to CMV driver health and safety. The Charter for the MRB was originally approved and filed with the General Services Administration on September 20, 2005 [FR 70 57642], and renewed on November 2, 2007.

The MRB promotes CMV safety by providing science-based medical expertise on the medical qualification of CMV drivers, reviewing and revising medical standards, and interpreting medical research. These activities address the appropriateness and

viability of the medical standards in the Federal Motor Carrier Safety Regulations, the framework that relates driver health to safe CMV operation. The MRB assesses and provides recommendations to FMCSA about regulations that may need to be changed or updated. FMCSA's MRB provides information, advice, and recommendations to the Secretary of Transportation and the FMCSA Administrator on the development and implementation of science-based physical qualification standards applicable to interstate CMV drivers, and implementation of a national registry of medical examiners. The MRB does not hold regulatory development responsibilities, manage programs, or make decisions affecting such programs. The MRB provides a forum for the development, consideration, and communication of information from a knowledgeable, scientific perspective. The MRB began operations in February 2006, with formal deliberations beginning in August 2006. The MRB meets quarterly each year and has issued many recommendations on cardiovascular diseases, seizure disorders, musculoskeletal diseases, and other topics pertinent to the certified driver medical examination.

II. Request for Applications

FMCSA seeks physicians from many different medical specialties to develop science-based CMV physical qualification standards, medical advisory criteria and safety policies. As members of the Agency's MRB, physicians will provide expert guidance on medical guidelines and standards. The Agency is committed to appointing physicians with diverse professional backgrounds and taking into account gender, ethnicity, demographic and socioeconomic factors. To be eligible for appointment, physicians must (a) Be a U.S. citizen; (b) not be a Federal government employee; (c) have a U.S. medical license (as a Medical Doctor or Doctor of Osteopathy) and is in good standing with a State medical licensing authority; (d) be able to attend three to four face-to-face meetings a year and three to five 1 hour teleconferences, and spend approximately 5 hours per month providing additional consultation. Interested physicians should have a commitment to transportation safety and health, an understanding of evidence-based medicine and research methods, knowledge of transportation medical issues, history of excellence in original medical research demonstrated through publications in peer-reviewed journals, experience on panels that develop medical standards and a record of leadership activities in transportation safety and medical professional organizations.

MRB members are special government employees under the Federal Advisory Committee Act of 1972, Public Law 92–463. While attending meetings or conducting business of the Committee, expenses for travel and subsistence or per diem allowances will be paid by FMCSA.

Applications should be submitted online at *http://www.mrb.fmcsa.dot.gov*. For additional information, please contact Jennifer Musick at 703–998–0189, extension 237, or via e-mail at *contactmrb@fmcsa.dot.gov*. FMCSA will accept applications through July 30, 2008, and will periodically call for applications as the MRB work continues.

Issued on: June 20, 2008.

John H. Hill,

Administrator.

[FR Doc. E8–14758 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–99–6156, FMCSA–99–6480, FMCSA–00–7006, FMCSA–01–10578, FMCSA–02–11714, FMCSA–02–13411, FMCSA–03–16241, FMCSA–03–16564, FMCSA–04–17195, FMCSA–05–21711, FMCSA–05–22194, FMCSA–05–23099, FMCSA–05–23238, FMCSA–06–23773, FMCSA–06–24015, FMCSA–06–24783]

Qualification of Drivers; Exemption Applications; Vision

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice of renewal of exemptions; request for comments.

SUMMARY: FMCSA announces its decision to renew the exemptions from the vision requirement in the Federal Motor Carrier Safety Regulations for 58 individuals. FMCSA has statutory authority to exempt individuals from the vision requirement if the exemptions granted will not compromise safety. The Agency has concluded that granting these exemption renewals will provide a level of safety that is equivalent to, or greater than, the level of safety maintained without the exemptions for these commercial motor vehicle (CMV) drivers.

DATES: This decision is effective July 20, 2008. Comments must be received on or before July 30, 2008.

ADDRESSES: You may submit comments bearing the Federal Docket Management System (FDMS) Docket ID FMCSA–99–6156, FMCSA–99–6480, FMCSA–00–7006, FMCSA–01–10578, FMCSA–02–11714, FMCSA–02–13411, FMCSA–03–16241, FMCSA–03–16564, FMCSA–04–17195, FMCSA–05–21711, FMCSA–05–22194, FMCSA–05–23099, FMCSA–05–23238, FMCSA–06–23773, FMCSA–06–24015, FMCSA–06–24783, using any of the following methods.

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov*. Follow the on-line instructions for submitting comments.
- *Mail:* Docket Management Facility; U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.
- *Hand Delivery or Courier:* West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.
- *Fax:* 1–202–493–2251.

Each submission must include the Agency name and the docket number for this Notice. Note that DOT posts all comments received without change to *http://www.regulations.gov*, including any personal information included in a comment. Please see the Privacy Act heading below.

Docket: For access to the docket to read background documents or comments, go to *http://www.regulations.gov* at any time or Room W12–140 on the ground level of the West Building, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The FDMS is available 24 hours each day, 365 days each year.

If you want acknowledgment that we received your comments, please include a self-addressed, stamped envelope or postcard or print the acknowledgement page that appears after submitting comments on-line.

Privacy Act: Anyone may search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or of the person signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19476). This information is also available at *http://DocketsInfo.dot.gov*.

FOR FURTHER INFORMATION CONTACT: Dr. Mary D. Gunnels, Director, Medical Programs, (202)–366–4001,

fmcsamedical@dot.gov, FMCSA, Department of Transportation, 1200 New Jersey Avenue, SE., Room W64–224, Washington, DC 20590–0001. Office hours are from 8:30 a.m. to 5 p.m. Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Background

Under 49 U.S.C. 31136(e) and 31315, FMCSA may renew an exemption from the vision requirements in 49 CFR 391.41(b)(10), which applies to drivers of CMVs in interstate commerce, for a two-year period if it finds ''such exemption would likely achieve a level of safety that is equivalent to, or greater than, the level that would be achieved absent such exemption.'' The procedures for requesting an exemption (including renewals) are set out in 49 CFR part 381.

Exemption Decision

This notice addresses 58 individuals who have requested a renewal of their exemption in accordance with FMCSA procedures. FMCSA has evaluated these 58 applications for renewal on their merits and decided to extend each exemption for a renewable two-year period. They are:

Jawad K. Al-Shaibani
Harold J. Bartley, Jr.
Kenneth J. Bernard
Allen G. Bors
Brad T. Braegger
Michael C. Branham
John E. Breslin
Trixie L. Brown
Raymond L. Brush
Marcus S. Burkholder
Scott F. Chalfant
Leroy A. Chambers
Harvis P. Cosby
Rodney D. Curtis
Norman J. Day
Michael D. DeBerry
Francisco Espinal
William L. Foote
Spencer N. Haugen
Victor B. Hawks
Edward J. Hess, Jr.
William G. Hix
Ralph Holmes
Bruce A. Homan
Timothy B. Hummel
Fredrick C. Ingles
Larry L. Jarvis
Michael S. Johannsen
Charles Johnston
Harry L. Jones
Mearl C. Kennedy
Patrick E. Martin
Bennet G. Maruska
Leland K. McAlhaney
Bobby G. Minton
William C. Mohr, Sr.
Charles J. Morman
Charles R. Murphy
Larry A. Nienhuis
Corey L. Paraf
Kenneth R. Piechnik
John J. Pribanic
Ronald M. Price
John P. Raftis
Bruce G. Robinson
Scott D. Russell
Alton M. Rutherford
Richard A. Schneider
Charles L. Schnell
Andrew W. Schollett
Joseph B. Shaw, Jr.
Wolfgang V. Spekis
Sandra J. Sperling
Ryan K. Steelman
Robert L. Swartz, Jr.
Charles V. Tracey
Duane L. Tysseling
Leonard R. Wilson

These exemptions are extended subject to the following conditions: (1) That each individual have a physical examination every year (a) by an ophthalmologist or optometrist who attests that the vision in the better eye continues to meet the standard in 49 CFR 391.41(b)(10), and (b) by a medical examiner who attests that the individual is otherwise physically qualified under 49 CFR 391.41; (2) that each individual provide a copy of the ophthalmologist's or optometrist's report to the medical examiner at the time of the annual medical examination; and (3) that each individual provide a copy of the annual medical certification to the employer for retention in the driver's qualification file and retain a copy of the certification on his/her person while driving for presentation to a duly authorized Federal, State, or local enforcement official. Each exemption will be valid for two years unless rescinded earlier by FMCSA. The exemption will be rescinded if: (1) The person fails to comply with the terms and conditions of the exemption; (2) the exemption has resulted in a lower level of safety than was maintained before it was granted; or (3) continuation of the exemption would not be consistent with the goals and objectives of 49 U.S.C. 31136(e) and 31315.

Basis for Renewing Exemptions

Under 49 U.S.C. 31315(b)(1), an exemption may be granted for no longer than two years from its approval date and may be renewed upon application for additional two year periods. In accordance with 49 U.S.C. 31136(e) and 31315, each of the 58 applicants has satisfied the entry conditions for obtaining an exemption from the vision requirements (64 FR 54948; 65 FR 159; 67 FR 10475; 69 FR 8260; 71 FR 19604; 71 FR 6824; 64 FR 68195; 65 FR 20251; 67 FR 38311; 69 FR 26921; 71 FR 27033; 66 FR 53826; 66 FR 66966; 68 FR 69434; 70 FR 74102; 65 FR 20245; 67 FR 15662; 67 FR 37907; 69 FR 26206; 71 FR 26601; 67 FR 76439; 68 FR 10298; 71 FR 16410; 68 FR 61857; 68 FR 75715; 71 FR 646; 68 FR 74699; 69 FR 10503; 71 FR 6829; 69 FR 17263; 69 FR 31447; 70 FR 48797; 70 FR 61493; 70 FR 57353; 70 FR 72689; 71 FR 4194; 71 FR 13450; 71 FR 5105; 71 FR 19600; 71 FR 6826; 71 FR 19602; 71 FR 14566; 71 FR 30227; 71 FR 32183; 71 FR 41310). Each of these 58 applicants has requested renewal of the exemption and has submitted evidence showing that the vision in the better eye continues to meet the standard specified at 49 CFR 391.41(b)(10) and that the vision impairment is stable. In addition, a review of each record of safety while driving with the respective vision deficiencies over the past two years indicates each applicant continues to meet the vision exemption standards. These factors provide an adequate basis for predicting each driver's ability to continue to drive safely in interstate commerce. Therefore, FMCSA concludes that extending the exemption for each renewal applicant for a period of two years is likely to achieve a level of safety equal to that existing without the exemption.

Request for Comments

FMCSA will review comments received at any time concerning a particular driver's safety record and determine if the continuation of the exemption is consistent with the requirements at 49 U.S.C. 31136(e) and 31315. However, FMCSA requests that interested parties with specific data concerning the safety records of these drivers submit comments by July 30, 2008.

FMCSA believes that the requirements for a renewal of an exemption under 49 U.S.C. 31136(e) and 31315 can be satisfied by initially granting the renewal and then requesting and evaluating, if needed, subsequent comments submitted by interested parties. As indicated above, the Agency previously published notices of final disposition announcing its decision to exempt these 58 individuals from the vision requirement in 49 CFR 391.41(b)(10). The final decision to grant an exemption to each of these individuals was based on the merits of each case and only after careful consideration of the comments received to its notices of applications. The notices of applications stated in detail the qualifications, experience, and medical condition of each applicant

for an exemption from the vision requirements. That information is available by consulting the above cited **Federal Register** publications.

Interested parties or organizations possessing information that would otherwise show that any, or all of these drivers, are not currently achieving the statutory level of safety should immediately notify FMCSA.

The Agency will evaluate any adverse evidence submitted and, if safety is being compromised or if continuation of the exemption would not be consistent with the goals and objectives of 49 U.S.C. 31136(e) and 31315, FMCSA will take immediate steps to revoke the exemption of a driver.

Issued on: June 19, 2008.

Larry W. Minor,

Associate Administrator for Policy and Program Development.

[FR Doc. E8–14763 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

Reappointment of Representatives to the Unified Carrier Registration Agreement Board of Directors

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice.

SUMMARY: FMCSA announces the reappointment of four Directors who serve on the Board of Directors that governs the Unified Carrier Registration (UCR) Agreement as the representatives from each of the four FMCSA service areas. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU) created the UCR Agreement. Under the UCR Agreement, for-hire and private motor carriers, brokers, freight forwarders, and leasing companies provide registration and financial responsibility information and pay certain fees. The UCR Agreement replaced the Single State Registration System (SSRS), which was repealed January 1, 2007.

DATES: The Directors' appointments to the Board are effective beginning on June 1, 2008. Their terms will expire May 31, 2011.

FOR FURTHER INFORMATION CONTACT: Ms. Julie Otto, Federal Motor Carrier Safety Administration, Office of Safety Programs (MC–ES), (202) 366–0710, 1200 New Jersey Avenue, SE., Washington, DC 20590. Office hours are from 8 a.m. to 5 p.m., ET, Monday through Friday except Federal holidays.

SUPPLEMENTARY INFORMATION:

Background

Section 4305 of SAFETEA–LU (Pub. L. 109–59, 119 Stat. 1144, Aug. 10, 2005) created, under Title 49 of the U.S. Code, a new section 14504a titled ''Unified Carrier Registration System Plan and Agreement.'' Under the UCR Agreement, for-hire motor carriers, motor private carriers, brokers, freight forwarders, and leasing companies provide registration and financial responsibility information and pay certain fees. The Unified Carrier Registration Plan Board of Directors must issue rules and regulations to govern the UCR Agreement.

Title 49 U.S.C. 14504a(a)(9) defines the Unified Carrier Registration Plan as the organization of State, Federal, and industry representatives responsible for developing, implementing, and administering the UCR Agreement. Section 14504a(d)(1)(B) directed the Secretary to establish a Unified Carrier Registration Plan Board of Directors made up of 15 members representing FMCSA, State government, and the motor carrier industry.

Section 14504a(d) stipulates that the Unified Carrier Registration Plan Board of Directors must consist of representatives from the following groups:

- One Director from the U.S. Department of Transportation, either the FMCSA Deputy Administrator or such other Presidential appointee;
- Four Directors, one from each of FMCSA service areas (as defined by FMCSA in 71 FR 27778, Jan. 1, 2005), selected from among the chief administrative officers of the State agencies responsible for overseeing the administration of the UCR agreement;
- Five Directors representing the State agencies responsible for overseeing the administration of the UCR Agreement, selected from among their professional staffs and nominated by the National Conference of State Transportation Specialists (NCSTS), a non-profit organization founded in 1959 and consisting of State agencies involved in transportation safety, insurance, and consumer protection; and
- Five Directors representing the motor carrier industry.

Board of Directors

Today's publication serves as public notice of the reappointment of the board members from four FMCSA service areas to the Unified Carrier Registration Plan Board of Directors. The four members reappointed to the Board include the following:

Mr. Charles ''Buddy'' Covert, Director, Transportation Administration Division, Public Service Commission of West Virginia is being reappointed to represent the FMCSA Eastern service area. Mr. Covert's office assists the State with supporting and promoting a transportation safety environment that balances the interests of all parties and pursues excellence through quality. The current Transportation Administration Division consists of the Director's office and three operations sections that include Motor Carrier, Hazardous Material Registration, and the Coal Resource Transportation System.

Ms. Sandy Bowling, Supervisor of Insurance and Safety Section, Indiana Department of Revenue, Motor Carrier Services Division is being reappointed to represent the FMCSA Midwestern service area. Ms. Bowling has been with the Motor Carrier Services Division for 23 years. She is responsible for issuing U.S. Department of Transportation (USDOT) numbers, UCR registration, intrastate operating authority, intrastate household goods and passenger authority, and insurance filings. Ms. Bowling's division also created the UCR registration system on behalf of the UCR Board. Ms. Bowling is responsible for all maintenance and reporting for the UCR registration system.

Ms. Angel Oliver, Supervisor, Credentialing Unit, Motor Carrier Division, Texas Department of Transportation (TxDOT) is being reappointed to represent the FMCSA Southern service area. The Motor Carrier Division is responsible for administering UCR in Texas and providing credentials to intrastate and interstate for-hire motor carriers. Ms. Oliver has been with TxDOT for 20 years.

Mr. Frank LaQua, Motor Carrier Services Manager, North Dakota Department of Transportation is being reappointed to represent the Western service area. Mr. LaQua has been with the North Dakota Department of Transportation for 23 years, serving 15 of those years as Manager of Motor Carrier Services. Mr. LaQua is responsible for North Dakota's International Fuel Tax Agreement (IFTA), International Registration Plan (IRP), and UCR program areas and is North Dakota's IRP and IFTA Commissioner.

Board Member Term Limits

The four Directors who are reappointed in this notice as members of the Board will serve a term of 3 years, expiring on May 31, 2011.

Issued on: June 18, 2008.

William A. Quade,

Associate Administrator for Enforcement and Program Delivery.

[FR Doc. E8–14755 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

U.S. Maritime Administration

Availability of a Draft Environmental Assessment

[Docket No. 2008–0060]

AGENCY: U.S. Department of Transportation, U.S. Maritime Administration.

ACTION: Notice of Availability of Draft Programmatic Environmental Assessment.

SUMMARY: Notice is hereby given that the U.S. Maritime Administration is issuing a Draft Programmatic Environmental Assessment (EA) for the Removal of Non-Retention Vessels from National Defense Reserve Fleet (NDRF) Sites for Disposal. The Draft EA has been prepared pursuant to the National Environmental Policy Act of 1969 (NEPA) (U.S.C. 4231 *et seq.*) in accordance with the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR 1500–1508). The Maritime Administration invites comments on the Draft EA.

The purpose of the Programmatic EA is to evaluate the potential environmental impacts from and alternatives to the Removal of Non-Retention Vessels from National Defense Reserve Fleet Sites for Disposal proposed by the Maritime Administration. The Maritime Administration is charged with disposing of obsolete ''non-retention'' U.S. government-owned merchant type vessels of 1,500 gross tons or more per Section 203 of the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 548 (2008)). Non-retention vessels are vessels that have been determined by the Maritime Administration to be of insufficient value for commercial or military operation by the Federal Government to merit further preservation. 46 U.S.C. 57102 (2008). The Maritime Administration's non-retention ships are located at three fleet anchorages in the James River, Virginia; Beaumont, Texas; and Suisun Bay, California.

The Maritime Administration is proposing to tow obsolete vessels from these three fleet anchorages either to one of seven Maritime Administration-approved or provisionally approved recycling facilities across the United States, or to various locations (to be determined on a case-by-case basis) to be used as artificial reefs, or sold for reuse as limited by applicable law, or to be donated for use as memorials and museums, or to be used by the U.S. Navy in at-sea training exercises referred to as Sinking Exercises, or SINKEX, during which the Navy fires live munitions at the vessel to give trainees a better sense of the capabilities of Navy weaponry. Following the use of live fire, vessels are allowed to sink to the sea bottom.

DATES: Written comments on this Draft Programmatic EA will be accepted on or before August 14, 2008.

Address for Further Information: To send comments or for more information, contact: Carolyn E. Junemann, U.S. Maritime Administration, Office of Environment, 1200 New Jersey Ave., SE., W25–217, Washington, DC 20590, or e-mail: *Carolyn.junemann@dot.gov.*

A copy of the Draft Programmatic EA can be obtained or viewed online at *http://www.regulations.gov.* The files are in a portable document format (pdf); in order to review or print the document, users need to obtain a free copy of Acrobat Reader. The Acrobat Reader can be obtained from *http://www.adobe.com/prodindex/acrobat/readstep.html.*

Copies of the Draft Programmatic EA will also be available for public review during normal business hours at the following locations: Beaumont Public Library, 801 Pearl St, Beaumont, TX 77701; Surry Public Library, 11640 Rolfe Hwy., Surry, VA 23882; Virgil I. Grissom Public Library, 366 DeShazor Drive, Newport News, VA 23608; and Benicia Public Library, 150 E L St., Benicia, CA 94510.

SUPPLEMENTARY INFORMATION: The mission of the Maritime Administration is to strengthen the U.S. maritime transportation system, including infrastructure, industry, and labor, to meet the economic and security needs of the United States, and to promote the development and maintenance of an adequate, well-balanced U.S. merchant marine, sufficient to carry the nation's domestic waterborne commerce and a substantial portion of its waterborne foreign commerce, and capable of service as a naval and military auxiliary in time of war or national emergency. The Maritime Administration also seeks to ensure that the United States maintains adequate shipbuilding and repair services, efficient ports, effective intermodal water and land transportation systems, and reserve shipping capacity for use in time of national emergency.

The Maritime Administration is charged with disposing of obsolete ''non-retention'' U.S. government-owned merchant type vessels of 1,500 gross tons or more per Section 203 of the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 548 (2008)). Non-retention vessels are vessels that have been determined by the Maritime Administration to be of insufficient value for commercial or military operation by the Federal Government to merit further preservation by the Federal Government. 46 U.S.C. 57102 (2008). The Maritime Administration's non-retention ships are located at three fleet anchorages in the James River, Virginia; Beaumont, Texas; and Suisun Bay, California.

Ongoing maintenance of non-retention vessels is limited to that which is necessary to maintain the integrity of the hull and keeping the established preservation systems in good order. The majority of non-retention NDRF vessels are systematically being recycled. However, some vessels have been loaned to other Government agencies, sold for reuse in accordance with applicable law, used as artificial reefs, used as museums, and used for military and civilian training. All of the vessels to be removed are obsolete non-retention vessels that Congress has directed the Maritime Administration to dispose of under the Merchant Marine Act of 1936, as amended.

The Maritime Administration continues to consider domestic dismantling (recycling) as the predominant means of vessel disposal, but continually evaluates alternative means of disposal such as artificial reefing, sale for reuse, deep-water sinking through the Navy's SINKEX Program, and donations to historic organizations when possible.

Domestic recyclers of obsolete NDRF vessels are required to follow all Federal, state, and local laws and regulations governing worker safety and environmental protection. Specific authority to pay for recycling provided in the Department of Defense Appropriations Act for Fiscal Year 2001 (Pub. L. 106–259 § 8136), was enacted on August 9, 2000, and included a budget for the accelerated recycling of those vessels in the ''worst condition.'' All other alternatives for disposal are required to be in accordance with all federal, state, and local laws and regulations. Selection of recycling facilities was included in the 2000

Congressional amendments to section 6(c)(1) of the National Maritime Heritage Act (NMHA), which directed the Maritime Administration to dispose of all obsolete vessels ''in the manner that provides the best value to the Government'' (Pub. L. 106–398, § 3502(a)). In addition, it provided subsection (b) Selection of Scrapping Facilities, which stated that:

> The Secretary of Transportation may recycle obsolete vessels pursuant to Section 6(c)(1) of the NMHA of 1994 [16 United States Code (USC) § 5405(c)(1)] through qualified dismantlement facilities, using the most expeditious recycling methodology and location practicable. Dismantlement facilities shall be selected under that section on a best value basis consistent with the Federal Acquisition Regulation (FAR), as in effect on the date of the enactment of this Act * * * taking into consideration, among other things, the ability of facilities to dismantle vessels; (1) at least cost to the Government; (2) in a timely manner; (3) giving consideration to worker safety and the environment; and (4) in a manner that minimizes the geographic distance that a vessel must be towed when towing a vessel poses a serious threat to the environment (Pub. L. 106–398, § 3502(b), 114 Stat. 1654a–490 (2000)).

With this notice, the Maritime Administration invites any affected Federal, State, and local Agencies and other interested persons to comment on the Draft Programmatic EA. Comments may be submitted by mail to the Docket Clerk, Docket Management Facility; U.S. Department of Transportation, 1200 New Jersey Avenue, SE., Room W12–140, Washington, DC 20590–0001. Comments may be hand delivered to Room W12–140 on the plaza level of the U.S. Department of Transportation at 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays. Written comments should refer to docket number MARAD 2008–0060. All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except Federal holidays. An electronic version of this document and all documents entered into this docket are available at *http://www.regulations.gov.* No comments will be accepted after August 14, 2008.

(Authority: 49 CFR 1.66)

By Order of the Maritime Administrator.
Dated: June 24, 2008.

Murray Bloom,

Acting Secretary, Maritime Administration.

[FR Doc. E8–14773 Filed 6–27–08; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF THE TREASURY

Senior Executive Service; Legal Division Performance Review Board

AGENCY: Department of the Treasury.

ACTION: Notice of members of the Legal Division Performance Review Board (PRB).

SUMMARY: Pursuant to 5 U.S.C. 4314(c)(4), this notice announces the appointment of members of the Legal Division PRB. The purpose of this Board is to review and make recommendations concerning proposed performance appraisals, ratings, bonuses, and other appropriate personnel actions for incumbents of SES positions in the Legal Division.

DATES: *Effective Date:* June 30, 2008.

FOR FURTHER INFORMATION CONTACT: Stephen Albrecht, Counselor to the General Counsel, Department of the Treasury, 1500 Pennsylvania Avenue, NW., Room 3000, Washington, DC 20220, *Telephone:* (202) 622–1143 (this is not a toll-free number).

SUPPLEMENTARY INFORMATION:

Composition of Legal Division PRB

The Board shall consist of at least three members. In the case of an appraisal of a career appointee, more than half the members shall consist of career appointees. Composition of the specific PRBs will be determined on an ad hoc basis from among the individuals listed in this notice.

The names and titles of the PRB members are as follows:

Stephen M. Albrecht, Counselor to the General Counsel;
Peter A. Bieger, Deputy Assistant General Counsel (Banking and Finance);
John Harrington, International Tax Counsel;
H. Stephen Kesselman, Deputy Chief Counsel (Operations), Internal Revenue Service;
Bernard J. Knight, Assistant General Counsel (General Law, Ethics and Regulation);
Donald L. Korb, Chief Counsel, Internal Revenue Service;
Richard Lepley, Deputy Assistant General Counsel (General Law and Regulation);
M.J.K. Maher, Jr., Deputy Assistant General Counsel (Enforcement & Intelligence);
Margaret V. Marquette, Chief Counsel, Financial Management Service;
Mark Monborne, Assistant General Counsel (Enforcement & Intelligence);
Himamauli Das, Assistant General Counsel (International Affairs);
Clarissa C. Potter, Deputy Chief Counsel (Technical), Internal Revenue Service;
Kevin Rice, Chief Counsel, Bureau of Engraving and Printing;
Laurie Schaffer, Assistant General Counsel (Banking and Finance);
Daniel P. Shaver, Chief Counsel, United States Mint;
Sean M. Thornton, Chief Counsel, Office of Foreign Assets Control;
Robert M. Tobiassen, Chief Counsel, Alcohol and Tobacco Tax and Trade Bureau, and
Paul Wolfteich, Chief Counsel, Bureau of Public Debt.

Dated: June 23, 2008.

Stephen M. Albrecht,

Counselor to the General Counsel.

[FR Doc. E8–14677 Filed 6–27–08; 8:45 am]

BILLING CODE 4810–25–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0665]

Agency Information Collection (Direct Deposit Enrollment/Change) Activities Under OMB Review

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden; it includes the actual data collection instrument.

DATES: Comments must be submitted on or before July 30, 2008.

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov*; or to VA's OMB Desk Officer, OMB Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 (202) 395–7316. Please refer to ''OMB Control No. 2900–0665'' in any correspondence.

FOR FURTHER INFORMATION CONTACT: Denise McLamb, Records Management Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, (202) 461–7485, fax (202) 273–0443 or e-mail *denise.mclamb@mail.va.gov*. Please refer to ''OMB Control No. 2900–0665.''

SUPPLEMENTARY INFORMATION:

Title: Direct Deposit Enrollment/Change, VA Form 29–0309.

OMB Control Number: 2900–0665.

Type of Review: Extension of a currently approved collection.

Abstract: Claimants complete VA Form 29–0309 authorizing VA to initiate or change direct deposit of insurance benefit at their financial institution.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published on April 21, 2008, at page 21412.

Affected Public: Individuals or households.

Estimated Annual Burden: 10,000 hours.

Estimated Average Burden per Respondent: 20 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 30,000.

Dated: June 23, 2008.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E8–14721 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0131]

Agency Information Collection (Request for Supplemental Information on Medical and Nonmedical Applications) Activities Under OMB Review

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden; it includes the actual data collection instrument.

DATES: Comments must be submitted on or before July 30, 2008.

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov*; or to VA's OMB Desk Officer, OMB Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 (202) 395–7316. Please refer to ''OMB Control No. 2900–0131'' in any correspondence.

FOR FURTHER INFORMATION CONTACT: Denise McLamb, Records Management Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, (202) 461–7485, fax (202) 273–0443 or e-mail *denise.mclamb@mail.va.gov*. Please refer to ''OMB Control No. 2900–0131.''

SUPPLEMENTARY INFORMATION:

Title: Request for Supplemental Information on Medical and Nonmedical Applications, VA Form Letter 29–615.

OMB Control Number: 2900–0131.

Type of Review: Extension of a currently approved collection.

Abstract: VA Form 29–615 used by the insured to apply for new issue, reinstatement or change of plan on Government Life Insurance policies.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published on April 21, 2008, at pages 21413–21414.

Affected Public: Individuals or households.

Estimated Annual Burden: 3,000 hours.

Estimated Average Burden per Respondent: 20 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 9,000.

Dated: June 23, 2008.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E8–14724 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0068]

Agency Information Collection (Application for Service—Disabled Veterans Insurance) Activities Under OMB Review

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden; it includes the actual data collection instrument.

DATES: Comments must be submitted on or before July 30, 2008.

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov*; or to VA's OMB Desk Officer, OMB Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 (202) 395–7316. Please refer to ''OMB Control No. 2900–0068'' in any correspondence.

FOR FURTHER INFORMATION CONTACT: Denise McLamb, Records Management Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, (202) 461–7485, fax (202) 273–0443 or e-mail *denise.mclamb@mail.va.gov*. Please refer to ''OMB Control No. 2900–0068.''

SUPPLEMENTARY INFORMATION:

Title: Application for Service—Disabled Veterans Insurance, VA Forms 29–4364 and 29–0151.

OMB Control Number: 2900–0068.

Type of Review: Extension of a currently approved collection.

Abstract: Claimants complete VA Forms 29–4364 and 29–0151 to apply for service—disabled veterans insurance, designate a beneficiary and to select an optional settlement. VA uses the data collected to determine the claimant's eligibility for insurance.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published on April 21, 2008, at page 21410.

Affected Public: Individuals or households.

Estimated Annual Burden: 2,833 hours.

Estimated Average Burden per Respondent: 40 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 4,250.

Dated: June 23, 2008.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E8–14726 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0503]

Agency Information Collection (Veterans Mortgage Life Insurance—Change of Address Statement) Activities Under OMB Review

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden; it includes the actual data collection instrument.

DATES: Comments must be submitted on or before July 30, 2008.

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov*; or to VA's OMB Desk Officer, OMB Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503, (202) 395–7316. Please refer to ''OMB Control No. 2900–0503'' in any correspondence.

FOR FURTHER INFORMATION CONTACT: Denise McLamb, Records Management Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, (202) 461–7485, fax (202) 273–0443 or e-mail *denise.mclamb@mail.va.gov*. Please refer to ''OMB Control No. 2900–0503.''

SUPPLEMENTARY INFORMATION:

Title: Veterans Mortgage Life Insurance—Change of Address Statement, VA Form 29–0563.

OMB Control Number: 2900–0503.

Type of Review: Extension of a currently approved collection.

Abstract: VA use VA Form 29–0563 to inquire about a veteran's continued ownership of property issued under Veterans Mortgage Life Insurance when an address change for the veteran is received. VA uses the data collected to determine whether continued Veterans Mortgage Life Insurance coverage is applicable since the law granting this insurance provides that coverage terminates if the veteran no longer owns the property.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published on April 21, 2008, at page 21411.

Affected Public: Individuals or households.

Estimated Annual Burden: 20 hours.

Estimated Average Burden per Respondent: 5 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 240.

Dated: June 23, 2008.

By direction of the Secretary:

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E8–14731 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0501]

Agency Information Collection (Veterans Mortgage Life Insurance Inquiry) Activities Under OMB Review

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden; it includes the actual data collection instrument.

DATES: Comments must be submitted on or before July 30, 2008.

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov*; or to VA's OMB Desk Officer, OMB Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 (202) 395–7316. Please refer to ''OMB Control No. 2900–0501'' in any correspondence.

FOR FURTHER INFORMATION CONTACT: Denise McLamb, Records Management Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, (202) 461–7485, fax (202) 273–0443 or e-mail *denise.mclamb@mail.va.gov*. Please refer to ''OMB Control No. 2900–0501.''

SUPPLEMENTARY INFORMATION:

Title: Veterans Mortgage Life Insurance Inquiry, VA Form 29–0543.

OMB Control Number: 2900–0501.

Type of Review: Extension of a currently approved collection.

Abstract: Veterans whose mortgage is insured under Veterans Mortgage Life Insurance (VMLI) completes VA Form 29–0543 to report any recent changes in the status of their mortgage. VMLI coverage is automatically terminated when the mortgage is paid in full or when the title to the property secured by the mortgage is no longer in the veteran's name.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published on April 21, 2008, at page 21410–21411.

Affected Public: Individuals or households.

Estimated Annual Burden: 45 hours.

Estimated Average Burden per Respondent: 5 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 540.

Dated: June 23, 2008.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E8–14747 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–New (21–0773)]

Proposed Information Collection (Operation Enduring Freedom/ Operation Iraqi Freedom Seriously Injured/Ill Service Member Veteran Worksheet); Comment Request

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Benefits Administration (VBA), Department of Veterans Affairs (VA), is announcing an

opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed new collection and allow 60 days for public comment in response to the notice. This notice solicits comments on information provided to Operation Enduring Freedom/Operation Iraqi Freedom veterans regarding benefits.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before August 29, 2008

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov* or to Nancy J. Kessinger, Veterans Benefits Administration (20M35), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420 or e-mail to *nancy.kessinger@va.gov*. Please refer to ''OMB Control No. 2900–New (21–0773)'' in any correspondence. During the comment period, comments may be viewed online through the Federal Docket Management System (FDMS) at *http://www.Regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Nancy J. Kessinger at (202) 461–9769 or FAX (202) 275–5947.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Pub. L. 104–13; 44 U.S.C. 3501–3521), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VBA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VBA's functions, including whether the information will have practical utility; (2) the accuracy of VBA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Title: Operation Enduring Freedom/Operation Iraqi Freedom Seriously Injured/Ill Service Member Veteran Worksheet, VA Form 21–0773.

OMB Control Number: 2900–New (21–0773).

Type of Review: New collection.

Abstract: Veterans Service Representatives used VA Form 21–0773 as a checklist to ensure that they provided Operation Enduring Freedom or Operation Iraqi Freedom service members with at least six months remaining on active duty and who may have suffered a serious injury or illness, with information, forms, and/or referral service regarding VA benefits.

Affected Public: Individuals or households.

Estimated Annual Burden: 77 hours.

Estimated Average Burden per Respondent: 30 minutes.

Frequency of Response: One time.

Estimated Number of Respondents: 153.

Dated: June 23, 2008.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E8–14760 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0492]

Agency Information Collection (VA MATIC Authorization) Activities Under OMB Review

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden; it includes the actual data collection instrument.

DATES: Comments must be submitted on or before July 30, 2008.

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov*; or to VA's OMB Desk Officer, OMB Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 (202) 395–7316. Please refer to ''OMB Control No. 2900–0492'' in any correspondence.

FOR FURTHER INFORMATION CONTACT: Denise McLamb, Records Management Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, (202) 461–7485, fax (202) 273–0443 or e-mail *denise.mclamb@mail.va.gov*. Please refer to ''OMB Control No. 2900–0492.''

SUPPLEMENTARY INFORMATION:

Title: VA MATIC Authorization, VA Form 29–0532–1.

OMB Control Number: 2900–0492.

Type of Review: Extension of a currently approved collection.

Abstract: Veteran policyholders complete VA Form 29–0532–1 to authorize deduction of Government Life Insurance premiums from their bank account.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published on April 21, 2008, at page 21412–21413.

Affected Public: Individuals or households.

Estimated Annual Burden: 1,500 hours.

Estimated Average Burden per Respondent: 30 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 3,000.

Dated: June 23, 2008.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E8–14782 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0024]

Agency Information Collection (Insurance Deduction Authorization (For Deduction From Benefit Payments)) Activities Under OMB Review

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the

nature of the information collection and its expected cost and burden; it includes the actual data collection instrument.

DATES: Comments must be submitted on or before July 30, 2008.

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov*; or to VA's OMB Desk Officer, OMB Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 (202) 395–7316. Please refer to ''OMB Control No. 2900–0024'' in any correspondence.

FOR FURTHER INFORMATION CONTACT: Denise McLamb, Records Management Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, (202) 461–7485, fax (202) 273–0443 or e-mail *denise.mclamb@mail.va.gov*. Please refer to ''OMB Control No. 2900–0024.''

SUPPLEMENTARY INFORMATION:

Title: Insurance Deduction Authorization (For Deduction from Benefit Payments), VA Form 29–888.

OMB Control Number: 2900–0024.

Type of Review: Extension of a currently approved collection.

Abstract: VA Form 29–888 is completed by the insured or their representative to authorize deduction from their compensation check to pay premiums, loans and/or liens on his or her insurance contract.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published on April 21, 2008, at pages 21409–21410.

Affected Public: Individuals or households.

Estimated Annual Burden: 622 hours.

Estimated Average Burden per Respondent: 10 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 3,732.

Dated: June 23, 2008.

By direction of the Secretary.

Denise McLamb, Program Analyst,

Records Management Service.

[FR Doc. E8–14784 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0324]

Agency Information Collection (Supplemental Physical Examination Report) Activities Under OMB Review

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3521), this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden; it includes the actual data collection instrument.

DATES: Comments must be submitted on or before July 30, 2008.

ADDRESSES: Submit written comments on the collection of information through *http://www.Regulations.gov*; or to VA's OMB Desk Officer, OMB Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 (202) 395–7316. Please refer to ''OMB Control No. 2900–0324'' in any correspondence.

FOR FURTHER INFORMATION CONTACT: Denise McLamb, Records Management Service (005R1B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, (202) 461–7485, fax (202) 273–0443 or e-mail *denise.mclamb@mail.va.gov*. Please refer to ''OMB Control No. 2900–0324.''

SUPPLEMENTARY INFORMATION:

Titles:

a. Supplemental Physical Examination Report, VA Form 29–8146.

b. Attending Physician's Statement, VA Form 29–8158.

c. Supplemental Physical Examination Report (Diabetes—Physician's Report), VA Form 29–8160.

OMB Control Number: 2900–0324.

Type of Review: Extension of a currently approved collection.

Abstract: The forms are used to obtain information regarding the physical and/or mental condition of a veteran who has submitted an application for Government Life Insurance or reinstatement of eligibility for such insurance.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published on April 21, 2008, at page 21413.

Affected Public: Individuals or households.

Estimated Annual Burden: 1,080 hours.

a. VA Form 29–8146—750 hours.

b. VA Form 29–8158—165 hours.

c. VA Form 29–8160—165 hours.

Estimated Average Burden Per Respondent:

a. VA Form 29–8146—45 minutes.

b. VA Form 29–8158—45 minutes.

c. VA Form 29–8160—45 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 1,440.

a. VA Form 29–8146—220.

b. VA Form 29–8158—1,000.

c. VA Form 29–8160—220.

Dated: June 23, 2008.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E8–14791 Filed 6–27–08; 8:45 am]

BILLING CODE 8320–01–P

Federal Register

Monday,

June 30, 2008

Part II

Department of Justice

28 CFR Parts 35 and 36

Nondiscrimination on the Basis of Disability by Public Accommodations, State and Local Government Services, and in Commercial Facilities; Proposed Rules

DEPARTMENT OF JUSTICE

28 CFR Part 35

[CRT Docket No. 105; AG Order No. 2967–2008]

RIN 1190–AA46

Nondiscrimination on the Basis of Disability in State and Local Government Services; Correction

AGENCY: Department of Justice, Civil Rights Division.

ACTION: Proposed rule; correction.

SUMMARY: This document contains corrections to the proposed rule, published Tuesday, June 17, 2008, at 73 FR 34466, implementing the Americans with Disabilities Act. The proposed rule would revise Department of Justice regulations on nondiscrimination on the basis of disability in state and local government services. The correction consists of the addition of two appendices that were inadvertently omitted.

DATES: All comments must be received by August 18, 2008.

FOR FURTHER INFORMATION CONTACT: Janet L. Blizard, Deputy Chief, Disability Rights Section, Civil Rights Division, U.S. Department of Justice, at (202) 307–0663 (voice or TTY). This is not a toll-free number. Information may also be obtained from the Department's toll-free ADA Information Line at (800) 514–0301 (voice) or (800) 514–0383 (TTY).

The text of this correction is also available in an accessible format on the ADA Home Page at *http://www.ada.gov*. You may obtain copies of the correction in large print or on computer disk by calling the ADA Information Line at the number listed above.

SUPPLEMENTARY INFORMATION:

Need for Correction

The proposed rule published on June 17, 2008, inadvertently omitted two documents: Appendix A, which addresses major issues in the proposed ADA Standards for Accessible Design and Appendix B, which explains the methodology underlying the Department's regulatory impact analysis. Both appendices also respond to comments received in response to the Department of Justice's Advance Notice of Proposed Rulemaking (ANPRM) published on September 30, 2004, 69 FR 58768. This correction document will add the appendices to the appropriate places in the proposed rule.

Corrections

28 CFR Part 35 [Corrected]

1. On page 34508, immediately after the proposed text for new § 35.190, paragraph (e), and before the signature of the Attorney General, add Appendix A and Appendix B, to read as follows:

APPENDIX A to PART 35: ANALYSIS OF THE PROPOSED STANDARDS

The following document is a summary of the major substantive changes proposed for the scoping and technical requirements of the 1991 Standards at 28 CFR pt. 36 adopted in 1991, as amended in 1994. The full text of the 2004 ADAAG is available for review on the Access Board's Web site, *http://www.access-board.gov*, along with a chart that shows the relationship between the 1991 Standards and the 2004 ADAAG.

This summary addresses only the major substantive changes that are being proposed. Editorial changes are not discussed. Scoping and technical requirements are discussed together, where appropriate, for ease of understanding the requirements. In addition, this document addresses substantive public comments on specific changes to the proposed standards received by the Department in response to its September 2004 ANPRM. Comments received by the Access Board on the adoption process or on the overall scope of the proposed standards have been addressed in the preamble to this notice. Comments that did not raise major issues are not addressed here.

The ANPRM issued by the Department concerning these proposed standards stated that comments received by the Access Board in response to its development of the guidelines upon which these proposed standards are issued would be considered in the development of this NPRM. Therefore, the Department will not restate here all of the comments and responses to them issued by the Access Board. The Department is supplementing the Access Board's comments and responses with substantive comments and responses in this notice. Comments and responses addressed by the Access Board that also were separately submitted to the Department will not be restated in their entirety here.

Analysis of Sections

Application and Administration

103 Equivalent Facilitation

This section acknowledges that nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability.

A commenter encouraged the Department to include a procedure for determining equivalent facilitation. The Department believes that the responsibility for determining and demonstrating equivalent facilitation properly rests with the covered entity. The purpose of allowing for equivalent facilitation is to encourage flexibility and innovation while still ensuring access. The Department believes that establishing potentially cumbersome bureaucratic provisions for reviewing requests for equivalent facilitation is inappropriate.

104 Conventions

Proposed section 104.1.1, Construction and Manufacturing Tolerances, provides that all dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points. Section 104.1 notes that all dimensions not stated as a ''maximum'' or ''minimum'' are absolute and that all dimensions are ''subject to conventional industry tolerances.''

Commenters requested that specific new construction allowances and tolerances be made for a variety of materials and designs required by the proposed standards. The Department believes that it is inappropriate for this agency to attempt to establish construction and manufacturing tolerances for every material, element, or design that may be used in new construction. Construction and manufacturing tolerances are best addressed by industry standards, where available, and are built into the specifications in the attached rules.

Section 104.2 provides that where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result, the next greater whole number of such elements or facilities shall be provided. Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one-half is permissible.

A commenter stated that it is customary in the building code industry to round up rather than down for values less than one-half. As noted here, where the proposed standards provide for scoping, fractional calculations will be rounded to the next whole number. The Department is retaining the portion of section 104.2, Calculation of Percentages, that permits rounding

down for values less than one-half where the determination of the required size or dimension of an element or facility involves ratios or percentages. Such practice is standard with the industry, and is in keeping with model building codes.

105 Referenced Standards

Section 105 lists the industry requirements that will be referenced in the proposed standards. This section also clarifies that where there is a difference between a provision of the proposed standards and the referenced requirements, the provision of the proposed standards applies.

Commenters noted that the National Fire Protection Association's (NFPA) referenced standard for fire alarms at section 105.2.5 is based on the NFPA 72 1999 or 2002 edition. The commenters recommended editing the final standards to require compliance with the edition of NFPA that is most recent because it is likely that the NFPA will amend its standards prior to the issuance of final ADA Standards.

The rules that govern the publication of regulations that incorporate private standards by reference require federal agencies to adopt specific editions of the referenced code that are in existence at the time of issuance of the rules. The Department anticipates that the Access Board will periodically update the ADAAG references. Until then, the Department will retain the reference contained in the 2004 ADAAG.

106 Definitions

Various definitions will be added to the proposed standards and some current definitions will be dropped.

One commenter asked that the term public right-of-way be defined; others asked that various terms and words defined by the 1991 Standards, and that were eliminated from the proposed standards, and other words and terms newly used in the proposed standards be defined.

The Department believes that it is not necessary to add definitions to this text because the proposed regulation at section 106.3 provides that the meanings of terms not specifically defined in the proposed standards, in the Department's regulation, or in referenced standards are to be defined by collegiate dictionaries in the sense that the context implies. The Department believes that this provision adequately addresses these commenter's issues.

Scoping and Technical Requirements

202 Existing Buildings and Facilities

Alterations to Primary Function Areas. A new provision at section 202.4 merely restates a current requirement under Title III, and therefore represents no change for Title III facilities or for those Title II facilities that currently have elected to comply with the 1991 Standards. However, under the revised provisions, state and local government facilities that currently elect to comply with UFAS instead of the 1991 Standards will no longer have that option, and thus will now be subject to the path of travel requirements. The path of travel requirement provides that when a primary function area of an existing facility is altered, the path of travel to that area (including rest rooms, telephones, and drinking fountains serving the area) must also be made accessible, but only to the extent that the cost of doing so does not exceed twenty percent (20%) of the cost of the alterations to the primary function area. The UFAS requirements for a substantial alteration, though different, may have covered some of the items that will now be covered by the path of travel requirement.

Visible Alarms in Alterations to Existing Facilities. The 1991 Standards at sections 4.1.3(14), and 4.1.6(1) and (b), and proposed sections 202.3 and 215.1, Exception require that when existing elements and spaces of a facility are altered, the alterations must comply with new construction requirements. The proposed regulations add a new exception to the scoping requirement for visible alarms in existing facilities that will provide that visible alarms must be installed only when an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

Commenters urged the Department not to include the exception because it will make the safety of individuals with disabilities dependent upon the varying age of existing fire alarm systems. Other commenters suggested that including this section, even with the exception, will result in significant cost to building owners and operators.

The Department believes that the language adopted by the Access Board strikes a reasonable balance between the interests of individuals with disabilities and those of the business community. If undertaken at the time a system is installed whether in a new facility or in a planned system upgrade, the cost of adding visible alarms is reasonable. Over time, existing facilities will become fully accessible to individuals who are deaf or hard of hearing, and will add minimal costs to owners and operators.

203 General Exceptions

Limited Access Spaces and Machinery Spaces. The 1991 Standards at section 4.1.1 contains an exception that exempts ''nonoccupiable'' spaces that have limited means of access, such as ladders or very narrow passageways, and that are visited only by service personnel for maintenance, repair, or occasional monitoring of equipment from all accessibility requirements. The proposed standards at sections 203.4 and 203.5 expand this exception by removing the condition that the exempt spaces be ''nonoccupiable,'' and by separating the other conditions into two independent exceptions: one for spaces with limited means of access, and the other for machinery spaces. More spaces are exempted by the proposed changes to the exception.

Employee Work Areas. Section 215.3 of the proposed standards provides that employee work areas in newly constructed facilities are required to have wiring systems that are capable of supporting visible alarms. The 1991 Standards, section 4.1.1(3), require visible alarms to be provided where fire alarm systems are provided, but do not require areas used only by employees as work areas to be equipped with accessibility features. As applied to office buildings, the 1991 Standards require visible alarms to be provided in public and common use areas such as hallways, conference rooms, break rooms, and restrooms, where fire alarm systems are provided.

Commenters asserted that the requirements of section 215.3 of the proposed standards would be burdensome to meet. These commenters also raised concerns that all employee work areas within existing buildings and facilities must be equipped with accessibility features.

The commenters' concerns about section 215.3 represent a misunderstanding of the requirements applicable to employee work areas. Newly constructed buildings and facilities merely are required to provide wiring for visible alarm systems that can be added as needed to accommodate employees who are deaf or hard of hearing. This is a minimum requirement without significant impact.

The other issue in the comments represents a misunderstanding of the Department's existing regulatory requirements. Employee common use areas in covered facilities (*e.g.*, locker rooms, break rooms, cafeterias, toilet rooms, and corridors to exits, and other common use spaces) are required to be

accessible under the 1991 Standards; areas in which employees are actually performing their jobs are required to enable a person using a wheelchair or mobility device to approach, enter, and exit the area. The proposed rule will require increased access through the circulation path requirement discussed below, but neither the 1991 Standards nor the proposed standards would require employee work stations to be accessible. Access to specific employee work stations would be governed by Title I of the ADA.

Common Use Circulation Paths in Employee Work Areas. The 1991 Standards at section 4.1.1(3), and the proposed standards at sections 203.9; 206.2.8, Exceptions 1, 2, and 3; 402.1; 402.2; 403.5; 405.5; and 405.8 will require employee work areas to be designed and constructed so that individuals with disabilities can approach, enter, and exit the areas. The ADA, 42 U.S.C. 12112(b)(5)(A) and (B), requires employers to make reasonable accommodations in the workplace for individuals with disabilities, which may include modifications to work areas when needed. Providing increased access to the facility at the time of construction or alteration will simplify the process of providing reasonable accommodations when they are needed. The requirement will not apply to existing facilities pursuant to the readily achievable barrier removal requirement. The Department has consistently held that barrier removal requirements do not apply to exclusively employee areas because the purpose of Title III is to ensure that access is provided to clients and customers. *See* 28 CFR pt. 36, App. B.

The proposed standards will require common use circulation paths within employee work areas to comply with the technical requirements for accessible routes, subject to several exceptions that exempt common use circulation paths in employee work areas where it may be difficult to comply with the technical requirements for accessible routes due to the size or function of the area:

- Employee work areas, or portions of employee work areas, that are less than 300 square feet and are elevated 7 inches or more above the ground or finish floor, where elevation is essential to the function of the space, are exempt.
- Common use circulation paths within employee work areas that are less than 1,000 square feet and are defined by permanently installed partitions, counters, casework, or furnishings are exempt. Kitchens in quick service restaurants, cocktail bars, and the employee side of service counters are frequently covered by this exception.
- Common use circulation paths within employee work areas that are an integral component of equipment are exempt. Common use circulation paths within large pieces of equipment in factories, electric power plants, and amusement rides are covered by this exception.
- Common use circulation paths within exterior employee work areas that are fully exposed to the weather are exempt. Farms, ranches, and outdoor maintenance facilities are covered by this exception.

The proposed changes also contain exceptions to the technical requirements for accessible routes:

- Machinery and equipment are permitted to reduce the clear width of common use circulation paths where it is essential to the function of the work performed. Machinery and equipment that must be placed a certain way to work properly, or for ergonomics or to prevent workplace injuries are covered by this exception.
- Handrails are not required on ramps, provided they can be added in the future.

Commenters stated that the proposed standards for common use circulation paths in employee work areas are inappropriate, particularly in kitchens, storerooms, and behind cocktail bars where wheelchairs would not be easily accommodated. These commenters further urged the Department not to adopt a requirement that circulation paths in employee work areas be at least 36 inches wide, including those at emergency exits.

The Department believes that the commenters misunderstand the scope of this provision. Nothing in the rule requires all circulation paths in non-exempt areas to be accessible. The Department recognizes that building codes and fire and life safety codes, which are adopted by all the States, require primary circulation paths in facilities, including employee work areas, to be at least 36 inches wide for purposes of emergency egress. Accessible routes also are at least 36 inches wide, therefore, the Department anticipates that covered entities will be able to satisfy the requirement to provide accessible circulation paths by ensuring that their required primary circulation paths are accessible.

Individual employee work stations, such as a grocery checkout counter or an automobile service bay designed for use by one person, do not contain common use circulation paths and are not required to comply. Other work areas, such as stockrooms that typically have narrow pathways between shelves would be required to design only one accessible circulation path into the stockroom. It would not be necessary to make each circulation path in the room accessible.

In addition, the proposed standards include exceptions for common use circulation paths in employee work areas where it may be difficult to comply with the technical requirements for accessible routes due to the size or function of the areas. The Department believes that these exceptions will provide the flexibility necessary to ensure that this requirement does not interfere with legitimate business operations.

205 and 309 Operable Parts

Sections 4.1.3, and more specifically 4.1.3(13), 4.27.3, and 4.27.4 of the 1991 Standards require operable parts on accessible elements, along accessible routes, and in accessible rooms and spaces to comply with the technical requirements for operable parts, including height and operation. The 1991 Standards at section 4.27.3 contain an exception that exempts ''special equipment [that] dictates otherwise,'' and electrical and communications systems receptacles not intended for use by building occupants from the technical requirement for the height of operable parts. The proposed changes divide this exception into three exceptions covering operable parts intended only for use by service or maintenance personnel; electrical or communication receptacles serving a dedicated use; and floor electrical receptacles. Operable parts covered by these new exceptions are exempt from all the technical requirements for operable parts. The proposed changes add exceptions that exempt certain outlets at kitchen counters; HVAC diffusers; and redundant controls provided for a single element, other than light switches, from the technical requirements for operable parts. The proposed changes also exempt gas pump nozzles from the technical requirement for activating force at section 309.4.

Reach Ranges. The 1991 Standards set the height for the maximum side reach at 54 inches. The proposed standards at section 308.3 lower that maximum height to 48 inches. The proposed standards also add exceptions for certain elements to the scoping requirement for operable parts.

The 1991 Standards at sections 4.1.3; 4.27.3; and 4.2.6, and the proposed standards at sections 205.1; 228.1; 228.2; 309.3; 308.3; 308.3.1, Exception 2; and 308.3.2 require operable parts of

accessible elements, along accessible routes, and in accessible rooms and spaces to be placed within a forward or side reach. The proposed standards also require at least one of each type of depositories, vending machines, change machines, and gas pumps, and at least 5 percent of mailboxes provided in an interior location to meet the technical requirements for a forward or side reach.

The 1991 Standards specify a maximum 54 inch high side reach and a minimum 9 inch low side reach for a reach depth of 10 inches maximum. The proposed standards specify a maximum 48 inch high side reach and a minimum 15 inch low side reach for an unobstructed reach, and a maximum 48 inch high side reach for a reach depth of 10 inches maximum over an obstruction 34 inches maximum in height. Changing the side reach will affect a variety of building elements such as light switches, electrical outlets, thermostats, fire-alarm pull stations, card readers, and keypads.

Commenters were divided in their views on the change to the reach range requirements. Disability advocacy groups and others, including individuals of short stature, supported the modifications to the proposed reach range requirements. Other commenters asserted that the proposed reach range requirements will be burdensome for small businesses to comply with and asked the Department to consider retaining 1991 requirements. These comments argued that the proposed reach range requirements restrict design options, especially in residential housing.

The Department believes that data provided by advocacy groups and others provides compelling evidence that lowered reach range requirements will serve significantly greater numbers of individuals with disabilities, including individuals of short stature, people with limited upper body strength, and others with limited use of their arms and fingers. This proposal was developed by the Access Board over a prolonged period in which there was extensive public participation. This process did not produce any significant data to indicate that applying this requirement in new construction or during alterations would impose a significant burden.

206 and 402 Accessible Routes

Slope. The proposed standards provide that the running slope of walking surfaces have cross slopes that shall not be steeper than 1:48. The 1991 Standards' cross slope requirement is 1:50.

A commenter recommended increasing the cross slope requirement to allow a maximum of ½ inch per foot (1:24) to prevent imperfections in concrete surfaces from ponding water.

The requirement that a cross slope shall not be steeper than 1:48 adequately provides for water drainage in most situations. Changes to the specifications suggested would double the allowable cross slope and create a significant impediment for many wheelchair users, and others with mobility impairments. Therefore, the Department declines to accept this recommendation.

Accessible Routes from Site Arrival Points and Within Sites. The 1991 Standards at sections 4.1.2(1) and (2) and the proposed changes at sections 206.2.1 Exception 2; and 206.2.2 Exception require, where provided, that at least one accessible route be provided from site arrival points to an accessible building entrance, and at least one accessible route connect accessible facilities on the same site. The proposed standards also add two exceptions that exempt site arrival points and accessible facilities within a site from the accessible route requirements where the only means of access between them is a vehicular way that does not provide pedestrian access.

Comments urged the Department to eliminate the exception that exempts site arrival points and accessible facilities from the accessible route requirements where the only means of access between them is a vehicular way not providing pedestrian access. The Department declines to accept this recommendation because the Department believes that its use will be limited. If it can be reasonably anticipated that the route between the site arrival point and the accessible facilities will be used by pedestrians, regardless of whether a pedestrian route is provided, then this exception will not apply. It will apply only in the relatively rare situations where the route between the site arrival point and the accessible facility dictates vehicular access—for example, an office complex on an isolated site that has a private access road, or a self-service storage facility where all users are expected to drive to their storage units.

Another commenter suggested that the language of section 406.1, General, is confusing because it states that curb ramps on accessible routes shall comply with the guidelines, and that the 1991 Standards provide that curb ramps shall be provided wherever an accessible route crosses a curb.

The Department declines to change this language because the change is purely editorial, resulting from the overall changes in the format. It does not change the substantive requirement. Under the revised format, all elements within a required accessible route must be accessible; therefore, if the accessible route crosses a curb, a curb ramp must be provided.

Limited-use/Limited-application Elevators and Private Residence Elevators. The 1991 Standards at sections 4.1.3(5), Exception 1, and the proposed standards at sections 206.2.3, Exception 1 and 2; and 206.6, Exception 1 and 2 include exceptions to the scoping requirement for accessible routes that exempt certain facilities from connecting each story with an elevator. If a facility is exempt from the scoping requirement, but nonetheless installs an elevator, the 1991 Standards require the elevator to comply with the technical requirements for elevators. The proposed standards add a new exception that allows a facility that is exempt from the scoping requirement to install a limited-use/limited-application (LULA) elevator. LULA elevators are permitted as an alternative to platform lifts. The proposed standards also add a new exception that permits private residence elevators in multi-story dwelling and transient lodging units. The proposed standards contain technical requirements for LULA elevators and private residence elevators.

A commenter questioned the value of permitting LULA elevators because, as was claimed, these elevators often are unreliable. LULAs are smaller than other elevators and have limited travel distance. They are in all other respects subject to the same safety and reliability standards as other elevators. The Department believes that because LULAs will be permitted only in situations where accessible vertical access is not now required, their use will not diminish required access and may, in fact, encourage covered entities to provide vertical access in situations where it is not now being provided.

Accessible Routes to Tiered Dining Areas in Sports Facilities. The 1991 Standards at sections 4.1.3(1) and 5.4 and the proposed changes at section 206.2.5 and Exception 3 require an accessible route to be provided to all dining areas in new construction, including raised or sunken dining areas. The proposed standards will add a new exception for tiered dining areas in sports facilities. Dining areas in sports facilities are typically integrated into the seating bowl and are tiered to provide adequate lines of sight for individuals with disabilities. The new exception requires an accessible route to be

provided to at least 25 percent of the tiered dining areas in sports facilities. Each tier must have the same services and the accessible route must serve the accessible seating.

Accessible Routes to Press Boxes. The 1991 Standards at sections 4.1.1(1) and 4.1.3(1) cover all areas of newly constructed facilities required to be accessible, and an accessible route to connect accessible entrances with all accessible spaces and elements within the facility. Section 201.1 of the proposed standards requires that all areas be accessible. The proposed changes at sections 206.2.7(1) and (2) add two exceptions that exempt small press boxes that are located on bleachers with entrances on only one level, and small press boxes that are free-standing structures elevated more than 12 feet, from the accessible route requirement when the aggregate area of all press boxes in a sports facility does not exceed 500 square feet. The Department anticipates that this change will significantly reduce the economic impacts on smaller sports facilities, such as those associated with high schools or community colleges.

Entrances. The 1991 Standards at sections 4.1.3(8), (a)(i), and (a)(ii); and 4.1.6(1)(h) require at least fifty percent (50%) of public entrances to be accessible. Additionally, the 1991 Standards require the number of accessible public entrances to be equivalent to the number of exits required by applicable building and fire codes. With very few exceptions, building and fire codes require at least two exits to be provided from spaces within a building and from the building itself. Therefore, under the 1991 Standards where two public entrances are planned in a newly constructed facility, both entrances must be accessible.

Instead of requiring accessible entrances based on the number of public entrances provided or the number of exits required (whichever is greater), section 206.4.1 of the proposed standards will require at least sixty percent (60%) of public entrances to be made accessible. The revision is intended to achieve the same result as the 1991 Standards. Thus, under the proposed standards where two public entrances are planned in a newly constructed facility, both entrances must be accessible.

Where multiple public entrances are planned to serve different site arrival points, the 1991 Standards at section 4.1.2(1) and section 206.2.1 of the proposed standards require at least one accessible route to be provided from each type of site arrival point provided, including accessible parking spaces, accessible passenger loading zones, public streets and sidewalks, and public transportation stops, to an accessible public entrance that serves the site arrival point.

The U.S. Small Business Administration Office of Advocacy and other comments recommended retaining the 1991 requirement for fifty percent (50%) of public entrances of covered entities to be accessible. These commenters also raised concerns about the impact upon existing facilities.

The Department believes that these commenters misunderstand the 1991 Standards. As explained above, the current requirements generally require more than fifty percent (50%) of entrances in small facilities to be accessible. Model codes require that most buildings have more than one means of egress, thus, most buildings have more than one entrance, and now these buildings must have more than one accessible entrance. Requiring at least sixty percent (60%) of public entrances to be accessible is not expected to result in a substantial increase in the number of accessible entrances compared to the current requirements. The 1991 Standards and the proposed standards also contain exceptions that limit the number of accessible entrances required in alterations to existing facilities. When entrances in an existing facility are altered and the facility has an accessible entrance, the entrance being altered is not required to be accessible, unless a primary function area also is altered and then an accessible path of travel must be provided to the primary function area to the extent the cost is not disproportionate. The Department anticipates retaining the requirement for accessible entrances. However, in order to ensure the Department is fully informed about the potential results of retaining the requirement, the Department is asking for detailed comments about this issue.

Alterations to Existing Elevators. When a single space or element is altered, the 1991 Standards at sections 4.1.6(1)(a) and (b) require the space or element to be made accessible. When an element in one elevator is altered, the proposed standards at section 206.6.1 will require the same element to be altered in all elevators that are programmed to respond to the same call button as the altered elevator.

The proposed standards at sections 407.2.1 Exception—407.4.7.1.2 Exception also contain exceptions to the technical requirements for elevators when existing elevators are altered that further minimize the impact of the revision:

- Existing elevators are permitted to have recessed call buttons.
- Existing call buttons and keypads are permitted to be located at 54 inches above the finish floor, measured to the centerline of the highest operable part.
- Existing call buttons are not required to be ¾ inch minimum in the smallest dimension.
- Existing call buttons are not required to have visible signals to indicate when each call is registered and when each call is answered.
- A visible and audible hall signal is not required to be provided at the hoistway entrance of existing elevators to indicate the direction of car travel.
- Existing visible hall signals are not required to be centered at 72 inches minimum above the finish floor and 2½ inches minimum measured along the centerline of the element.
- Existing hall signals are not required to meet the requirements for frequency and range of audible signals.
- Existing manually operated hoistway swing doors are permitted if the door opening provides a clear width of 32 inches minimum, and the force for pushing or pulling open the door is 5 pounds maximum.
- Existing manually operated doors are not required to provide a reopening device that automatically stops and reopens the car door and hoistway door if the doors are obstructed by an object or a person.
- A power operated car door with a door opening that provides a clear width of 32 inches minimum is permitted in an existing elevator.
- Existing elevator car configurations that provide a clear floor area of 16 square feet, and provide 54 inches minimum inside clear depth and 36 inches minimum clear width are permitted.
- Where a new car operating panel with accessible elevator car controls and tactile markings is provided in an existing elevator, existing car operating panels are not required to be made accessible.
- Existing car control buttons with floor designations are permitted to be located 54 inches maximum above the finish floor where a parallel approach is provided.
- Existing car control buttons with floor designations are permitted to be recessed.
- Where space on an existing car operating panel precludes the placement of tactile markings immediately to the left of the control button, the markings are permitted to be

placed as near to the control button as possible.

Commenters expressed concerns about the requirement that when an element in one elevator is altered, the proposed standards at section 206.6.1 will require the same element to be altered in all elevators that are programmed to respond to the same call button as the altered elevator. Commenters noted that such a requirement is burdensome and will result in costly efforts without significant benefit to individuals with disabilities.

The Department believes that this requirement is necessary to ensure that when an individual with a disability presses a call button, an accessible elevator will arrive. The Department believes that the effort required to meet this provision is minimal in the majority of situations, and the benefit to individuals with disabilities not having to wait unnecessarily for an accessible elevator to make its way to them arbitrarily outweighs any minor burden of programming corresponding elevators.

Elevator Leveling. Section 407.4.4, Leveling, provides that each car must automatically level to ½ inch at floor landings.

Accessible Routes in Dwelling Units with Mobility Features. The UFAS, at sections 4.34.1 and 4.34.2, require the living area, kitchen and dining area, bedroom, bathroom, and laundry area where provided in dwelling units with mobility features to be on an accessible route. Where dwelling units have two or more bedrooms, at least two bedrooms are required to be on an accessible route.

The proposed changes at sections 233.3.1.1, 809.1; 809.2; 809.2.1 and 809.4 will require all spaces and elements within dwelling units with mobility features to be on an accessible route. These proposed changes exempt unfinished attics and unfinished basements from the accessible route requirement. These proposed changes also include an exception to the dispersion requirement that permits single-story dwelling units or ''flats'' to be constructed, where multi-story dwelling units are provided. A ''flat'' eliminates the need to provide a residential elevator or platform lift to connect stories.

Location of Accessible Routes. The 1991 Standards, section 4.3.2(1), require accessible routes connecting site arrival points and accessible building entrances to coincide with general circulation paths, to the maximum extent feasible. The proposed regulation requires all accessible routes to coincide with or be located in the same general area as general circulation paths. Additionally, a new provision specifies that where a circulation path is interior, the required accessible route must also be located in the interior of the facility, where general circulation paths are located in the interior of the facility. The revision affects a limited number of buildings. The proposed changes at section 206.3 will explicitly require all accessible routes to coincide with or be located in the same general area as general circulation paths. Designing newly constructed interior accessible routes to coincide with or to be located in the same area as general circulation paths will not typically present a difficult design challenge and is expected to impose limited design constraints. The revision will have no impact on exterior accessible routes. The 1991 Standards and proposed standards also require accessible routes to be located in the interior of the facility, where general circulation paths are located in the interior of the facility. The revision affects a limited number of buildings.

Location of Accessible Routes to Stages. The 1991 Standards at section 4.33.5 require an accessible route to connect the accessible seating and the performing area. Proposed section 206.2.6 will require the accessible route to directly connect the seating area and the accessible seating, stage, and all areas of the stage, where a circulation path directly connects the seating area and the stage. The 1991 Standards require and the proposed changes also will require an accessible route to connect the stage and ancillary areas used by performers such as dressing rooms. The proposed standards do not require an additional accessible route to be provided to the stage. Rather, the changes specify where the accessible route to the stage, which is required by the 1991 Standards, must be located.

207 Accessible Means of Egress

General. The 1991 Standards at sections 4.1.3(9); 4.1.6(1)(g); and 4.3.10 establish scoping and technical requirements for accessible means of egress. The proposed changes at section 207.1, Exception 1 reference the International Building Code for scoping and technical requirements for accessible means of egress. Relevant proposed sections include 216.4.

The 1991 Standards require the same number of accessible means of egress to be provided as the number of exits required by applicable building and fire codes. The International Building Code (IBC) requires at least one accessible means of egress and at least two accessible means of egress where more than one means of egress is required by other sections of the code. The proposed changes are expected to have minimal impact since the model fire and life safety codes, which are adopted by all the States, contain equivalent requirements with respect to the number of accessible means of egress.

The 1991 Standards require areas of rescue assistance or horizontal exits in facilities with levels above or below the level of exit discharge level. Areas of rescue assistance are spaces that have direct access to an exit, stair, or enclosure where individuals who are unable to use stairs can go to call for assistance and wait for evacuation. The proposed standards will now incorporate the requirements established by the IBC. The IBC requires an evacuation elevator designed with standby power and other safety features that can be used for emergency evacuation of individuals with disabilities in facilities with four or more stories above or below the exit discharge level, and allows exit stairways and evacuation elevators to be used as an accessible means of egress in conjunction with areas of refuge or horizontal exits. The proposed change is expected to have minimal impact since the model fire and life safety codes, adopted by most States, already contain parallel requirements with respect to evacuation elevators.

The 1991 Standards exempt facilities equipped with a supervised automatic sprinkler system from providing areas of rescue assistance, and also exempt alterations to existing facilities from providing an accessible means of egress. The IBC exempts buildings equipped with a supervised automatic sprinkler system from certain technical requirements for areas of refuge, and also exempts alterations to existing facilities from providing an accessible means of egress.

The proposed standards will require signs that provide direction to or information about functional spaces to meet certain technical requirements. The proposed standard at section 216.4 addresses exit signs. This section requires exit signs at doors to be raised with Braille characters, and also requires directional exit signs and signs at areas of refuge to have appropriate visual characteristics. This section is consistent with the requirements of the IBC. Signs used for means of egress are covered by this scoping requirement. The proposed requirements specifically identify signs used for means of egress and require the signs to meet certain technical requirements.

Standby Power for Platform Lifts. The proposed regulations at section 207.2

will require standby power to be provided for platform lifts that are permitted to serve as part of an accessible means of egress by the IBC. The IBC permits platform lifts to serve as part of an accessible means of egress in a limited number of places where platform lifts are allowed in new construction. The 1991 Standards and the proposed regulations similarly limit the places where platform lifts are allowed in new construction. ADAAG 4.1.3(5) Exception 4(a) through (d); sections 206.7.1 through 206.7.10 of the proposed regulations.

Commenters urged the Department to reconsider provisions that would require standby power to be provided for platform lifts. Concerns were raised that ensuring standby power is too burdensome. The Department views this issue as a fundamental life safety issue. Lift users face the prospect of being trapped on the lift in the event of a power failure if stand-by power is not provided. The lack of stand-by power could be life-threatening in situations where the power failure is associated with a fire or other emergency. The use of a platform lift is generally only one of the options available to covered entities. Covered entities that are concerned about the costs associated with maintaining standby power for a lift may wish to explore design options that would permit the use of a ramp.

208 and 502 Parking Spaces

General. Where parking spaces are provided, the proposed standards at sections 4.1.2(5)(a) and (7) and 7(a), and the proposed changes at section 208.1 and Exception require a specified number of the parking spaces to be accessible. The proposed changes add a new exception that exempts parking spaces used exclusively for buses, trucks, delivery vehicles, law enforcement vehicles, or for purposes of vehicular impound from the scoping requirement for parking spaces. If a lot containing parking spaces for these vehicles is used by the public, the lot is required to have an accessible passenger loading zone.

The proposed standards require accessible parking spaces to be identified by signs that display the International Symbol of Accessibility. At section 216.5 and Exceptions 1 and 2 new changes will add two new exceptions that exempt accessible parking spaces from the signage requirement. The first exception exempts sites that have four or fewer parking spaces from the signage requirement. The second exception exempts residential facilities where parking spaces are assigned to specific dwelling units from the signage requirement.

Commenters stated that the first exception, by allowing a parking lot with four or fewer spaces not to post a sign at its one accessible space, is problematic because it could allow all drivers to park in accessible parking spaces. The Department believes that this exception provides necessary relief for small business entities that may otherwise face the prospect of having between twenty-five percent (25%) and one hundred percent (100%) of their limited parking area unavailable to their customers because it is reserved for the exclusive use of persons with accessible tags or parking placards. The proposed standards still require these businesses to ensure that at least one of their available spaces is designed to be accessible.

A commenter stated that accessible parking spaces must be clearly marked. The Department notes that section 502.6, Identification, provides that parking spaces must be identified by signs that include the International Symbol of Accessibility. Additional signs are required to identify van accessible spaces. Also, section 502.3.3, Marking, requires that access aisles are to be marked so as to discourage parking in them.

Access Aisle. The advisory note accompanying section 502.3 provides that it is preferable that the accessible route connecting parking spaces to accessible entrances not pass behind parked vehicles.

Commenters questioned why this advisory note would permit the placement of individuals with disabilities in the path of moving vehicles. The Department believes that the proposed standards appropriately recognize that not all parking facilities provide separate pedestrian routes. Section 502.3 provides the flexibility necessary to permit designers and others to determine the most appropriate location of the access route in connection to the accessible entrances. If all pedestrians using the parking facility are expected to share the vehicular lanes, then the ADA permits covered entities to use the vehicular lanes as part of the accessible route. The advisory note, however, calls attention to the fact that this practice, while permitted, is not ideal. Accessible parking spaces must be located on the shortest accessible route of travel to the facility's entrance. Accessible parking spaces and the required accessible route should be located where individuals with disabilities do not have to cross vehicular lanes or pass behind parked vehicles to have access to the entrance. If it is necessary to cross a vehicular lane because, for example, local fire engine access requirements prohibit parking immediately adjacent to a building, then a marked crossing should be used as part of the accessible route to the entrance.

Van Accessible Parking Spaces. The 1991 standards at sections 4.1.2(5)(b), 4.6.3; 4.6.4; and 4.6.5 require one in every eight accessible parking spaces to be van accessible. Proposed changes will require one in every six accessible parking spaces to be van accessible.

A commenter asked whether automobiles other than vans may use van accessible parking spaces. The ADA regulations do not prohibit automobiles other than vans from using van accessible parking spaces. The Department does not distinguish between automobiles that are actual ''vans'' versus other vehicles such as trucks, station wagons, SUVs, or other automobiles because many vehicles other than vans may be used by individuals with disabilities to transport mobility devices.

Commenters' opinions were divided on this proposal. Facility operators and others asked for a reduction in the number of required accessible parking spaces, especially the number of van accessible parking spaces because they claimed these spaces often are not used. Individuals with disabilities, however, requested an increase in the scoping requirements for these parking spaces.

The Department is aware that a strong difference of opinion exists between those who use such spaces and those who must provide or maintain them. Therefore, the Department is not proposing to increase the total number of accessible spaces. The only change that is being proposed is to increase the proportion of spaces that must be accessible to vans and other vehicles equipped to transport mobility devices.

Direct Access Entrances from Parking Structures. Where levels in a parking garage have direct connections for pedestrians to another facility, the 1991 Standards, 4.1.3(8)(b)(i), require at least one of the direct connections to be accessible. The proposed changes at section 206.4.2 require all of the direct connections to be accessible.

209 and 503 Passenger Loading Zones and Bus Stops

Passenger Loading Zones at Medical Care and Long-term Care Facilities. Sections 6.1 and 6.2 of the 1991 Standards and proposed section 209.3 require medical care and long-term care facilities, where the period of stay exceeds 24 hours, to provide at least one passenger loading zone at an accessible

entrance. The 1991 Standards also require a canopy or roof overhang at the passenger loading zone. The proposed standards will not require a canopy or roof overhang.

Commenters urged the Department to reinstate the existing requirement for a canopy or roof overhang at passenger loading zones at medical care and long-term care facilities. While the Department recognizes that a canopy or roof overhang may afford useful protection from inclement weather conditions to everyone using a facility, it is not clear that the absence of such protection would impede access by individuals with disabilities. Therefore, the Department declines to reinstate that requirement.

Passenger Loading Zones. Where passenger loading zones are provided, the 1991 Standards, at sections 4.1.2(5) and 4.6.6, require at least one passenger loading zone to be accessible. The proposed changes at sections 209.2.1, 503.2, 503.3, 503.3.1, 503.3.2, 503.3.3, and 503.4 Exception, will require facilities such as airport passenger terminals that have long, continuous passenger loading zones to provide one accessible passenger loading zone in every continuous 100 linear feet of loading zone space. The 1991 Standards and the proposed standards include technical requirements for the vehicle pull-up space (96 inches wide minimum and 20 feet long minimum). Accessible passenger loading zones must have an access aisle that is 60 inches wide minimum and extends the full length of the vehicle pull-up space. The 1991 Standards provide that the access aisle may be on the same level as the vehicle pull-up space, or on the sidewalk with a curb ramp. The proposed changes will require the access aisle to be on the same level as the vehicle pull-up space and to be marked so as to discourage parking in the access aisle.

Commenters expressed concern that certain covered entities, particularly airports, cannot accommodate the proposed requirements to provide passenger loading zones, and urged a revision that would require one passenger loading zone located in reasonable proximity to each building entrance served by the curb.

Commenters raised a variety of issues about the requirements at section 503 stating that the requirements for an access aisle, width, length, and marking of passenger loading zones are not clear and do not fully meet the needs of individuals with disabilities, and stated that these requirements may run afoul of state or local requirements, or may not be needed because many passenger loading zones are typically staffed by doormen or valet parkers. The wide range of opinions expressed in these comments indicates that this provision is controversial. However, none of these comments provides sufficient data to enable the Department to determine that the requirement is not appropriate.

Valet Parking and Mechanical Access Parking Garages. The 1991 Standards, sections 4.1.2(5)(a) and (e), and the proposed changes, sections 208.2, 209.4, and 209.5 require parking facilities that provide valet parking services to have an accessible passenger loading zone. The proposed standards will extend this requirement to mechanical access parking garages. The 1991 Standards contain an exception that exempts valet parking facilities from providing accessible parking spaces. The proposed standards also will eliminate this exception. The reason for not retaining the provision is that valet parking is a service, not a facility type.

Commenters questioned why the exception for valet parking facilities from providing accessible parking spaces is being eliminated. The provision is being eliminated because valet parkers may not have the skills necessary to drive a vehicle that is equipped to be accessible, including use of hand controls, or when a seat is not present to accommodate a driver using a wheelchair. In that case, permitting the individual with a disability to self-park may be a required reasonable modification of policy for a covered entity.

210 and 504 Stairways

The 1991 Standards provide that stairs are required to be accessible only when they provide access to floor levels not otherwise connected by an accessible route (*e.g.*, an elevator, lift, or ramp). The proposed standards at sections 210.1 and 504.2 will require all newly constructed stairs that are part of a means of egress to comply with the requirements for accessible stairs, which cover treads, risers, and handrails. In existing facilities, where floor levels are connected by an accessible route, only the handrail requirement will apply.

Commenters were divided in their response to this provision. The Department believes that it strikes an appropriate balance by focusing the expanded requirements on new construction.

211 and 602 Drinking Fountains

Sections 4.1.3(10)(a) and 4.1.3(b), 4.15.2, 4.15.5(1) and 4.15.5(2) of the 1991 Standards, and the changes proposed at sections 211.1, 211.2 Exception; 211.3 Exception, 602.2 Exception, 602.4, and 602.7 require drinking fountains to be provided for wheelchair users and for people who stand. The 1991 Standards require wall and post-mounted cantilevered drinking fountains mounted at a height for wheelchair users to provide clear floor space for a forward approach with knee and toe clearance, and free standing or built-in drinking fountains to provide clear floor space for a parallel approach. The proposed changes require drinking fountains mounted at a height for wheelchair users to provide clear floor space for a forward approach with knee and toe clearance, and include an exception for a parallel approach for drinking fountains installed at a height to accommodate very small children. The changes also include a technical requirement for drinking fountains for standing persons.

One commenter recommended that the mounting height of drinking fountains should take into consideration the increased use of three-wheeled electric scooters and the increasing size of wheelchairs. The Department is aware that the use of three- and four-wheeled electric scooters may be increasing and that wheelchairs may be larger than in the past; however, no reliable data is yet available indicating specific dimensions that may be needed to provide access to individuals using these devices. Therefore, at the present time, the Department intends to retain the proposed requirements.

212 and 606 Kitchens, Kitchenettes, Lavatories, and Sinks

The 1991 Standards at sections 4.1.1; 4.24.1; 4.24.3; 4.24.5; and 9.2.2(7) contain technical requirements for sinks, but only have specific scoping requirements for sinks in transient lodging. Proposed sections 212.3 will require at least 5 percent of sinks in each accessible space to comply with the technical requirements for sinks. The technical requirements address clear floor space, height, faucets, and exposed pipes and surfaces. The 1991 Standards and the proposed changes require the clear floor space at sinks to be positioned for a forward approach, and knee and toe clearance to be provided under the sink. The 1991 Standards allow the clear floor space at kitchen sinks and wet bars in hotel guest rooms with mobility features to be positioned for either a forward approach with knee and toe clearance, or for a parallel approach. The proposed changes include a broader exception that permits the clear floor space to be positioned for a parallel approach at kitchen sinks in any space where a cook top or conventional range is not provided, and at a wet bar.

A commenter stated that it is unclear what the difference is between a sink and a lavatory, and that this is complicated by requirements that apply to sinks (5 percent accessible) and lavatories (at least 1 accessible). The term ''lavatory'' generally refers to the specific type of plumbing fixture required for hand washing in toilet and bathing facilities. The more generic term ''sink'' applies to all other types of sinks located in covered facilities.

A commenter recommended that the mounting height of sinks and lavatories should take into consideration the increased use of three-wheeled electric scooters and some larger wheelchairs. The Department is aware that the use of three-wheeled electric scooters and larger wheelchairs may be increasing; however, although no reliable data is yet available, the Access Board is working to obtain data that may be used to develop design guidelines that provide access to individuals using these mobility devices.

213, 603, 604, and 608 Toilet and Bathing Facilities, Rooms, and Compartments

General. Where toilet facilities and bathing facilities are provided, they must comply with section 213.

A commenter recommended that all accessible toilet facilities, toilet rooms, and compartments should be required to have signage indicating that such spaces are restricted solely for the use of individuals with disabilities. The Department believes that it is neither necessary nor appropriate to restrict the use of accessible toilet facilities. Like many other facilities designed to be accessible, accessible toilet facilities can provide a necessary level of usability for a wide range of individuals with and without disabilities.

Ambulatory Accessible Toilet Compartments. The proposed changes at sections 213.3.1 and 604.8.2 will require multi-user men's toilet rooms where the total of toilet compartments and urinals is six or more to contain at least one ambulatory accessible compartment. The 1991 Standards count only toilet compartments for this purpose. The proposed standards will establish parity with multi-user women's toilet rooms.

Urinals. Men's toilet rooms with only one urinal will no longer be required to provide an accessible urinal. Such toilet rooms will still be required to provide an accessible toilet compartment.

Commenters urged that the exception be eliminated. This change will provide flexibility to many small businesses. This provision does not alter the requirement that all common use restrooms must be accessible. Therefore, the Department declines to eliminate the exception.

Multiple Single-user Toilet Rooms. Where multiple single-user toilet rooms are clustered in a single location, fifty percent (50%), rather than the currently required one hundred percent (100%), will be required to be accessible by proposed section 213.2. Accessible single-user toilet rooms will have to be identified by the international symbol of accessibility.

Hospital Patient Toilet Rooms. An exception has been added in section 223.1 that provides that toilet rooms that are part of critical or intensive care patient sleeping rooms will no longer be required to provide mobility features.

Water Closet Location and Rear Grab Bar. Sections 604.2 and 604.5.2, Exception 1 of the proposed changes will allow greater flexibility for the placement of the centerline of water closets, and will permit a shorter grab bar where there is not enough space due to special circumstances (*e.g.*, because a lavatory is located next to the water closet in dwelling units and the wall behind the lavatory is recessed so that the lavatory does not overlap the clear floor space at the water closet). The 1991 Standards contain no exception for grab bar length, and require the centerline to be exactly 18 inches from the side wall, while the proposed requirement will allow the centerline to be between 16 and 18 inches from the wall.

Commenters recommended that the centerline location of water closets should be 18 inches plus or minus 1 inch because people are becoming larger and the toilet paper dispensers are becoming larger and protrude into the 18 inch space. Other commenters suggested that the proposed requirement will increase the overall size of toilet rooms unnecessarily and recommended smaller dimensions.

The Department is aware that this issue has sparked debate of a highly speculative nature. The Department is not aware of clear evidence that the dimensional change adopted by the Access Board and the model code organizations is incorrect or unworkable. Therefore, the Department will retain the requirement.

Water Closet Clearance. Proposed section 604.3 represents a change where a lavatory is installed adjacent to the water closet. The 1991 Standards allow lavatories to be placed 18 inches minimum from the water closet centerline, which precludes side transfers. To allow greater transfer options, the proposed standards prohibit lavatories from overlapping the clear floor space at water closets, except in dwelling units.

Commenters urged the Department not to adopt section 604.3 claiming that it will require single-user toilet rooms to be two feet wider than the requirements now provide, and this additional requirement will be difficult to meet.

The requirements at section 604.3.2 specify how required clearance around the water closet can overlap with specific elements and spaces. An exception, that applies only to residential dwelling units, permits a lavatory to be located no closer than 18 inches from the centerline of the water closet. The requirements at section 604.3.2 increase accessibility for individuals with disabilities.

Toilet Room Doors. Section 603.2.3 of the proposed rule permits the doors of single user toilet or bathing rooms with in-swinging doors to swing into the required turning space, but not into the clear floor space required at any fixture. Section 603.2.3 Exception 2 permits the door to swing into the clear floor space of an accessible fixture if a clear floor space that measures 30 inches by 48 inches is available outside the door swing in single-user toilet rooms.

Concerns were raised that permitting doors of single user toilet or bathing rooms with in-swinging doors to swing into the clearance around any fixture will result in inaccessibility to individuals using larger wheelchairs and scooters. The Department believes the provision is sufficient to meet the needs of individuals using larger scooters and wheelchairs.

The Department prepared a series of figures illustrating comparisons of the minimum size single-user toilet rooms. These figures show typical examples that meet the minimum requirements of the proposed rule.

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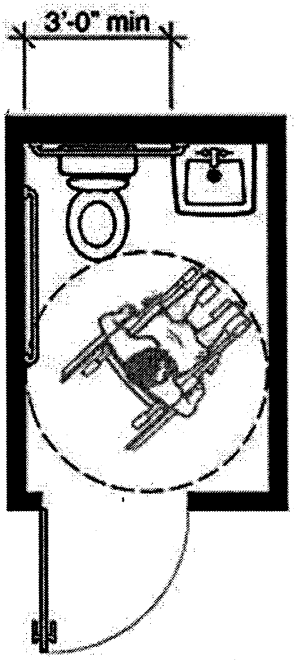
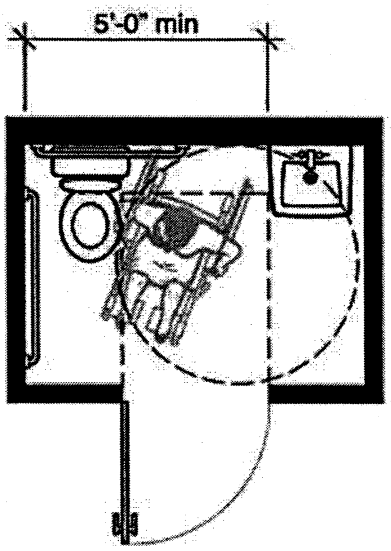
Comparison of Minimum Size Single-User Toilet Room Layouts

With Fixtures Side-by-Side



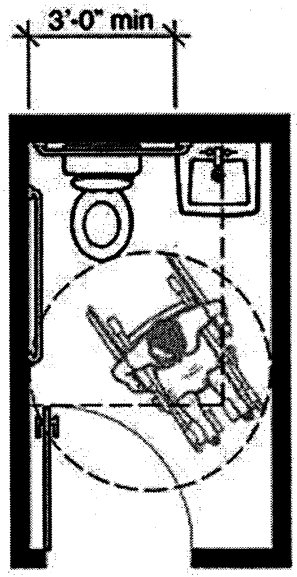
Plan-1A: 1991 Standards Minimum with Out-swinging Door
5'-0" X 7'-3" • 36.25 Square Fee

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 1991 Standards. The size of this space is determined by the minimum width required for the water closet and lavatory between the side walls, the minimum wheelchair turning space, and the space required for the out-swinging door. A lavatory with knee space can overlap the clear floor space required for the water closet provided that at least 36 inches of clearance is maintained between the side wall next to the water closet and the lavatory, see, 1991 Standards 4.17.3 and Fig. 28. A wheelchair turning space meeting section 4.2.3 of the 1991 Standards must be provided. The size of this room requires that the entry door swing out. The room would be larger if the door was in-swinging.



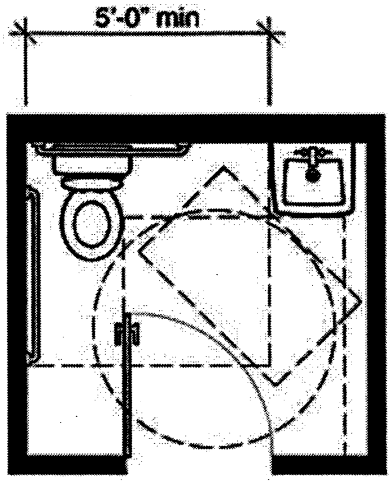
Plan-1B: 2004 ADAAG Minimum with Out-swinging Door
7'-0" X 5'-0" • 35.00 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 2004 ADAAG. Features include: five foot minimum width between the side wall of the water closet and the lavatory; 60 inch minimum circular wheelchair turning space; and 36 inch by 48 inch clear maneuvering space for the out-swinging entry door. The 2004 ADAAG requires a floor clearance at a water closet that is a minimum of 60 inches wide by 56 inches deep regardless of approach, section 604.3.1. Except in residential dwelling units, no other plumbing fixtures can be located in this clear space, section 604.3.2. The 2004 ADAAG, at section 304.3, allows the turning space to extend into toe and knee space provided beneath fixtures and other elements, section 304.3. Required maneuvering space for the entry door (inside the room) must be clear of all fixtures. If the door had both a closer and latch then additional space would be required to the latch side, section 404.2.4.1 and Figure 404.2.1 (c). This layout is three point five percent (3.5%) smaller than the accompanying Plan-1A: 1991 Standards Minimum with Out-swinging Door example.



Plan-2A: 1991 Standards Minimum with In-swinging Door
5'-0" X 8'-6" • 42.50 Square Feet

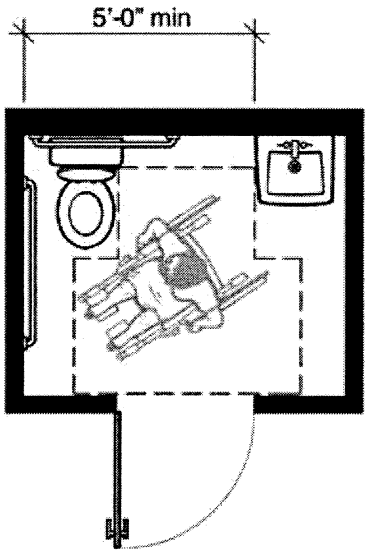
This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 1991 Standards. Depending on the width of the hallway and other circulation issues, it can be preferable to swing the entry door into the toilet room. Businesses and public entities typically prefer to have an in-swinging door. The in-swinging door increases overall room size because it cannot swing over the required clear floor space at any accessible fixture, 1991 Standards 4.22.2. This increases the room depth from Plan-1A. The door is permitted to swing over the required turning space shown as a 60 inch circle.



Plan-2B: 2004 ADAAG Minimum with In-swinging Door
7'-0" X 6'-6" • 45.50 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 2004 ADAAG when the entry door swings into the room. In the proposed standards an exception allows the entry door to swing over the clear floor spaces and clearances required at the fixtures if a clear floor space complying with section 305.3 (30 inches by 48 inches) is provided outside the arc of the door swing, section 603.3.3 exception 2. The required maneuvering space for the door, section 404.2.4.1 and figure 404.2.4.1(a), also is a factor in room size. This clear space cannot be obstructed by the plumbing fixtures. Note that this layout provides more space for turning when the door is closed than Plan-1B.

This layout is seven percent (7%) larger than the accompanying Plan-2A: 1991 Standards Minimum with in-swinging Door example.

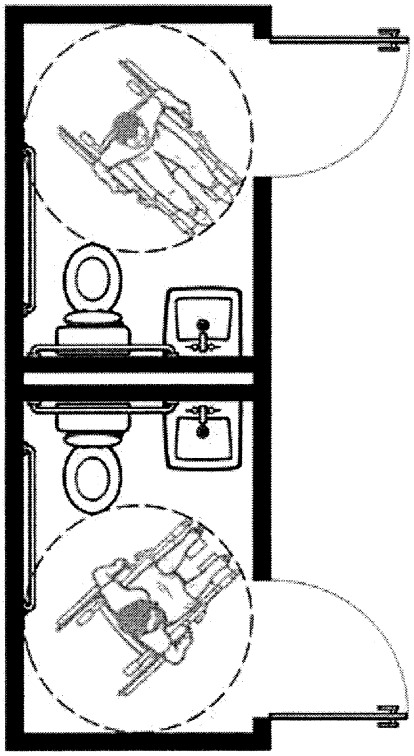


Plan-3: Meets Both 1991 Standards 2004 ADAAG
7'-0" X 5'-9" • 40.25 Square Feet

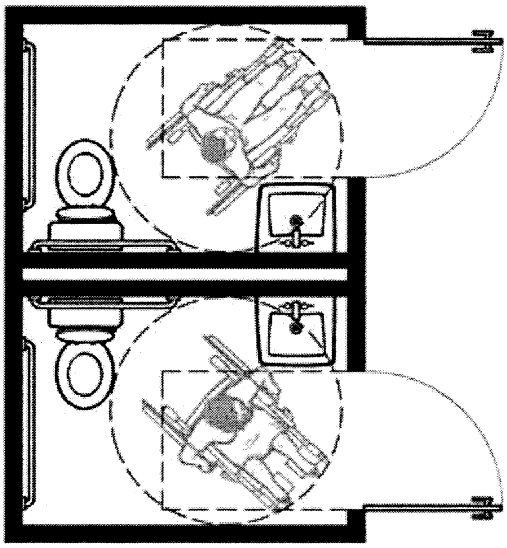
This plan shows an example of a single-user toilet room that meets the minimum requirements of both the 1991 Standards and 2004 ADAAG. A T-shaped turning space has been used, 1991 Standards Figure 3(a) and 2004 ADAAG Figure 304.3.2, to maintain a compact room size. An out-swinging door also minimizes the overall layout depth and cannot swing over the required clear floor space or clearance at any accessible plumbing fixture.

This layout is eleven percent (11%) larger than the Plan-1A: 1991 Standards Minimum with out-swinging Door example shown at the beginning of these plan comparisons.

Comparison of Minimum Size Single-user Toilet Room "Pairs" With Fixtures Side-by-Side



Plan-1A Pair: 1991 Standards Minimum with Out-swinging Doors
Two 5'-0" X 7'-3" rooms
72.50 Square Feet Total



Plan-1B Pair: 2004 ADAAG Minimum with Out-swinging Doors
Two 7'-0" X 5'-0" Rooms
70.00 Square Feet Total

Above are a men's/women's room configuration comparison for Plans 1A and 1B.

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Shower Spray Controls. In accessible bathtubs and shower compartments, sections 607.6 and 608.6 of the proposed standards will require shower spray controls to have an on/off control and to deliver water that is 120 °F (49 °C) maximum. Currently, neither feature is required by the 1991 Standards, but may be required by plumbing codes. Meeting the latter specification will require either controlling the maximum temperature at each shower spray unit or at the hot water supply.

Shower Compartments. The 1991 Standards at sections 4.21.2; 9.1.2; 4.21.5; and 4.21.7, and the proposed standards at sections 608.1; 608.2.1; 608.2.3; 608.4; 608.5.3; and 608.7, Exception contain technical requirements for transfer-type and roll-in shower compartments. The proposed standards provide more flexibility than the 1991 Standards as follows:

■ Transfer-type showers are 36 inches by 36 inches. The proposed standards specify that these dimensions are measured at the center point of opposing sides to accommodate molded compartments with rounded bottom edges.

■ The 1991 Standards and the proposed standards permit a ½-inch maximum curb in transfer-type showers. The proposed standards add a new exception that permits a 2-inch maximum curb in transfer-type showers in alterations to existing facilities, where recessing the compartment to achieve a ½-inch curb will disturb the structural reinforcement of the floor slab.

■ Roll-in showers are 30 inches minimum by 60 inches minimum. Alternate roll-in showers are 36 inches by 60 inches minimum, and have a 36 inch minimum opening on the long side of the compartment. The 1991 Standards require alternate roll-in showers in a portion of accessible hotel guest rooms, but provision of this shower type in other facilities is generally permitted as an equivalent facilitation. The 1991 Standards require a seat to be provided on the side with the opening; and require the controls to be located on the side adjacent to the seat. The proposed standards will permit alternate roll-in showers to be used in any facility; only require a seat in hotel guest rooms only; and allow location of controls on the back wall opposite the seat as an alternative.

A disability advocacy group and others raised concerns that adding a new exception that permits a - inch maximum curb in transfer-type showers in alterations to existing facilities, where recessing the compartment to achieve a ½-inch curb will disturb the structural reinforcement of the floor slab, will impair the ability of individuals with disabilities to use transfer-type showers.

The exception permitting an increased maximum curb in transfer-type showers is allowed only when structural barriers prevent full compliance, therefore the Department believes its use will be restricted to limited situations. The exception is intended to provide some flexibility to provide accessibility where the existing structure precludes full access.

Toilet and Bathing Rooms. Section 603, Toilet and Bathing Rooms, provides the technical requirements for toilet and bathing rooms.

Commenters recommended that section 603, Toilet and Bathing Rooms, should include requirements for unisex toilet and bathing rooms. These commenters suggested that unisex toilet and bathing rooms are most useful as companion care facilities.

Model plumbing and building codes require single-user (unisex or family) toilet facilities in certain occupancies, primarily assembly facilities, covered malls, and transportation facilities. These toilet rooms provide flexibility for persons needing privacy so that they can obtain assistance from family members or persons of the opposite sex. When these facilities are provided, both the 1991 Standards and proposed standards require that they be accessible. The Access Board did not scope unisex toilet facilities because plumbing codes generally determine the number and type of plumbing fixtures to be provided in a particular occupancy and often determine whether an occupancy must provide separate sex facilities in addition to single-user facilities. However, the Access Board did provide scoping at section 213.2.1 to coordinate with model plumbing and building code requirements which will permit a small toilet room with two water closets or one water closet and one urinal to be considered a single-user toilet room provided the room has a privacy latch. In this way, a person needing assistance from a person of the opposite sex can lock the door to use the facility while temporarily inconveniencing only one other user. These provisions strike a reasonable balance and pose a lesser impact on covered businesses and other occupancies required to provide fewer plumbing fixtures.

A commenter recommended that in shower compartments rectangular seats as provided in section 610.3.1 should not be permitted as a substitute for L-shaped seats as provided in 610.3.2.

The proposed standards do not indicate a preference for either rectangular or L-shaped seats in shower compartments.

214 and 611 Washing Machines and Clothes Dryers

The proposed standard, sections 214.2–3, 611.3, and 309.3 will specify the number of machines of each type required to be accessible (1–2 depending upon the total number provided). An exception will permit the maximum height for the tops of these machines to be 2 inches higher than the general requirement for high reach maximums over an obstruction.

A commenter objected to the scoping provision for accessible washing machines and clothes dryers stating that the probability that more than one accessible machine will be needed at the same time would appear to be low in the context of transient lodging.

The scoping in this provision is based on the relative size of the facility rather than the identity of the covered entity. The Department assumes that the size of the facility (and, therefore the number of accessible machines provided) will be determined by the covered entities' assessment of the demand for laundry facilities. The Department declines to assume that people with disabilities will have less use for accessible facilities in transient lodging than in other public accommodations.

216 and 703 Signs

The following types of signs, though they are not specifically subject to the 1991 Standards for raised character and Braille signs, will now be explicitly exempted by sections 216.1, Exceptions 1–3, 216.2, Exception, 216.3, 703.4.1, and 703.4.2, Exception. These types of signs include: Seat and row designations in assembly areas; occupant names, building addresses; company names and logos; signs in parking facilities (except those identifying accessible parking spaces and means of egress); and exterior signs identifying permanent rooms and spaces that are not located at the door to the space they serve. This requirement also will clarify that the exception for temporary signs applies to signs used for seven days or less.

The proposed standards retain the option to provide one sign where both visual and tactile characters are provided or two signs, one with visual, and one with tactile characters.

217 and 704 Telephones

Drive-up Public Telephones. Where public telephones are provided, the 1991 Standards, at section 4.1.3(17)(a), and proposed section 217.2, Exception, require a certain number of telephones to be wheelchair accessible. The proposed requirement adds a new exception that exempts drive-up public telephones.

Public Telephone Volume Controls. Current sections 4.1.3(17), 4.30.7(2), and 4.31.5 require all wheelchair accessible public telephones and twenty-five percent (25%) of all other public telephones to have volume controls, and to be identified by signs. Proposed changes at sections 217.3 and 704.3 will require all public telephones to have volume controls, and will delete the requirement for identifying signs. The 1991 Standards require volume control telephones to provide a minimum gain of 12 dB and a maximum gain of 18 dB. A proposed change will require a gain up to 20 dB minimum and an automatic reset.

The proposed change is expected to have minimum impact since the proposed scoping and technical requirements are consistent with guidelines and standards issued by the Access Board under section 255 of the Telecommunications Act of 1998 (36 CFR 1193.43(e)), and Section 508 of the Rehabilitation Act of 1973, as amended, (36 CFR 1194.23(f)) which require all new telephones to have volume controls.

TTY. Section 4.1.3(17) of the 1991 Standards require a public TTY if there are four or more public pay telephones at a site and at least one is in an interior location. Proposed changes, 217.4.2, will require that a building or facility provide a public TTY on each floor that has four or more public telephones, and in each telephone bank that has four or more telephones as proposed by sections 217.4.1, 217.4.3, 217.4.3.1, 217.4.3.2, 217.4.4, 217.4.5, 217.4.6, 217.4.7, and 217.4.8.

Another commenter stated that requiring installation of telephones within the proposed reach range requirements would adversely impact the public and telephone owners and operators. According to the commenter, people without disabilities will not use telephones that are installed within the reach range requirements because they may be inconvenienced by bending to operate these telephones, and, therefore, owners and operators will lose revenues because of the reduction in use.

This comment misunderstands the scoping requirements for wheelchair accessible telephones. Proposed section 217.2 provides that where one or more single units are provided, only one unit per floor, level, or exterior site is required to be wheelchair accessible. However, where banks of telephones are provided, only one telephone in each bank is required to be wheelchair accessible. The Department believes these scoping requirements for

wheelchair accessible telephones are reasonable and will not result in burdensome obligations or lost revenue for owners and operators.

218 and 810 Transportation Facilities

Detectable Warnings. Detectable warnings are a distinctively textured surface of truncated domes that is identifiable by cane and underfoot. The 1991 Standards at sections 4.1.3(15); 4.7.7; 4.29.2; 4.29.5; 4.29.6; and 10.3.1(8) require detectable warnings at curb ramps, hazardous vehicular areas, reflecting pools, and transit platform edges. The proposed revisions at sections 218.2; 218.3; 810.5; 810.5.2; 705.1; 705.1.1; 705.1.2; 705.1.3; and 705.2 only require detectable warnings at transit platform edges. The proposal will change the technical specifications for the diameter and spacing of the truncated domes. The proposal also deletes the requirement for the material used to provide contrast to be an integral part of the truncated domes and for the truncated domes to contrast in resiliency or sound-on-cane contact from adjoining walking surfaces at interior locations.

The proposed revisions to the 1991 Standards apply to detectable warnings on developed sites. They do not apply to the public-right-of-way. Scoping for detectable warnings at all locations other than transit platform edges has been eliminated from this rule. However, because detectable warnings have been shown to significantly benefit individuals with disabilities at transit platform edges, the proposed standards will provide scoping and technical requirements for detectable warnings at transit platform edges.

219 and 706 Assistive Listening Systems

Signs. Section 216.10 requires each covered assembly area to provide signs at each auditorium to inform patrons that assistive listening systems are available. However, an exception to this requirement permits assembly areas that have ticket offices or ticket windows to display the required signs at the ticket window.

A commenter recommended eliminating the exception at 216.10 because, for example, people who buy tickets through the mail, by subscription, or on-line may not need to stop at a ticket office or window upon arrival at the assembly area. The Department believes that an individual's decision to purchase tickets before arriving at a performance does not limit the discretion of the assembly operator to use the ticket window to provide other services to its patrons. The Department is retaining the exception at 216.10 to permit the venue operator some flexibility in determining how to meet the needs of its patrons.

Audible Communication. The 1991 Standards at section 4.1.3(19)(b) require assembly areas where audible communication is integral to the use of the space to provide an assistive listening system if they have an audio amplification system or an occupant load of 50 or more people and have fixed seating. The proposed standards at section 219 will require assistive listening systems in spaces where communication is integral to the space and audio amplification is provided, and in courtrooms.

The 1991 Standards require receivers to be provided for at least 4 percent of the total number of seats minimum. The proposed standards at section 219.3, will revise the percentage of receivers required according to a table that correlates the required number of receivers to the seating capacity of the facility. Small facilities will continue to provide receivers for 4 percent of the seats. The required percentage declines as the size of the facility increases. The changes proposed also will require at least twenty-five (25%), but no fewer than two, of the receivers to be hearing-aid compatible. Assembly areas served by an induction loop assistive listening system will not have to provide hearing-aid compatible receivers.

Commenters were divided in their opinion of this change. The Department believes that the reduction in the required number of assistive listening systems for larger assembly areas will meet the needs of individuals with disabilities. The new requirement to provide hearing-aid compatible receivers should make assistive listening systems more usable for people who have been underserved until now.

Concerns were raised that the requirement to provide assistive listening systems may have an adverse impact on restaurants. This comment misunderstands the scope of coverage. The proposed standards define the term ''assembly area'' to include facilities used for entertainment, educational, or civic gatherings. Restaurants would fall within this category only if they are presenting programs to educate or entertain diners, and if the restaurant provides an audio amplification system.

Same Management or Building. The proposed standards add a new exception that allows multiple assembly areas that are in the same building and under the same management, such as theaters in a multiplex cinema and lecture halls in a college building, to calculate the number of receivers required based on the total number of seats in all the assembly areas, instead of each assembly area separately, where the receivers are compatible with the assistive listening systems used in each of the assembly areas.

Mono Jacks, Sound Pressure, etc. Section 4.33.7 of the 1991 Standards does not contain specific technical requirements for assistive listening systems. The proposed changes at sections 706.1, 706.2, 706.3, 706.4, 706.5, and 706.6 will require assistive listening systems to have standard mono jacks; and will require hearing-aid compatible receivers to have neck loops to interface with telecoils in hearing aids. The proposed changes also specify sound level pressure, signal-to-noise ratio, and peak clipping level. Currently available assistive listening systems meet the proposed technical requirements.

220 and 707 Automatic Teller Machines and Fare Machines

Proposed changes at section 707 will add specific technical requirements for speech output, privacy, tactilely discernable input controls, display screens, and Braille instructions to current general accessibility requirements. Exceptions will be made that relate to the type of network or information provided (for example, audible tones will not be required for visible output where privacy is desirable). The 1991 Standards require these machines to be accessible to and independently usable by people with visual impairments, but do not contain any technical specifications.

The Department received comments on this provision from the banking industry that focused primarily on the effects on operating policies and existing equipment. Those issues have been addressed in the preamble to the NPRM.

221 Assembly Areas

Aisle Stairs and Ramps. The 1991 Standards sections 4.1.3 and 4.1.3(4) require that interior, and exterior, stairs connecting levels that are not connected by an elevator, ramp, or other accessible means of vertical access shall comply with the technical requirements for stairs found in section 4.9. The proposed section 210.1 requires that stairs that are part of a means of egress shall comply with the technical requirements for stairs in proposed section 504. The 1991 Standards currently do not contain any exceptions for aisle stairs in assembly areas. The proposed section 210.1, Exception 3, adds a new exception that exempts aisle stairs in assembly areas from the

technical requirements for stairs found in proposed section 504, including the handrail technical requirements found in proposed section 505.

The 1991 Standards at section 4.8.5 now exempt aisle ramps that are part of an accessible route, from providing handrails on the side adjacent to seating. The proposed regulations at section 405.1 exempt aisle ramps, adjacent to seating in assembly areas and *not* serving elements required to be on an accessible route, from complying with all the technical requirements for ramps proposed in section 405. Where aisle ramps in assembly areas serve elements required to be on an accessible route, the proposed regulation will require that the aisle ramps comply with the technical requirements for ramps in proposed section 405. The proposed standards will not require a handrail on an aisle ramp at adjacent seating because proposed sections 505.2 and 505.3 provide exceptions for aisle ramp handrails. Section 505.2 proposes that in assembly areas, a handrail may be provided at either side or within the aisle width when handrails are not provided on both sides of aisle ramps. Section 505.3 proposes that, in assembly areas, handrails need not be continuous in aisles serving seating.

Wheelchair Spaces/Companion Seats. The proposed standards at section 221 reduce the number of wheelchair spaces and companion seats required in assembly areas that seat more than 500 patrons. The 1991 Standards at 4.1.3 (19)(a) provide that assembly areas with more than 500 seats must provide six wheelchair spaces plus one additional wheelchair space for each additional 100 seats. Sections 221.2; 221.2.1.1; 221.2.1.2; and 221.2.1.3 of the proposed standards provide that assembly areas that have 501 to 5000 seats must provide six wheelchair spaces plus one additional wheelchair space for each additional 150 seats (or fraction thereof) between 501 and 5000. Assembly areas that have more than 5000 seats must provide 36 wheelchair spaces plus one additional wheelchair space for each 200 seats (or fraction thereof) over 5000. Both the 1991 Standards and the proposed standards require assembly areas to provide a companion seat adjacent to each wheelchair space.

The proposed changes clarify that the scoping requirements are to be applied separately to general seating areas, and to each luxury box, club box, and suites in stadiums and arenas. In performing arts facilities with tiered boxes, the scoping requirement is applied to the total number of seats in the tiered boxes, and the wheelchair spaces are required to be dispersed among at least twenty percent (20%) of the tiered boxes.

Commenters questioned why scoping requirements for assembly areas are being reduced. During the development of the 2004 ADAAG, industry providers, particularly those for larger stadium-style assembly areas, supplied data to the Access Board demonstrating the current scoping requirements for large assembly areas often exceed the demand. Based on the data provided to the Access Board, the Department now believes the reduced scoping requirements will adequately meet the needs of individuals with disabilities, while balancing concerns of the industry.

Commenters raised concerns that the proposed changes clarifying requirements for scoping of seating areas to each luxury box, club box, and suites in stadiums and arenas could result in no wheelchair and companion spaces available for individuals with disabilities. These comments appear to misunderstand the proposed requirements. The rule will require that each luxury box, club box, and suite must be accessible. In addition, the remaining seating areas must contain the number of wheelchair and companion seating locations specified in the rule. In performing arts facilities with tiered boxes, the scoping requirement is applied to the total number of seats in the tiered boxes, and the wheelchair spaces are required to be dispersed among at least twenty percent (20%) of the tiered boxes. For example, if a performing arts facility has 20 tiered boxes with 5 fixed seats in each box, at least 4 wheelchair spaces must be provided in the boxes, and they must be dispersed among at least 4 of the 20 boxes.

One commenter asked that scoping requirements for larger assembly areas be reduced even more than what was proposed. Although the commenter referenced data demonstrating that wheelchair spaces in larger facilities with seating capacity of 70,000 or more may not be used by individuals with disabilities, the data was not based on actual results, but was calculated at least in part based on probability assumptions.

A commenter recommended that section 221.4, Designated Aisle Seats, be changed to require that aisle seats be on an accessible route, and be integrated and dispersed throughout an assembly area. Aisle seats, by their nature, are located with the general seating, and integration occurs automatically. The issue of dispersing aisle seats or locating them on accessible routes is much more challenging. The Access Board specifically requested public comment on the question of whether aisle seats should be required to be located on accessible routes. After reviewing the comments, the Access Board concluded that this could not be done without making significant and costly changes in the design of most assembly areas. However, section 221.4 requires that access aisle seats be the aisle seats closest to accessible routes. The Department concurs in that conclusion. Regarding the dispersion of aisle seats, the Department notes that the location of the seats is dictated to a great extent by the fact that they must be located on an aisle and on or close to an accessible route. In small facilities, very few seats meet those criteria. Therefore, the Department declines to propose further changes.

Wheelchair Space Overlap in Assembly Areas. The 1991 Standards at sections 4.3.3 and the proposed changes at sections 402.1; 402.2; 403.5.1; 802.1.4; and 802.1.5 require walkways that are part of an accessible route to have a 36 inch minimum clear width. The changes proposed specifically prohibit accessible routes from overlapping wheelchair spaces. This change is consistent with the technical requirements for accessible routes, since the clear width of accessible routes cannot be obstructed by any object. The proposed standards also specifically prohibit wheelchair spaces from overlapping circulation paths. An advisory note clarifies that this prohibition applies only to the circulation path width required by applicable building codes and fire and life safety codes since the codes prohibit obstructions in the required width of assembly aisles.

The revision does not present any difficult design challenges and is expected to have minimal impact. Where a main circulation path is located in front of a row of seats that contains a wheelchair space and the circulation path is wider than required by applicable building codes and fire and life safety codes, the wheelchair space may overlap the ''extra'' circulation path width. Where a main circulation path is located behind a row of seats that contains a wheelchair space and the wheelchair space is entered from the rear, the aisle in front of the row may need to be wider in order not to block the required circulation path to the other seats in the row, or a mid-row opening may need to be provided to access the required circulation path to the other seats.

Line-of-Sight. Proposed section 221.2.3 frames the basic comparability requirement in terms of viewing angles

providing that ''wheelchair spaces shall provide spectators with * * * viewing angles that are substantially equivalent to, or better than, the * * * viewing angles available to all other spectators.'' This applies to all types of assembly areas, including stadium-style movie theaters, sports arenas, and concert halls.

Commenters stated that the qualitative viewing angle language contained in section 221.2.3 is not appropriate for an enforceable regulatory standard unless the terms of such language are defined. Other commenters requested definitions for viewing angles, an explanation for precisely how viewing angles are measured, and an explanation for precisely how to evaluate whether one viewing angle is better than another viewing angle. The proposed regulatory language is sufficient to provide a performance standard for designers, architects, and others necessary to provide viewing angles required by the proposed standard. The Department believes that as a general rule, the vast variety of sizes and configurations found in assembly areas requires it to establish a performance standard for designers to adapt to the specific circumstances of the venue that is being designed. The requirement is to design so that lines of sight for wheelchair spaces offer a choice of viewing angles well within the range of viewing angles offered to others. The Department has proposed, in section 36.406 of this NPRM, to provide more explicit requirements for stadium-style theaters.

Another commenter inquired as to what determines whether a choice of seating locations or viewing angles is better than that available to all other spectators. The answer to this question varies according to each assembly area that is being designed. That is why the regulation must provide performance standards applicable to all facilities. Nevertheless, the Department believes that for each specific facility that is designed, the owner, operator, and design professionals will be able to distinguish easily between seating locations and associated lines of sight from these seat locations that are desirable and those that are not.

Stadium-style Movie Theaters. The Department will implement provisions specific to line-of-sight issues in stadium-style movie theaters. The horizontal and vertical dispersion requirements set forth in proposed section 221.2.3.1 and 221.2.3.2 may be adopted in their entirety and will apply independently of any line-of-sight requirements of the 1991 Standards at 4.33.3. The proposed line-of-sight regulations recognize the importance of viewing angles to the movie going experience and are aimed at ensuring that movie patrons with disabilities are provided views of the movie screen comparable to other theater patrons. Some commenters supported regulatory language that would require stadium-style theaters to meet standards of accessibility equal to those of nonstadium-style theaters, with larger theaters being required to provide accessible seating locations and viewing angles equal to those offered to individuals without disabilities.

A commenter noted that stadium-style movie theaters, sports arenas, music venues, theaters, and concert halls each pose unique conditions that require separate and specific standards to accommodate patrons with disabilities, and recommended that the Department provide more specific requirements for sports arenas, music venues, theaters, and concert halls. The Department believes that these proposed standards have been drafted in a way that will provide sufficient flexibility to adapt them to the wide variety of assembly venues covered.

Vertical Access. Section 4.33.3 of the 1991 Standards requires wheelchair spaces to be located in more than one area where the seating capacity exceeds 300 and to provide a choice of admission prices. Under the 1991 Standards, sports facilities typically locate some wheelchair spaces on each accessible level of the facilities.

The proposed standards at sections 221.2.3.2 and 206.6 do not require wheelchair spaces to be dispersed based on admission prices because pricing is not always established at the design phase and may vary by event. The proposed standards will require wheelchair spaces to be vertically dispersed at varying distances from the screen, performance area, or playing field. The revised provisions also will require wheelchair spaces to be located in each balcony or mezzanine served by an accessible route. Sports facilities can meet the requirements by locating some wheelchair spaces on each accessible level of the facilities, which is consistent with the current requirements.

Companion Seats. The 1991 Standards at section 4.33.3 require at least one fixed companion seat to be provided next to each wheelchair space. Proposed changes at sections 221.3 and 802.3 will permit companion seats to be readily removable, but will not require the seats to be designed so they can also serve as wheelchair spaces when removed.

One commenter recommended that there should be a requirement at section 802.3 that when companion seats are fixed, each seat shall be identified by a sign or marker as a companion seat. The Department believes that it is not necessary to identify the companion seat with an accessibility symbol because its placement adjacent to the wheelchair location makes it easily identifiable.

Commenters urged the Department to ensure that companion seats are positioned in a manner that places the user at the same shoulder height as their companions using mobility devices. The Department recognizes that some facilities have created difficulty by locating either the wheelchair space or the companion seat on a different floor elevation (often a difference of one riser). The proposed standards at section 802.3.1 address this problem by requiring the wheelchair space and the companion seat to be on the same floor elevation. This should prevent any vertical discrepancies that are not the direct result of differences in the sizes and configurations of wheelchairs.

Designated Aisle Seats. Existing requirements at section 4.1.3(19)(a) require one percent (1%) of fixed seats in assembly areas to be designated aisle seats. Designated aisle seats must have either no armrests or folding or retractable armrests on the aisle side of the seat.

Proposed sections 221.4; 802.4; 802.4.1; and 802.4.2 base the number of required designated aisle seats on the number of aisle seats, instead of all the seats in a sports facility as the 1991 Standards require. At least five percent (5%) of the aisle seats are required to be designated aisle seats and to be located closest to accessible routes. This option will almost always result in fewer aisle seats being designated aisle seats compared to the 1991 Standards. Sports facilities typically locate designated aisle seats on, or as near to, accessible routes as permitted by the configuration of the facilities.

Dispersion of Wheelchair Spaces and Lines of Sight in Assembly Areas. The 1991 Standards at section 4.33.3 require wheelchair spaces to be an integral part of any fixed seating plan in assembly areas and to be dispersed, when the seating capacity exceeds 300. The 1991 Standards also require wheelchair spaces to provide individuals with disabilities lines of sight comparable to the sightlines available to other spectators in assembly areas. The Department interprets comparable sightlines as requiring wheelchair spaces in sports stadiums and arenas to provide lines of sight over standing

spectators to the playing field, where spectators are expected to stand during events. The Department also interprets comparable lines of sight as requiring wheelchair spaces in stadium-style movie theaters to provide viewing angles comparable to those provided to other spectators.

The proposed revisions at sections 221.2.2; 221.2.3; 221.2.3.1, Exceptions 1; 221.2.3.2, Exceptions 1 and 2; 802.2; 802.2.1; 802.2.1.1; 802.2.1.2; 802.2.2; 802.2.2.1; and 802.2.2.2 add specific technical requirements for providing sightlines over seated and standing spectators; and require wheelchair spaces to provide individuals with disabilities choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to other spectators. The proposed changes also clarify the dispersion requirements. Wheelchair spaces must be dispersed horizontally and vertically. The revisions include exceptions for assembly areas that have 300 or fewer seats, where the wheelchair spaces are located in the 2nd or 3rd quartile of the total row length and provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility. The revisions are expected to have minimal impact since they are consistent with the Department's interpretations of the 1991 Standards.

The 1991 Standards contain an exception that permits wheelchair spaces to be clustered in steeply sloped bleachers and balconies. The proposed changes will require wheelchair spaces to be located at the entry points to bleachers, and in each balcony or mezzanine that is on an accessible route.

Lawn Seating in Assembly Areas. The 1991 Standards, section 4.1.1(1), require all areas of newly constructed facilities to be accessible, but do not contain a specific scoping requirement for lawn seating in assembly areas. The proposed standards at section 221.5 specifically will require lawn seating areas and exterior overflow seating areas without fixed seats to connect to an accessible route. The accessible route does not have to extend through the lawn seating area.

A commenter recommended that in section 221.5, Lawn Seating, there should be a requirement for at least one level area for wheelchair seating on an accessible route. The Department believes that unless a lawn seating area has fixed or designated seating locations that would trigger scoping requirements for wheelchair locations, an assembly provider can satisfy its nondiscrimination obligations by ensuring that there is an accessible route to the area to enable people with disabilities who can take advantage of lawn seating to do so.

222 and 803 Dressing, Fitting, and Locker Rooms

Dressing rooms, fitting rooms, and locker rooms in sports or recreation facilities will be required to meet the accessibility requirements of proposed sections 222 and 803. Where rooms are provided in clusters, five percent (5%) but at least one room in each cluster will have to be accessible.

Proposed sections 225.2.1 and 811 will require lockers to meet accessibility requirements. Where lockers are provided in clusters, 5 percent but at least one locker in each cluster will have to comply. Under the 1991 Standards, only one locker of each type provided had be accessible.

Commenters stated that many retail establishments and clothing stores, in particular, are concerned with a changed provision on the placement of benches and other accessibility-related elements and features in customer dressing and fitting rooms that may require redesigns of entire changing areas or loss of sales or inventory space that will be redirected to the enlarged dressing and fitting rooms. Comments also expressed opposition to the accessibility requirements for locker rooms for similar reasons.

The Department reminds the commenters that the requirements in the standards are designed to apply to new construction and alterations. The Department believes that in these situations creative designers can mitigate the impact of the changes.

224 and 806 Transient Lodging Guest Rooms

General. The minimum number of guest rooms required to be accessible in transient lodging facilities is covered by section 224. Access is addressed for people with disabilities, including people with mobility impairments at section 224.2, and people who are deaf or hard of hearing at section 224.4.

The U.S. Chamber of Commerce and others representing the hotel industry provided comments opposing the current requirements for guest rooms accessible to individuals with mobility impairments stating that statistics provided by the industry demonstrate that all types of accessible guest rooms are unused. They further claimed that the proposed requirements are too burdensome to meet in new construction, and that the proposed requirements will result in a loss of hotel living space. By contrast, commenters representing people with disabilities urged the Department to increase the number of guest rooms required to be accessible.

The number of rooms accessible to people with mobility impairments and the number accessible to people with communication impairments in the proposed standards are consistent with the 1991 Standards and with IBC. The Department continues to receive complaints about the lack of accessible guest rooms throughout the country. Accessible guest rooms are used not only by individuals using mobility devices such as wheelchairs and scooters, but by individuals with a variety of physical impairments such as those using walkers, canes, and crutches.

Data provided by the Disability Statistics Center at the University of California, San Francisco that demonstrated the number of adults who use wheelchairs has been increasing at the rate of six percent per year from 1969 to 1999; and by 2010, it is projected that two percent of the adult population will use wheelchairs. In addition to people who use wheelchairs, three percent of adults used crutches, canes, walkers, and other mobility devices in 1999; and the number is projected to increase to four percent by 2010. Thus, by 2010, up to six percent of the population may need accessible guest rooms.

Some commenters have asked the Department to clarify and simplify the dispersion requirements set forth in section 224.5, in particular the scope of the term ''amenities.'' Section 224.5 requires that guestrooms with mobility features and guestrooms with communication features ''[s]hall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. When the minimum number of guest rooms required * * * is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds and amenities.'' This general dispersion requirement is intended to effectuate Congress' directive that a percentage of each class of hotel rooms is to be fully accessible to persons with disabilities. *See* H.R. Rep. No. 101–485 (II) at 391. Accordingly, the promise of the ADA in this instance is that persons with disabilities will have an equal opportunity to benefit from the various options available to hotel guests without disabilities, from single occupancy

guestrooms with limited features (and accompanying limited price-tags) to luxury suites with lavish features and choices. The inclusion of section 224.5 is not new to the requirements, as substantially similar language was contained in section 9.1.4 of the 1991 Standards.

Commenters have specifically asked the Department to clarify what is meant by various terms used in section 224.5 and its advisory: ''class,'' ''type,'' ''options,'' and ''amenities.'' The Department envisions that all of these terms are not to be considered terms of art, but will be used as in their normal course. For example, ''class'' is defined by Webster's Dictionary as ''a division by quality.'' ''Type'' is defined as ''a group of * * * things that share common traits or characteristics distinguishing them as an identifiable group or class.'' Accordingly, these terms are not intended to convey different concepts, but are used as synonyms. Section 224.5 and its advisory require dispersion in such a varied range of hotels and lodging facilities that the Department believes that the chosen terms are appropriate to convey what is intended. Dispersion required by this section is not ''one size fits all'' and it is imperative upon each covered entity to consider its individual circumstance as it applies to this requirement.

Commenters have raised concern that the factors included in the advisory to section 224.5 have been expanded. The advisory provides: ''[f]actors to be considered in providing an equivalent range of options may include, but are not limited to, room size, bed size, cost, view, bathroom fixtures such as hot tubs and spas, smoking and nonsmoking, and the number of rooms provided.'' As previously discussed, the advisory materials provided by the Access Board are meant to be illustrative and do not set out specific requirements. In this particular instance, the advisory materials for section 224.5 set out some of the common types of amenities found at transient lodging facilities, and include common sense concepts as view, bathroom fixtures and smoking status. The intention of these factors is to indicate to the hotel industry the sorts of considerations that the Department, in its enforcement efforts since the enactment of the ADA, has considered as amenities that should be made available to persons with disabilities, just as they are made available to hotel guests without disabilities.

Commenters for the hotel industry have offered several recommendations for addressing dispersion. One option includes the flexibility to use an equivalent facilitation option similar to that provided in 9.1.4(2) of the 1991 Standards. While the Department believes this is a legitimate option for existing hotels subject to readily achievable barrier removal, the Department does not view this as an acceptable option for those facilities subject to the new construction or alterations requirements, unless it can be demonstrated that it would not be feasible to provide accessibility through compliance with the guidelines. Because Congress made it clear that each class of hotel room be available to individuals with disabilities, the Department declines to adopt such a limitation. In considering the comments of the hotel industry and the Department's enforcement efforts in this area, the Department will consider (and seeks comment on) whether the dispersion requirements should be applied proportionally, or whether it meets the requirements of section 224.5 if access to at least one guest room of each type is sufficient.

Some commenters have requested a specific exemption for small hotels of 300 or fewer guestrooms from dispersion regarding smoking rooms. The advisory to section 224.5 contains specific references to smoking and nonsmoking guestrooms as examples of the types of amenities to be considered for dispersion. The ADA requires that individuals with disabilities are entitled to the same range of options as persons without disabilities, and, therefore, the Department declines to add an exemption. It is noted, however, that the existence of this language in the advisory does not require a hotel that does not offer smoking guestrooms at its facility to do so only for individuals with disabilities.

Guest Rooms with Communication Features. The 1991 Standards at sections 9.1.2 and 9.2 require hotels to provide a minimum number of guest rooms with mobility features based on the total number of guest rooms in the facility. These requirements provide that an additional minimum number of guest rooms shall provide roll-in showers. A number of other guest rooms as well as all guest rooms that are required to provide mobility features and roll-in showers also must be equipped with communication features for individuals who are deaf or hard of hearing.

Commenters suggested that the proposed requirements for scoping and dispersion of guest rooms for people with mobility impairments and guest rooms with communication features are too complex for the industry to effectively implement. The Department believes the requirements are clear and that these requirements are necessary to provide equal opportunity for travelers with disabilities.

The proposed revisions at section 224.4 effect no change from the 1991 Standards with respect to the number of guest rooms required to provide communication features. The scoping requirement is consolidated into a single table, instead of appearing in three sections as in the 1991 Standards. The revised provisions also limit the overlap between guest rooms required to provide mobility features and guest rooms required to provide communication features. At least one, but not more than ten percent (10%), of the guest rooms required to provide mobility features also can provide communication features.

Visible Alarms in Guest Rooms with Communication Features. The 1991 Standards at sections 9.3.1 and 4.28.4 require transient lodging guest rooms with communication features to provide either permanently installed visible alarms that are connected to the building fire alarm system, or portable visible alarms that are connected to a standard 110-volt electrical outlet and are both activated by the building fire alarm system and provide a visible alarm when the single station smoke detector is activated.

The proposed changes at sections 806.3; 806.3.1; and 702.1 will require transient lodging guest rooms with communication features to provide permanently installed visible alarms complying with the NFPA 72, National Fire Alarm Code (1999 or 2002 edition). The NFPA 72 contains technical requirements for visible alarms in sleeping areas, and requires combination smoke alarms and visible notification appliances that are connected to the building's electrical system.

The revised provisions will add a new exception for alterations to existing facilities that exempt existing fire alarm systems from providing visible alarms, unless the fire alarm system itself is upgraded or replaced, or a new fire system is installed. Transient lodging facilities that alter guest rooms are not required to provide permanently installed visible alarms complying with the NFPA 72 if the existing fire alarm system has not been upgraded or replaced, or a new fire alarm system has not been installed.

The U.S. Small Business Administration Office of Advocacy and others stated that small providers of transient lodging guest rooms raised concerns about the proposed changes to

prohibit the use of portable visible alarms used in transient lodging guest rooms. These commenters recommended retaining current requirements that allow the use of portable visible alarms.

People who are deaf or hard of hearing have reported that portable visible alarms used in transient lodging guest rooms are deficient because the alarms are not activated by the building fire alarm system, and the alarms do not work when the building power source goes out in emergencies. The proposed revision is consistent with the model building codes and fire and life safety codes, which are adopted by all the States and require newly constructed transient lodging facilities to provide smoke alarms in guest rooms.

Vanity Counter Space. Proposed section 806.2.4.1 provides that if vanity counter top space is provided in nonaccessible transient lodging guest toilet or bathing rooms, comparable vanity space must be provided in accessible hotel guest toilet or bathing rooms.

A commenter questioned whether in existing facilities vanity countertop space may be provided through the addition of a shelf. In some circumstances, the addition of a shelf in an existing facility may be a reasonable way to provide access. However, this is a determination that must be made on a case-by-case basis.

Shower and Sauna Doors in Transient Lodging Facilities. Section 9.4 of the 1991 Standards and section 206.5.3 of the proposed regulations require doors in transient lodging guest rooms that do not provide mobility features to have at least 32 inches clear width. Congress directed this requirement to be included so individuals with disabilities can visit guests in other rooms. *See*, H. Rept. 101–485, pt. 2, at 118 (1990); S. Rept. 101–116, at 70 (1989). Proposed section 224.1.2 will add a new exception to clarify that shower and sauna doors are exempt from the requirement.

Platform Lifts in Hotel Guest Rooms and Dwelling Units. The 1991 Standards at section 4.1.3(5), exception 4, and proposed sections 206.7 and 206.7.6 limit the places where platform lifts are permitted to be used as part of an accessible route. The proposed regulations add a new scoping requirement that permits platform lifts to be used to connect levels within transient lodging guest rooms and dwelling units with mobility features.

The Department prepared figures showing that the proposed requirements can be met without significant loss of hotel living space in hotel guest rooms or other areas. New construction requirements can be met without difficultly.

The following Department prepared figures illustrate accessible hotel rooms that meet minimum requirements of 2004. These illustrations demonstrate that 12 and 13 foot wide accessible hotel rooms based on ADAAG 2004 do not decrease the size of rooms from the 1991 Standards.

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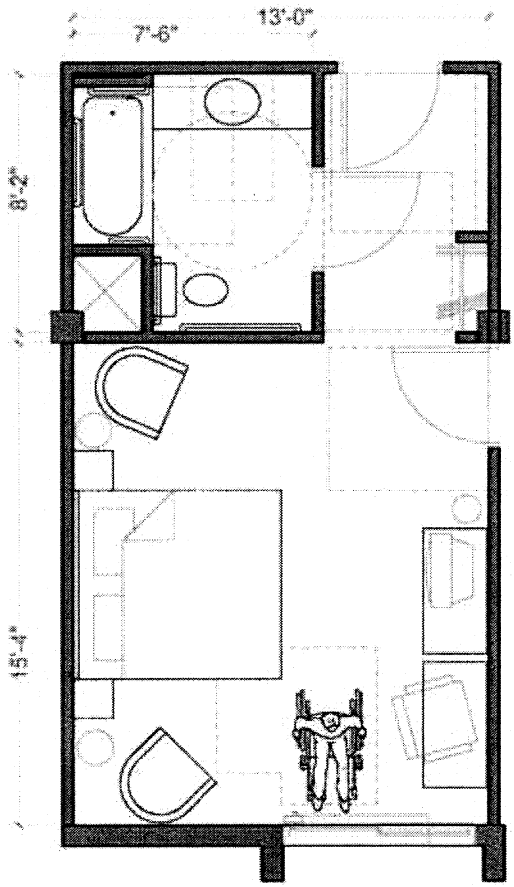


PLAN 1a:

ACCESSIBLE 13 foot wide hotel room based on 2004 ADAAG.

Plan provides a tub, vanity, open closet, and suite door at column.

Furnishings include a king bed and seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

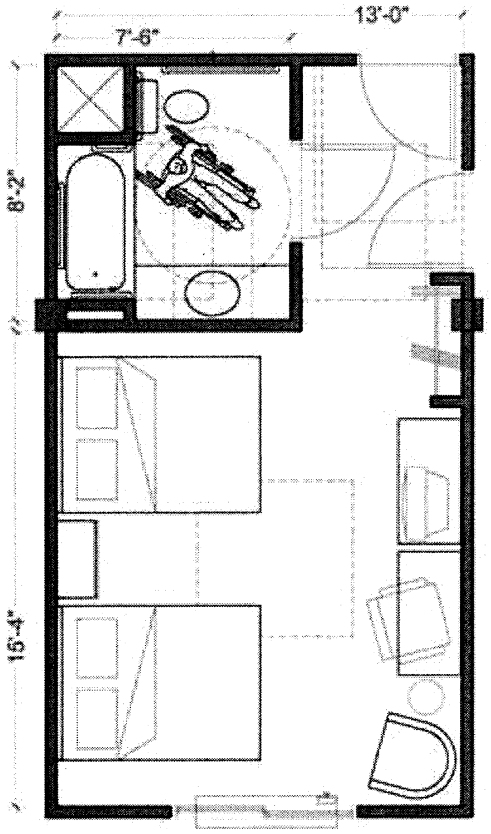
This figure represents an accessible 13 foot wide hotel room with a king bed, seating, and a vanity. (Spaces with an "X" serve as a plumbing / mechanical chase).

This figure demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom includes a vanity counter top space. § 806.2.4.1. As the tub is recessed, the water closet's rear grab bar is "24 inches long ... centered on the water closet ... due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space ... shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap," § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" along its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, § 604.2. "The required clearance around the water closet shall be permitted to overlap ... accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. "Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches wide . . ." with a lavatory at the end. § 607.2.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 1b:
ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides a tub, vanity, open closet, and suite door in the vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

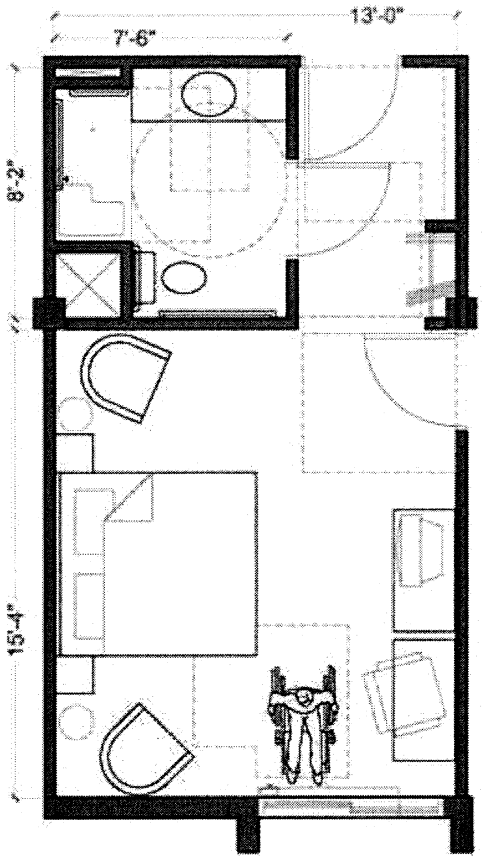
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings include two queen beds, additional seating and a vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The drawing demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The bathtub is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space … shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches, § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. Clearance adjacent to the bathtub shall extend the length of the tub and shall be 30 inches wide, minimum.
§ 607.2

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 2a:
ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides a standard roll-in shower, comparable vanity, open closet, and suite door at column.

Furnishings include a king bed, and seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

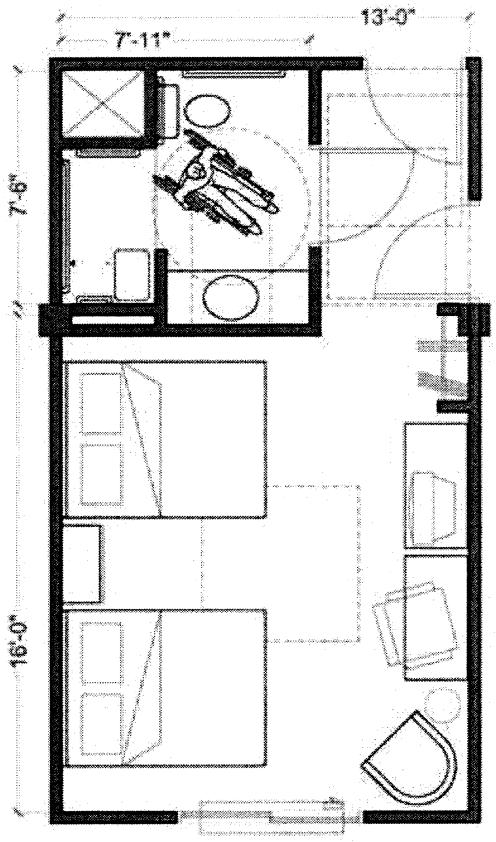
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door at the column. Furnishings here include a king bed, additional seating and a vanity. (Spaces with an "X" serve as a plumbing / mechanical chase).

This drawing demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom includes a "comparable vanity counter top space." § 806.2.4.1. As the roll-in shower is recessed, the water closet's rear grab bar is "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space . . . shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" along its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. . The roll-in shower is 30 inches wide and 60 inches deep . . . § 608.2.2. A 30 inch wide minimum by 60 inch long minimum clearance shall be provided adjacent to the open face of the shower compartment." § 608.2. 2.1

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space" § 309.2, within "the reach ranges." § 309.3.



PLAN 2b:
ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides an 'alternate' roll-in shower, comparable vanity, open closet, and suite door in the vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 20004 ADAAG 2004 compliant design.

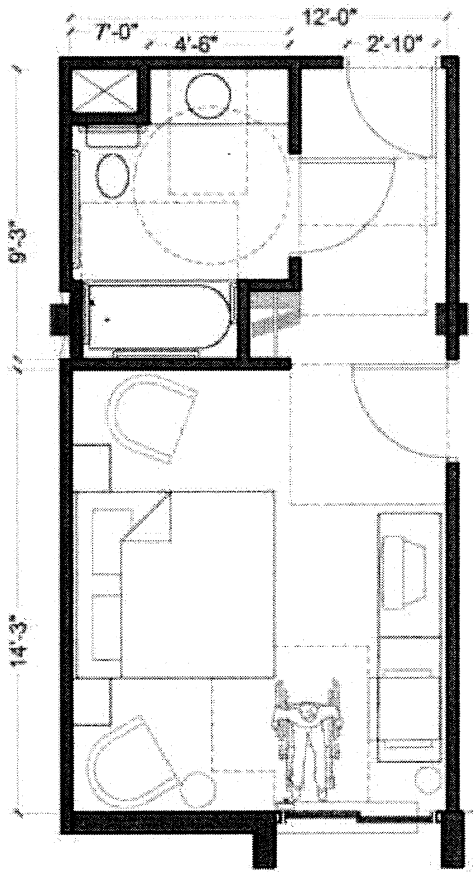
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings here include queen beds, and a vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The figure demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The alternate roll-in shower is recessed, so the water closet's rear grab bar is only "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space … shall be provided within the room" § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap. § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. The 'alternate' roll-in shower is "36 inches wide and 60 inches deep . . . a 36 inch wide minimum entry shall be provided." § 608.2.3

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. A single clear floor space between two beds is sufficient, as it "shall not be required on both sides of a bed." § 806.2.3 Exception. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space" § 309.2, within "the reach ranges." § 309.3.



PLAN 3a:
ACCESSIBLE 12 ft wide hotel room based on 2004 ADAAG.

Plan provides a bathtub, comparable vanity, open closet, and suite door in the room.

Furnishings include a king bed, and additional seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

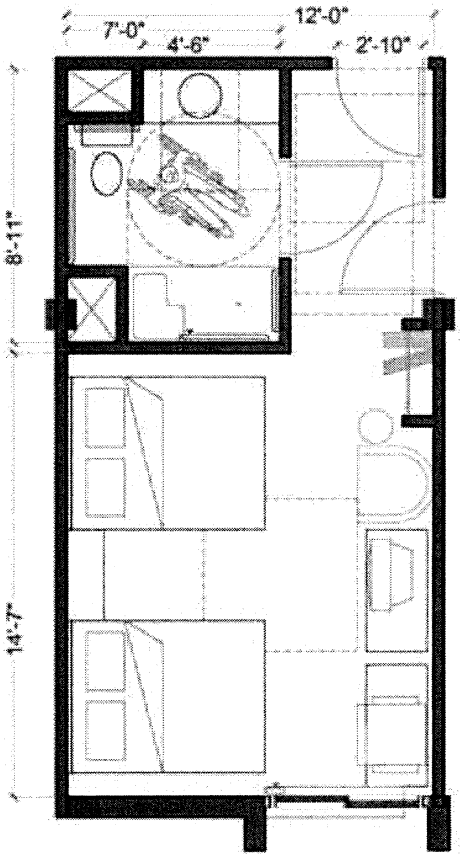
This figure represents an accessible 12 foot wide hotel room with an open closet, and an adjoining suite door in the room. Furnishings here include a king bed, additional seating, and a comparable vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

This figure demonstrates that an accessible 12 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The lavatory is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space … shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap. § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance" § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. "Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches wide." § 607.2.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 3b:
ACCESSIBLE 12 ft wide hotel room based on 2004 ADAAG.

Plan provides a standard roll-in shower, comparable vanity, open closet, and suite door in vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 2004 ADDAG compliant design.

This figure represents an accessible 12 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings include queen beds and a comparable vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The figure demonstrates that an accessible 12 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The lavatory is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space … shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. Adjacent to the shower, a 30 inch wide by 60 inch long clearance is required, § 608.2.2.1.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. A single clear floor space between two beds is sufficient, as it "shall not be required on both sides of a bed." § 806.2.3 Exception. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.

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225 and 811 Storage

Proposed section 225 provides that where storage is provided in accessible spaces, at least one of each type shall comply with the Standards. Self-service shelving is required to be on an accessible route, but is not required to comply with the reach range requirements. These requirements are consistent with the 1991 Standards. Proposed section 225.3 will add a new scoping requirement for self-storage facilities. Facilities with 200 or fewer storage spaces will be required to make at least five percent (5%) of the storage spaces accessible. Facilities with more than 200 storage spaces will be required to provide 10 accessible storage spaces, plus make at least two percent (2%) of the storage spaces over 200 accessible.

Commenters recommended that the Department adopt language requiring public accommodations to provide access to all self-service shelves and display areas available to customers. Other comments opposed this requirement as too burdensome on retail and other entities and that significant revenue will be lost if this requirement is implemented.

Any fixed or built-in self-service shelves or storage are required to be on accessible routes, but not all shelves are required to be within reach. Because the shelves are permitted to exceed the reach ranges, not all merchandise on the shelves will be accessible.

226 and 902 Dining Surfaces and Work Surfaces

The proposed standards at section 226.1 provide that where dining surfaces are provided for the consumption of food or drink, at least five percent (5%) of the seating spaces and standing spaces at the dining surfaces will comply with section 902. Section 902.2 requires the provision of accessible knee and toe clearance.

The U.S. Chamber of Commerce and others requested that cocktail style tables be exempt from the technical requirements for knee and toe clearance. ''Cocktail-style tables'' are not a defined term. The proposed standards apply to fixed or built-in tables provided for the consumption of food. If cocktail-style tables (that is, tables typically built for use by individuals who are standing) are fixed equipment, they will be subject to the rule. Furniture that is not fixed or built-in would be subject to the nondiscrimination requirements of the rule.

Commenters stated that basing accessible seating on seating spaces and standing spaces is problematic and urged a return to the 1991 Standard of requiring accessible seating based on fixed dining tables. Consistent with long-standing interpretation, the requirements in the ADA regulations will be applied to fixed building elements. The scoping change merely takes into account that tables may vary in size so that basing the calculation on the number of the tables rather than on the number of people that may be accommodated by the tables could unnecessarily restrict opportunities for people with disabilities.

227 and 904 Sales and Service, Check-out Aisles and Sales and Service Counters

The 1991 Standards at sections 7.2(1), (2), (i), (ii), and (iii), and the proposed changes at sections 904.4, Exception; 904.4.1, Exception; and 904.4.2 contain technical requirements for sales and service counters. The 1991 Standards generally require counters to have an accessible portion at least 36 inches long and no higher than 36 inches. The revised requirements will specify different lengths for the accessible portion of counters based on the type of approach. Where a forward approach is provided, the accessible portion of the counter must be at least 30 inches long and no higher than 36 inches, and knee and toe space must be provided under the counter. Where a parallel approach is provided, the accessible portion of the counter must be at least 36 inches long and no higher than 36 inches. The revised requirements add a new exception for alterations to counters in existing facilities that permits the accessible portion of the counter to be at least 24 inches long, where providing a longer accessible counter will result in a reduction in the number of existing counters or existing mailboxes.

The revised requirements clarify that the accessible portion of the counter must extend the same depth as the sales or service counter top. Where the counter is a single-height counter, this requirement applies across the entire depth of the counter top. Where the counter is a split-height counter, this requirement applies only to the customer side of the counter top. The employee-side of the counter top may be higher or lower than the customer-side of the counter top.

Proposed section 227.5 clarifies the requirements for food service lines. Queues and waiting lines serving counters or check-out aisles, including queues and waiting lines for food service must be accessible to individuals with disabilities.

Commenters recommended that the Department consider a regulatory alternative exempting small retailers from the new knee and toe clearance requirement and retaining existing wheelchair accessibility standards for sales and service counters. These commenters believed that the proposed knee and toe clearance requirements will cause a reduction in the sales and inventory space at check-out aisles and other sales and service counters.

The proposed standards, as do the current requirements, permit covered entities to determine whether they will provide forward or parallel approach. So any business that does not wish to provide the knee or toe clearance may avoid that option. However, the Department believes that permitting a forward approach without requiring knee and toe clearance is not adequate to provide accessibility because the person using a wheelchair will be prevented from coming close enough to the counter to see the merchandise or to transact business with a degree of convenience that is comparable to that provided for other customers. A parallel approach to sales and service counters also can provide accessibility required by the proposed standards. Individuals using wheelchairs can approach sales and service counters from a side, and, assuming the necessary elements, features, or merchandise necessary to complete a business transaction are within the reach range requirements for a side approach, the needs of individuals with disabilities can be met effectively.

229 Windows

A new requirement at section 229.1 provides that if operable windows are provided for building users, then at least one window in an accessible space must be equipped with controls that comply with section 309.

Commenters supported including this provision in the regulations, but some commenters asked whether the five-pounds (5 lbs.) of force requirement of section 309 applies to the window latch itself or only the force required to open the window. Section 309 applies to all controls and operating mechanisms, so the latch must comply.

230 and 708 Two-Way Communication Systems

New provisions at sections 230.1 and 708 require two-way communications systems to be equipped with visible as well as audible signals.

231 and 808 Judicial Facilities and Courtrooms

Accessible Courtroom Stations. Proposed requirements at sections 231.2, 808, 304, 305, and 902 provide increased accessibility at courtroom

stations. Clear floor space for a forward approach will be required for all courtroom stations (judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, court reporters' stations and litigants' and counsel stations). Other applicable specifications include accessible work surface heights and toe and knee clearance.

Accessible Jury Boxes and Witness Stands. Vertical access by ramp, elevator, or platform lift will have to be fully in place at the time of construction or alteration as required by section 206.2.4.

Raised Courtroom Stations Not for Members of the Public. Proposed section 206.2.4, Exception 1 provides that raised courtroom stations that are used by judges, clerks, bailiff, and court reporters will not have to provide full vertical access when first constructed or altered if they are constructed to be easily adaptable to provide vertical accessibility.

A comment asserted that there is nothing inherent in clerks' stations, jury boxes, and witness stands that require them to be raised. While it would, of course, be easiest to provide access by eliminating height differences among courtroom elements, the Department recognizes that accessibility is only one factor that must be considered in the design process of a functioning courtroom. The need to ensure the ability of the judge to maintain order, the need to ensure sightlines between the judge, the witness, the jury, and other participants, and the need to maintain the security of the participants all affect the design of the space. The Department believes that the proposed standards have been drafted in a way that will achieve accessibility without unduly constraining the ability of a designer to address the other considerations that are unique to courtrooms.

Commenters argued that permitting courtroom stations to be adaptable rather than fully accessible at the time of new construction likely will lead to discrimination in hiring of clerks, court reporters, and other court staff. The Department believes that the provisions will facilitate, not hinder, the hiring of court personnel who have disabilities. All courtroom work stations will be on accessible routes and will be required to have all fixed elements designed in compliance with the proposed standards. Elevated work stations for court employees may be designed to add vertical access as needed. Because the original design must provide the proper space and electrical wiring to install vertical access, the change should be easily accomplished.

232 Detention Facilities and Correctional Facilities

New provisions at section 232 establish requirements for the design and construction of cells in detention and correctional facilities. Alterations to cells shall not be required to comply, except to the extent determined by the Attorney General. The Department has proposed new requirements in 28 CFR 35.152.

233 Residential Facilities

General. Revised provisions in section 233 will now include specific scoping and technical provisions that apply to new construction and alteration of residential facilities. As part of this revision, section 9.5, which established scoping and technical requirements for homeless shelters, group homes, and similar social service establishments, has been deleted. The Department has proposed language in the NPRM at section 28 CFR section 36.406 that will provide that most social service establishments now subject to section 9.5 will be subject to requirements for residential facilities rather than the requirements for transient lodging. This approach will harmonize federal accessibility obligations under both the ADA and section 504 of the Rehabilitation Act of 1973, as amended. Dwelling units provided by places of education will be subject to the design requirements for transient lodging.

Galley Kitchens. New requirements at section 804.2 require a 60-inch clearance space in so-called galley kitchens, which have cabinets and appliances on opposite walls, if there is only one entry to the kitchen.

New provisions at sections 804.2; 804.2.1; and 804.2.2 also specify clearances between opposing base cabinets, counters, appliances, or walls based on the layout of the kitchen:

- ''U-shaped'' kitchens, which are enclosed on three contiguous sides, are required to have 60 inches minimum clearance between opposing base cabinets, counters, appliances, or walls.
- ''Pass through'' kitchens, which have two entries, are required to have 40 inches minimum clearance between opposing base cabinets, counters, appliances, or walls.
- Kitchens that do not have a cooktop or conventional range are exempt from the clearance requirements.

The revision will impact small dead-end or single-entry ''galley'' kitchens with base cabinets, counters, and appliances on two opposing walls. The 1991 Standards require this ''galley'' kitchen to have 40 inches minimum clearance between the opposing base cabinets, counters, appliances, or walls. In multi-family residential facilities, kitchens, bathrooms, and closets are located along interior walls, and space constraints may limit adding a second entry to the kitchen.

If a ''galley'' kitchen does not have two entries, the revised provisions require the kitchen to have 60 inches minimum clearance between the opposing base cabinets, counters, appliances, or walls. For a typical small ''galley'' kitchen that is 8 feet long, increasing the width of the kitchen to provide 60 inches clearance will add approximately 13 square feet to the kitchen.

One commenter supported the provisions of section 804, Kitchens and Kitchenettes, but sought clarification whether this section applies to residential units only, or to lodging and office buildings as well. Section 212 makes section 804 applicable to all kitchens and kitchenettes in covered buildings.

Residential Facilities. The UFAS at section 4.1.4(11) contains scoping requirements for the new construction of housing. The proposed standards will revise and update these requirements. Sections 233.1; 233.2; 233.3; 233.3.1; 233.3.1.1; 233.3.1.2; and 233.3.2 differentiate between entities subject to the HUD regulations implementing section 504 of the Rehabilitation Act, and entities not subject to the HUD regulations. The HUD regulations apply to recipients of federal financial assistance through HUD, and require at least five percent (5%) of dwelling units in multi-family projects of five or more dwelling units to provide mobility features and at least two percent (2%) of the dwelling units to provide communication features. The HUD regulations define a project unique to its programs as ''one or more residential structures * * * which are covered by a single contract for federal financial assistance or application for assistance, or are treated as a whole for processing purposes, whether or not located on a common site.'' To avoid any potential conflicts with the HUD regulation, the proposed regulation requires entities subject to the HUD regulations to comply with the scoping requirements in the HUD regulations, instead of the scoping requirements in the Department's proposed regulation.

For entities not subject to the HUD regulations, the proposed regulations require at least five percent (5%) of the dwelling units in residential facilities provide mobility features, and at least two percent (2%) of the dwelling units provide communication features. The proposed regulations define facilities in

terms of buildings located on a site. The proposed regulations permit facilities that contain 15 or fewer dwelling units to apply the scoping requirements to all the dwelling units that are constructed under a single contract, or are developed as whole, whether or not located on a common site.

The proposed regulation defers to HUD and agencies responsible for issuing regulations under Section 504 of the Rehabilitation Act to determine the extent to which accessible features are to be provided in publicly funded dwelling units offered for sale.

Alterations to Residential Facilities. The UFAS at sections 4.1.6 require federal, state, and local government housing to comply with the general requirements for alterations to facilities. Applying the general requirements for alterations to housing can result in partially accessible dwelling units where single elements or spaces in dwelling units are altered.

The proposed regulations at sections 202.3 Exceptions 3; 202.4; 233.3; 233.3.4; 233.3.4.1; and 233.3.4.2 Exception contain specific scoping requirements for alterations to dwelling units. Dwelling units that are not required to be accessible are exempt from the general requirements for alterations to elements and spaces and for alterations to primary function areas.

The scoping requirements for alterations to dwelling units generally are based on the requirements in the current UFAS.

- Where a building is vacated for purposes of alterations and has more than 15 dwelling units, at least five percent (5%) of the altered dwelling units are required to provide mobility features and at least two percent (2%) of the dwelling units are required to provide communication features.
- Where a bathroom or a kitchen is substantially altered in an individual dwelling unit and at least one other room is also altered, the dwelling unit is required to comply with the scoping requirements for new construction until the total number of dwelling units in the facility required to provide mobility features and communication features is met.

As with new construction, the proposed regulations permit facilities that contain 15 or fewer dwelling units to apply the scoping requirements to all the dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site. The proposed regulations also permit a comparable dwelling unit to provide mobility features where it is not technically feasible for the altered dwelling unit to comply with the technical requirements.

234 and 1002 Amusement Rides

Section 234 provides accessibility guidelines for newly designed and constructed amusement rides. Mobile and temporary rides are exempt from these requirements. Altered rides will be required to provide accessible load or unload areas, but no changes will be required to the ride itself unless the structural or operational characteristics of the ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer.

Accessible Route. Proposed sections 206.2.9 and 1002.2 will require an accessible route to serve each ride, including the load/unload area.

One commenter asked that section 234, Amusement Rides, make clear that the requirements for accessible routes include the routes leading up to and including the loading and unloading areas of amusement rides. Sections 206.2.9, Amusement Rides, and 1002.2, Accessible Routes, make clear that the requirements for accessible routes include the routes leading up to and including the loading and unloading areas of amusement rides.

Wheelchair Space or Transfer Seat or Transfer Device. New sections 234.3 and 1002.4–6 provide that each new amusement ride, except for mobile/temporary rides and a few additional excepted rides, will be required to provide at least one type of access by means of one wheelchair space or one transfer seat or one transfer device (the design of the transfer device is not specified).

Commenters representing industry concerns urged the Department to revise the requirements for wheelchair space and transfer seats and devices because the majority of amusement rides are too complex to be reasonably modified or reengineered to accommodate the majority of individuals with disabilities. They argued that the experience of amusement rides will be significantly reduced if the proposed requirements are implemented.

These proposed standards were developed with the assistance of an advisory committee that included representation from the design staffs of major amusement venues and people with disabilities. The Department believes that the resulting guidelines reflect sensitivity to the complex problems posed in adapting existing rides by focusing on new rides that can be designed from the outset to be accessible. To permit maximum design flexibility, the guidelines permit the designers to determine whether it is more appropriate to permit people who use wheelchairs to remain in their chairs on the ride, or to provide for transfer access.

Maneuvering Space in Load and Unload Area. Specified maneuvering space as required by new sections 234.2 and 1002.3 in the load/unload area of each amusement ride will be required.

Sign. Section 216.12 requires signs at entries to queues and waiting lines identifying type and location of access for the amusement ride.

A member of the amusement parks and attractions industry raised concerns that smaller amusement parks tend to purchase used rides more frequently than new rides, and that the conversion of a used ride to provide the proposed accessibility may be difficult to ensure because of the possible complications in modifying equipment to provide accessibility.

The Department agrees with this commenter. The Department notes, however, that the proposed standards will require modifications to used amusement rides only if a ride is undergoing an alteration intended to change its structural or operational characteristics. The Department expects that the focus of the requirements for rides that are not new will be to ensure that these rides are served by an accessible route and have accessible load/unload areas for the benefit of those people with disabilities who are able to use the ride. Mobile or temporary amusement rides that are set up for short periods of time generally will not be covered by the proposed regulations. However, the ADA authorizes the Department to require covered entities to provide general nondiscrimination opportunities to individuals with disabilities. Therefore, the Department will require mobile or temporary amusement rides that are set up for short periods of time to be on an accessible route.

235 and 1003 Recreational Boating Facilities

These sections require accessible boat slips to be provided.

Accessible Route. Newly added sections 206.2.10 and 1003.2 require an accessible route to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps.

Commenters raised concerns that because of water level fluctuations it may be difficult to provide accessible routes to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps. The guidelines take this into account. A number of exceptions are provided from the

general proposed standards requiring accessible routes in order to take into account the difficulty of meeting accessibility requirements due to fluctuations in water level.

Accessible Boarding Piers. If provided at boat launch ramps, new sections 235.3 and 1003.3.2 provide that five percent (5%) of boarding piers, but at least one, will have to be accessible.

Accessible Boat Slips. New sections 235.2 and 1003.3.1 provide that a specified number of boat slips in each recreational boating facility will be required to meet specified accessibility standards. The greater the number of slips provided, then the larger number of slips must be accessible, *e.g.*, if 100 boat slips are provide, 3 must be accessible, or if 500 boat slips are provided, 7 must be accessible. Accessible slips will have to be dispersed throughout the boat slip area.

236 and 1004 Exercise Machines and Equipment

Accessible Route to Exercise Machines and Equipment. An accessible route will be required to serve accessible exercise machines and equipment by new provision 206.2.13.

Concerns were raised that the requirement to provide accessible routes to serve accessible exercise machines and equipment will be difficult for some facilities to provide, especially some transient lodging facilities that typically locate exercise machines and equipment in a single room. The Department thinks that this requirement is a reasonable one for new construction and alterations. Barrier removal issues are addressed separately in section 36.304.

Exercise Machines and Equipment. Newly added sections 236 and 1004 will require one of each type of exercise machine to meet clear floor space specifications. Types of machines are generally defined according to the muscular groups exercised or the kind of cardiovascular exercise provided.

Commenters were divided in response to this issue. Some supported requirements for accessible machines and equipment; others urged the Department not to require accessible machines and equipment because of the costs involved. The Department believes that this provision strikes an appropriate balance in ensuring that people with disabilities, particularly those who use wheelchairs will have the opportunity to use the exercise equipment provided by a public accommodation. Providing access to exercise machines and equipment recognizes the need and desires of individuals with disabilities to have the same opportunity as other patrons to enjoy the advantages of exercise and maintaining health.

237 and 1005 Fishing Piers and Platforms

Accessible Route. Sections 206.2.14 and 1005.1 will require an accessible route to each accessible fishing pier and platform. The exceptions described under recreational boating will apply to gangways and floating piers.

Accessible Fishing Piers and Platforms. Newly added sections 237 and 1005 will require at least twenty-five percent (25%) of railings (if provided) to be of a specified maximum height so that a person seated in a wheelchair could cast a fishing line over the railing and dispersed among the piers and platforms. If railings, guards, or handrails are provided, accessible edge protection, clear floor or ground space, and turning space will be required.

238 and 1006 Golf Facilities

Accessible Route. Sections 206.2.15 and 1006.2 and 1006.3 require an accessible route to connect all accessible elements within the boundary of the golf course and, in addition, to connect golf car rental areas, bag drop areas, teeing grounds, putting greens, and weather shelters. An accessible route also will be required to connect any practice putting greens, practice teeing grounds, and teeing stations at driving ranges that will be required to be accessible. An exception permits the accessible route requirements to be met, within the boundaries of the golf course, by providing a ''golf car passage'' (the path typically used by golf cars) if specifications for width and curb cuts are met.

Accessible Teeing Grounds, Putting Greens, and Weather Shelters. Sections 238.2 and 1006.4 will require that golf cars will have to be able to enter and exit each putting green and weather shelter. Where two teeing grounds are provided, the forward teeing ground will be required to be accessible (golf car can enter and exit). Where three or more teeing grounds are provided, at least two, including the forward teeing ground, shall be accessible.

A national advocacy organization supported requirements for teeing grounds, particularly requirements for accessible teeing grounds. Accessible teeing grounds are essential to the full and equal enjoyment of the golfing experience.

Accessible Practice Putting Greens, Practice Teeing Grounds, and Teeing Stations at Driving Ranges. Newly added section 238.3 requires that five percent (5%) but at least one of each of practice putting greens, practice teeing grounds, and teeing stations at driving ranges must permit golf cars to enter and exit.

239 and 1007 Miniature Golf Facilities

Accessible Route to Holes. Sections 206.2.16, 239.3, and 1007.2 will require an accessible route to connect accessible miniature golf course holes and will be required from the last accessible hole on the course directly to the course entrance or exit; generally, the accessible holes will have to be consecutive ones. Specified exceptions will be available for accessible routes located on the playing surfaces of holes.

Accessible Holes. At least fifty percent (50%) of golf holes on miniature golf courses will be required by new sections 239.2 and 1007.3 to be accessible (includes specified clear space at start of play).

240 and 1008 Play Areas

Accessible Route to Play Components. Sections 206.2.17, 240.2.1–2, and 1008.2–3 will require that accessible routes be provided within each play area. Where required, accessible ground surfaces for play areas will follow special rules, incorporated by reference from nationally recognized standards for accessibility and safety in play areas, including those issued by the American Society for Testing and Materials (ASTM). The accessible route will have to connect to at least one ground level play component of each different type provided (*e.g.*, for different experiences such as rocking, swinging, climbing, spinning, and sliding); to at least fifty percent (50%) of elevated play components (some exceptions will be provided from general accessible route rules); and to one or two entry points to soft contained play structures. If elevated play components are provided, the play area will have the option of either locating a specified additional number of its different types of ground level components on the accessible route or meeting a higher standard of accessibility for the elevated components (namely, fifty percent (50%) of the elevated components will have to be connected by a ramp and the connected components will have to be of at least three different types).

A commenter noted that the proposed standards allow for the provision of transfer steps to elevated play structures based on the number of elevated play activities, but asserted that transfer steps have not been documented as effective means of access.

The guidelines recognize that play structures are designed to provide unique experiences and opportunities

for children. The proposed rule provides for play components that are accessible to children who cannot transfer from their wheelchair, but it also provides opportunities for children who are able to transfer. Children often interact with their environment in ways that would be considered inappropriate for adults. Crawling and climbing, for example, are integral parts of the play experience for young children. Permitting the use of transfer platforms in play structures provides some flexibility for creative playground design.

Accessible Play Components. Play components (including ground level, elevated, and soft contained play structures) will be required to be on an accessible route, including elevated play components that are required to be connected by ramps, and will themselves have to comply with accessibility requirements (including specifications for turning space and clear floor space and for play tables and transfer entry points and supports).

A commenter expressed concerns that the general requirements of section 240.2.1, Play Areas, and the advisory accompanying section 240.2.1, General, conflict. The comment asserts that section 240.2.1 provides that the only requirement for integration of equipment is where there are two or more required ground level play components, while the advisory appears to suggest that all accessible components must be integrated.

The commenter misinterprets the requirement. The ADA mandates that people with disabilities be able to participate in programs or activities in the most integrated setting appropriate to their needs. Therefore, all accessible playground equipment must be integrated into the general playground setting. Section 240.2.1 specifies that where there is more than one accessible ground level play component, the components must be both dispersed and integrated.

Ground Surfaces. Section 1008.2.6, Ground Surfaces, provides that ground surfaces on accessible routes must comply with ASTM requirements.

A commenter recommended that the Department closely examine the requirements for ground surfaces at play areas. The Department is aware that there is an ongoing controversy about ground surfaces arising from a concern that some surfaces that meet the ASTM requirements at the time of installation will become inaccessible if they do not receive constant maintenance. The Access Board is also aware of this issue and is undertaking research to explore solutions to the problems. The Department would caution covered entities selecting among the ground surfacing materials that comply with the ASTM requirements, that they must anticipate the maintenance costs that will be associated with some of the products. Permitting a surface to deteriorate so that it does not meet the proposed standards would be an independent violation of the Department's ADA regulations.

241 and 612 Saunas and Steam Rooms

Saunas and steam rooms will be required by sections 241 and 612 to meet accessibility requirements, including accessible turning space and an accessible bench. Where they are provided in clusters, five percent (5%), but at least one sauna or stream room in each cluster will have to be accessible.

Commenters raised concerns that the safety of individuals with disabilities outweighs the usefulness in providing accessible saunas and steam rooms. The Department believes that there is an element of risk in many activities available to the general public. One of the major tenets of the ADA is that individuals with disabilities should have the same opportunities as other people to decide what risks to take. It is not appropriate for covered entities to prejudge the abilities of people with disabilities.

242 Swimming Pools, Wading Pools, and Spas

Accessible Means of Entry to Pools. At least two accessible means of entry will be required for larger pools (300 or more linear feet) and one entry will be required for smaller pools as required by section 242.2. This section requires that at least one entry will have to be a sloped entry or a pool lift; the other could be a sloped entry, pool lift, a transfer wall, or a transfer system (technical specifications for each entry type are included).

Accessible Means of Entry to Wading Pools. Sections 242.3 and 1009.3 require that at least one sloped means of entry will be required into the deepest part of each wading pool.

Accessible Means of Entry to Spas. Sections 242.4 and 1009.2, 1009.4, and 1009.5 require spas to meet accessibility requirements, including an accessible means of entry. Where spas are provided in clusters, five percent (5%) but at least one spa in each cluster will have to be accessible. A pool lift, a transfer wall, or a transfer system will be permitted.

Commenters, including individuals with disabilities and state entities, supported the proposed scoping and technical requirements for swimming pools. A national association representing the interests of recreation and park providers recommended that existing inaccessible swimming pools need only provide one means of access when meeting program access requirements under Title II or readily achievable barrier removal obligations under Title III. These issues are addressed elsewhere in this proposed rule.

243 Shooting Facilities With Firing Positions

Sections 243 and 1010 will require an accessible turning space for each different type of firing position at a shooting facility if designed on site. Where firing positions are provided in clusters, five percent (5%), but at least one position of each type in each cluster will have to be accessible.

Additional Technical Requirements

304 Turning Space

The turning space is required to be 60 inches diameter minimum and is permitted to include knee and toe clearance.

Commenters urged the Department to retain the turning space requirement, but exclude knee and toe clearance from being permitted as part of this space. They argued that wheelchairs and other mobility devices are becoming larger and that more individuals with disabilities are using electric three- and four-wheeled scooters.

The Department recognizes that there is a growing perception that the 1991 Standards, which are based on wheelchair dimensions, may not adequately meet the needs of people using some larger electric scooters. However, there is no consensus about the appropriate dimension on which to base revised requirements. The Department is aware that the Access Board is financing an extensive study of this issue in order to determine if new requirements are warranted. The Department plans to wait for the results of this study before changing the specifications in the Department's rules.

404 Doors, Doorways, and Gates

Automatic Door Break-out Openings. The proposed standards do not contain any technical requirement for automatic door break out openings. The proposed standards at sections 404.1; 404.3; 404.3.1; and 404.3.6 will require automatic doors that are part of a means of egress and that do not have standby power to have a 32 inch minimum clear break out opening when operated in emergency mode. The minimum clear opening width for automatic doors is

measured with all leaves in the open position. Automatic bi-parting doors or pairs of swinging doors that provide a 32 inch minimum clear break out opening in emergency mode when both leaves are opened manually meet the technical requirement. The proposed regulation includes an exception that exempts automatic doors from the technical requirement for break-out openings when accessible manual swinging doors serve the same means of egress.

Maneuvering Clearance or Standby Power for Automatic Doors. The 1991 Standards, section 4.13.6, do not require maneuvering clearance at automatic doors. Section 404.3.2, Exception of the proposed regulation will require automatic doors that serve as an accessible means of egress to either provide maneuvering clearance or to have standby power to operate the door in emergencies. This provision has limited application and will affect, among others, in-swinging automatic doors that serve small spaces.

Commenters urged the Department to reconsider provisions that would require maneuvering clearance or standby power for automatic doors. They assert that these requirements would impose unreasonable financial and administrative burdens on all covered entities, particularly smaller entities. The Department declines to change these provisions because they are fundamental life-safety issues. The requirement applies only to doors that are part of a means of egress that must be accessible in an emergency. If an emergency-related power failure prevents the operation of the automatic door, a person with a disability could be trapped unless there is either adequate maneuvering room to open the door manually, or there is a back-up power source.

Thresholds at Doorways. The 1991 Standards at section 4.13.8 require thresholds at doorways not to exceed ½ inch; and thresholds at exterior sliding doors not to exceed ¾ inch. Proposed sections 404.1 and 404.2.5 will require thresholds at all doorways that are part of an accessible route not to exceed ½ inch. The 1991 Standards and the proposed regulations require raised thresholds that exceed ¼ inch to be beveled on each side with a slope not steeper than 1:2. The proposed standards include an exception that exempts existing and altered thresholds that do not exceed ¾ inch and are beveled on each side from the requirement.

407 Elevators

Section 407.4.8.2, Audible Indicators, and section 407.4.8.2.1, Signal Type, provide that an elevator signal shall be an automatic verbal annunicator that announces the floor at which the car is about to stop.

A commenter noted that requiring an audible signal for elevators is important; however, the requirement that the signal be a verbal annunicator, presumably in English, is troubling to building owners and operators whose buildings may be located in multi-lingual communities or international tourist destinations. The commenter suggested that the 1991 Standard's requirement for chimes or tones, once for up and twice for down, should be retained and the requirement for a verbal annunciation deleted from the proposed standards.

The proposed standards, at section 407.2.2.3 permit building operators to choose an audible signal or a verbal annunciator to indicate the direction in which the elevator is traveling. Section 407.4.8 provides an additional requirement for a verbal annunciator to identify the floor at which the elevator is stopping. This requirement is for an announcement within the elevator car to notify passengers of floor arrival. The Department will retain the requirement as drafted because the verbal annunciator provides more detailed locator information than would be provided by just the use of an audible signal. The Department notes, however, that nothing in the guidelines would preclude a building operator from providing this information in a language—or languages—other than English when the building operator deems it appropriate.

505 Handrails

The proposed standards add a new technical requirement for handrails along walking surfaces. The 1991 Standards at sections 4.8.5(2), (3); 4.9.4(2), (3); 4.26.2; and 4.26.4, and proposed sections 505.5; 505.6 Exception 2; 505.7; 505.7.1; 505.7.2; 505.8; 505.10 and Exception 3; and 505.10.3 contain technical requirements for handrails. The revised regulations provide more flexibility than the 1991 Standards as follows:

- The 1991 Standards require handrail gripping surfaces to have edges with a minimum radius of ⅛ inch. The revised regulations will require handrail gripping surfaces to have rounded edges.
- The 1991 Standards require handrail gripping surfaces to have a diameter of 1¼ inches to 1½ inches, or to provide an equivalent gripping surface. The revised regulations will require handrail gripping surfaces with a circular cross section to have an outside diameter of 1¼ inches to 2 inches. Handrail gripping surfaces with a non-circular cross section must have a perimeter dimension of 4 inches to 6¼ inches, and a cross section dimension of 2¼ inches maximum.
- The 1991 Standards require handrail gripping surfaces to be continuous, and to be uninterrupted by newel posts, other construction elements, or obstructions. The revised regulation will require handrail gripping surfaces to be continuous along their length and not to be obstructed along their tops or sides. The bottoms of handrail gripping surfaces must not be obstructed more than twenty percent (20%) of their length. Where provided, horizontal projections must occur at least 1½ inches below the bottom of the handrail gripping surface. An exception permits the distance between the horizontal projections and the bottom of the gripping surface to be reduced by ⅛ inch for each ½ inch of additional handrail perimeter dimension that exceeds 4 inches.
- The 1991 Standards require handrails at the bottom of stairs to extend at least 12 inches plus the width of one tread beyond the bottom riser. The revised regulations will require handrails at the bottom of stairs to extend a horizontal distance at least equal to one tread depth beyond the last riser nosing. The revised regulations add a new exception for alterations to existing facilities that exempts handrails at the top and bottom of ramps and stairs from providing full extensions where it will be hazardous due to plan configuration.

A commenter noted that handrail extensions are currently required at the top and bottom of stairs, but the proposed regulation does not include this requirement, and urged the Department to retain the current requirement. Other commenters questioned the need for the extension at the bottom of stairs.

The Department's proposed guidelines, in sections 505.10.2 and 505.10.3 will require handrail extensions at both the top and bottom of a flight of stairs. The requirement that handrails extend an additional 12 inches at the bottom of stairs was deleted by the Access Board in response to public comments.

Commenters noted that the revised regulations will require handrail gripping surfaces with a circular cross section to have an outside diameter of 2 inches, and that this requirement would impose a physical barrier to

individuals with disabilities who need the handrail for stability and support while accessing stairs.

The requirement permits an outside diameter of 1¼ inches to 2 inches. This range allows flexibility in meeting the needs of individuals with disabilities and designers and architects. The Department is not aware of any data indicating that an outside diameter of 2 inches would pose any adverse impairment to use by individuals with disabilities.

Handrails Along Walkways

The 1991 Standards do not contain any technical requirement for handrails provided along walkways that are not ramps. The proposed standards regulations, section 403.6, will specify that where handrails are provided along walkways that are not ramps, they shall comply with certain technical requirements. The proposed change is expected to have minimal impact.

Appendix B: Initial Regulatory Assessment

Background

As directed by Executive Order 12866, as amended without substantial change to its requirements by Executive Order 13258, the Department is required to conduct an initial regulatory impact analysis (hereinafter ''RIA'' or ''regulatory assessment'') in order to assess the economic benefits and costs of its proposed regulations implementing titles II and III of the ADA. The purpose of regulatory analysis is to inform stakeholders in the regulatory process of the effects, both positive and negative, of the proposed regulations. In this context, the primary stakeholders are individuals with disabilities who will benefit from using accessible facilities and the owners and developers of covered entities that will incur the costs of compliance. In addition, as directed by the Regulatory Flexibility Act of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), as well as Executive Order 13272, the Department is required to consider the potential impact of its proposed regulations on small entities.

A key component of the Department's regulatory assessment is a comprehensive benefit-cost analysis of the proposed revisions to the ADA Standards. OMB Circular A–4 requires Federal agencies to conduct a full benefit-cost analysis for any regulation that is ''economically significant''—that is, a regulation that is expected to have an annual impact on the economy of $100 million or more. Such an analysis must include both quantitative and qualitative measurements of the benefits and costs of the proposed regulation, as well as a discussion of each potentially effective and reasonably feasible regulatory alternative. OMB Circular A–4 also stipulates that regulatory analyses should only assess those costs and benefits that arise as a result of the proposed regulations themselves —in other words, the incremental impact of the proposed regulations when compared to a baseline of the legal status quo that would continue to apply absent regulatory action.

Early on in this process, the Department concluded that the economic impact of its adoption of the proposed standards was likely to exceed this $100 million threshold, not only because it would be proposing to adopt several years' worth of revised and supplemental accessibility guidelines at once, but also because the proposed standards would apply to all newly constructed and existing facilities. Accordingly, the Department has conducted an initial RIA for the proposed standards. Consistent with the requirements for regulatory analyses, the RIA assumes a 40-year lifecycle for the longest lasting facilities subject to the regulations (here, a typical newly constructed building) before they must be substantially altered, torn down, or rebuilt. The RIA also assumes that the proposed regulations will remain in force for 15 years, after which time it is presumed they would be superseded by future revisions to the title II and title III regulations.

In September 2004, the Department issued an Advance Notice of Proposed Rulemaking (''ANPRM'') which, among other things, described its proposed methodology for the initial regulatory assessment and solicited public comment on this methodology generally. *See* 69 FR 58,768 (Sept. 30, 2004). Additionally, section IV of the ANPRM entitled ''Regulatory Assessment Issues'' posed specific questions for public comment relating to the application of the proposed standards to existing facilities, including general sources for benefit and cost data, information on the impact of the proposed rules on small entities and suggestions for regulatory alternatives, and recommended sources of data for certain types of facilities or requirements. *Id.* at 58,779–782 (Question Nos. 9–49). The Department received many comments in response to the ANPRM and it has taken those comments into consideration during the regulatory assessment process.

At the same time, the Department also received many comments expressing the view that economic analysis is irrelevant with respect to the implementation of a civil rights statute. Under this view, because the ADA is a civil rights statute protecting the rights of individuals with disabilities, regulations designed to implement its protections are necessary regardless of whether quantifiable benefits can be shown to outweigh costs. As these commenters noted, traditional benefit-cost analysis is not designed to measure the inherent value of civil rights protections or to make judgments about fairness or equity.

The Department is sympathetic to the views expressed by these commenters. However, the Federal laws and regulations that require agencies to express the benefits and costs of regulations in economic terms do not distinguish between regulations that implement civil rights statutes like the ADA and regulations that implement other kinds of laws. The Department also believes that there is much to be gained from the comprehensive identification and description of the benefits of accessibility standards, which are, after all, designed to ensure equal access for everyone. Such benefits include not only the measurable benefits to individuals with disabilities but also the more subtle and far-reaching benefits for society as a whole. The majority of commenters representing industry groups also expressed the belief that the proposed standards would not confer any measurable benefit on individuals with disabilities, and, consequently, were perceived by some business owners as ''punitive.'' In fact, not only do the revised requirements confer measurable benefits on individuals with disabilities, in many cases, they also lower the costs for businesses. By conducting a comprehensive assessment of the benefits and costs of the proposed standards, the Department hopes to promote greater understanding of the ADA and to further compliance with its civil rights protections.

Complete copies of the Department's RIA and accompanying Supplementary Results report are available on the Department's ADA Web site (*http://www.ada.gov*). The RIA itself is the work product of HDR/HLB Decision Economics, Inc., the economics firm with which the Department has contracted to conduct its initial regulatory assessment. The Department has adopted the results of the RIA as its assessment of the benefits and costs that the proposed standards will confer on society. The Department invites the public to read the RIA and to submit electronic comments by visiting the

Department's Web site for public comments. *See http://www.regulations.gov.* When the Department publishes a final rule, it will also publish an accompanying final regulatory assessment. What follows is a general overview of the basic principles of the RIA, as well as the Department's responses to ANPRM comments concerning the methodology for this assessment.

Methodology for Data Collection

Several commenters proposed that the Department measure the relevant inputs for the RIA—such as the types of benefits individuals might realize from using a particular element or space in a facility, the unit costs that facilities will incur to comply with a requirement, or the likelihood that compliance will be readily achievable—by conducting surveys, focus groups, and similar types of studies. For example, commenters representing industry groups suggested that the Department conduct a nationwide survey of existing facilities representing a range of ages, sizes, and building methods in order to assess the unit costs to existing facilities of complying with the proposed regulations. Similarly, in order to measure the benefits to users, some commenters proposed that the Department conduct a national survey of people with disabilities using a broad sampling of ages, types of impairments and socioeconomic status. Other suggestions included interviewing support groups or State health officials and staff at long term care facilities, conducting a nationwide survey using the Social Security mailing list, and adding questions to the U.S. Census questionnaire.

The Department has determined that it would be infeasible to conduct surveys or otherwise collect information from (or about) all facilities and all persons with disabilities nationwide. Nor would surveys on the ''real world'' costs of compliance have aided the regulatory assessment; only the incremental costs of compliance are relevant to the analysis. Similarly, the Department also has determined that it would be infeasible to conduct a nationwide survey of individuals with disabilities with respect to the incremental benefits they might be likely to experience from the proposed regulations.

Instead, the RIA relies on publicly available data sources—supplemented as necessary with estimates generated or verified by expert cost and benefit panels—to calculate the incremental impact of the proposed regulations. *See* RIA, Ch. 4. Public data sources used in the RIA are wide-ranging and include: the 2002 Economic Census (to estimate the number and types of existing facilities); *RS Means* publications (to estimate unit costs); *Dodge Construction Potential Bulletins* (to estimate new construction rates); firm size data compiled by the Small Business Administration's Office of Advocacy (to estimate the total number and sales receipts of small businesses); the Annual Time Use Survey published by the Bureau of Labor Statistics (to estimate facility use and travel time); population surveys by the U.S. Census Bureau (to estimate the percentage of U.S. population with disabilities and types of disabilities); and average hourly wage statistics compiled by the Bureau of Labor Statistics (to estimate the value of time per facility group). For those aspects of the RIA model that lacked publicly available data, estimates were developed by HDR/HLB or Department architects (as appropriate) and then reviewed by expert cost and benefit panels. From the cost perspective, estimated values include the number and type of elements per typical facility. *See* RIA §§ 4.1.2, 4.1.7. With respect to benefits, the expert panel developed estimates concerning the time savings due to changes in accessibility, the expected number of uses for each requirement, and the likelihood that persons with disabilities would realize benefits from a requirement. *See* RIA §§ 4.2.4, 4.2.6.

The Access Board's Final Regulatory Assessment—2004 ADAAG

In July 2004, the Access Board published its final regulatory assessment for the 2004 Americans with Disabilities Act and Architectural Barrier Act Accessibility Guidelines (''2004 ADAAG''). See Regulatory Assessment of the Final Revised Accessibility Guidelines for the Americans with Disabilities Act and Architectural Barriers Act, *http://www.access-board.gov/ada-aba/reg-assess.htm* (July 2004). A few years earlier, the Access Board also issued final regulatory assessments for its supplemental guidelines for play areas (2000) and recreation facilities (2002).[1]

[1] The Access Board's final assessments for its supplemental guidelines for play areas and recreation facilities are available on its *Web site. See* Assessment of Benefits and Costs of Final Accessibility Guidelines for Recreation Facilities, *http://www.access-board.gov/recreation/reg-assessment.htm* (Sept. 2002); Final Accessibility Guidelines for Play Areas—Economic Assessment, *http://www.access-board.gov/play/assess.htm* (Oct. 2000). The Board conducted an initial, but not a final, regulatory assessment for its supplemental guidelines for State and local government facilities issued in 1998.

The Access Board's final regulatory assessment for the 2004 ADAAG does not, however, incorporate these supplemental guidelines into its economic analysis since the costs of these guidelines had already been addressed in prior regulatory assessments.

In summary, the Access Board's final regulatory assessment for the 2004 ADAAG used a sampling approach to calculate the costs of the revised guidelines as applied to newly constructed and altered facilities. In this final regulatory assessment, the Board identified fourteen requirements that were projected to impose higher costs (relative to the 1991 ADAAG) for newly constructed or altered facilities. From this group of ''increased cost'' requirements, the Board selected ten requirements for direct economic analysis based on its determination that these requirements were likely to have the greatest cost impact on newly constructed and altered facilities. The Board then calculated the costs of applying these ten requirements to the new construction and alteration of four representative facility groups: office buildings; hotels; hospitals and nursing homes; and public (government) housing. These four facility groups were selected based on the assumption that they would most likely incur relatively higher costs for the ten selected requirements as compared to other facilities. Using the foregoing methodology, the Board's final regulatory assessment estimated that the aggregate national cost of the ten selected final revised guidelines for newly constructed or altered office buildings, hotels, hospitals and nursing homes, and public housing ranged from $12.6 million (using IBC 2000 & 2003 as the ''lower bound'' baseline) to $26.7 million (using an ''upper bound'' baseline of the 1991 ADAAG) annually.

In the ANPRM, the Department stated that it expected to ''adopt'' the Access Board's final regulatory assessment for the 2004 ADAAG as its assessment of the cost impact that the proposed standards would have on newly constructed and altered facilities. At the same time, however, the Department recognized that its assessment of the costs for newly constructed and altered facilities would have to be broader than that of the Board. First, the Department's assessment would have to include the costs associated with the supplemental guidelines, which, because they had been adopted by the Board in earlier rulemaking initiatives, had not been included in the Board's final regulatory assessment of the 2004 ADAAG. In addition, as the Department

noted in the ANPRM, the unit costs estimated by the Board, though they might serve as a starting point, would nonetheless have to be supplemented with indirect costs, balanced with reduced costs, and then spread out over the 40-year lifecycle of the regulations. Finally, because the Department was undertaking a comprehensive benefit-cost analysis, the Department—unlike the Board—would have to include an assessment of benefits for each requirement.

In response to the ANPRM, several commenters representing industry groups urged the Department not to simply ''adopt'' the Board's assessment but, instead, to conduct its own assessment of the benefits and costs of the proposed standards for newly constructed and altered facilities. Questioning the accuracy of the sampling approach employed in the Board's assessment, as well as its decision not to estimate unit costs for requirements it had concluded would impose ''reduced cost'' or ''no or minimal cost,'' these commenters urged the Department to conduct a comprehensive benefit-cost analysis that would assess the benefits and costs of all requirements as applied to all types of facilities.

As a practical matter, the RIA does indeed follow the comprehensive benefit-cost approach suggested by these commenters. The Department had long planned to assess the incremental impact of revised and supplemental requirements at existing facilities on a per requirement and per facility basis with respect to barrier removal. Using a different methodology for newly constructed and altered facilities would have made it impossible to ''roll up'' the benefits and costs of the proposed regulations for each requirement, each facility group, and for the rule as a whole. The Department concluded that the most sensible approach would be to use the same methodology throughout its initial regulatory assessment. Thus, the Department did not ''adopt'' the Access Board's final regulatory assessment for the 2004 ADAAG, but, rather, conducted its own assessment of the proposed title II and title III regulations.

Moreover, while the Department suggested in the ANPRM that it might use the Board's unit cost estimates as a starting point for newly constructed and altered facilities, the RIA does not, in fact, rely on the Access Board's cost figures. Instead, the RIA uses detailed cost estimates for each requirement as provided by an independent professional cost estimator. *See* RIA §§ 4.1.3–4.1.6 & App. 3–H. These unit cost estimates were derived using standard industry practices and published sources for construction costs. Low, middle, and high unit cost estimates were developed for each requirement and separately applied to new construction, alterations and barrier removal. As with all data used in the RIA, the Department invites the public to comment on its unit cost estimates and to provide, where appropriate, any supporting information that might be necessary for the Department to properly consider the comment. Because this is an initial RIA, it will be followed by a final regulatory assessment when the Department publishes a final rule. The Department will carefully consider all comments relating to the initial RIA during the development of the final rules and final regulatory assessment.

Categorization of Requirements

The Department's RIA assesses the incremental benefits and costs of 110 proposed requirements (or series of closely-related requirements). For ease of reference, the RIA assigns a number to each proposed requirement. *See* RIA, Tbl. 1 & App. 2. The RIA's requirements largely follow the requirement categories developed by the Access Board in its final regulatory assessment for the 2004 ADAAG. The Department's categorization of requirements, however, does not track perfectly with the Board's final regulatory assessment for two primary reasons. First, the two assessments use different primary baselines. In the Access Board's final regulatory assessment, the 1991 ADAAG served as one of the two primary baselines, whereas the RIA employs the Department's 1991 Standards as the primary baseline. Second, the Board's final regulatory assessment only directly calculated the cost impact of a limited subset of revised guidelines as applied to four representative newly constructed or altered facility groups. For situations in which either of these considerations altered the incremental substantive or monetary impact of a proposed requirement, the RIA categorizes that requirement differently than the Access Board. *See* RIA § 2.2.

Requirements in the RIA are categorized as either ''supplemental'' or ''revised'' requirements. Supplemental requirements represent proposed requirements that have no scoping or technical counterpart in the 1991 Standards. There are 44 requirements in the RIA categorized as ''supplemental.'' *See* RIA, App. 2 (Req. ## 67–110) & App. 8 (Matrix of Changes). For the most part, these supplemental requirements come from the supplemental guidelines promulgated by the Access Board for judicial, detention, and correctional facilities (1998), play areas (2000), and recreational facilities (2002). The Department's title II and title III NPRMs also independently propose a handful of new regulatory requirements applicable to sports stadiums, post-secondary school multistory dormitory facilities, accessible prison cells, and social service establishments. *See* RIA, App. 2 (Req. ## 106–110) & App. 8 (Matrix of Changes). In general, supplemental requirements apply to features or elements that are typically found only in specific types of facilities such as courthouses, jails, recreational boating and fishing facilities, golf courses, amusement rides, and playgrounds. However, a few supplemental requirements (i.e., requirements relating to exercise facilities, swimming pools and play areas) apply to features or elements found in a broader range of facility types. Supplemental requirements in the RIA are assigned requirement numbers 67–110. *See* RIA, Apps. 2 & 8.

The RIA also identifies 66 proposed requirements as ''revised'' requirements. Unlike supplemental requirements, revised requirements apply to features or elements that are currently subject to (or specifically exempted from) scoping or technical provisions in the 1991 Standards. For the most part, revised requirements apply to elements that are found in a wide range of commonly used facility types, such as restaurants, retail stores, schools, hospitals, and office buildings. Also categorized as revised requirements in the RIA are requirements applicable to common building elements (such as windows) and commonly used facility types (such as residential dwelling units) that have long been subject to specific accessibility requirements, either through the Uniform Federal Accessibility Standards (''UFAS''), other Federal accessibility standards (such as the Fair Housing Act or Section 504 of the Rehabilitation Act), or the International Building Code (IBC). Each of the ''revised'' requirements in the RIA was adopted by the Board in 2004 and is, therefore, also described in the final regulatory assessment accompanying the 2004 ADAAG. ''Revised'' requirements in the RIA encompass requirement numbers 1 through 66. *See* RIA, Apps. 2 & 8.

For analytical purposes, the RIA also further divides ''revised'' requirements into two subcategories: ''more stringent'' and ''less stringent'' requirements. Generally speaking, more stringent requirements are requirements that have

been modified to mandate greater accessibility as compared to the 1991 Standards. For the most part, the RIA's ''more stringent'' revised requirements generally correspond to requirements identified by the Board as ''no or minimal cost'' or ''increased cost'' requirements in its final regulatory assessment for the 2004 ADAAG. These differences in terminology arise out of the dissimilar methodologies underlying the respective regulatory assessments—namely, while the Board's final regulatory assessment assessed only the costs of the revised guidelines, the Department's RIA includes both incremental benefit and the cost calculations for each proposed requirement. ''More stringent'' requirements in the RIA include the following requirement numbers: 2–11; 14–16; 19–24; 27–29; 32; 35–37; 40–42; 45–46; 48–49; 51–53; and 58–62. *See* RIA, App. 8. Less stringent revised requirements, on the other hand, represent requirements that have been relaxed relative to the 1991 Standards. Requirements categorized as ''less stringent'' in the RIA generally equate to ''reduced cost'' requirements in the Access Board's final regulatory assessment. In the RIA, less stringent revised requirements are represented by the following requirement numbers: 1; 12–13; 17–18; 25–26; 30–31; 33–34; 38–39; 43–44; 47; 50; 54–57; and 63–66. *See* RIA, App. 8.

Facilities—Categorization by Group

The RIA calculates the incremental benefits and costs of the proposed standards for all public and private facilities covered by the ADA. With respect to places of public accommodation covered by title III, commenters stressed the need to consider each type of facility—whether it is a restaurant, a hotel, a theater or an amusement park—in its own respective category. Commenters also encouraged the Department to break out facility groups in a way that reflects the homogeneity (or lack thereof) of the types of buildings and industries that fall within each group. For example, commenters representing the restaurant industry emphasized the diverse nature of the industry and urged the Department not to use a ''one size fits all'' approach. Similarly, commenters representing the amusement industry pointed out that their industry is ''not monolithic'' and encompasses amusement facilities of various types and sizes, ranging from large theme parks to small miniature golf courses. These commenters also related their view that amusement facilities have physical environments and construction costs that are fundamentally dissimilar from other types of facilities and should not be lumped in with places of public entertainment generally.

The Department appreciates the need for a facility categorization scheme that reflects, to the greatest extent possible, the wide range of facilities covered by titles II and III of the ADA. Accordingly, rather than simply relying on the twelve facility categories enumerated in the ADA, the RIA features more than 65 different facility groups. *See* RIA, Tbl. 2 & App. 3–A to 3–C. All public (title II) and private (title III) facilities are assigned separate facility groups. Additionally, public and private facilities are also grouped according to general similarities in size, in underlying economic characteristics (including the responsiveness of average customers to changes in price), or both. Some of the resulting facility groups represent single-purpose facilities (*i.e.*, elementary schools or hospitals), while other groups include classes of facilities (*i.e.*, single level stores). A few facilities—namely, swimming pools and parking garages—represent both individual facility groups and elements in larger facilities (such as hotels).

While the range of facility groups in the RIA is thus broad, it is not limitless. No regulatory assessment can account for every nuance across all industries and facility types nationwide. The Department has nonetheless endeavored to craft as many facility groups as necessary to properly estimate the incremental benefits and costs of the proposed regulations, as well as to afford stakeholders a meaningful opportunity to assess the regulations in terms of their own particular circumstances. For example, due to the wide variations between transient lodging facilities and the fact that several revised requirements are directly related to the number of rooms in such facilities, places of lodging have been divided into three size-specific groups: ''motels,'' ''inns,'' and ''hotels.'' Additionally, both because most of the supplemental requirements relate to specific types of recreation facilities and because such facilities vary greatly by size and features, the RIA includes distinct categories for each of the following public and private recreation-related facility groups: amusement parks; exercise facilities and health spas; aquatic centers; bowling alleys; golf courses; recreational boating facilities; fishing piers and platforms; miniature golf courses; and shooting facilities. The RIA does not, however, differentiate restaurants and other eating establishments into multiple facility groups as suggested by some commenters. Since more than 75% of restaurants are owned by small businesses, their respective sizes, features, and elements are relatively homogenous. *See* RIA, Ch. 6, Tbl. 17. Thus, for purposes of the RIA, restaurants and other eating establishments are collectively assigned to a unitary facility group. The Department, however, welcomes public comment on these and other facility groups used in the initial RIA and will consider such comments carefully when preparing the final RIA.

Facilities—Estimation of Number of Elements per Facility

The primary building blocks for the RIA's economic analyses are the estimated number of elements in each facility. Elements represent the architectural features, amenities, or spaces that are subject to revised or supplemental proposed requirements. As noted previously, it was not feasible for the Department to conduct a nationwide survey of all buildings and facilities. Nor are published sources available that document the number and types of elements—as defined in the RIA—in all facilities across the country. Estimating the number of elements per facility thus required the development of specifications for each element, as well as a methodology for counting the number of elements in each facility. These estimates were initially developed by Department architects and HDR and then verified (or, as needed, modified) by a panel of experts with broad experience in architecture, code consulting, and cost estimation across a wide spectrum of facilities. *See* RIA §§ 3.1, 4.1.2 & Apps. 3–D, 3–E, 7.

The end result of this element estimation process is a constructed element count for all types of ADA-covered facilities nationwide. Within each facility group, the RIA assumes a ''typical'' or average facility for each facility group that applies to all facilities in that group. *See* RIA, App. 3–C. Examples of assumptions about facility size include square footage, number of stories or elevators, and seating capacity. For each typical facility, in turn, the RIA assumes a specified set of elements. *See* RIA, App. 3–E. As a general rule, larger facilities have more elements, and smaller facilities have fewer elements. However, the specific number and type of elements in a typical facility are determined by the size and nature of the facility. For example, the typical restaurant is assumed to potentially have up to the following number of elements subject to change: Valet parking garages (1); passenger loading zones (1); parking

spaces (1); urinals (1); water closet clearances in single-user toilet rooms (2); side reach (3); sales and service counters (1); limited access spaces and machinery spaces (1); detectable warnings (1); and small play area (1). *See* RIA, App. 3–E1.

In actuality, of course, not every facility will share precisely the same set of elements that are assumed for the typical facility in the facility group. For example, even though it is estimated that the typical restaurant facility has one passenger loading zone, many restaurants are located on streets, in shopping malls, or other interior spaces where passenger loading zone requirements do not apply. The RIA takes this uncertainty factor into account by incorporating likelihood values into the model. That is, each element is assigned a range of values (low, medium, and high) representing the likelihood that the element is both located in the typical facility *and* subject to change in order to bring it into compliance with applicable revised or supplemental requirements. *See* RIA §§ 3.1, 4.1.2 & Apps. 3–F, 3–G. Continuing with the restaurant example, the ''most likely'' value for passenger loading zones being located at a particular facility and requiring change is assumed to be 10%, with high and low values equal to plus or minus 5% respectively. *See* RIA, App. 3–G. Thus, by quantifying and incorporating likelihoods into the model with respect to facility element counts (and other estimated cost and benefit values), the RIA more realistically addresses some of the inherent uncertainties underlying benefit-cost analyses. *See* RIA §§ 3.3, 4.3.1 (discussing ''Risk Analysis'' approach) & App. 6 (RAP Primer).

Facilities—Application of Model to Newly Constructed and Existing Facilities

The universe of facilities required to comply with the Department's proposed standards will be divided into mutually exclusive categories—facilities that are ''newly constructed'' after the effective date, and facilities that are already ''existing'' as of the effective date. Facilities constructed after the effective date of the regulations will be required to build in conformance with the requirements governing new construction. Elements and spaces within existing facilities will be subject to the proposed standards through either alterations or barrier removal requirements. In the RIA, each of these types of construction is modeled separately with respect to each facility group (and each requirement) so that stakeholders will be able to better assess the impact of the proposed regulations on their own particular facilities or circumstances.

Application of the RIA cost model to new construction is relatively straightforward. The number of new facilities constructed each year after the effective date of the regulations (up to the 15th year) is generally based on published industry and sector-specific annual growth rates. *See* RIA §§ 3.1, 4.1.1 & App. 3–B. In simplified form, the total incremental cost for a particular facility group in a given year is calculated by multiplying the number of newly constructed facilities for that group for the year by the total number of elements across all newly constructed facilities in that group and the unit cost per element (that includes both initial and recurring costs). As a general rule, new construction costs are typically lower than the costs for other types of construction. Indeed, many proposed requirements are expected to have zero costs for new construction either because the cost of the element is negligible, or because it is presumed that architects can ''design around'' the new requirement in the planning stages with no appreciable increase in design or construction costs.

For existing facilities, compliance with the proposed standards may come in the form of either alterations or barrier removal. The alterations requirement is only triggered when an entity voluntarily undertakes an alteration project, and, even then, generally applies only to the particular elements undergoing alteration. (Alterations affecting ''primary function areas'' are also required, absent certain circumstances, to ensure that the path of travel to the altered area is accessible to persons with disabilities.) Moreover, not all existing facilities would be altered within the presumed 15-year lifespan of the proposed regulations. The RIA thus incorporates a historically derived alterations schedule for each facility group based on published data. *See* RIA § 3.4 & App. 3–B. Based on this alterations schedule, the total incremental alterations cost for a particular facility group are then calculated using the same basic formula as described above for new construction costs. Alterations costs reflect only the incremental costs necessary to bring the affected element(s) into compliance and exclude costs otherwise attributable to other planned aspects of the alteration. Overall, alterations costs vary greatly by facility group, with some facilities experiencing minimal alterations costs (or even cost savings) under the proposed regulations (e.g., stadiums, convention centers, airport terminals, depots, ski facilities, bowling alleys, fishing piers, and public amusement parks), and other facilities projected to incur relatively higher alterations costs (e.g., single-level stores, indoor service establishments, offices of health care providers, office buildings, and courthouses). *See* Initial Regulatory Impact Analysis—Supplemental Results (''Supplemental Results''), pp. 14–147. The variability in alterations costs are largely driven by the mix of affected elements in each respective facility group.

Barrier removal, by contrast, is a continuing obligation that applies to all public areas of existing title III-covered facilities. For this reason, all elements in these existing facilities—irrespective of compliance with the current 1991 Standards—potentially would be required to satisfy applicable supplemental or revised proposed requirements to the extent barrier removal was readily achievable. Factors in the barrier removal calculus include whether elements are subject to more stringent revised requirements and, thereby, potentially exempt from barrier removal under the Department's safe harbor proposal; whether elements are subject to supplemental requirements for which safe harbor protection does not apply; when the facility was originally constructed; whether, or to what extent, elements have been altered; and whether removal of architectural barriers is readily achievable under the 1991 Standards or proposed requirements respectively.

Taking all of the foregoing factors into consideration makes barrier removal cost calculations potentially more complex (or, put another way, more variable-driven) as compared to costs for other types of construction. Figure 1 in the RIA fully illustrates the various conditions under which particular elements in an existing facility may become compliant and whether the costs associated with such compliance is assessed under barrier removal or alterations. As a practical matter, however, barrier removal cost calculations in the RIA can be distilled down to two essential considerations. First, the RIA assumes that elements in existing facilities subject to supplemental requirements may potentially incur barrier removal costs. Since the Department's proposed safe harbor is conditioned on compliance with the 1991 Standards, elements covered by supplemental requirements—which, by definition, have no counterpart in the 1991 Standards—are necessarily ineligible for safe harbor protection. Second, with respect to revised requirements, the RIA

presumes no barrier removal costs will be incurred by virtue of the safe harbor provision. (Instead, modifications to existing elements subject to revised requirements proceed on the alterations schedule and are costed accordingly.)

The RIA presents the overall results for barrier removal under two scenarios—a comparison of total net present value (''NPV'') under ''safe harbor'' and ''no safe harbor'' conditions, and a comparison of varying assumptions about readily achievable barrier removal rates (*i.e.*, 0%, 50%, and 100%). *See* RIA, Figures ES–3 & ES–4. (Total barrier removal costs are also presented for each respective facility group under the ''Safe Harbor'' scenario in the Supplemental Results.) In sum, many title III-covered facilities are expected to incur few—if any—costs for barrier removal due to the Department's proposed safe harbor provision. Indeed, when taking safe harbor into account, one-half of the 38 facility groups comprised of title III-covered (private) facilities are projected to incur no barrier removal costs. *See* Supplemental Results, pp. 14–147. Such facility groups include: motels; restaurants; movie theaters; single-level stores; shopping malls; museums and libraries; day care centers; and homeless shelters. Other facilities, on the other hand, are expected to incur barrier removal costs under the proposed regulations due to the presence of elements affected by supplemental requirements. For such existing facilities, barrier removal costs typically run higher than new construction costs because: (1) retrofitting existing buildings or facilities is often more expensive than new construction; and (2) from an economic perspective, the full cost of bringing existing elements into compliance with the proposed regulations is attributable to barrier removal whereas, for new construction, only the incremental cost differential between compliant and noncompliant elements is attributable to new construction. *See* RIA § 4.1.3. Title III-covered facility groups with expected barrier removal costs that are higher relative to their respective new construction costs include amusement parks; exercise facilities; aquatic centers; and golf courses.

Facilities—Assumption of Compliance With Current Law

In accordance with the principle that regulatory analyses should only assess the incremental benefits and costs attributable to proposed regulations, the RIA assumes that elements in existing facilities covered by the ADA are currently in compliance with applicable regulatory standards. Indeed, if the RIA did not make this assumption, the benefits and costs of entities' noncompliance with their legal obligations would be improperly charged to the proposed regulations.

While the RIA's assumption of compliance has implications throughout the assessment, its impact is most obvious with respect to existing private (title III) facilities subject to barrier removal. As discussed previously, the Department is proposing a safe harbor provision that would exempt elements in existing facilities that comply with the 1991 Standards from barrier removal that might otherwise be necessary to bring them into compliance with revised standards in the proposed regulations. In this context, the RIA presumes that existing facilities have already satisfied their legal obligations by removing architectural barriers to the extent readily achievable. Thus, any remaining barriers are those for which barrier removal has not yet been readily achievable under the 1991 Standards. Moreover, if barrier removal to date has not been readily achievable under the current Standards (which, by definition, are less stringent than the proposed revised requirements), it is reasonable to assume that barrier removal will also remain beyond reach under more stringent revised requirements.

For existing public (title II) facilities, however, the assumption of compliance with current law plays out differently. Existing public facilities are not subject to barrier removal requirements. Instead, title II-covered public entities must ensure that their programs and services, ''when viewed in their entirety,'' are accessible to individuals with disabilities. Compliance with program accessibility requirements thus does not necessarily require structural modifications to existing facilities since compliance is determined on a program-wide—rather than element-by-element—basis.

For these reasons, the RIA follows the methodology outlined in the ANPRM and generally does not assess the impact of the proposed regulations on existing public facilities covered by title II. However, there are two limited circumstances in which the regulatory assessment does include existing public facilities in the economic calculus. First, alterations to existing public facilities must still comply with the proposed regulations irrespective of program accessibility requirements. Thus, the RIA model assumes that when an existing title II-covered facility undergoes alteration, the incremental costs and benefits of that alteration are included in the regulatory assessment. Second, the RIA takes into account program access when calculating the estimated incremental impact of the proposed regulations with respect to supplemental requirements relating to existing swimming pools, saunas and steam rooms, and play areas. The RIA includes program accessibility in the regulatory calculus in the context of these three sets of requirements for several reasons. Even in the context of program accessibility, compliance with these supplemental requirements would undoubtedly require some structural modifications unless the facilities that compose the program were already—pursuant to program accessibility or otherwise—accessible in the same manner and to the same extent as required by the proposed standards. Moreover, the Department is proposing certain regulatory exemptions and exceptions that exclusively apply to existing title II-covered facilities with swimming pools, saunas and steam rooms, or play areas.

The Department's statement in the ANPRM that it did not intend to include existing title II-covered public facilities in the assessment generated several objections by commenters. In summary, these commenters asserted that existing public facilities should be included in the regulatory assessment since they would be affected by the proposed standards in various circumstances, including voluntary efforts to improve access, determinations that compliance with program accessibility requirements could only be met with structural changes or litigation.

As stated previously, however, the purpose of the RIA is to measure the incremental benefits and costs of the Department's proposed regulations. Because the program accessibility provisions in title II require public entities to ensure access to programs, rather than facilities, the necessity for structural modifications cannot be assumed.[2] (By comparison, the obligation to remove structural barriers in existing private facilities is both mandatory and amenable to assessment on an element-by-element basis.) Moreover, as with existing private facilities, public facilities newly constructed or altered since the effective date of the 1991 Standards should already be fully or largely accessible, and older facilities—those built before

[2] Nor will public entities be required to retrofit elements in existing title II-covered facilities to bring them into compliance with the applicable revised standards so long as such elements presently comply with either the 1991 Standards or UFAS. To make this clear, the Department is proposing a safe harbor provision for existing public facilities.

1993—have been required to meet the program accessibility requirements for at least 15 years, if not longer. It is thus reasonable to assume that if structural modifications were necessary to provide program access, they likely would have been implemented by now.

Benefits—Public Comments Relating to the Measurement of Benefits

The Department received many public comments with suggestions about how the RIA should measure the benefits of the proposed standards to individuals with disabilities. With the exception of those commenters who expressed the view that any form of economic analysis is inappropriate for regulations implementing a civil rights statute, commenters were unanimous that the assessment should balance costs against a comprehensive assessment of benefits, both economic and social. Generally speaking, commenters also recognized that quantifying benefits would be a difficult, if not impossible task, since the paucity of hard data on the economic benefits of accessibility would require the Department to generate such data from scratch.

Most comments relating to the assessment of benefits tended to be global in nature. That is, rather than suggesting methods for estimating the incremental benefits of the proposed regulations, the majority of proposals appeared better suited to a comprehensive assessment of the overall societal benefits of accessibility itself. For example, commenters representing disability groups recommended that the Department adopt a process of benefit-based analysis recommended to the President by the National Council on Disability (NCD) in its report entitled ''National Disability Policy: A Progress Report, December 2002–December 2003.'' Recognizing the need for ''vastly more data'' on the effects of societal decisions on people with disabilities, these commenters urged the Department to analyze the long-term benefits of the proposed regulations for people with disabilities, as well as economic activities foregone by persons with disabilities due to inaccessibility. As one commenter noted: ''An individual with a disability able to access the local aquatic center will be able to seek physical activity and recreation opportunities that promote healthy living and wellness, reduce the risk for disease and declining health, seek additional opportunities for community participation including employment and thereby reduce reliance on governmental subsidies for housing, welfare or health care.''

Other commenters representing disability groups recognized that, while certain short-term benefits could be measured, gauging the more enduring or meaningful benefits of the changes represented by the proposed regulations for people with disabilities and for society as a whole would be very difficult. For example, determining the incremental impact that one change—or even all of the changes—might have on the earning power of people with disabilities would ''require a much more complex exercise than construction cost estimating.'' Other unquantifiable benefits noted by commenters included the extent to which the incremental changes reflected in the proposed regulations might lower the liability exposure faced by facilities by making accessible elements and spaces safer for persons with disabilities.

Commenters representing industry groups suggested that the RIA assess the benefits of accessibility on an element-by-element basis in order to establish a ''breakeven'' value for each proposed requirement—that is, how much benefit an accessible element would need to provide to be worth the cost of making it accessible. One commenter representing the design and construction industry described this approach as measuring ''performance outcomes'' (i.e., the quantifiable benefits and costs conferred by each proposed requirement), as compared to other types of analysis that measure ''social outcomes'' (i.e., the overall impact of the proposed requirement on society). This comment suggested that ''cost effectiveness analyses'' focus on quantifiable performance outcomes, while ''cost utility analyses'' focus on qualitatively describing the range of social benefits and costs. In the RIA, the Department is doing both—quantifying the incremental benefits and costs of each proposed requirement to the extent they can be quantified, and, to the extent they cannot, describing the unquantifiable benefits and costs in qualitative terms.

Several commenters representing disability groups or industry groups suggested that the practical effect of accessibility requirements is to redistribute economic resources from society as a whole to the ''under served'' population of individuals with disabilities. Commenters representing disability groups hailed the redistribution as an obvious social good, asserting that civil rights regulations need not confer benefits on ''society as a whole'' to be worthwhile. By contrast, commenters representing industry groups questioned whether such redistribution was cost-efficient. These commenters referred the Department to Part D of OMB Circular A–4 (''Distributional Effects''), which applies when the benefits and costs of a regulation are unevenly distributed throughout the U.S. population or economy. Distributional effects may be imbalanced for different industrial sectors or regions of the country, or, as urged here, for different subpopulations of people. As OMB Circular A–4 puts it, the uneven distribution of regulatory impacts occurs when ''[t]hose who bear the costs of [the] regulation and those who enjoy its benefits * * * are not the same people.'' These commenters urged the Department to recognize that the proposed regulations would have uneven distributional effects because, in their view, those who will purportedly bear all the costs of compliance (facility owners and operators) and those who will enjoy its benefits (people with disabilities) are not the same groups.

From the Department's perspective, however, the redistribution analogy is inapposite. Accessibility requirements do not represent a transfer of resources from one group of people to another, but, rather, a dedication of shared resources to a particular end. In contrast to the types of subpopulations mentioned in OMB Circular A–4 (i.e., race, sex, or income level), disability is not a fixed or even relatively static category; rather, it is inherent in the human condition. The vast majority of individuals who are fortunate enough to reach an advanced age will benefit personally from an accessible environment. Business owners and people with disabilities are not discrete subpopulations—just as people with disabilities own businesses, many business owners have or will acquire a disability during their lifetime. Moreover, while the direct costs of compliance with the proposed standards may be incurred initially by businesses, as commenters representing industry groups have repeatedly stated, such costs eventually may be passed along to consumers. In other words, all members of society will pay the price for accessibility, just as all will benefit from it. Rather than representing a transfer of resources between distinct groups of people, then, accessibility requirements represent—for all members of society, whether they will benefit from accessibility now or at some point in the future—a choice among different forms of societal benefits.

Benefits—Quantification and Monetization of User Benefits in the RIA

From an economic perspective, the value that people derive from accessibility can be divided into three categories: ''use value'' (the value that people derive from using accessible facilities), ''option value'' (the value that people with and without disabilities derive from the opportunity to obtain the benefit of accessible facilities in the future) and ''existence value'' (the value that people with and without disabilities derive from the simple existence of accessible facilities including the fulfilment of constitutional guarantees of equal protection and nondiscrimination). The RIA, however, only quantifies and monetizes the incremental benefits to users (i.e., persons with disabilities) conferred by changes in accessibility due to the proposed regulations. This is largely due to data constraints. The overall benefits of the proposed regulations will be experienced by nearly all members of society to a greater or lesser extent during the projected 40-year lifecycle of facilities affected by these regulations. However, quantification of these benefits is beyond the scope of the Department's regulatory assessment, and, likely, any regulatory assessment. Instead, the RIA is necessarily limited to assessing the value of specific types of benefits that can be quantified and assigned monetary values (i.e., user benefits) for a demographically defined population of people (i.e., persons with disabilities). In this sense, the regulatory assessment must be considered conservative since it almost certainly understates the overall value of the proposed regulations to society.

The RIA quantifies and monetizes user benefits in two ways. First, an expert panel developed estimates of the amount of time persons with disabilities can be expected to save time either gaining access to a facility (e.g., a retail store), waiting to use a particular amenity in that facility (e.g., a restroom), or using an amenity in the facility (e.g., an ATM inside the store) as a result of the proposed regulations. *See* RIA §§ 3.2.2, 4.2.6 & Apps. 4–H, 4–K, 4–L, and 4–N. Second, for proposed requirements—primarily, supplemental requirements—that can be expected to create new users who previously were unable to visit a facility (e.g., fishing piers) or to use a facility amenity independently (e.g., hotel swimming pools), the assessment quantifies the value of the new uses generated by the change in accessibility. *See* RIA § 3.2.3 & App. 4–I. Each of these components of user benefits is then monetized using an appropriate ''value of time''—namely, an expression of a user's willingness to pay for changes at the facility. In keeping with common economic assumptions, user benefits associated with accessibility changes are monetized based on the value of the user's time. *See* RIA §§ 3.2, 4.2.5 & App. 4–J.

The benefits model in the RIA also places a ''premium'' on the value of certain types of time savings. The RIA describes the theory and mechanics of this approach in greater detail. *See* RIA § 4.2.5 & App. 4–J. Briefly stated, the assessment assumes that individuals would be willing to pay more for time saved gaining access to a facility due to improved accessibility than their respective typical uses of the same amount of time. This presumption derives from studies in the transportation industry concluding that the inherent discomfort of having to wait (as compared to the satisfaction of feeling like one is at least moving in the direction one wants to go) leads people waiting at a bus stop to prefer to have the bus arrive sooner, even if it means that the bus ride itself will take longer (so that the net travel time is the same). Essentially, people experience the time they spend waiting for the bus as a more negative experience—by a factor of two to one—as compared to the time they spend riding the bus and, consequently, ''value'' decreasing the time spent waiting more than they would an equivalent amount of bus time. In the RIA, this premium is applied, as applicable, to the incremental time savings benefit afforded by each revised or supplemental requirement.

In the end, the approach the Department has taken with respect to the assessment of benefits in the RIA is closest to the proposals of commenters representing industry groups. By calculating the incremental benefits (and costs) for each supplemental and revised requirement, the assessment generates a benefit-cost ratio for each such requirement. Although this approach has allowed the Department to gauge the incremental cost-effectiveness of the change represented by each revised or supplemental requirement as applied to a particular element, it should be understood that it is also fundamentally different from gauging the absolute cost-effectiveness of requiring a given element to be accessible. Most of the inherent value of an accessible element, as with accessibility generally, derives not from the incremental changes represented by the proposed standards, but from the fact that the element is required to be accessible at all.

Finally, not all of the revised requirements will confer increased benefits on persons with disabilities. The ''less stringent'' revised requirements generally reduce both benefits and costs, though such reductions may not be distributed equally. As a general matter, requirements have been made less stringent to clarify the meaning of the current requirement, or to provide an exception that takes into account special circumstances in specific facilities. For less stringent requirements that propose reductions in scoping, these revisions were typically based on the Access Board's determination that demand for the affected accessibility feature or communication device was not high enough to warrant the current numerical requirements. For purposes of the RIA, when less stringent revised requirements confer lower benefits relative to the current requirements, these reduced benefits have been assessed only with respect to new construction and alterations. Elements in existing facilities subject to less stringent requirements are assumed to be compliant already, either with current (more stringent) requirements or revised (less stringent) requirements. Facility owners would have neither a legal obligation nor a financial incentive to undergo barrier removal for such elements in order to ''comply'' with the revised standard. The RIA thus assumes that reductions in benefits due to less stringent revised requirements will not be realized for elements in existing facilities unless the affected elements are altered.

Benefits—Nature and Significance of Unquantified Benefits

In addition to the foregoing monetized user benefits, the RIA acknowledges that the proposed regulations would, if promulgated in final form, undoubtedly confer significant and important benefits on society that defy easy quantification or monetization. These benefits include the option and existence values discussed previously. Other benefits would also likely accrue to businesses through reduced administrative costs (from harmonization of the 2004 ADAAG with model codes) or increased worker productivity (due to greater workplace accessibility). The regulatory assessment discusses these types of benefits in *qualitative,* rather than quantitative, terms. *See* RIA section 5.4.

Perhaps the most significant unquantified benefit is the myriad ways in which the proposed standards—to

the extent they make the built environment more accessible—would improve the lives of many persons with disabilities. Even on an incremental level, the beneficial domino effect of increased access to all types of facilities, for each individual and, ultimately, for society as a whole, simply cannot be measured, much less reduced to monetary terms. An example related by one commenter referred to the way in which the proposed regulations would enable many individuals with disabilities to begin independently accessing various types of recreational facilities for the first time. This commenter observed how ''[r]egular involvement and participation in recreation, social, and leisure activities plays a significant role in living and maintaining a healthy lifestyle,'' and ensures that people ''remain physically active, develop social skills, and develop the skills necessary to enjoy lifelong leisure activities.'' Among the many collateral benefits of access to recreational opportunities are the ''prevention of obesity, [a] decrease of secondary conditions, improved social and problem solving skills, promotion of physical and emotional health and decreased likelihood of being hospitalized for another illness,'' not to mention ''increased independent living skills and preparation for employment.''

Unquantified benefits from the proposed regulations, moreover, are not limited to those accruing from the increased accessibility of recreational facilities. The revised requirements would increase accessibility throughout the entire range of public and private facility groups. For example, one commenter cited a study published in a recent issue of the *Journal of Consumer Affairs* presenting the perspectives of people with disabilities regarding the effectiveness of the ADA. Based on a national sample of one thousand noninstitutionalized individuals with disabilities, the study found that respondents who interacted more frequently with the marketplace, or even simply perceived the marketplace as more accessible, were more satisfied with life. According to this comment, study authors Carol Kaufman-Scarborough and Stacey Menzel Baker stated that their finding ''indicates the value behind efforts designed to empower consumers with disabilities by offering services that assist them * * * and by creating environments that enable them to experience full participation in society.'' Increased accessibility of the marketplace as a whole, which can be expected to heighten facility use across a wide range of facility groups, will also lead to greater benefits over time. A commenter representing a State government echoed this theme, citing potentially increased usage of public recreation areas and greater participation in the democratic process.

Additionally, the number of Americans with disabilities is expected to continue increasing over time. As many commenters pointed out, the proportion of the U.S. population that has a disability not only has been growing steadily over the last forty years, but also is projected to continue growing during the 40-year lifecycle of the regulations. Data provided by the Disability Statistics Center at the University of California at San Francisco demonstrates that the number of adults who use wheelchairs increased at a rate of 6% per year between 1969 and 1999; by 2010, it is projected that 2% of the adult population in the U.S. will use wheelchairs. In addition to people who use wheelchairs, in 1999, 3% of adults used crutches, canes, walkers, and other mobility devices; by 2010, that number is projected to have increased to 4%. Thus, by 2010, up to 6% of the U.S. population is projected to have mobility impairments. Moreover, because this figure was based on data from 1999, it does not take into account the influence of the current war in Iraq. This war is creating a new generation of young men and women with disabilities, the majority of whom are returning from war in their early twenties and can be expected to outlive the 40-year lifecycle of any building subject to these proposed regulations. Just as the original Federal disability rights legislation—Section 504 of the Rehabilitation Act of 1973—was enacted in direct response to the thousands of disabled war veterans returning home from Vietnam, the need to ensure an accessible built environment is now more critical than ever.

Benefits from the proposed regulations potentially would also extend to the public generally irrespective of disability status. For some, value may be derived simply from the existence of enhanced accessibility and improved social equity brought on by the proposed regulations. Others may take ''insurance'' value from the opportunity to make use of accessible features or facilities in the event they should need them in the future. Accessible facilities also benefit individuals without disabilities. Several commenters noted that improved accessibility features might benefit, for example, elderly persons, athletes temporarily on crutches, expectant mothers, or mail carriers using hand carts to deliver large packages. Moreover, because individuals tend to patronize facilities—especially places of public accommodation like hotels and restaurants—in pairs or groups, the benefits of accessibility also extend to the partners, companions, friends, family members, and personal assistants of people with disabilities. Finally, although requirements that apply to existing facilities pursuant to the barrier removal requirement are not primarily intended to benefit employees, employees with disabilities will certainly benefit from the accessibility of such features, which, given the importance of employment to the economic vitality of an individual, their family, and society as a whole, magnifies the benefits of accessibility throughout the economy.

Lastly, businesses—as well as State and local governments—would also likely experience benefits from the proposed regulations in ways that are not quantified in the RIA. Increased harmonization of the revised ADA Standards with model codes and consensus standards will yield substantial benefits to businesses, architects, and State and local governments by eliminating confusion and reducing administrative costs.[3] Harmonization will also make it easier for code-setting governmental entities to have their respective State or local codes certified as meeting or exceeding Federal standards. Businesses may also experience increased workforce

[3] While the benefits of harmonization between the ADA Standards and the model codes are clear, a few commenters noted the potential short-run downsides of harmonization. For example, some commenters complained that it would be expensive for small businesses to purchase copies of the IBC which is privately published by the International Code Council. Other commenters expressed concern that, since the 2004 ADAAG has a revised organization and format, they will have to learn a whole new regulatory system should the Department adopt these guidelines as the revised ADA Standards. The Department recognizes that, while harmonization will make ADA compliance easier for all covered entities (including small business owners) over the lifespan of the regulation, this benefit may not be fully realized by all entities immediately. To assist in the transition to the 2004 ADAAG, the Access Board has published a side-by-side comparison between the 2004 ADAAG and IBC 2003—including the provisions that have been incorporated by reference in the 2004 ADAAG—on its Web site (*www.access-board.gov*). The ICC offers free downloads of a similarly detailed comparison between the 2004 ADAAG and IBC 2006 on its Web site (*www.iccsafe.org*). The Department is exploring the possibility of publishing a similar side-by-side analysis on its Web site that compares the ADA Standards (both current and as revised) to one or more editions of the IBC (including any IBC provisions incorporated by reference) following promulgation of the final regulations. Additionally, when the proposed regulations become final, the Department will publish small entity compliance guides required by SBREFA and other appropriate technical assistance.

efficiency and productivity as a result of accessibility changes in the proposed regulations. For example, one commenter representing the design and construction industry pointed out that greater independence for users of facilities confers a ''productive'' benefit for businesses, whose staff can be redirected from providing assistance to customers with disabilities to potentially more economically rewarding tasks.

Analytical Scenarios—Safe Harbor

The most significant of the regulatory alternatives proposed by the Department is the ''safe harbor'' for certain existing title III-covered facilities and elements. As noted previously, the safe harbor proposal exempts covered facilities from barrier removal obligations that might otherwise arise under the proposed regulations so long as the elements therein are in compliance with the 1991 Standards. The Department has proposed this safe harbor to mitigate the impact of the proposed regulations on existing private facilities.

The RIA results indeed reflect the significant impact of the safe harbor proposal. In order to both assist the Department with its consideration of the safe harbor provision and inform the public of the benefits and costs of its adoption, the RIA compares the total NPV for ''safe harbor'' versus ''no safe harbor'' scenarios. *See* RIA, Figures ES–3 & 13. These comparative scenarios use the 1991 Standards as the primary baseline and assume barrier removal is readily achievable for 50% of the elements in existing facilities. Based on these assumptions, the RIA shows that there is most likely a $4.3 billion difference in total NPV between the ''safe harbor'' scenario ($7.6 billion) and the ''no safe harbor'' scenario ($3.3 billion).

Analytical Scenarios—Barrier Removal

By statute, an action to remove barriers is considered ''readily achievable'' if, for a particular entity, it is ''easily accomplishable and able to be carried out without much difficulty or expense.'' 42 U.S.C. 12182(b)(2)(A)(iv). In practice, what is readily achievable for any given entity with respect to a given element must be determined on a case-by-case basis, and has no monetary or other absolute parameters—it is specific to the individual facility and to the particular time, place, and context in which that facility operates. The Department's current title III regulations provide a list of factors that should be considered in determining whether an action is readily achievable. Only one of those factors—the nature and cost of the action—relates to the element itself. All of the other factors specifically relate to the business entity, including the impact of the action on the operation of the site; the overall financial resources of the entity and any parent corporation; the type of operation of the entity or parent corporation (including the composition, structure, and functions of the relevant workforce); the geographic, administrative and fiscal relationships between the facility, entity, and parent company; and the effect of the action on any legitimate safety requirements that may be necessary for safe operation.

Recognizing the infeasibility of conducting an empirical assessment of the individualized barrier removal efforts by facility owners and operators nationwide, the Department proposed in the ANPRM to develop a computer simulation model that would assess the statistical probability that existing facilities would be required to remove barriers in order to comply with supplemental or revised requirements. Several commenters expressed concern that the lack of reliable data would make the results of a simulation model useless. Other commenters suggested that the same indefinite parameters that make compliance with the barrier removal requirement difficult would also complicate any attempt to accurately calculate the likelihood that compliance would be required. In addition, these commenters stated that modeling readily achievable barrier removal as a function of the financial resources of an entity would underestimate the costs of compliance since entities, faced with an ambiguous definition of ''readily achievable,'' purportedly often spend more on barrier removal efforts than required by the ADA. Rather than using definite parameters to evaluate an indefinite requirement, these commenters proposed that the Department simply make an honest attempt to quantify the costs of compliance and to describe the distributional impacts of the rule across individuals and industries.

The Department agrees that the lack of reliable data on existing facilities' barrier removal efforts would render any statistical analysis too indefinite to be of value. Therefore, rather than basing calculations of total incremental benefits and costs on potentially arbitrary assumptions about whether (or to what extent) elements at existing facilities have undergone barrier removal, the RIA takes a more practical approach. First, with respect to existing elements subject to supplemental requirements, the RIA calculates an expected total NPV based on the assumption that barrier removal would be readily achievable for every element (100%) in a manner that is fully compliant with the new standards. Second, the RIA then calculates total NPV under two other compliance scenarios (0% and 50%) to show how varying barrier removal rates impact the overall results. Taken together, these three barrier removal scenarios reflect the range of probabilities of barrier removal obligations that existing facilities would have under the proposed regulations. Presenting the data this way enables the facility owner who could potentially incur the costs of compliance, as well as the individual with a disability who could potentially benefit from that compliance, to gauge the impact that the proposed standards might have on a particular facility by selecting the scenarios that most closely match the level of compliance and resources of the covered entity.

Primary Baseline

The 1991 Standards serve as the primary baseline for the RIA because they are the only uniform set of accessibility standards that apply to every place of public accommodation, every commercial facility, and every State or local government facility in the country. According to statistics compiled by the International Code Council (which publishes the IBC), a version of the IBC—either IBC 2000, IBC 2003 or IBC 2006—has been adopted at the State or local level in all 50 States and the District of Columbia. Nonetheless, there is still variation among states with respect to model code adoption. For example, because model codes such as the IBC are voluntary, public entities sometimes modify or carve out particular provisions or sections or leave adoption to the discretion of local jurisdictions. By contrast, because the ADA is a mandatory Federal law, it applies the same standards to every facility in the country, ensuring a uniform level of accessibility—as well as a uniform means of baseline assessment—nationwide.

Because of this uniformity, the 1991 Standards baseline is the only baseline against which the incremental costs and benefits of the proposed regulations are estimated on a requirement-by-requirement and facility-by-facility basis. The results for the primary baseline are summarized in the main RIA text and presented in full in the accompanying Supplemental Results. It also bears noting that the primary baseline assumes that facilities subject to the 1991 Standards are *not* also required to comply with equivalent provisions in model codes (such as the

IBC) that have been adopted as State or local building codes—even though compliance with State or local building codes necessarily is compulsory. In other words, the primary baseline does not take into account the substantial overlap between requirements in the proposed regulations and model code provisions in the IBC. While this approach likely leads to significant overstatement of the costs (and benefits) of the proposed regulations with respect to many requirements, it also nonetheless represents the only means of uniformly assessing the incremental impact of the proposed regulations across all facilities nationwide.

Some commenters representing industry groups expressed the view that the Department should not use the 1991 Standards as a baseline because, in their view, the benefits and costs of the current requirements were not adequately measured when the requirements were first adopted in 1991. Instead, these commenters propose that the Department assess the absolute benefits and costs of the proposed standards as measured against a zero baseline—that is, the full cost of compliance with the proposed regulations irrespective of the current level of accessibility of facilities due to the 1991 Standards.

The Department disagrees with these comments. OMB Circular A–4 is very clear that regulatory analyses should only account for those incremental benefits and costs that arise as a result of the proposed regulatory action itself. To assess the absolute (or total) benefits and costs of compliance with the proposed regulations would improperly attribute to the proposed standards all of the benefits and costs of the 1991 Standards, thereby distorting the economic impact of the proposed regulations. The 1991 Standards are the law of the land and facilities have been subject to the current requirements for 15 years. Assessing the benefits and costs of the proposed standards as if the ADA had just been enacted would thus drastically overstate both the benefits and the costs of the proposed regulations. For these reasons, the RIA uses the 1991 Standards as the primary baseline and assesses the incremental impact of the proposed standards accordingly.

Alternate Baselines

While the RIA uses the 1991 Standards as the primary baseline, the assessment nonetheless still accounts for the impact of the widespread adoption of model codes by using alternate IBC baselines for several analyses. Due to the high degree of overlap between the IBC, the 2004 ADAAG, and the Department's proposed standards, the widespread adoption of various versions of the IBC by State and local jurisdictions means that most buildings and facilities nationwide are already being constructed or altered in compliance with many of the proposed standards. (Indeed, one of the Access Board's goals in revising ADAAG was to harmonize these guidelines with model codes, such as the IBC, precisely because they form the basis of most State and local building codes.) Thus, for facilities located in one of the many jurisdictions that have adopted—in whole or in part—a version of the IBC, the Department's adoption of the proposed regulations will have far less impact as compared to other facilities.

For these reasons, several commenters representing disability groups urged the Department to use the IBC, in conjunction with other accessibility standards that have been adopted by States or local governments, as the primary baseline in lieu of the 1991 Standards. Commenters representing industry groups also recognized that versions of the IBC had been adopted in many States and localities, but suggested that the Department only use the IBC as a baseline for those jurisdictions in which its provisions had actually been adopted into law by code-making authorities.

As noted in the Regulatory Framework section of the ANPRM, the Department considered following a State-by-State approach in which the relevant baseline for newly constructed and altered facilities would vary from State to State, depending on which IBC version each State or local jurisdiction had adopted. Under this approach, the 1991 Standards would only have been used as a default baseline for jurisdictions that had not yet adopted any version of the IBC. However, the many variations among State and local jurisdictions concerning the extent to which various IBC-related accessibility provisions (i.e., IBC Chapter 11, IBC Appendix E, and ANSI A117.1) have been adopted without revision, adopted in a modified fashion, or carved out completely, make the creation of State-by-State baselines infeasible for every supplemental and revised requirement across all facilities nationwide. First, given these variations among States, use of State-by-State baselines would effectively require the creation of over one hundred separate baselines in order to accurately reflect which jurisdictions have adopted IBC provisions that are equivalent to each of the revised and supplemental requirements assessed in the RIA. Moreover, State-by-State baselines would also necessarily require information concerning the precise geographical location, age, and type of occupancy of all existing facilities nationwide. The Department, however, is not aware of any publicly available ''facility census'' to provide this requisite information. Such considerations would have made State-by-State (or, as applicable, locality-by-locality) baselines both extremely time-consuming to create and likely unreliable in application.

Thus, while the RIA applies alternate baselines for three different versions of the IBC (i.e., IBC 2000, IBC 2003, and IBC 2006) to assess the overall impact of the proposed regulations, it employs a simplified approach to the creation of these baselines. Specifically, the RIA assumes that the applicable version of the IBC applies equally to all facilities nationwide, and that relevant provisions of ANSI A117.1, IBC Chapter 11 and IBC Appendix E have been incorporated by all State and local jurisdictions. This latter assumption is necessary because these three sources establish most of the accessibility standards that apply under the IBC. If none of them were assumed to apply, adoption of the IBC by a jurisdiction would tell us little about the accessibility of its facilities, and, if some but not all of them were assumed to apply, predicting which provisions would apply to which facilities would be impossible. The alternate IBC baselines in the RIA, therefore, do not present the overall results on a State-by-State basis. However, these baselines nonetheless still permit facilities to see how the impact of the proposed standards varies depending on which version of the IBC the State or local code authorities have or might adopt in the future.

The RIA presents the comparative results for the three alternate IBC baselines in summary ''rolled-up'' fashion that combines all proposed requirements and facility groups. That is, for each alternate IBC baseline, the regulatory assessment provides a graphic representation (in the shape of a so-called ''S-Curve'') of the NPV at various likelihoods of occurrence. *See* RIA, Figure ES–5 & 15. Unlike the primary (1991 Standards) baseline, the results for each of the alternate IBC baseline scenarios are not further broken down to show the incremental benefits and costs for each requirement or facility group. Since requirement-by-requirement and facility-by-facility results are already calculated for the primary baseline, similarly detailed analyses for each IBC baseline effectively would have amounted to

conducting four separate regulatory assessments.

Moreover, to further assist stakeholders in assessing the impact of the proposed regulations, the RIA also presents several more limited analyses that assess the incremental impact of four illustrative proposed requirements against requirement-specific alternate IBC/ANSI baselines. When constructing these four requirement-specific IBC baselines, the Department endeavored to determine (or approximate) the actual extent to which the relevant equivalent IBC provisions have been adopted by every State or local jurisdiction nationwide. The results of these analyses underscore the point that consideration of alternate requirement-specific IBC baselines on a requirement-by-requirement basis would likely lead to markedly lower incremental costs and benefits for many proposed requirements. For example, the first scenario in the RIA uses requirement-specific IBC baselines to assess the incremental impact of the proposed revisions with respect to two proposed requirements—alterations to existing stairs and elevators—that have equivalent provisions in the ''main'' IBC chapters (Chapters 10 and 34) and, thus, have been adopted by virtually every State and local jurisdiction nationwide. *See* RIA, Table 10. This first scenario shows that the incremental costs for these two requirements collectively would be reduced by about $1.1 billion over the lifespan of the regulations when using the requirement-specific alternate IBC baselines as compared to the primary baseline (1991 Standards). A second scenario in the RIA employs requirement-specific alternate IBC/ANSI baselines to assess the incremental impact of proposed revisions to two other requirements—relating to side reach and water closed clearances—whose corresponding IBC provisions are only incorporated by reference into the IBC (through Chapter 11 and ANSI A117.1). *See* RIA, Table 11. These incorporated provisions have not been as uniformly adopted as other IBC provisions. Nonetheless, the incremental costs for these latter two requirements still would be reduced by about $660 million over the lifespan of the regulations when using requirement-specific IBC baselines as compared to the primary baseline (1991 Standards).

Regulatory Alternatives—Existing Facilities

As required by the Regulatory Flexibility Act of 1980, as amended by SBREFA, as well as Executive Order 13272, the Department has considered regulatory alternatives that would achieve the same statutory and regulatory goals but impose less cost on society. With respect to new construction and alterations, the ADA requires the Department to adopt standards that are ''consistent with'' the minimum guidelines issued by the Access Board. The Department does not have the statutory authority to modify the 2004 ADAAG. The Department does, however, have the discretion to determine whether—or to what extent—those guidelines should apply to existing facilities.

The most far-reaching regulatory alternative in the proposed regulations is the safe harbor provision that potentially exempts certain elements at existing facilities from barrier removal obligations under the proposed regulations. The RIA results demonstrate that this safe harbor proposal is expected to reduce substantially the total monetary impact of revised (more stringent) requirements on existing facilities, whether owned by small entities or larger groups or organizations. *See* RIA, Table ES–3.

Another regulatory alternative being proposed by the Department would—for the first time—place a monetary limit on the barrier removal obligations of qualifying small businesses. Qualifying small businesses are those small entities that satisfy small business size standards promulgated by the Small Business Administration. Pursuant to this proposal, a ''qualified small business'' would have met its readily achievable barrier removal obligations for a given year if, in the preceding tax year, that entity had spent at least one percent (1%) of its gross revenues removing architectural barriers.

The RIA does not, however, incorporate this monetary cap on barrier removal expenditures for qualifying small businesses into its cost or benefit models. Assessing the incremental impact of this provision would have required assumptions regarding the number of small businesses satisfying the definition of ''qualified small business'' in any given year, as well as the nature and extent of barrier removal efforts by such businesses in the preceding year. For example, even assuming it could be determined (or assumed) that a particular small retail establishment satisfied the ''qualified small business'' definition in a particular year, several sets of assumptions would nonetheless still be required to model the presumed barrier removal efforts made by that small retailer in the preceding year. For example, should it be assumed that the small retailer had removed architectural barriers related to a ramp, accessible routes, and accessible parking spaces in the preceding year? Or had this small retailer instead focused its barrier removal efforts on removing barriers concerning sales and service counters, doorways, and a single-user toilet room? In either case, did the small retailer's efforts result in complete or partial removal of the affected architectural barriers? Such questions underscore the difficulty in creating a reliable framework for modeling the individualized determinations that are necessarily part of the barrier removal calculus. The Department thus determined that incorporating the provision for qualifying small businesses into the RIA would have been neither feasible nor useful. Nonetheless, interested parties may still get a rough gauge of the potential impact of this proposed safe harbor by reviewing the ''Small Business Impact Analysis'' in Chapter Six of the RIA.

Lastly, the Department is also proposing several regulatory alternatives directed at lessening the monetary impact of certain supplemental requirements relating to existing play areas, swimming pools, and saunas and steam rooms at public and private facilities. Smaller existing and unaltered play areas, pools, and saunas (meeting specified size limits) would be exempt from technical and scoping standards in the supplemental requirements. Facilities exceeding the proposed size threshold would nonetheless have reduced scoping requirements for elevated play components (play areas) or accessible means of entry (swimming pools). Because there are few sources of reliable data concerning the number and relative size of existing play areas, swimming pools, and saunas and steam rooms in the United States, the RIA does not incorporate this proposed regulatory alternative into the model. However, to the limited extent such information was available, it is used in the RIA to modify, as appropriate, the likelihood of occurrence or unit cost of the element. *See* RIA, Apps. 3–E, 3–G, and 3–H.

Commenters representing small business groups expressed appreciation for the Department's efforts—represented by the foregoing regulatory proposals—to mitigate the potential impact of the proposed regulations. These commenters noted that such regulatory alternatives ''have the potential to remove much regulatory uncertainty and provide a level playing field for small businesses anxious to provide accessibility to their customers.''

Summary of Results—Main Regulatory Assessment

From an economic perspective (as specified in OMB Circular A–4), the primary determinant of whether proposed regulations increase social resources and thus represent a public good is whether monetized benefits exceed monetized costs—that is, whether the regulations have a positive net present value. The Department's proposed regulations indeed have a positive NPV under each of the four scenarios calculated in the regulatory assessment. The RIA's first scenario examines the incremental impact of the proposed regulations using the ''main'' set of assumptions (i.e., assuming a primary baseline (1991 Standards), safe harbor applies, and barrier removal readily achievable for 50% of elements subject to supplemental requirements). Under this first set of assumptions, the proposed regulations have an expected NPV of $31.1 billion (3% discount rate) and $7.5 billion (7% discount rate). *See* RIA, Table ES–1 & Figure ES–2. The second RIA scenario calculates the incremental impact of ''safe harbor'' versus ''no safe harbor'' scenarios with all other assumptions remaining equal. The expected NPV for the proposed regulations under a ''no safe harbor'' scenario would still remain positive, albeit at a significantly reduced level. *See* RIA, Table ES–3. Third, the RIA explores the incremental impact of varying the assumptions concerning the percentage of existing elements subject to supplemental requirements for which barrier removal would be readily achievable. Readily achievable barrier removal rates are modeled at 0%, 50%, and 100% levels. The results of this third scenario show that, while the expected NPV is positive for each readily achievable barrier removal rate, varying this assumed rate has little impact on expected NPV. *See* RIA, Table ES–4. Lastly, the RIA's fourth scenario demonstrates the impact of using three alternate baseline scenarios (i.e., IBC 2000, IBC 2003, and IBC 2006) instead of the primary baseline. As with the other scenarios, use of these alternate IBC baselines results in positive expected NPVs in all cases. *See* RIA, Table ES–5. These results also indicate that IBC 2000 and IBC 2006 have the respective highest and lowest expected NPVs. These results are due to changes in the make-up of the set of requirements that are included in each alternative baseline.

Summary of Results—Small Business Impact Analysis

In addition to its benefit-cost analysis of the impact of the proposed standards on all entities subject to titles II or III of the ADA, the Department is required under the Regulatory Flexibility Act (''RFA'') to analyze the impact of its proposed regulations on ''small entities''—namely, small businesses, small non-profit organizations, and small governmental jurisdictions with populations of less than 50,000. If the proposed regulations are projected to have a ''significant economic impact on a substantial number of small entities,'' the RFA requires an agency to prepare and make available for public comment an initial regulatory flexibility analysis (''IRFA''). On the other hand, no IRFA need be prepared should the head of the agency certify that the proposed rules—if promulgated—would not have a such an economic impact on a substantial number of small entities.

The Access Board certified, in both its NPRM and final rule promulgating the 2004 ADAAG, that its revised guidelines would not have a significant economic impact on a substantial number of newly constructed and altered small facilities. *See* 64 FR. 62,248 (Nov. 16, 1999) (NPRM); 69 FR 44,084 (July 23, 2004) (final rule). Consequently, the Access Board was not statutorily required to prepare either an initial or final regulatory flexibility analysis for the 2004 ADAAG.

In the ANPRM, the Department encouraged small entities to provide cost data on the potential economic impact of applying specific provisions of the 2004 ADAAG to existing facilities and to recommend less burdensome alternatives. Small businesses were well represented among ANPRM commenters. Many commenters representing industry groups of all sizes said that ''the possibility of having to modify existing facilities presents the most severe and burdensome compliance scenario for most businesses'' and that the biggest potential cost of the proposed standards was represented by the ''no safe harbor'' scenario. By contrast, several commenters representing disability groups urged the Department not to adopt a safe harbor, asserting that the ''readily achievable'' defense provided in the ADA adequately addresses the concerns of small businesses.

The Department agrees with the commenters representing small businesses that a safe harbor provision is a reasonable means of lowering the potential costs of the regulation and, with these NPRMs, is proposing to adopt the safe harbor scenario. Because the potential costs of compliance with the proposed standards pursuant to the barrier removal requirement was consistently identified by commenters as their paramount concern, the Department's adoption of the safe harbor should go a long way toward addressing the concerns of small businesses.

Some commenters representing small businesses also suggested that the Department employ a different methodology for its regulatory assessment than the Access Board. Specifically, these commenters recommended that the Department assess the incremental benefits and costs for all facilities, rather than just a few. These comments noted that many of the facility groups for which the Board did not provide a direct assessment of costs—including retail stores, restaurants, small manufacturers, and small service providers—are more typically small businesses. By comparison, as noted previously, the Department's RIA assesses the impact of the proposed regulations on all public and private facilities. Moreover, the Department's small business impact analysis includes all facility groups (for which statistical information was available) that could potentially be effected by the proposed regulations, including facility groups within which small businesses predominate.

Several commenters representing industry groups pointed to particular revised requirements as likely to have a disproportionate cost impact on small businesses, including the requirement relating to public entrances (which they suggest could impose greater costs on small businesses, which are more likely to have only two entrances, both of which would now be required to be accessible), and the requirement relating to operable windows (which are more typically found in small or rural motels rather than large urban high rises). Commenters also noted that small businesses are more likely to be located in older buildings, which cost more to renovate than newer buildings, and discussed the greater marginal impact that any regulation (particularly one as complex as the proposed standards) has on small businesses due to their smaller economies of scale. The Department notes that the revised requirement relating to public entrances is expected to effect no change for small facilities, and to the extent it effects a change at all, it will be for very large facilities for which it will be ''less stringent'' than the current requirement. Similarly, the operable windows requirement can be met using inexpensive add-on hardware

(similar to a light switch extension handle).

More generally, with respect to requirements that may impose a fixed cost, several commenters representing small businesses suggested that the Department provide small businesses with a lower cost alternative by permitting equivalent facilitation. In the proposed regulations for title III, the Department has specifically recognized the continued legitimacy of equivalent facilitation as a means of lowering the potential costs associated with barrier removal. In all cases, measures to remove barriers are only required when they are readily achievable, but if substantially equivalent access can be provided at less cost through alternative measures, entities are entitled to use them.

Chapter Six of the RIA sets forth the Department's comprehensive assessment of the estimated impact of the proposed regulations on small entities. For the most part, this analysis uses the same methodology as the underlying ''main'' regulatory assessment except that some additional publicly-available statistics (from, for example, the Census Bureau and the Office of Advocacy of the Small Business Administration) are incorporated into the model in order to permit particularized calculations for small entities.

In sum, the Department's small business impact analysis uses the following methodological approach. First, the analysis estimates (by facility group) the total number of facilities owned or operated by small entities and their respective total annual sales receipts. Since governmental entities typically do not have sales receipts, expenditures—broken down by category (e.g., education, hospitals, parks, museums)—serve as a proxy for ''sales receipts'' for small governmental jurisdictions. The resulting figures for small entity-owned facilities and sales receipts are compared to the ''typical'' facility. *See* RIA, Table 17. Second, the analysis compares the net costs of the proposed regulations on small entities and the ''typical'' facility for each facility group. *See id.,* Table 18. Lastly, the analysis estimates total annual costs and annual costs as a percentage of sales for both small entities and ''typical'' facilities. *See id.,* Table 19.

The results of the Department's small business impact analysis demonstrate that the proposed regulations would not have a significant economic impact on a substantial number of small entities. *See* RIA, Ch. 6. For small government jurisdictions, annualized costs are not expected to be greater than 0.5% of sales for any type of facility. Similarly, for all but a handful of small private entities, annualized costs are not expected to be greater than 0.5% of sales. Only with respect to two types of facilities owned or operated by small private entities—aquatic centers and miniature golf courses—are annualized costs estimated to exceed 0.5% of sales. However, as noted previously, the RIA does not incorporate the Department's proposed monetary limit (i.e., 1% of gross revenue) on barrier removal obligations for qualified small entities. Application of this monetary cap on barrier removal costs for qualifying small businesses that own or operate aquatic centers or miniature golf courses would mitigate the incremental impact of the proposed regulations on these (or any other) qualified small entities.

Dated: June 19, 2008.

Rosemary Hart,

Federal Register Liaison Officer.

[FR Doc. E8–14388 Filed 6–27–08; 8:45 am]

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DEPARTMENT OF JUSTICE

28 CFR Part 36

[CRT Docket No. 106; AG Order No. 2968–2008]

RIN 1190–AA44

Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities; Correction

AGENCY: Department of Justice, Civil Rights Division.

ACTION: Proposed rule; correction.

SUMMARY: This document contains corrections to the proposed rule, published Tuesday, June 17, 2008, at 73 FR 34508, implementing the Americans with Disabilities Act. The proposed rule would revise Department of Justice regulations on nondiscrimination on the basis of disability by public accommodations and in commercial facilities. The correction consists of the addition of two appendices that were inadvertently omitted.

DATES: All comments must be received by August 18, 2008.

FOR FURTHER INFORMATION CONTACT: Janet L. Blizard, Deputy Chief, Disability Rights Section, Civil Rights Division, U.S. Department of Justice, at (202) 307–0663 (voice or TTY). This is not a toll-free number. Information may also be obtained from the Department's toll-free ADA Information Line at (800) 514–0301 (voice) or (800) 514–0383 (TTY).

The text of this correction is also available in an accessible format on the ADA Home Page at *http://www.ada.gov.* You may obtain copies of the correction in large print or on computer disk by calling the ADA Information Line at the number listed above.

SUPPLEMENTARY INFORMATION:

Need for Correction

The proposed rule published on June 17, 2008, inadvertently omitted two documents: Appendix A, which addresses major issues in the proposed ADA Standards for Accessible Design and Appendix B, which explains the methodology underlying the Department's regulatory impact analysis. Both appendices also respond to comments received in response to the Department of Justice's Advance Notice of Proposed Rulemaking (ANPRM) published on September 30, 2004, 69 FR 58768. This correction document will add the appendices to the appropriate places in the proposed rule.

Corrections

28 CFR Part 36 [Corrected]

1. On page 34557, immediately after the amendment to § 36.608 redesignating that section as § 36.607, and before the signature of the Attorney General, add Appendix A and Appendix B, to read as follows:

APPENDIX A TO PART 36: ANALYSIS OF THE PROPOSED STANDARDS

The following document is a summary of the major substantive changes proposed for the scoping and technical requirements of the 1991 Standards at 28 CFR pt. 36 adopted in 1991, as amended in 1994. The full text of the 2004 ADAAG is available for review on the Access Board's Web site, *http://www.access-board.gov,* along with a chart that shows the relationship between the 1991 Standards and the 2004 ADAAG.

This summary addresses only the major substantive changes that are being proposed. Editorial changes are not discussed. Scoping and technical requirements are discussed together, where appropriate, for ease of understanding the requirements. In addition, this document addresses substantive public comments on specific changes to the proposed standards received by the Department in response to its September 2004 ANPRM. Comments received by the Access Board on the adoption process or on the overall scope of the proposed standards have been addressed in the preamble to this notice. Comments that did not raise major issues are not addressed here.

The ANPRM issued by the Department concerning these proposed standards stated that comments received by the Access Board in response to its development of the guidelines upon which these proposed standards are issued would be considered in the development of this NPRM. Therefore, the Department will not restate here all of the comments and responses to them issued by the Access Board. The Department is supplementing the Access Board's comments and responses with substantive comments and responses in this notice. Comments and responses addressed by the Access Board that also were separately submitted to the Department will not be restated in their entirety here.

Analysis of Sections

Application and Administration

103 Equivalent Facilitation

This section acknowledges that nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability.

A commenter encouraged the Department to include a procedure for determining equivalent facilitation. The Department believes that the responsibility for determining and demonstrating equivalent facilitation properly rests with the covered entity. The purpose of allowing for equivalent facilitation is to encourage flexibility and innovation while still ensuring access. The Department believes that establishing potentially cumbersome bureaucratic provisions for reviewing requests for equivalent facilitation is inappropriate.

104 Conventions

Proposed section 104.1.1, Construction and Manufacturing Tolerances, provides that all dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points. Section 104.1 notes that all dimensions not stated as a ''maximum'' or ''minimum'' are absolute and that all dimensions are ''subject to conventional industry tolerances.''

Commenters requested that specific new construction allowances and tolerances be made for a variety of materials and designs required by the proposed standards. The Department believes that it is inappropriate for this agency to attempt to establish construction and manufacturing tolerances for every material, element, or design that may be used in new construction. Construction and manufacturing tolerances are best addressed by industry standards, where available, and are built into the specifications in the attached rules.

Section 104.2 provides that where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result, the next greater whole number of such elements or facilities shall be provided. Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one-half is permissible.

A commenter stated that it is customary in the building code industry to round up rather than down for values less than one-half. As noted here, where the proposed standards provide for scoping, fractional calculations will be rounded to the next whole number. The Department is retaining the portion of section 104.2, Calculation of Percentages, that permits rounding down for values less than one-half where the determination of the required size or dimension of an element or facility involves ratios or percentages. Such practice is standard with the industry, and is in keeping with model building codes.

105 Referenced Standards

Section 105 lists the industry requirements that will be referenced in the proposed standards. This section also clarifies that where there is a difference between a provision of the proposed standards and the referenced requirements, the provision of the proposed standards applies.

Commenters noted that the National Fire Protection Association's (NFPA) referenced standard for fire alarms at section 105.2.5 is based on the NFPA 72 1999 or 2002 edition. The commenters recommended editing the final standards to require compliance with the edition of NFPA that is most recent because it is likely that the NFPA will amend its standards prior to the issuance of final ADA Standards.

The rules that govern the publication of regulations that incorporate private standards by reference require federal agencies to adopt specific editions of the referenced code that are in existence at the time of issuance of the rules. The Department anticipates that the Access Board will periodically update the ADAAG references. Until then, the Department will retain the reference contained in the 2004 ADAAG.

106 Definitions

Various definitions will be added to the proposed standards and some current definitions will be dropped.

One commenter asked that the term public right-of-way be defined; others asked that various terms and words defined by the 1991 Standards, and that were eliminated from the proposed standards, and other words and terms newly used in the proposed standards be defined.

The Department believes that it is not necessary to add definitions to this text because the proposed regulation at section 106.3 provides that the meanings of terms not specifically defined in the proposed standards, in the Department's regulation, or in referenced standards are to be defined by collegiate dictionaries in the sense that the context implies. The Department believes that this provision adequately addresses these commenter's issues.

Scoping and Technical Requirements

202 Existing Buildings and Facilities

Alterations to Primary Function Areas. A new provision at section 202.4 merely restates a current requirement under Title III, and therefore represents no change for Title III facilities or for those Title II facilities that currently have elected to comply with the 1991 Standards. However, under the revised provisions, state and local government facilities that currently elect to comply with UFAS instead of the 1991 Standards will no longer have that option, and thus will now be subject to the path of travel requirements. The path of travel requirement provides that when a primary function area of an existing facility is altered, the path of travel to that area (including rest rooms, telephones, and drinking fountains serving the area) must also be made accessible, but only to the extent that the cost of doing so does not exceed twenty percent (20%) of the cost of the alterations to the primary function area. The UFAS requirements for a substantial alteration, though different, may have covered some of the items that will now be covered by the path of travel requirement.

Visible Alarms in Alterations to Existing Facilities. The 1991 Standards at sections 4.1.3(14), and 4.1.6(1) and (b), and proposed sections 202.3 and 215.1, Exception require that when existing elements and spaces of a facility are altered, the alterations must comply with new construction requirements. The proposed regulations add a new exception to the scoping requirement for visible alarms in

existing facilities that will provide that visible alarms must be installed only when an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

Commenters urged the Department not to include the exception because it will make the safety of individuals with disabilities dependent upon the varying age of existing fire alarm systems. Other commenters suggested that including this section, even with the exception, will result in significant cost to building owners and operators.

The Department believes that the language adopted by the Access Board strikes a reasonable balance between the interests of individuals with disabilities and those of the business community. If undertaken at the time a system is installed whether in a new facility or in a planned system upgrade, the cost of adding visible alarms is reasonable. Over time, existing facilities will become fully accessible to individuals who are deaf or hard of hearing, and will add minimal costs to owners and operators.

203 General Exceptions

Limited Access Spaces and Machinery Spaces. The 1991 Standards at section 4.1.1 contains an exception that exempts ''nonoccupiable'' spaces that have limited means of access, such as ladders or very narrow passageways, and that are visited only by service personnel for maintenance, repair, or occasional monitoring of equipment from all accessibility requirements. The proposed standards at sections 203.4 and 203.5 expand this exception by removing the condition that the exempt spaces be ''nonoccupiable,'' and by separating the other conditions into two independent exceptions: one for spaces with limited means of access, and the other for machinery spaces. More spaces are exempted by the proposed changes to the exception.

Employee Work Areas. Section 215.3 of the proposed standards provides that employee work areas in newly constructed facilities are required to have wiring systems that are capable of supporting visible alarms. The 1991 Standards, section 4.1.1(3), require visible alarms to be provided where fire alarm systems are provided, but do not require areas used only by employees as work areas to be equipped with accessibility features. As applied to office buildings, the 1991 Standards require visible alarms to be provided in public and common use areas such as hallways, conference rooms, break rooms, and restrooms, where fire alarm systems are provided.

Commenters asserted that the requirements of section 215.3 of the proposed standards would be burdensome to meet. These commenters also raised concerns that all employee work areas within existing buildings and facilities must be equipped with accessibility features.

The commenters' concerns about section 215.3 represent a misunderstanding of the requirements applicable to employee work areas. Newly constructed buildings and facilities merely are required to provide wiring for visible alarm systems that can be added as needed to accommodate employees who are deaf or hard of hearing. This is a minimum requirement without significant impact.

The other issue in the comments represents a misunderstanding of the Department's existing regulatory requirements. Employee common use areas in covered facilities (*e.g.*, locker rooms, break rooms, cafeterias, toilet rooms, and corridors to exits, and other common use spaces) are required to be accessible under the 1991 Standards; areas in which employees are actually performing their jobs are required to enable a person using a wheelchair or mobility device to approach, enter, and exit the area. The proposed rule will require increased access through the circulation path requirement discussed below, but neither the 1991 Standards nor the proposed standards would require employee work stations to be accessible. Access to specific employee work stations would be governed by Title I of the ADA.

Common Use Circulation Paths in Employee Work Areas. The 1991 Standards at section 4.1.1(3), and the proposed standards at sections 203.9; 206.2.8, Exceptions 1, 2, and 3; 402.1; 402.2; 403.5; 405.5; and 405.8 will require employee work areas to be designed and constructed so that individuals with disabilities can approach, enter, and exit the areas. The ADA, 42 U.S.C. 12112 (b)(5)(A) and (B), requires employers to make reasonable accommodations in the workplace for individuals with disabilities, which may include modifications to work areas when needed. Providing increased access to the facility at the time of construction or alteration will simplify the process of providing reasonable accommodations when they are needed. The requirement will not apply to existing facilities pursuant to the readily achievable barrier removal requirement. The Department has consistently held that barrier removal requirements do not apply to exclusively employee areas because the purpose of Title III is to ensure that access is provided to clients and customers. *See* 28 CFR pt. 36, App. B.

The proposed standards will require common use circulation paths within employee work areas to comply with the technical requirements for accessible routes, subject to several exceptions that exempt common use circulation paths in employee work areas where it may be difficult to comply with the technical requirements for accessible routes due to the size or function of the area:

- Employee work areas, or portions of employee work areas, that are less than 300 square feet and are elevated 7 inches or more above the ground or finish floor, where elevation is essential to the function of the space, are exempt.
- Common use circulation paths within employee work areas that are less than 1,000 square feet and are defined by permanently installed partitions, counters, casework, or furnishings are exempt. Kitchens in quick service restaurants, cocktail bars, and the employee side of service counters are frequently covered by this exception.
- Common use circulation paths within employee work areas that are an integral component of equipment are exempt. Common use circulation paths within large pieces of equipment in factories, electric power plants, and amusement rides are covered by this exception.
- Common use circulation paths within exterior employee work areas that are fully exposed to the weather are exempt. Farms, ranches, and outdoor maintenance facilities are covered by this exception.

The proposed changes also contain exceptions to the technical requirements for accessible routes:

- Machinery and equipment are permitted to reduce the clear width of common use circulation paths where it is essential to the function of the work performed. Machinery and equipment that must be placed a certain way to work properly, or for ergonomics or to prevent workplace injuries are covered by this exception.
- Handrails are not required on ramps, provided they can be added in the future.

Commenters stated that the proposed standards for common use circulation paths in employee work areas are inappropriate, particularly in kitchens, storerooms, and behind cocktail bars where wheelchairs would not be easily accommodated. These commenters further urged the Department not to adopt a requirement that circulation paths in employee work areas be at least 36 inches wide, including those at emergency exits.

The Department believes that the commenters misunderstand the scope of this provision. Nothing in the rule requires all circulation paths in non-exempt areas to be accessible. The Department recognizes that building codes and fire and life safety codes, which are adopted by all the States, require primary circulation paths in facilities, including employee work areas, to be at least 36 inches wide for purposes of emergency egress. Accessible routes also are at least 36 inches wide, therefore, the Department anticipates that covered entities will be able to satisfy the requirement to provide accessible circulation paths by ensuring that their required primary circulation paths are accessible.

Individual employee work stations, such as a grocery checkout counter or an automobile service bay designed for use by one person, do not contain common use circulation paths and are not required to comply. Other work areas, such as stockrooms that typically have narrow pathways between shelves would be required to design only one accessible circulation path into the stockroom. It would not be necessary to make each circulation path in the room accessible.

In addition, the proposed standards include exceptions for common use circulation paths in employee work areas where it may be difficult to comply with the technical requirements for accessible routes due to the size or function of the areas. The Department believes that these exceptions will provide the flexibility necessary to ensure that this requirement does not interfere with legitimate business operations.

205 and 309 Operable Parts

Sections 4.1.3, and more specifically 4.1.3(13), 4.27.3, and 4.27.4 of the 1991 Standards require operable parts on accessible elements, along accessible routes, and in accessible rooms and spaces to comply with the technical requirements for operable parts, including height and operation. The 1991 Standards at section 4.27.3 contain an exception that exempts ''special equipment [that] dictates otherwise,'' and electrical and communications systems receptacles not intended for use by building occupants from the technical requirement for the height of operable parts. The proposed changes divide this exception into three exceptions covering operable parts intended only for use by service or maintenance personnel; electrical or communication receptacles serving a dedicated use; and floor electrical receptacles. Operable parts covered by these new exceptions are exempt from all the technical requirements for operable parts. The proposed changes add exceptions that exempt certain outlets at kitchen counters; HVAC diffusers; and redundant controls provided for a single element, other than light switches, from the technical requirements for operable parts. The proposed changes also exempt gas pump nozzles from the technical requirement for activating force at section 309.4.

Reach Ranges. The 1991 Standards set the height for the maximum side reach at 54 inches. The proposed standards at section 308.3 lower that maximum height to 48 inches. The proposed standards also add exceptions for certain elements to the scoping requirement for operable parts.

The 1991 Standards at sections 4.1.3; 4.27.3; and 4.2.6, and the proposed standards at sections 205.1; 228.1; 228.2; 309.3; 308.3; 308.3.1, Exception 2; and 308.3.2 require operable parts of accessible elements, along accessible routes, and in accessible rooms and spaces to be placed within a forward or side reach. The proposed standards also require at least one of each type of depositories, vending machines, change machines, and gas pumps, and at least 5 percent of mailboxes provided in an interior location to meet the technical requirements for a forward or side reach.

The 1991 Standards specify a maximum 54 inch high side reach and a minimum 9 inch low side reach for a reach depth of 10 inches maximum. The proposed standards specify a maximum 48 inch high side reach and a minimum 15 inch low side reach for an unobstructed reach, and a maximum 48 inch high side reach for a reach depth of 10 inches maximum over an obstruction 34 inches maximum in height. Changing the side reach will affect a variety of building elements such as light switches, electrical outlets, thermostats, fire-alarm pull stations, card readers, and keypads.

Commenters were divided in their views on the change to the reach range requirements. Disability advocacy groups and others, including individuals of short stature, supported the modifications to the proposed reach range requirements. Other commenters asserted that the proposed reach range requirements will be burdensome for small businesses to comply with and asked the Department to consider retaining 1991 requirements. These comments argued that the proposed reach range requirements restrict design options, especially in residential housing.

The Department believes that data provided by advocacy groups and others provides compelling evidence that lowered reach range requirements will serve significantly greater numbers of individuals with disabilities, including individuals of short stature, people with limited upper body strength, and others with limited use of their arms and fingers. This proposal was developed by the Access Board over a prolonged period in which there was extensive public participation. This process did not produce any significant data to indicate that applying this requirement in new construction or during alterations would impose a significant burden.

206 and 402 Accessible Routes

Slope. The proposed standards provide that the running slope of walking surfaces have cross slopes that shall not be steeper than 1:48. The 1991 Standards' cross slope requirement is 1:50.

A commenter recommended increasing the cross slope requirement to allow a maximum of ½ inch per foot (1:24) to prevent imperfections in concrete surfaces from ponding water.

The requirement that a cross slope shall not be steeper than 1:48 adequately provides for water drainage in most situations. Changes to the specifications suggested would double the allowable cross slope and create a significant impediment for many wheelchair users, and others with mobility impairments. Therefore, the Department declines to accept this recommendation.

Accessible Routes from Site Arrival Points and Within Sites. The 1991 Standards at sections 4.1.2(1) and (2) and the proposed changes at sections 206.2.1 Exception 2; and 206.2.2 Exception require, where provided, that at least one accessible route be provided from site arrival points to an accessible building entrance, and at least one accessible route connect accessible facilities on the same site. The proposed standards also add two exceptions that exempt site arrival points and accessible facilities within a site from the accessible route requirements where the only means of access between them is a vehicular way that does not provide pedestrian access.

Comments urged the Department to eliminate the exception that exempts site arrival points and accessible facilities from the accessible route requirements where the only means of access between them is a vehicular way not providing pedestrian access. The Department declines to accept this recommendation because the

Department believes that its use will be limited. If it can be reasonably anticipated that the route between the site arrival point and the accessible facilities will be used by pedestrians, regardless of whether a pedestrian route is provided, then this exception will not apply. It will apply only in the relatively rare situations where the route between the site arrival point and the accessible facility dictates vehicular access—for example, an office complex on an isolated site that has a private access road, or a self-service storage facility where all users are expected to drive to their storage units.

Another commenter suggested that the language of section 406.1, General, is confusing because it states that curb ramps on accessible routes shall comply with the guidelines, and that the 1991 Standards provide that curb ramps shall be provided wherever an accessible route crosses a curb.

The Department declines to change this language because the change is purely editorial, resulting from the overall changes in the format. It does not change the substantive requirement. Under the revised format, all elements within a required accessible route must be accessible; therefore, if the accessible route crosses a curb, a curb ramp must be provided.

Limited-use/Limited-application Elevators and Private Residence Elevators. The 1991 Standards at sections 4.1.3(5), Exception 1, and the proposed standards at sections 206.2.3, Exception 1 and 2; and 206.6, Exception 1 and 2 include exceptions to the scoping requirement for accessible routes that exempt certain facilities from connecting each story with an elevator. If a facility is exempt from the scoping requirement, but nonetheless installs an elevator, the 1991 Standards require the elevator to comply with the technical requirements for elevators. The proposed standards add a new exception that allows a facility that is exempt from the scoping requirement to install a limited-use/limited-application (LULA) elevator. LULA elevators are permitted as an alternative to platform lifts. The proposed standards also add a new exception that permits private residence elevators in multi-story dwelling and transient lodging units. The proposed standards contain technical requirements for LULA elevators and private residence elevators.

A commenter questioned the value of permitting LULA elevators because, as was claimed, these elevators often are unreliable. LULAs are smaller than other elevators and have limited travel distance. They are in all other respects subject to the same safety and reliability standards as other elevators. The Department believes that because LULAs will be permitted only in situations where accessible vertical access is not now required, their use will not diminish required access and may, in fact, encourage covered entities to provide vertical access in situations where it is not now being provided.

Accessible Routes to Tiered Dining Areas in Sports Facilities. The 1991 Standards at sections 4.1.3(1) and 5.4 and the proposed changes at section 206.2.5 and Exception 3 require an accessible route to be provided to all dining areas in new construction, including raised or sunken dining areas. The proposed standards will add a new exception for tiered dining areas in sports facilities. Dining areas in sports facilities are typically integrated into the seating bowl and are tiered to provide adequate lines of sight for individuals with disabilities. The new exception requires an accessible route to be provided to at least 25 percent of the tiered dining areas in sports facilities. Each tier must have the same services and the accessible route must serve the accessible seating.

Accessible Routes to Press Boxes. The 1991 Standards at sections 4.1.1(1) and 4.1.3(1) cover all areas of newly constructed facilities required to be accessible, and an accessible route to connect accessible entrances with all accessible spaces and elements within the facility. Section 201.1 of the proposed standards requires that all areas be accessible. The proposed changes at sections 206.2.7(1) and (2) add two exceptions that exempt small press boxes that are located on bleachers with entrances on only one level, and small press boxes that are free-standing structures elevated more than 12 feet, from the accessible route requirement when the aggregate area of all press boxes in a sports facility does not exceed 500 square feet. The Department anticipates that this change will significantly reduce the economic impacts on smaller sports facilities, such as those associated with high schools or community colleges.

Entrances. The 1991 Standards at sections 4.1.3(8), (a)(i), and (a)(ii); and 4.1.6(1)(h) require at least fifty percent (50%) of public entrances to be accessible. Additionally, the 1991 Standards require the number of accessible public entrances to be equivalent to the number of exits required by applicable building and fire codes. With very few exceptions, building and fire codes require at least two exits to be provided from spaces within a building and from the building itself. Therefore, under the 1991 Standards where two public entrances are planned in a newly constructed facility, both entrances must be accessible.

Instead of requiring accessible entrances based on the number of public entrances provided or the number of exits required (whichever is greater), section 206.4.1 of the proposed standards will require at least sixty percent (60%) of public entrances to be made accessible. The revision is intended to achieve the same result as the 1991 Standards. Thus, under the proposed standards where two public entrances are planned in a newly constructed facility, both entrances must be accessible.

Where multiple public entrances are planned to serve different site arrival points, the 1991 Standards at section 4.1.2(1) and section 206.2.1 of the proposed standards require at least one accessible route to be provided from each type of site arrival point provided, including accessible parking spaces, accessible passenger loading zones, public streets and sidewalks, and public transportation stops, to an accessible public entrance that serves the site arrival point.

The U.S. Small Business Administration Office of Advocacy and other comments recommended retaining the 1991 requirement for fifty percent (50%) of public entrances of covered entities to be accessible. These commenters also raised concerns about the impact upon existing facilities.

The Department believes that these commenters misunderstand the 1991 Standards. As explained above, the current requirements generally require more than fifty percent (50%) of entrances in small facilities to be accessible. Model codes require that most buildings have more than one means of egress, thus, most buildings have more than one entrance, and now these buildings must have more than one accessible entrance. Requiring at least sixty percent (60%) of public entrances to be accessible is not expected to result in a substantial increase in the number of accessible entrances compared to the current requirements. The 1991 Standards and the proposed standards also contain exceptions that limit the number of accessible entrances required in alterations to existing facilities. When entrances in an existing facility are altered and the facility has an accessible entrance, the entrance being altered is not required to be accessible, unless a primary function area also is altered and then an accessible path of travel must be provided to the primary function area to

the extent the cost is not disproportionate. The Department anticipates retaining the requirement for accessible entrances. However, in order to ensure the Department is fully informed about the potential results of retaining the requirement, the Department is asking for detailed comments about this issue.

Alterations to Existing Elevators. When a single space or element is altered, the 1991 Standards at sections 4.1.6(1)(a) and (b) require the space or element to be made accessible. When an element in one elevator is altered, the proposed standards at section 206.6.1 will require the same element to be altered in all elevators that are programmed to respond to the same call button as the altered elevator.

The proposed standards at sections 407.2.1 Exception—407.4.7.1.2 Exception also contain exceptions to the technical requirements for elevators when existing elevators are altered that further minimize the impact of the revision:

- Existing elevators are permitted to have recessed call buttons.
- Existing call buttons and keypads are permitted to be located at 54 inches above the finish floor, measured to the centerline of the highest operable part.
- Existing call buttons are not required to be ¾ inch minimum in the smallest dimension.
- Existing call buttons are not required to have visible signals to indicate when each call is registered and when each call is answered.
- A visible and audible hall signal is not required to be provided at the hoistway entrance of existing elevators to indicate the direction of car travel.
- Existing visible hall signals are not required to be centered at 72 inches minimum above the finish floor and 2½ inches minimum measured along the centerline of the element.
- Existing hall signals are not required to meet the requirements for frequency and range of audible signals.
- Existing manually operated hoistway swing doors are permitted if the door opening provides a clear width of 32 inches minimum, and the force for pushing or pulling open the door is 5 pounds maximum.
- Existing manually operated doors are not required to provide a reopening device that automatically stops and reopens the car door and hoistway door if the doors are obstructed by an object or a person.
- A power operated car door with a door opening that provides a clear width of 32 inches minimum is permitted in an existing elevator.
- Existing elevator car configurations that provide a clear floor area of 16 square feet, and provide 54 inches minimum inside clear depth and 36 inches minimum clear width are permitted.
- Where a new car operating panel with accessible elevator car controls and tactile markings is provided in an existing elevator, existing car operating panels are not required to be made accessible.
- Existing car control buttons with floor designations are permitted to be located 54 inches maximum above the finish floor where a parallel approach is provided.
- Existing car control buttons with floor designations are permitted to be recessed.
- Where space on an existing car operating panel precludes the placement of tactile markings immediately to the left of the control button, the markings are permitted to be placed as near to the control button as possible.

Commenters expressed concerns about the requirement that when an element in one elevator is altered, the proposed standards at section 206.6.1 will require the same element to be altered in all elevators that are programmed to respond to the same call button as the altered elevator. Commenters noted that such a requirement is burdensome and will result in costly efforts without significant benefit to individuals with disabilities.

The Department believes that this requirement is necessary to ensure that when an individual with a disability presses a call button, an accessible elevator will arrive. The Department believes that the effort required to meet this provision is minimal in the majority of situations, and the benefit to individuals with disabilities not having to wait unnecessarily for an accessible elevator to make its way to them arbitrarily outweighs any minor burden of programming corresponding elevators.

Elevator Leveling. Section 407.4.4, Leveling, provides that each car must automatically level to ½ inch at floor landings.

Accessible Routes in Dwelling Units with Mobility Features. The UFAS, at sections 4.34.1 and 4.34.2, require the living area, kitchen and dining area, bedroom, bathroom, and laundry area where provided in dwelling units with mobility features to be on an accessible route. Where dwelling units have two or more bedrooms, at least two bedrooms are required to be on an accessible route.

The proposed changes at sections 233.3.1.1, 809.1; 809.2; 809.2.1 and 809.4 will require all spaces and elements within dwelling units with mobility features to be on an accessible route. These proposed changes exempt unfinished attics and unfinished basements from the accessible route requirement. These proposed changes also include an exception to the dispersion requirement that permits single-story dwelling units or ''flats'' to be constructed, where multi-story dwelling units are provided. A ''flat'' eliminates the need to provide a residential elevator or platform lift to connect stories.

Location of Accessible Routes. The 1991 Standards, section 4.3.2(1), require accessible routes connecting site arrival points and accessible building entrances to coincide with general circulation paths, to the maximum extent feasible. The proposed regulation requires all accessible routes to coincide with or be located in the same general area as general circulation paths. Additionally, a new provision specifies that where a circulation path is interior, the required accessible route must also be located in the interior of the facility, where general circulation paths are located in the interior of the facility. The revision affects a limited number of buildings. The proposed changes at section 206.3 will explicitly require all accessible routes to coincide with or be located in the same general area as general circulation paths. Designing newly constructed interior accessible routes to coincide with or to be located in the same area as general circulation paths will not typically present a difficult design challenge and is expected to impose limited design constraints. The revision will have no impact on exterior accessible routes. The 1991 Standards and proposed standards also require accessible routes to be located in the interior of the facility, where general circulation paths are located in the interior of the facility. The revision affects a limited number of buildings.

Location of Accessible Routes to Stages. The 1991 Standards at section 4.33.5 require an accessible route to connect the accessible seating and the performing area. Proposed section 206.2.6 will require the accessible route to directly connect the seating area and the accessible seating, stage, and all areas of the stage, where a circulation path directly connects the seating area and the stage. The 1991 Standards require and the proposed changes also will require an accessible route to connect the stage and ancillary areas used by performers such as dressing rooms. The proposed standards do not

require an additional accessible route to be provided to the stage. Rather, the changes specify where the accessible route to the stage, which is required by the 1991 Standards, must be located.

207 Accessible Means of Egress

General. The 1991 Standards at sections 4.1.3(9); 4.1.6(1)(g); and 4.3.10 establish scoping and technical requirements for accessible means of egress. The proposed changes at section 207.1, Exception 1 reference the International Building Code for scoping and technical requirements for accessible means of egress. Relevant proposed sections include 216.4.

The 1991 Standards require the same number of accessible means of egress to be provided as the number of exits required by applicable building and fire codes. The International Building Code (IBC) requires at least one accessible means of egress and at least two accessible means of egress where more than one means of egress is required by other sections of the code. The proposed changes are expected to have minimal impact since the model fire and life safety codes, which are adopted by all the States, contain equivalent requirements with respect to the number of accessible means of egress.

The 1991 Standards require areas of rescue assistance or horizontal exits in facilities with levels above or below the level of exit discharge level. Areas of rescue assistance are spaces that have direct access to an exit, stair, or enclosure where individuals who are unable to use stairs can go to call for assistance and wait for evacuation. The proposed standards will now incorporate the requirements established by the IBC. The IBC requires an evacuation elevator designed with standby power and other safety features that can be used for emergency evacuation of individuals with disabilities in facilities with four or more stories above or below the exit discharge level, and allows exit stairways and evacuation elevators to be used as an accessible means of egress in conjunction with areas of refuge or horizontal exits. The proposed change is expected to have minimal impact since the model fire and life safety codes, adopted by most States, already contain parallel requirements with respect to evacuation elevators.

The 1991 Standards exempt facilities equipped with a supervised automatic sprinkler system from providing areas of rescue assistance, and also exempt alterations to existing facilities from providing an accessible means of egress. The IBC exempts buildings equipped with a supervised automatic sprinkler system from certain technical requirements for areas of refuge, and also exempts alterations to existing facilities from providing an accessible means of egress.

The proposed standards will require signs that provide direction to or information about functional spaces to meet certain technical requirements. The proposed standard at section 216.4 addresses exit signs. This section requires exit signs at doors to be raised with Braille characters, and also requires directional exit signs and signs at areas of refuge to have appropriate visual characteristics. This section is consistent with the requirements of the IBC. Signs used for means of egress are covered by this scoping requirement. The proposed requirements specifically identify signs used for means of egress and require the signs to meet certain technical requirements.

Standby Power for Platform Lifts. The proposed regulations at section 207.2 will require standby power to be provided for platform lifts that are permitted to serve as part of an accessible means of egress by the IBC. The IBC permits platform lifts to serve as part of an accessible means of egress in a limited number of places where platform lifts are allowed in new construction. The 1991 Standards and the proposed regulations similarly limit the places where platform lifts are allowed in new construction. ADAAG 4.1.3(5) Exception 4(a) through (d); sections 206.7.1 through 206.7.10 of the proposed regulations.

Commenters urged the Department to reconsider provisions that would require standby power to be provided for platform lifts. Concerns were raised that ensuring standby power is too burdensome. The Department views this issue as a fundamental life safety issue. Lift users face the prospect of being trapped on the lift in the event of a power failure if standby power is not provided. The lack of standby power could be life-threatening in situations where the power failure is associated with a fire or other emergency. The use of a platform lift is generally only one of the options available to covered entities. Covered entities that are concerned about the costs associated with maintaining standby power for a lift may wish to explore design options that would permit the use of a ramp.

208 and 502 Parking Spaces

General. Where parking spaces are provided, the proposed standards at sections 4.1.2(5)(a) and (7) and 7(a), and the proposed changes at section 208.1 and Exception require a specified number of the parking spaces to be accessible. The proposed changes add a new exception that exempts parking spaces used exclusively for buses, trucks, delivery vehicles, law enforcement vehicles, or for purposes of vehicular impound from the scoping requirement for parking spaces. If a lot containing parking spaces for these vehicles is used by the public, the lot is required to have an accessible passenger loading zone.

The proposed standards require accessible parking spaces to be identified by signs that display the International Symbol of Accessibility. At section 216.5 and Exceptions 1 and 2 new changes will add two new exceptions that exempt accessible parking spaces from the signage requirement. The first exception exempts sites that have four or fewer parking spaces from the signage requirement. The second exception exempts residential facilities where parking spaces are assigned to specific dwelling units from the signage requirement.

Commenters stated that the first exception, by allowing a parking lot with four or fewer spaces not to post a sign at its one accessible space, is problematic because it could allow all drivers to park in accessible parking spaces. The Department believes that this exception provides necessary relief for small business entities that may otherwise face the prospect of having between twenty-five percent (25%) and one hundred percent (100%) of their limited parking area unavailable to their customers because it is reserved for the exclusive use of persons with accessible tags or parking placards. The proposed standards still require these businesses to ensure that at least one of their available spaces is designed to be accessible.

A commenter stated that accessible parking spaces must be clearly marked. The Department notes that section 502.6, Identification, provides that parking spaces must be identified by signs that include the International Symbol of Accessibility. Additional signs are required to identify van accessible spaces. Also, section 502.3.3, Marking, requires that access aisles are to be marked so as to discourage parking in them.

Access Aisle. The advisory note accompanying section 502.3 provides that it is preferable that the accessible route connecting parking spaces to accessible entrances not pass behind parked vehicles.

Commenters questioned why this advisory note would permit the placement of individuals with disabilities in the path of moving

vehicles. The Department believes that the proposed standards appropriately recognize that not all parking facilities provide separate pedestrian routes. Section 502.3 provides the flexibility necessary to permit designers and others to determine the most appropriate location of the access route in connection to the accessible entrances. If all pedestrians using the parking facility are expected to share the vehicular lanes, then the ADA permits covered entities to use the vehicular lanes as part of the accessible route. The advisory note, however, calls attention to the fact that this practice, while permitted, is not ideal. Accessible parking spaces must be located on the shortest accessible route of travel to the facility's entrance. Accessible parking spaces and the required accessible route should be located where individuals with disabilities do not have to cross vehicular lanes or pass behind parked vehicles to have access to the entrance. If it is necessary to cross a vehicular lane because, for example, local fire engine access requirements prohibit parking immediately adjacent to a building, then a marked crossing should be used as part of the accessible route to the entrance.

Van Accessible Parking Spaces. The 1991 standards at sections 4.1.2(5)(b), 4.6.3; 4.6.4; and 4.6.5 require one in every eight accessible parking spaces to be van accessible. Proposed changes will require one in every six accessible parking spaces to be van accessible.

A commenter asked whether automobiles other than vans may use van accessible parking spaces. The ADA regulations do not prohibit automobiles other than vans from using van accessible parking spaces. The Department does not distinguish between automobiles that are actual ''vans'' versus other vehicles such as trucks, station wagons, SUVs, or other automobiles because many vehicles other than vans may be used by individuals with disabilities to transport mobility devices.

Commenters' opinions were divided on this proposal. Facility operators and others asked for a reduction in the number of required accessible parking spaces, especially the number of van accessible parking spaces because they claimed these spaces often are not used. Individuals with disabilities, however, requested an increase in the scoping requirements for these parking spaces.

The Department is aware that a strong difference of opinion exists between those who use such spaces and those who must provide or maintain them. Therefore, the Department is not proposing to increase the total number of accessible spaces. The only change that is being proposed is to increase the proportion of spaces that must be accessible to vans and other vehicles equipped to transport mobility devices.

Direct Access Entrances from Parking Structures. Where levels in a parking garage have direct connections for pedestrians to another facility, the 1991 Standards, 4.1.3(8)(b)(i), require at least one of the direct connections to be accessible. The proposed changes at section 206.4.2 require all of the direct connections to be accessible.

209 and 503 Passenger Loading Zones and Bus Stops

Passenger Loading Zones at Medical Care and Long-term Care Facilities. Sections 6.1 and 6.2 of the 1991 Standards and proposed section 209.3 require medical care and long-term care facilities, where the period of stay exceeds 24 hours, to provide at least one passenger loading zone at an accessible entrance. The 1991 Standards also require a canopy or roof overhang at the passenger loading zone. The proposed standards will not require a canopy or roof overhang.

Commenters urged the Department to reinstate the existing requirement for a canopy or roof overhang at passenger loading zones at medical care and long-term care facilities. While the Department recognizes that a canopy or roof overhang may afford useful protection from inclement weather conditions to everyone using a facility, it is not clear that the absence of such protection would impede access by individuals with disabilities. Therefore, the Department declines to reinstate that requirement.

Passenger Loading Zones. Where passenger loading zones are provided, the 1991 Standards, at sections 4.1.2(5) and 4.6.6, require at least one passenger loading zone to be accessible. The proposed changes at sections 209.2.1, 503.2, 503.3, 503.3.1, 503.3.2, 503.3.3, and 503.4 Exception, will require facilities such as airport passenger terminals that have long, continuous passenger loading zones to provide one accessible passenger loading zone in every continuous 100 linear feet of loading zone space. The 1991 Standards and the proposed standards include technical requirements for the vehicle pull-up space (96 inches wide minimum and 20 feet long minimum). Accessible passenger loading zones must have an access aisle that is 60 inches wide minimum and extends the full length of the vehicle pull-up space. The 1991 Standards provide that the access aisle may be on the same level as the vehicle pull-up space, or on the sidewalk with a curb ramp. The proposed changes will require the access aisle to be on the same level as the vehicle pull-up space and to be marked so as to discourage parking in the access aisle.

Commenters expressed concern that certain covered entities, particularly airports, cannot accommodate the proposed requirements to provide passenger loading zones, and urged a revision that would require one passenger loading zone located in reasonable proximity to each building entrance served by the curb.

Commenters raised a variety of issues about the requirements at section 503 stating that the requirements for an access aisle, width, length, and marking of passenger loading zones are not clear and do not fully meet the needs of individuals with disabilities, and stated that these requirements may run afoul of state or local requirements, or may not be needed because many passenger loading zones are typically staffed by doormen or valet parkers. The wide range of opinions expressed in these comments indicates that this provision is controversial. However, none of these comments provides sufficient data to enable the Department to determine that the requirement is not appropriate.

Valet Parking and Mechanical Access Parking Garages. The 1991 Standards, sections 4.1.2(5)(a) and (e), and the proposed changes, sections 208.2, 209.4, and 209.5 require parking facilities that provide valet parking services to have an accessible passenger loading zone. The proposed standards will extend this requirement to mechanical access parking garages. The 1991 Standards contain an exception that exempts valet parking facilities from providing accessible parking spaces. The proposed standards also will eliminate this exception. The reason for not retaining the provision is that valet parking is a service, not a facility type.

Commenters questioned why the exception for valet parking facilities from providing accessible parking spaces is being eliminated. The provision is being eliminated because valet parkers may not have the skills necessary to drive a vehicle that is equipped to be accessible, including use of hand controls, or when a seat is not present to accommodate a driver using a wheelchair. In that case, permitting the individual with a disability to self-park may be a required reasonable modification of policy for a covered entity.

210 and 504 Stairways

The 1991 Standards provide that stairs are required to be accessible only when they provide access to floor levels

not otherwise connected by an accessible route (*e.g.*, an elevator, lift, or ramp). The proposed standards at sections 210.1 and 504.2 will require all newly constructed stairs that are part of a means of egress to comply with the requirements for accessible stairs, which cover treads, risers, and handrails. In existing facilities, where floor levels are connected by an accessible route, only the handrail requirement will apply.

Commenters were divided in their response to this provision. The Department believes that it strikes an appropriate balance by focusing the expanded requirements on new construction.

211 and 602 Drinking Fountains

Sections 4.1.3(10)(a) and 4.1.3(b), 4.15.2, 4.15.5(1) and 4.15.5(2) of the 1991 Standards, and the changes proposed at sections 211.1, 211.2 Exception; 211.3 Exception, 602.2 Exception, 602.4, and 602.7 require drinking fountains to be provided for wheelchair users and for people who stand. The 1991 Standards require wall and post-mounted cantilevered drinking fountains mounted at a height for wheelchair users to provide clear floor space for a forward approach with knee and toe clearance, and free standing or built-in drinking fountains to provide clear floor space for a parallel approach. The proposed changes require drinking fountains mounted at a height for wheelchair users to provide clear floor space for a forward approach with knee and toe clearance, and include an exception for a parallel approach for drinking fountains installed at a height to accommodate very small children. The changes also include a technical requirement for drinking fountains for standing persons.

One commenter recommended that the mounting height of drinking fountains should take into consideration the increased use of three-wheeled electric scooters and the increasing size of wheelchairs. The Department is aware that the use of three- and four-wheeled electric scooters may be increasing and that wheelchairs may be larger than in the past; however, no reliable data is yet available indicating specific dimensions that may be needed to provide access to individuals using these devices. Therefore, at the present time, the Department intends to retain the proposed requirements.

212 and 606 Kitchens, Kitchenettes, Lavatories, and Sinks

The 1991 Standards at sections 4.1.1; 4.24.1; 4.24.3; 4.24.5; and 9.2.2(7) contain technical requirements for sinks, but only have specific scoping requirements for sinks in transient lodging. Proposed sections 212.3 will require at least 5 percent of sinks in each accessible space to comply with the technical requirements for sinks. The technical requirements address clear floor space, height, faucets, and exposed pipes and surfaces. The 1991 Standards and the proposed changes require the clear floor space at sinks to be positioned for a forward approach, and knee and toe clearance to be provided under the sink. The 1991 Standards allow the clear floor space at kitchen sinks and wet bars in hotel guest rooms with mobility features to be positioned for either a forward approach with knee and toe clearance, or for a parallel approach. The proposed changes include a broader exception that permits the clear floor space to be positioned for a parallel approach at kitchen sinks in any space where a cook top or conventional range is not provided, and at a wet bar.

A commenter stated that it is unclear what the difference is between a sink and a lavatory, and that this is complicated by requirements that apply to sinks (5 percent accessible) and lavatories (at least 1 accessible). The term ''lavatory'' generally refers to the specific type of plumbing fixture required for hand washing in toilet and bathing facilities. The more generic term ''sink'' applies to all other types of sinks located in covered facilities.

A commenter recommended that the mounting height of sinks and lavatories should take into consideration the increased use of three-wheeled electric scooters and some larger wheelchairs. The Department is aware that the use of three-wheeled electric scooters and larger wheelchairs may be increasing; however, although no reliable data is yet available, the Access Board is working to obtain data that may be used to develop design guidelines that provide access to individuals using these mobility devices.

213, 603, 604, and 608 Toilet and Bathing Facilities, Rooms, and Compartments

General. Where toilet facilities and bathing facilities are provided, they must comply with section 213.

A commenter recommended that all accessible toilet facilities, toilet rooms, and compartments should be required to have signage indicating that such spaces are restricted solely for the use of individuals with disabilities. The Department believes that it is neither necessary nor appropriate to restrict the use of accessible toilet facilities. Like many other facilities designed to be accessible, accessible toilet facilities can provide a necessary level of usability for a wide range of individuals with and without disabilities.

Ambulatory Accessible Toilet Compartments. The proposed changes at sections 213.3.1 and 604.8.2 will require multi-user men's toilet rooms where the total of toilet compartments and urinals is six or more to contain at least one ambulatory accessible compartment. The 1991 Standards count only toilet compartments for this purpose. The proposed standards will establish parity with multi-user women's toilet rooms.

Urinals. Men's toilet rooms with only one urinal will no longer be required to provide an accessible urinal. Such toilet rooms will still be required to provide an accessible toilet compartment.

Commenters urged that the exception be eliminated. This change will provide flexibility to many small businesses. This provision does not alter the requirement that all common use restrooms must be accessible. Therefore, the Department declines to eliminate the exception.

Multiple Single-user Toilet Rooms. Where multiple single-user toilet rooms are clustered in a single location, fifty percent (50%), rather than the currently required one hundred percent (100%), will be required to be accessible by proposed section 213.2. Accessible single-user toilet rooms will have to be identified by the international symbol of accessibility.

Hospital Patient Toilet Rooms. An exception has been added in section 223.1 that provides that toilet rooms that are part of critical or intensive care patient sleeping rooms will no longer be required to provide mobility features.

Water Closet Location and Rear Grab Bar. Sections 604.2 and 604.5.2, Exception 1 of the proposed changes will allow greater flexibility for the placement of the centerline of water closets, and will permit a shorter grab bar where there is not enough space due to special circumstances (*e.g.*, because a lavatory is located next to the water closet in dwelling units and the wall behind the lavatory is recessed so that the lavatory does not overlap the clear floor space at the water closet). The 1991 Standards contain no exception for grab bar length, and require the centerline to be exactly 18 inches from the side wall, while the proposed requirement will allow the centerline to be between 16 and 18 inches from the wall.

Commenters recommended that the centerline location of water closets should be 18 inches plus or minus 1 inch because people are becoming larger and the toilet paper dispensers are

becoming larger and protrude into the 18 inch space. Other commenters suggested that the proposed requirement will increase the overall size of toilet rooms unnecessarily and recommended smaller dimensions.

The Department is aware that this issue has sparked debate of a highly speculative nature. The Department is not aware of clear evidence that the dimensional change adopted by the Access Board and the model code organizations is incorrect or unworkable. Therefore, the Department will retain the requirement.

Water Closet Clearance. Proposed section 604.3 represents a change where a lavatory is installed adjacent to the water closet. The 1991 Standards allow lavatories to be placed 18 inches minimum from the water closet centerline, which precludes side transfers. To allow greater transfer options, the proposed standards prohibit lavatories from overlapping the clear floor space at water closets, except in dwelling units.

Commenters urged the Department not to adopt section 604.3 claiming that it will require single-user toilet rooms to be two feet wider than the requirements now provide, and this additional requirement will be difficult to meet.

The requirements at section 604.3.2 specify how required clearance around the water closet can overlap with specific elements and spaces. An exception, that applies only to residential dwelling units, permits a lavatory to be located no closer than 18 inches from the centerline of the water closet. The requirements at section 604.3.2 increase accessibility for individuals with disabilities.

Toilet Room Doors. Section 603.2.3 of the proposed rule permits the doors of single user toilet or bathing rooms with in-swinging doors to swing into the required turning space, but not into the clear floor space required at any fixture. Section 603.2.3 Exception 2 permits the door to swing into the clear floor space of an accessible fixture if a clear floor space that measures 30 inches by 48 inches is available outside the door swing in single-user toilet rooms.

Concerns were raised that permitting doors of single-user toilet or bathing rooms with in-swinging doors to swing into the clearance around any fixture will result in inaccessibility to individuals using larger wheelchairs and scooters. The Department believes the provision is sufficient to meet the needs of individuals using larger scooters and wheelchairs.

The Department prepared a series of figures illustrating comparisons of the minimum size single-user toilet rooms. These figures show typical examples that meet the minimum requirements of the proposed rule.

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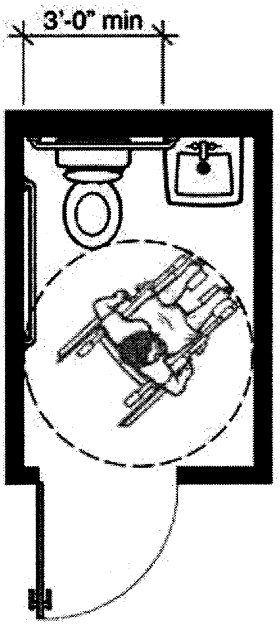
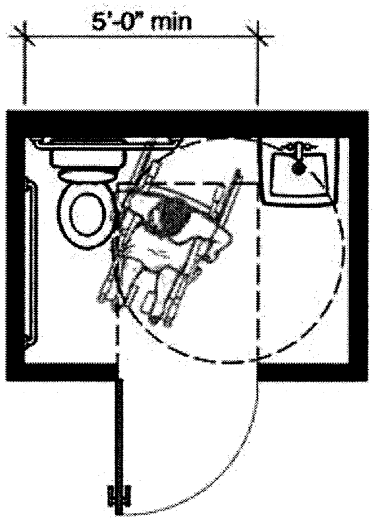
Comparison of Minimum Size Single-User Toilet Room Layouts

With Fixtures Side-by-Side



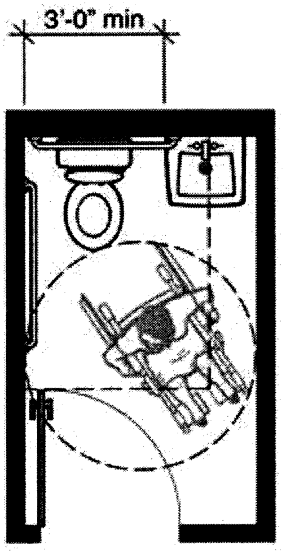
Plan-1A: 1991 Standards Minimum with Out-swinging Door
5'-0" X 7'-3" • 36.25 Square Fee

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 1991 Standards. The size of this space is determined by the minimum width required for the water closet and lavatory between the side walls, the minimum wheelchair turning space, and the space required for the out-swinging door. A lavatory with knee space can overlap the clear floor space required for the water closet provided that at least 36 inches of clearance is maintained between the side wall next to the water closet and the lavatory, see, 1991 Standards 4.17.3 and Fig. 28. A wheelchair turning space meeting section 4.2.3 of the 1991 Standards must be provided. The size of this room requires that the entry door swing out. The room would be larger if the door was in-swinging.



Plan-1B: 2004 ADAAG Minimum with Out-swinging Door
7'-0" X 5'-0" • 35.00 Square Feet

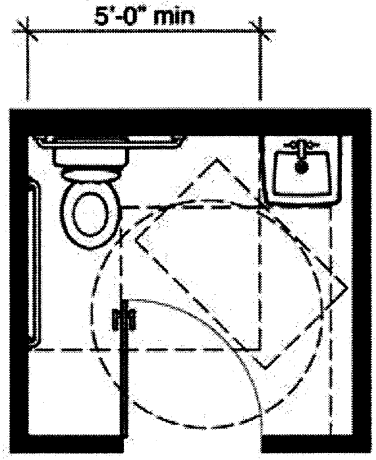
This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 2004 ADAAG. Features include: five foot minimum width between the side wall of the water closet and the lavatory; 60 inch minimum circular wheelchair turning space; and 36 inch by 48 inch clear maneuvering space for the out-swinging entry door. The 2004 ADAAG requires a floor clearance at a water closet that is a minimum of 60 inches wide by 56 inches deep regardless of approach, section 604.3.1. Except in residential dwelling units, no other plumbing fixtures can be located in this clear space, section 604.3.2. The 2004 ADAAG, at section 304.3, allows the turning space to extend into toe and knee space provided beneath fixtures and other elements, section 304.3. Required maneuvering space for the entry door (inside the room) must be clear of all fixtures. If the door had both a closer and latch then additional space would be required to the latch side, section 404.2.4.1 and Figure 404.2.1 (c). This layout is three point five percent (3.5%) smaller than the accompanying Plan-1A: 1991 Standards Minimum with Out-swinging



Plan-2A: 1991 Standards Minimum with In-swinging Door
5'-0" X 8'-6" • 42.50 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 1991 Standards. Depending on the width of the hallway and other circulation issues, it can be preferable to swing the entry door into the toilet room. Businesses and public entities typically prefer to have an in-swinging door. The in-swinging door increases overall room size because it cannot swing over the required clear floor space at any accessible fixture, 1991 Standards 4.22.2. This increases the room depth from Plan-1A. The door is permitted to swing over the required turning space shown as a 60 inch circle.

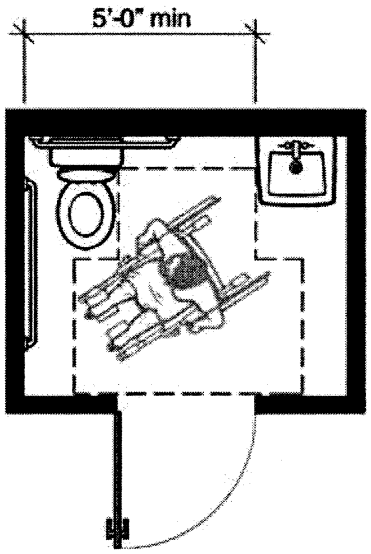
Door example.



Plan-2B: 2004 ADAAG Minimum with In-swinging Door
7'-0" X 6'-6" • 45.50 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 2004 ADAAG when the entry door swings into the room. In the proposed standards an exception allows the entry door to swing over the clear floor spaces and clearances required at the fixtures if a clear floor space complying with section 305.3 (30 inches by 48 inches) is provided outside the arc of the door swing, section 603.3.3 exception 2. The required maneuvering space for the door, section 404.2.4.1 and figure 404.2.4.1(a), also is a factor in room size. This clear space cannot be obstructed by the plumbing fixtures. Note that this layout provides more space for turning when the door is closed than Plan-1B.

This layout is seven percent (7%) larger than the accompanying Plan-2A: 1991 Standards Minimum with in-swinging Door example.

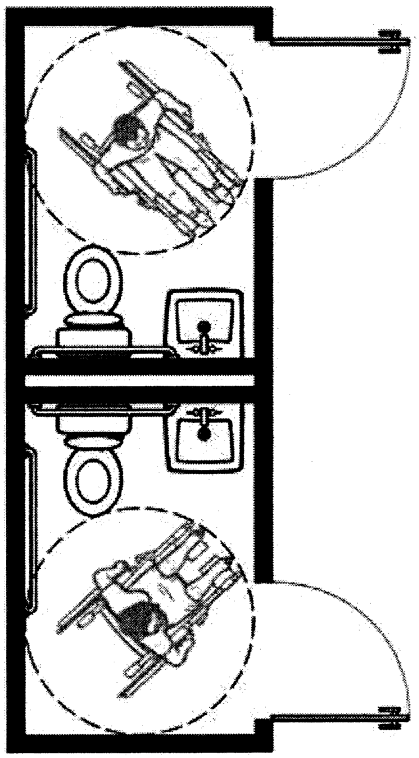


Plan-3: Meets Both 1991 Standards 2004 ADAAG
7'-0" X 5'-9" • 40.25 Square Feet

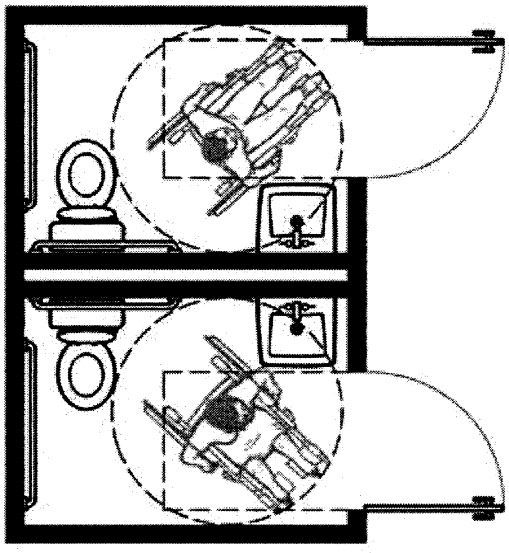
This plan shows an example of a single-user toilet room that meets the minimum requirements of both the 1991 Standards and 2004 ADAAG. A T-shaped turning space has been used, 1991 Standards Figure 3(a) and 2004 ADAAG Figure 304.3.2, to maintain a compact room size. An out-swinging door also minimizes the overall layout depth and cannot swing over the required clear floor space or clearance at any accessible plumbing fixture.

This layout is eleven percent (11%) larger than the Plan-1A: 1991 Standards Minimum with out-swinging Door example shown at the beginning of these plan comparisons.

Comparison of Minimum Size Single-user Toilet Room "Pairs" With Fixtures Side-by-Side



Plan-1A Pair: 1991 Standards Minimum with Out-swinging Doors
Two 5'-0" X 7'-3" rooms
72.50 Square Feet Total



Plan-1B Pair: 2004 ADAAG Minimum with Out-swinging Doors
Two 7'-0" X 5'-0" Rooms
70.00 Square Feet Total

Above are a men's/women's room configuration comparison for Plans 1A and 1B.

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Shower Spray Controls. In accessible bathtubs and shower compartments, sections 607.6 and 608.6 of the proposed standards will require shower spray controls to have an on/off control and to deliver water that is 120 °F (49 °C) maximum. Currently, neither feature is required by the 1991 Standards, but may be required by plumbing codes. Meeting the latter specification will require either controlling the maximum temperature at each shower spray unit or at the hot water supply.

Shower Compartments. The 1991 Standards at sections 4.21.2; 9.1.2; 4.21.5; and 4.21.7, and the proposed standards at sections 608.1; 608.2.1; 608.2.3; 608.4; 608.5.3; and 608.7, Exception contain technical requirements for transfer-type and roll-in shower compartments. The proposed standards provide more flexibility than the 1991 Standards as follows:

- Transfer-type showers are 36 inches by 36 inches. The proposed standards specify that these dimensions are measured at the center point of opposing sides to accommodate molded compartments with rounded bottom edges.
- The 1991 Standards and the proposed standards permit a ½ inch maximum curb in transfer-type showers. The proposed standards add a new exception that permits a 2 inch maximum curb in transfer-type showers in alterations to existing facilities, where recessing the compartment to achieve a ½ inch curb will disturb the structural reinforcement of the floor slab.
- Roll-in showers are 30 inches minimum by 60 inches minimum. Alternate roll-in showers are 36 inches by 60 inches minimum, and have a 36 inch minimum opening on the long side of the compartment. The 1991 Standards require alternate roll-in showers in a portion of accessible hotel guest rooms, but provision of this shower type in other facilities is generally permitted as an equivalent facilitation. The 1991 Standards require a seat to be provided on the side with the opening; and require the controls to be located on the side adjacent to the seat. The proposed standards will permit alternate roll-in showers to be used in any facility; only require a seat in hotel guest rooms only; and allow location of controls on the back wall opposite the seat as an alternative.

A disability advocacy group and others raised concerns that adding a new exception that permits a 2 inch maximum curb in transfer-type showers in alterations to existing facilities, where recessing the compartment to achieve a ½ inch curb will disturb the structural reinforcement of the floor slab, will impair the ability of individuals with disabilities to use transfer-type showers.

The exception permitting an increased maximum curb in transfer-type showers is allowed only when structural barriers prevent full compliance, therefore the Department believes its use will be restricted to limited situations. The exception is intended to provide some flexibility to provide accessibility where the existing structure precludes full access.

Toilet and Bathing Rooms. Section 603, Toilet and Bathing Rooms, provides the technical requirements for toilet and bathing rooms.

Commenters recommended that section 603, Toilet and Bathing Rooms, should include requirements for unisex toilet and bathing rooms. These commenters suggested that unisex toilet and bathing rooms are most useful as companion care facilities.

Model plumbing and building codes require single-user (unisex or family) toilet facilities in certain occupancies, primarily assembly facilities, covered malls, and transportation facilities. These toilet rooms provide flexibility for persons needing privacy so that they can obtain assistance from family members or persons of the opposite sex. When these facilities are provided, both the 1991 Standards and proposed standards require that they be accessible. The Access Board did not scope unisex toilet facilities because plumbing codes generally determine the number and type of plumbing fixtures to be provided in a particular occupancy and often determine whether an occupancy must provide separate sex facilities in addition to single-user facilities. However, the Access Board did provide scoping at section 213.2.1 to coordinate with model plumbing and building code requirements which will permit a small toilet room with two water closets or one water closet and one urinal to be considered a single-user toilet room provided the room has a privacy latch. In this way, a person needing assistance from a person of the opposite sex can lock the door to use the facility while temporarily inconveniencing only one other user. These provisions strike a reasonable balance and pose a lesser impact on covered businesses and other occupancies required to provide fewer plumbing fixtures.

A commenter recommended that in shower compartments rectangular seats as provided in section 610.3.1 should not be permitted as a substitute for L-shaped seats as provided in 610.3.2.

The proposed standards do not indicate a preference for either rectangular or L-shaped seats in shower compartments.

214 and 611 Washing Machines and Clothes Dryers

The proposed standard, sections 214.2–3, 611.3, and 309.3 will specify the number of machines of each type required to be accessible (1–2 depending upon the total number provided). An exception will permit the maximum height for the tops of these machines to be 2 inches higher than the general requirement for high reach maximums over an obstruction.

A commenter objected to the scoping provision for accessible washing machines and clothes dryers stating that the probability that more than one accessible machine will be needed at the same time would appear to be low in the context of transient lodging.

The scoping in this provision is based on the relative size of the facility rather than the identity of the covered entity. The Department assumes that the size of the facility (and, therefore the number of accessible machines provided) will be determined by the covered entities' assessment of the demand for laundry facilities. The Department declines to assume that people with disabilities will have less use for accessible facilities in transient lodging than in other public accommodations.

216 and 703 Signs

The following types of signs, though they are not specifically subject to the 1991 Standards for raised character and Braille signs, will now be explicitly exempted by sections 216.1, Exceptions 1–3, 216.2, Exception, 216.3, 703.4.1, and 703.4.2, Exception. These types of signs include: seat and row designations in assembly areas; occupant names, building addresses; company names and logos; signs in parking facilities (except those identifying accessible parking spaces and means of egress); and exterior signs identifying permanent rooms and spaces that are not located at the door to the space they serve. This requirement also will clarify that the exception for temporary signs applies to signs used for seven days or less.

The proposed standards retain the option to provide one sign where both visual and tactile characters are provided or two signs, one with visual, and one with tactile characters.

217 and 704 Telephones

Drive-up Public Telephones. Where public telephones are provided, the 1991 Standards, at section 4.1.3(17)(a), and proposed section 217.2, Exception, require a certain number of telephones to be wheelchair accessible. The proposed requirement adds a new exception that exempts drive-up public telephones.

Public Telephone Volume Controls. Current sections 4.1.3(17), 4.30.7(2), and 4.31.5 require all wheelchair accessible public telephones and twenty-five percent (25%) of all other public telephones to have volume controls, and to be identified by signs. Proposed changes at sections 217.3 and 704.3 will require all public telephones to have volume controls, and will delete the requirement for identifying signs. The 1991 Standards require volume control telephones to provide a minimum gain of 12 dB and a maximum gain of 18 dB. A proposed change will require a gain up to 20 dB minimum and an automatic reset.

The proposed change is expected to have minimum impact since the proposed scoping and technical requirements are consistent with guidelines and standards issued by the Access Board under section 255 of the Telecommunications Act of 1998 (36 CFR 1193.43(e), and Section 508 of the Rehabilitation Act of 1973, as amended, (36 CFR 1194.23(f)) which require all new telephones to have volume controls.

TTY. Section 4.1.3(17) of the 1991 Standards require a public TTY if there are four or more public pay telephones at a site and at least one is in an interior location. Proposed changes, 217.4.2, will require that a building or facility provide a public TTY on each floor that has four or more public telephones, and in each telephone bank that has four or more telephones as proposed by sections 217.4.1, 217.4.3, 217.4.3.1, 217.4.3.2, 217.4.4, 217.4.5, 217.4.6, 217.4.7, and 217.4.8.

Another commenter stated that requiring installation of telephones within the proposed reach range requirements would adversely impact the public and telephone owners and operators. According to the commenter, people without disabilities will not use telephones that are installed within the reach range requirements because they may be inconvenienced by bending to operate these telephones, and, therefore, owners and operators will lose revenues because of the reduction in use.

This comment misunderstands the scoping requirements for wheelchair accessible telephones. Proposed section 217.2 provides that where one or more single units are provided, only one unit per floor, level, or exterior site is required to be wheelchair accessible. However, where banks of telephones are provided, only one telephone in each bank is required to be wheelchair accessible. The Department believes these scoping requirements for wheelchair accessible telephones are reasonable and will not result in

burdensome obligations or lost revenue for owners and operators.

218 and 810 Transportation Facilities

Detectable Warnings. Detectable warnings are a distinctively textured surface of truncated domes that is identifiable by cane and underfoot. The 1991 Standards at sections 4.1.3(15); 4.7.7; 4.29.2; 4.29.5; 4.29.6; and 10.3.1(8) require detectable warnings at curb ramps, hazardous vehicular areas, reflecting pools, and transit platform edges. The proposed revisions at sections 218.2; 218.3; 810.5; 810.5.2; 705.1; 705.1.1; 705.1.2; 705.1.3; and 705.2 only require detectable warnings at transit platform edges. The proposal will change the technical specifications for the diameter and spacing of the truncated domes. The proposal also deletes the requirement for the material used to provide contrast to be an integral part of the truncated domes and for the truncated domes to contrast in resiliency or sound-on-cane contact from adjoining walking surfaces at interior locations.

The proposed revisions to the 1991 Standards apply to detectable warnings on developed sites. They do not apply to the public-right-of-way. Scoping for detectable warnings at all locations other than transit platform edges has been eliminated from this rule. However, because detectable warnings have been shown to significantly benefit individuals with disabilities at transit platform edges, the proposed standards will provide scoping and technical requirements for detectable warnings at transit platform edges.

219 and 706 Assistive Listening Systems

Signs. Section 216.10 requires each covered assembly area to provide signs at each auditorium to inform patrons that assistive listening systems are available. However, an exception to this requirement permits assembly areas that have ticket offices or ticket windows to display the required signs at the ticket window.

A commenter recommended eliminating the exception at 216.10 because, for example, people who buy tickets through the mail, by subscription, or on-line may not need to stop at a ticket office or window upon arrival at the assembly area. The Department believes that an individual's decision to purchase tickets before arriving at a performance does not limit the discretion of the assembly operator to use the ticket window to provide other services to its patrons. The Department is retaining the exception at 216.10 to permit the venue operator some flexibility in determining how to meet the needs of its patrons.

Audible Communication. The 1991 Standards at section 4.1.3(19)(b) require assembly areas where audible communication is integral to the use of the space to provide an assistive listening system if they have an audio amplification system or an occupant load of 50 or more people and have fixed seating. The proposed standards at section 219 will require assistive listening systems in spaces where communication is integral to the space and audio amplification is provided, and in courtrooms.

The 1991 Standards require receivers to be provided for at least 4 percent of the total number of seats minimum. The proposed standards at section 219.3, will revise the percentage of receivers required according to a table that correlates the required number of receivers to the seating capacity of the facility. Small facilities will continue to provide receivers for 4 percent of the seats. The required percentage declines as the size of the facility increases. The changes proposed also will require at least twenty-five (25%), but no fewer than two, of the receivers to be hearing-aid compatible. Assembly areas served by an induction loop assistive listening system will not have to provide hearing-aid compatible receivers.

Commenters were divided in their opinion of this change. The Department believes that the reduction in the required number of assistive listening systems for larger assembly areas will meet the needs of individuals with disabilities. The new requirement to provide hearing-aid compatible receivers should make assistive listening systems more usable for people who have been underserved until now.

Concerns were raised that the requirement to provide assistive listening systems may have an adverse impact on restaurants. This comment misunderstands the scope of coverage. The proposed standards define the term ''assembly area'' to include facilities used for entertainment, educational, or civic gatherings. Restaurants would fall within this category only if they are presenting programs to educate or entertain diners, and if the restaurant provides an audio amplification system.

Same Management or Building. The proposed standards add a new exception that allows multiple assembly areas that are in the same building and under the same management, such as theaters in a multiplex cinema and lecture halls in a college building, to calculate the number of receivers required based on the total number of seats in all the assembly areas, instead of each assembly area separately, where the receivers are compatible with the assistive listening systems used in each of the assembly areas.

Mono Jacks, Sound Pressure, etc. Section 4.33.7 of the 1991 Standards does not contain specific technical requirements for assistive listening systems. The proposed changes at sections 706.1, 706.2, 706.3, 706.4, 706.5, and 706.6 will require assistive listening systems to have standard mono jacks; and will require hearing-aid compatible receivers to have neck loops to interface with telecoils in hearing aids. The proposed changes also specify sound level pressure, signal-to-noise ratio, and peak clipping level. Currently available assistive listening systems meet the proposed technical requirements.

220 and 707 Automatic Teller Machines and Fare Machines

Proposed changes at section 707 will add specific technical requirements for speech output, privacy, tactilely discernable input controls, display screens, and Braille instructions to current general accessibility requirements. Exceptions will be made that relate to the type of network or information provided (for example, audible tones will not be required for visible output where privacy is desirable). The 1991 Standards require these machines to be accessible to and independently usable by people with visual impairments, but do not contain any technical specifications.

The Department received comments on this provision from the banking industry that focused primarily on the effects on operating policies and existing equipment. Those issues have been addressed in the preamble to the NPRM.

221 Assembly Areas

Aisle Stairs and Ramps. The 1991 Standards sections 4.1.3 and 4.1.3(4) require that interior, and exterior, stairs connecting levels that are not connected by an elevator, ramp, or other accessible means of vertical access shall comply with the technical requirements for stairs found in section 4.9. The proposed section 210.1 requires that stairs that are part of a means of egress shall comply with the technical requirements for stairs in proposed section 504. The 1991 Standards currently do not contain any exceptions for aisle stairs in assembly areas. The proposed section 210.1, Exception 3, adds a new exception that exempts aisle stairs in assembly areas from the technical requirements for stairs found in proposed section 504, including the

handrail technical requirements found in proposed section 505.

The 1991 Standards at section 4.8.5 now exempt aisle ramps that are part of an accessible route, from providing handrails on the side adjacent to seating. The proposed regulations at section 405.1 exempt aisle ramps, adjacent to seating in assembly areas and not serving elements required to be on an accessible route, from complying with all the technical requirements for ramps proposed in section 405. Where aisle ramps in assembly areas serve elements required to be on an accessible route, the proposed regulation will require that the aisle ramps comply with the technical requirements for ramps in proposed section 405. The proposed standards will not require a handrail on an aisle ramp at adjacent seating because proposed sections 505.2 and 505.3 provide exceptions for aisle ramp handrails. Section 505.2 proposes that in assembly areas, a handrail may be provided at either side or within the aisle width when handrails are not provided on both sides of aisle ramps. Section 505.3 proposes that, in assembly areas, handrails need not be continuous in aisles serving seating.

Wheelchair Spaces/Companion Seats. The proposed standards at section 221 reduce the number of wheelchair spaces and companion seats required in assembly areas that seat more than 500 patrons. The 1991 Standards at 4.1.3 (19)(a) provide that assembly areas with more than 500 seats must provide six wheelchair spaces plus one additional wheelchair space for each additional 100 seats. Sections 221.2; 221.2.1.1; 221.2.1.2; and 221.2.1.3 of the proposed standards provide that assembly areas that have 501 to 5000 seats must provide six wheelchair spaces plus one additional wheelchair space for each additional 150 seats (or fraction thereof) between 501 and 5000. Assembly areas that have more than 5000 seats must provide 36 wheelchair spaces plus one additional wheelchair space for each 200 seats (or fraction thereof) over 5000. Both the 1991 Standards and the proposed standards require assembly areas to provide a companion seat adjacent to each wheelchair space.

The proposed changes clarify that the scoping requirements are to be applied separately to general seating areas, and to each luxury box, club box, and suites in stadiums and arenas. In performing arts facilities with tiered boxes, the scoping requirement is applied to the total number of seats in the tiered boxes, and the wheelchair spaces are required to be dispersed among at least twenty percent (20%) of the tiered boxes.

Commenters questioned why scoping requirements for assembly areas are being reduced. During the development of the 2004 ADAAG, industry providers, particularly those for larger stadium-style assembly areas, supplied data to the Access Board demonstrating the current scoping requirements for large assembly areas often exceed the demand. Based on the data provided to the Access Board, the Department now believes the reduced scoping requirements will adequately meet the needs of individuals with disabilities, while balancing concerns of the industry.

Commenters raised concerns that the proposed changes clarifying requirements for scoping of seating areas to each luxury box, club box, and suites in stadiums and arenas could result in no wheelchair and companion spaces available for individuals with disabilities. These comments appear to misunderstand the proposed requirements. The rule will require that each luxury box, club box, and suite must be accessible. In addition, the remaining seating areas must contain the number of wheelchair and companion seating locations specified in the rule. In performing arts facilities with tiered boxes, the scoping requirement is applied to the total number of seats in the tiered boxes, and the wheelchair spaces are required to be dispersed among at least twenty percent (20%) of the tiered boxes. For example, if a performing arts facility has 20 tiered boxes with 5 fixed seats in each box, at least 4 wheelchair spaces must be provided in the boxes, and they must be dispersed among at least 4 of the 20 boxes.

One commenter asked that scoping requirements for larger assembly areas be reduced even more than what was proposed. Although the commenter referenced data demonstrating that wheelchair spaces in larger facilities with seating capacity of 70,000 or more may not be used by individuals with disabilities, the data was not based on actual results, but was calculated at least in part based on probability assumptions.

A commenter recommended that section 221.4, Designated Aisle Seats, be changed to require that aisle seats be on an accessible route, and be integrated and dispersed throughout an assembly area. Aisle seats, by their nature, are located with the general seating, and integration occurs automatically. The issue of dispersing aisle seats or locating them on accessible routes is much more challenging. The Access Board specifically requested public comment on the question of whether aisle seats should be required to be located on accessible routes. After reviewing the comments, the Access Board concluded that this could not be done without making significant and costly changes in the design of most assembly areas. However, section 221.4 requires that access aisle seats be the aisle seats closest to accessible routes. The Department concurs in that conclusion. Regarding the dispersion of aisle seats, the Department notes that the location of the seats is dictated to a great extent by the fact that they must be located on an aisle and on or close to an accessible route. In small facilities, very few seats meet those criteria. Therefore, the Department declines to propose further changes.

Wheelchair Space Overlap in Assembly Areas. The 1991 Standards at sections 4.3.3 and the proposed changes at sections 402.1; 402.2; 403.5.1; 802.1.4; and 802.1.5 require walkways that are part of an accessible route to have a 36 inch minimum clear width. The changes proposed specifically prohibit accessible routes from overlapping wheelchair spaces. This change is consistent with the technical requirements for accessible routes, since the clear width of accessible routes cannot be obstructed by any object. The proposed standards also specifically prohibit wheelchair spaces from overlapping circulation paths. An advisory note clarifies that this prohibition applies only to the circulation path width required by applicable building codes and fire and life safety codes since the codes prohibit obstructions in the required width of assembly aisles.

The revision does not present any difficult design challenges and is expected to have minimal impact. Where a main circulation path is located in front of a row of seats that contains a wheelchair space and the circulation path is wider than required by applicable building codes and fire and life safety codes, the wheelchair space may overlap the ''extra'' circulation path width. Where a main circulation path is located behind a row of seats that contains a wheelchair space and the wheelchair space is entered from the rear, the aisle in front of the row may need to be wider in order not to block the required circulation path to the other seats in the row, or a mid-row opening may need to be provided to access the required circulation path to the other seats.

Line-of-Sight. Proposed section 221.2.3 frames the basic comparability requirement in terms of viewing angles providing that ''wheelchair spaces shall provide spectators with * * * viewing

angles that are substantially equivalent to, or better than, the * * * viewing angles available to all other spectators.'' This applies to all types of assembly areas, including stadium-style movie theaters, sports arenas, and concert halls.

Commenters stated that the qualitative viewing angle language contained in section 221.2.3 is not appropriate for an enforceable regulatory standard unless the terms of such language are defined. Other commenters requested definitions for viewing angles, an explanation for precisely how viewing angles are measured, and an explanation for precisely how to evaluate whether one viewing angle is better than another viewing angle. The proposed regulatory language is sufficient to provide a performance standard for designers, architects, and others necessary to provide viewing angles required by the proposed standard. The Department believes that as a general rule, the vast variety of sizes and configurations found in assembly areas requires it to establish a performance standard for designers to adapt to the specific circumstances of the venue that is being designed. The requirement is to design so that lines of sight for wheelchair spaces offer a choice of viewing angles well within the range of viewing angles offered to others. The Department has proposed, in section 36.406 of this NPRM, to provide more explicit requirements for stadium-style theaters.

Another commenter inquired as to what determines whether a choice of seating locations or viewing angles is better than that available to all other spectators. The answer to this question varies according to each assembly area that is being designed. That is why the regulation must provide performance standards applicable to all facilities. Nevertheless, the Department believes that for each specific facility that is designed, the owner, operator, and design professionals will be able to distinguish easily between seating locations and associated lines of sight from these seat locations that are desirable and those that are not.

Stadium-style Movie Theaters. The Department will implement provisions specific to line-of-sight issues in stadium-style movie theaters. The horizontal and vertical dispersion requirements set forth in proposed section 221.2.3.1 and 221.2.3.2 may be adopted in their entirety and will apply independently of any line-of-sight requirements of the 1991 Standards at 4.33.3. The proposed line-of-sight regulations recognize the importance of viewing angles to the movie going experience and are aimed at ensuring that movie patrons with disabilities are provided views of the movie screen comparable to other theater patrons. Some commenters supported regulatory language that would require stadium-style theaters to meet standards of accessibility equal to those of nonstadium-style theaters, with larger theaters being required to provide accessible seating locations and viewing angles equal to those offered to individuals without disabilities.

A commenter noted that stadium-style movie theaters, sports arenas, music venues, theaters, and concert halls each pose unique conditions that require separate and specific standards to accommodate patrons with disabilities, and recommended that the Department provide more specific requirements for sports arenas, music venues, theaters, and concert halls. The Department believes that these proposed standards have been drafted in a way that will provide sufficient flexibility to adapt them to the wide variety of assembly venues covered.

Vertical Access. Section 4.33.3 of the 1991 Standards requires wheelchair spaces to be located in more than one area where the seating capacity exceeds 300 and to provide a choice of admission prices. Under the 1991 Standards, sports facilities typically locate some wheelchair spaces on each accessible level of the facilities.

The proposed standards at sections 221.2.3.2 and 206.6 do not require wheelchair spaces to be dispersed based on admission prices because pricing is not always established at the design phase and may vary by event. The proposed standards will require wheelchair spaces to be vertically dispersed at varying distances from the screen, performance area, or playing field. The revised provisions also will require wheelchair spaces to be located in each balcony or mezzanine served by an accessible route. Sports facilities can meet the requirements by locating some wheelchair spaces on each accessible level of the facilities, which is consistent with the current requirements.

Companion Seats. The 1991 Standards at section 4.33.3 require at least one fixed companion seat to be provided next to each wheelchair space. Proposed changes at sections 221.3 and 802.3 will permit companion seats to be readily removable, but will not require the seats to be designed so they can also serve as wheelchair spaces when removed.

One commenter recommended that there should be a requirement at section 802.3 that when companion seats are fixed, each seat shall be identified by a sign or marker as a companion seat. The Department believes that it is not necessary to identify the companion seat with an accessibility symbol because its placement adjacent to the wheelchair location makes it easily identifiable.

Commenters urged the Department to ensure that companion seats are positioned in a manner that places the user at the same shoulder height as their companions using mobility devices. The Department recognizes that some facilities have created difficulty by locating either the wheelchair space or the companion seat on a different floor elevation (often a difference of one riser). The proposed standards at section 802.3.1 address this problem by requiring the wheelchair space and the companion seat to be on the same floor elevation. This should prevent any vertical discrepancies that are not the direct result of differences in the sizes and configurations of wheelchairs.

Designated Aisle Seats. Existing requirements at section 4.1.3(19)(a) require one percent (1%) of fixed seats in assembly areas to be designated aisle seats. Designated aisle seats must have either no armrests or folding or retractable armrests on the aisle side of the seat.

Proposed sections 221.4; 802.4; 802.4.1; and 802.4.2 base the number of required designated aisle seats on the number of aisle seats, instead of all the seats in a sports facility as the 1991 Standards require. At least five percent (5%) of the aisle seats are required to be designated aisle seats and to be located closest to accessible routes. This option will almost always result in fewer aisle seats being designated aisle seats compared to the 1991 Standards. Sports facilities typically locate designated aisle seats on, or as near to, accessible routes as permitted by the configuration of the facilities.

Dispersion of Wheelchair Spaces and Lines of Sight in Assembly Areas. The 1991 Standards at section 4.33.3 require wheelchair spaces to be an integral part of any fixed seating plan in assembly areas and to be dispersed, when the seating capacity exceeds 300. The 1991 Standards also require wheelchair spaces to provide individuals with disabilities lines of sight comparable to the sightlines available to other spectators in assembly areas. The Department interprets comparable sightlines as requiring wheelchair spaces in sports stadiums and arenas to provide lines of sight over standing spectators to the playing field, where spectators are expected to stand during events. The Department also interprets

comparable lines of sight as requiring wheelchair spaces in stadium-style movie theaters to provide viewing angles comparable to those provided to other spectators.

The proposed revisions at sections 221.2.2; 221.2.3; 221.2.3.1, Exceptions 1; 221.2.3.2, Exceptions 1 and 2; 802.2; 802.2.1; 802.2.1.1; 802.2.1.2; 802.2.2; 802.2.2.1; and 802.2.2.2 add specific technical requirements for providing sightlines over seated and standing spectators; and require wheelchair spaces to provide individuals with disabilities choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to other spectators. The proposed changes also clarify the dispersion requirements. Wheelchair spaces must be dispersed horizontally and vertically. The revisions include exceptions for assembly areas that have 300 or fewer seats, where the wheelchair spaces are located in the 2nd or 3rd quartile of the total row length and provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility. The revisions are expected to have minimal impact since they are consistent with the Department's interpretations of the 1991 Standards.

The 1991 Standards contain an exception that permits wheelchair spaces to be clustered in steeply sloped bleachers and balconies. The proposed changes will require wheelchair spaces to be located at the entry points to bleachers, and in each balcony or mezzanine that is on an accessible route.

Lawn Seating in Assembly Areas. The 1991 Standards, section 4.1.1(1), require all areas of newly constructed facilities to be accessible, but do not contain a specific scoping requirement for lawn seating in assembly areas. The proposed standards at section 221.5 specifically will require lawn seating areas and exterior overflow seating areas without fixed seats to connect to an accessible route. The accessible route does not have to extend through the lawn seating area.

A commenter recommended that in section 221.5, Lawn Seating, there should be a requirement for at least one level area for wheelchair seating on an accessible route. The Department believes that unless a lawn seating area has fixed or designated seating locations that would trigger scoping requirements for wheelchair locations, an assembly provider can satisfy its nondiscrimination obligations by ensuring that there is an accessible route to the area to enable people with disabilities who can take advantage of lawn seating to do so.

222 and 803 Dressing, Fitting, and Locker Rooms

Dressing rooms, fitting rooms, and locker rooms in sports or recreation facilities will be required to meet the accessibility requirements of proposed sections 222 and 803. Where rooms are provided in clusters, five percent (5%) but at least one room in each cluster will have to be accessible.

Proposed sections 225.2.1 and 811 will require lockers to meet accessibility requirements. Where lockers are provided in clusters, 5 percent but at least one locker in each cluster will have to comply. Under the 1991 Standards, only one locker of each type provided had be accessible.

Commenters stated that many retail establishments and clothing stores, in particular, are concerned with a changed provision on the placement of benches and other accessibility-related elements and features in customer dressing and fitting rooms that may require redesigns of entire changing areas or loss of sales or inventory space that will be redirected to the enlarged dressing and fitting rooms. Comments also expressed opposition to the accessibility requirements for locker rooms for similar reasons.

The Department reminds the commenters that the requirements in the standards are designed to apply to new construction and alterations. The Department believes that in these situations creative designers can mitigate the impact of the changes.

224 and 806 Transient Lodging Guest Rooms

General. The minimum number of guest rooms required to be accessible in transient lodging facilities is covered by section 224. Access is addressed for people with disabilities, including people with mobility impairments at section 224.2, and people who are deaf or hard of hearing at section 224.4.

The U.S. Chamber of Commerce and others representing the hotel industry provided comments opposing the current requirements for guest rooms accessible to individuals with mobility impairments stating that statistics provided by the industry demonstrate that all types of accessible guest rooms are unused. They further claimed that the proposed requirements are too burdensome to meet in new construction, and that the proposed requirements will result in a loss of hotel living space. By contrast, commenters representing people with disabilities urged the Department to increase the number of guest rooms required to be accessible.

The number of rooms accessible to people with mobility impairments and the number accessible to people with communication impairments in the proposed standards are consistent with the 1991 Standards and with IBC. The Department continues to receive complaints about the lack of accessible guest rooms throughout the country. Accessible guest rooms are used not only by individuals using mobility devices such as wheelchairs and scooters, but by individuals with a variety of physical impairments such as those using walkers, canes, and crutches.

Data provided by the Disability Statistics Center at the University of California, San Francisco that demonstrated the number of adults who use wheelchairs has been increasing at the rate of six percent per year from 1969 to 1999; and by 2010, it is projected that two percent of the adult population will use wheelchairs. In addition to people who use wheelchairs, three percent of adults used crutches, canes, walkers, and other mobility devices in 1999; and the number is projected to increase to four percent by 2010. Thus, by 2010, up to six percent of the population may need accessible guest rooms.

Some commenters have asked the Department to clarify and simplify the dispersion requirements set forth in section 224.5, in particular the scope of the term ''amenities.'' Section 224.5 requires that guest rooms with mobility features and guest rooms with communication features ''[s]hall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. When the minimum number of guest rooms required * * * is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds and amenities.'' This general dispersion requirement is intended to effectuate Congress' directive that a percentage of each class of hotel rooms is to be fully accessible to persons with disabilities. *See* H.R. Rep. No. 101–485 (II) at 391. Accordingly, the promise of the ADA in this instance is that persons with disabilities will have an equal opportunity to benefit from the various options available to hotel guests without disabilities, from single occupancy guest rooms with limited features (and accompanying limited price-tags) to luxury suites with lavish features and

choices. The inclusion of section 224.5 is not new to the requirements, as substantially similar language was contained in section 9.1.4 of the 1991 Standards.

Commenters have specifically asked the Department to clarify what is meant by various terms used in section 224.5 and its advisory: ''class,'' ''type,'' ''options,'' and ''amenities.'' The Department envisions that all of these terms are not to be considered terms of art, but will be used as in their normal course. For example, ''class'' is defined by Webster's Dictionary as ''a division by quality.'' ''Type'' is defined as ''a group of * * * things that share common traits or characteristics distinguishing them as an identifiable group or class.'' Accordingly, these terms are not intended to convey different concepts, but are used as synonyms. Section 224.5 and its advisory require dispersion in such a varied range of hotels and lodging facilities that the Department believes that the chosen terms are appropriate to convey what is intended. Dispersion required by this section is not ''one size fits all'' and it is imperative upon each covered entity to consider its individual circumstance as it applies this requirement.

Commenters have raised concern that the factors included in the advisory to section 224.5 have been expanded. The advisory provides: ''[f]actors to be considered in providing an equivalent range of options may include, but are not limited to, room size, bed size, cost, view, bathroom fixtures such as hot tubs and spas, smoking and nonsmoking, and the number of rooms provided.'' As previously discussed, the advisory materials provided by the Access Board are meant to be illustrative and do not set out specific requirements. In this particular instance, the advisory materials for section 224.5 set out some of the common types of amenities found at transient lodging facilities, and include common sense concepts as view, bathroom fixtures and smoking status. The intention of these factors is to indicate to the hotel industry the sorts of considerations that the Department, in its enforcement efforts since the enactment of the ADA, has considered as amenities that should be made available to persons with disabilities, just as they are made available to hotel guests without disabilities.

Commenters for the hotel industry have offered several recommendations for addressing dispersion. One option includes the flexibility to use an equivalent facilitation option similar to that provided in 9.1.4(2) of the 1991 Standards. While the Department believes this is a legitimate option for existing hotels subject to readily achievable barrier removal, the Department does not view this as an acceptable option for those facilities subject to the new construction or alterations requirements, unless it can be demonstrated that it would not be feasible to provide accessibility through compliance with the guidelines. Because Congress made it clear that each class of hotel room be available to individuals with disabilities, the Department declines to adopt such a limitation. In considering the comments of the hotel industry and the Department's enforcement efforts in this area, the Department will consider (and seeks comment on) whether the dispersion requirements should be applied proportionally, or whether it meets the requirements of section 224.5 if access to at least one guest room of each type is sufficient.

Some commenters have requested a specific exemption for small hotels of 300 or fewer guest rooms from dispersion regarding smoking rooms. The advisory to section 224.5 contains specific references to smoking and nonsmoking guest rooms as examples of the types of amenities to be considered for dispersion. The ADA requires that individuals with disabilities are entitled to the same range of options as persons without disabilities, and, therefore, the Department declines to add an exemption. It is noted, however, that the existence of this language in the advisory does not require a hotel that does not offer smoking guest rooms at its facility to do so only for individuals with disabilities.

Guest Rooms with Communication Features. The 1991 Standards at sections 9.1.2 and 9.2 require hotels to provide a minimum number of guest rooms with mobility features based on the total number of guest rooms in the facility. These requirements provide that an additional minimum number of guest rooms shall provide roll-in showers. A number of other guest rooms as well as all guest rooms that are required to provide mobility features and roll-in showers also must be equipped with communication features for individuals who are deaf or hard of hearing.

Commenters suggested that the proposed requirements for scoping and dispersion of guest rooms for people with mobility impairments and guest rooms with communication features are too complex for the industry to effectively implement. The Department believes the requirements are clear and that these requirements are necessary to provide equal opportunity for travelers with disabilities.

The proposed revisions at section 224.4 effect no change from the 1991 Standards with respect to the number of guest rooms required to provide communication features. The scoping requirement is consolidated into a single table, instead of appearing in three sections as in the 1991 Standards. The revised provisions also limit the overlap between guest rooms required to provide mobility features and guest rooms required to provide communication features. At least one, but not more than ten percent (10%), of the guest rooms required to provide mobility features also can provide communication features.

Visible Alarms in Guest Rooms with Communication Features. The 1991 Standards at sections 9.3.1 and 4.28.4 require transient lodging guest rooms with communication features to provide either permanently installed visible alarms that are connected to the building fire alarm system, or portable visible alarms that are connected to a standard 110-volt electrical outlet and are both activated by the building fire alarm system and provide a visible alarm when the single station smoke detector is activated. The proposed changes at sections 806.3; 806.3.1; and 702.1 will require transient lodging guest rooms with communication features to provide permanently installed visible alarms complying with the NFPA 72, National Fire Alarm Code (1999 or 2002 edition). The NFPA 72 contains technical requirements for visible alarms in sleeping areas, and requires combination smoke alarms and visible notification appliances that are connected to the building's electrical system.

The revised provisions will add a new exception for alterations to existing facilities that exempts existing fire alarm systems from providing visible alarms, unless the fire alarm system itself is upgraded or replaced, or a new fire system is installed. Transient lodging facilities that alter guest rooms are not required to provide permanently installed visible alarms complying with the NFPA 72 if the existing fire alarm system has not been upgraded or replaced, or a new fire alarm system has not been installed.

The U.S. Small Business Administration Office of Advocacy and others stated that small providers of transient lodging guest rooms raised concerns about the proposed changes to prohibit the use of portable visible alarms used in transient lodging guest rooms. These commenters recommended retaining current

requirements that allow the use of portable visible alarms.

People who are deaf or hard of hearing have reported that portable visible alarms used in transient lodging guest rooms are deficient because the alarms are not activated by the building fire alarm system, and the alarms do not work when the building power source goes out in emergencies. The proposed revision is consistent with the model building codes and fire and life safety codes, which are adopted by all the States and require newly constructed transient lodging facilities to provide smoke alarms in guest rooms.

Vanity Counter Space. Proposed section 806.2.4.1 provides that if vanity countertop space is provided in nonaccessible transient lodging guest toilet or bathing rooms, comparable vanity space must be provided in accessible hotel guest toilet or bathing rooms.

A commenter questioned whether in existing facilities vanity countertop space may be provided through the addition of a shelf. In some circumstances, the addition of a shelf in an existing facility may be a reasonable way to provide access. However, this is a determination that must be made on a case-by-case basis.

Shower and Sauna Doors in Transient Lodging Facilities. Section 9.4 of the 1991 Standards and section 206.5.3 of the proposed regulations require doors in transient lodging guest rooms that do not provide mobility features to have at least 32 inches clear width. Congress directed this requirement to be included so individuals with disabilities can visit guests in other rooms. *See,* H. Rept. 101–485, pt. 2, at 118 (1990); S. Rept. 101–116, at 70 (1989). Proposed section 224.1.2 will add a new exception to clarify that shower and sauna doors are exempt from the requirement.

Platform Lifts in Hotel Guest Rooms and Dwelling Units. The 1991 Standards at section 4.1.3(5), exception 4, and proposed sections 206.7 and 206.7.6 limit the places where platform lifts are permitted to be used as part of an accessible route. The proposed regulations add a new scoping requirement that permits platform lifts to be used to connect levels within transient lodging guest rooms and dwelling units with mobility features.

The Department prepared figures showing that the proposed requirements can be met without significant loss of hotel living space in hotel guest rooms or other areas. New construction requirements can be met without difficultly.

The following Department-prepared figures illustrate accessible hotel rooms that meet minimum requirements of 2004. These illustrations demonstrate that 12 and 13 foot wide accessible hotel rooms based on ADAAG 2004 do not decrease the size of rooms from the 1991 Standards.

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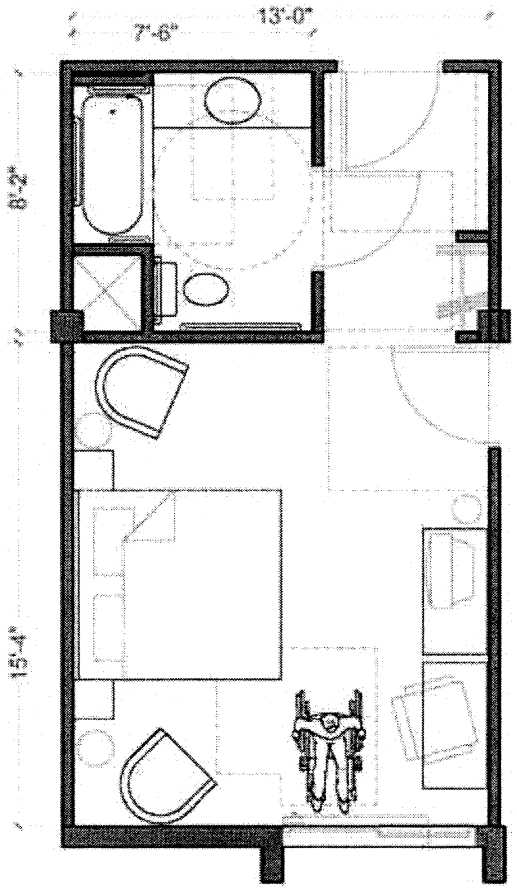


PLAN 1a:

ACCESSIBLE 13 foot wide hotel room based on 2004 ADAAG.

Plan provides a tub, vanity, open closet, and suite door at column.

Furnishings include a king bed and seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

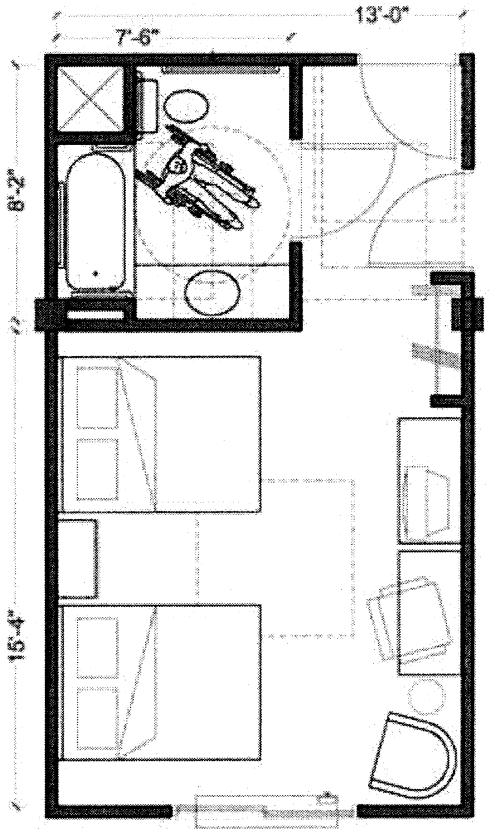
This figure represents an accessible 13 foot wide hotel room with a king bed, seating, and a vanity. (Spaces with an "X" serve as a plumbing / mechanical chase).

This figure demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom includes a vanity counter top space. § 806.2.4.1. As the tub is recessed, the water closet's rear grab bar is "24 inches long ... centered on the water closet ... due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space ... shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap," § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" along its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, § 604.2. "The required clearance around the water closet shall be permitted to overlap ... accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. "Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches wide . . ." with a lavatory at the end. § 607.2.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 1b:
ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides a tub, vanity, open closet, and suite door in the vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

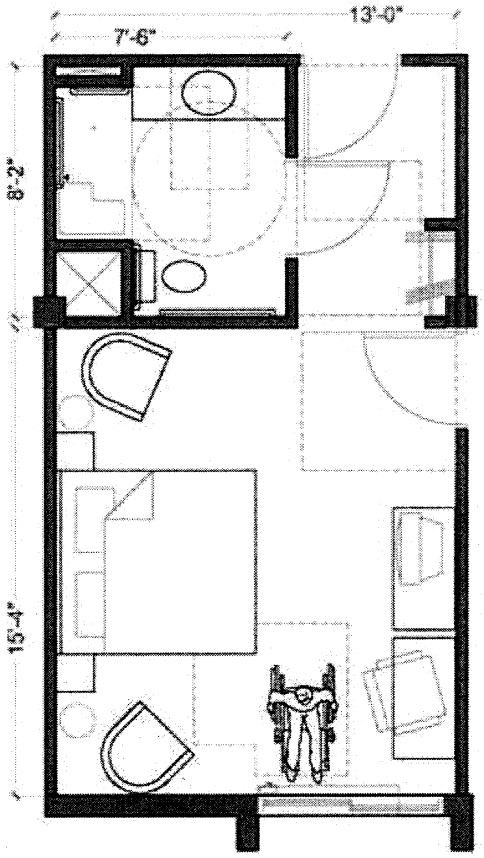
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings include two queen beds, additional seating and a vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The drawing demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The bathtub is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space … shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches, § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. Clearance adjacent to the bathtub shall extend the length of the tub and shall be 30 inches wide, minimum.
§ 607.2

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 2a:
ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides a standard roll-in shower, comparable vanity, open closet, and suite door at column.

Furnishings include a king bed, and seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

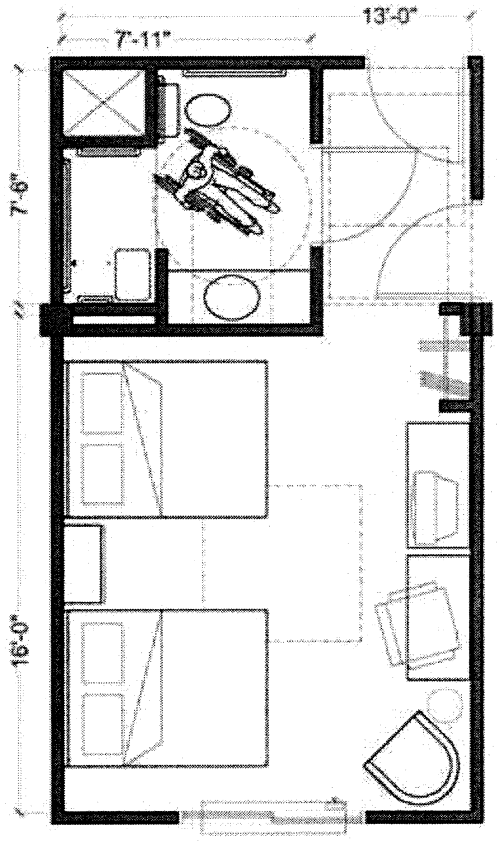
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door at the column. Furnishings here include a king bed, additional seating and a vanity. (Spaces with an "X" serve as a plumbing / mechanical chase).

This drawing demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom includes a "comparable vanity counter top space." § 806.2.4.1. As the roll-in shower is recessed, the water closet's rear grab bar is "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space . . . shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" along its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. . The roll-in shower is 30 inches wide and 60 inches deep . . . § 608.2.2. A 30 inch wide minimum by 60 inch long minimum clearance shall be provided adjacent to the open face of the shower compartment." § 608.2. 2.1

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space" § 309.2, within "the reach ranges." § 309.3.



PLAN 2b:
ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides an 'alternate' roll-in shower, comparable vanity, open closet, and suite door in the vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 20004 ADAAG 2004 compliant design.

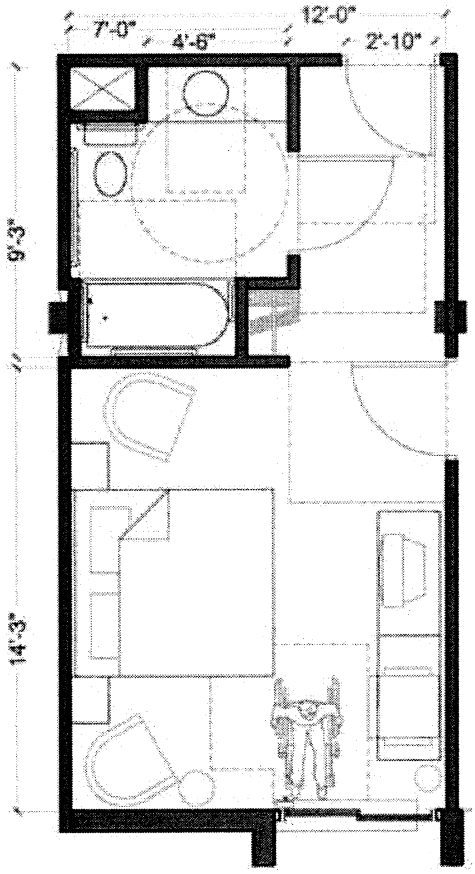
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings here include queen beds, and a vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The figure demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The alternate roll-in shower is recessed, so the water closet's rear grab bar is only "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space … shall be provided within the room" § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap. § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. The 'alternate' roll-in shower is "36 inches wide and 60 inches deep . . . a 36 inch wide minimum entry shall be provided." § 608.2.3

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. A single clear floor space between two beds is sufficient, as it "shall not be required on both sides of a bed." § 806.2.3 Exception. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space" § 309.2, within "the reach ranges." § 309.3.



PLAN 3a:
ACCESSIBLE 12 ft wide hotel room based on 2004 ADAAG.

Plan provides a bathtub, comparable vanity, open closet, and suite door in the room.

Furnishings include a king bed, and additional seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

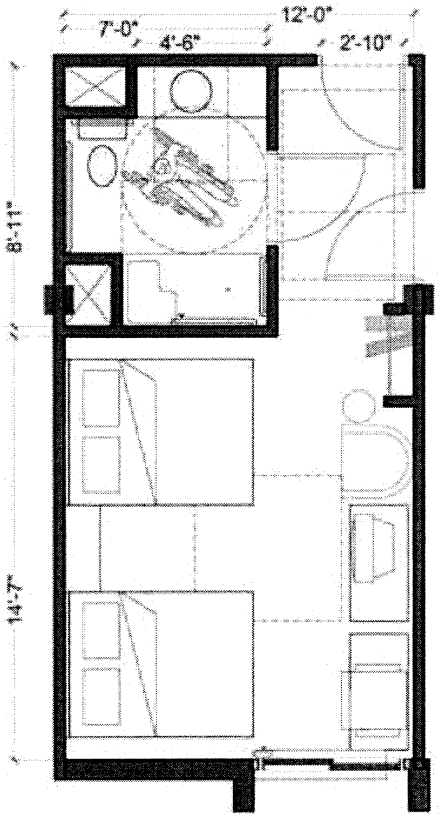
This figure represents an accessible 12 foot wide hotel room with an open closet, and an adjoining suite door in the room. Furnishings here include a king bed, additional seating, and a comparable vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

This figure demonstrates that an accessible 12 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The lavatory is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space ... shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap. § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance" § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. "Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches wide." § 607.2.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 3b:
ACCESSIBLE 12 ft wide hotel room based on 2004 ADAAG.

Plan provides a standard roll-in shower, comparable vanity, open closet, and suite door in vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 2004 ADDAG compliant design.

This figure represents an accessible 12 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings include queen beds and a comparable vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The figure demonstrates that an accessible 12 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The lavatory is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space … shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. Adjacent to the shower, a 30 inch wide by 60 inch long clearance is required, § 608.2.2.1.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. A single clear floor space between two beds is sufficient, as it "shall not be required on both sides of a bed." § 806.2.3 Exception. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.

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225 and 811 Storage

Proposed section 225 provides that where storage is provided in accessible spaces, at least one of each type shall comply with the Standards. Self-service shelving is required to be on an accessible route, but is not required to comply with the reach range requirements. These requirements are consistent with the 1991 Standards. Proposed section 225.3 will add a new scoping requirement for self-storage facilities. Facilities with 200 or fewer

storage spaces will be required to make at least five percent (5%) of the storage spaces accessible. Facilities with more than 200 storage spaces will be required to provide 10 accessible storage spaces, plus make at least two percent (2%) of the storage spaces over 200 accessible.

Commenters recommended that the Department adopt language requiring public accommodations to provide access to all self-service shelves and display areas available to customers. Other comments opposed this requirement as too burdensome on retail and other entities and that significant revenue will be lost if this requirement is implemented.

Any fixed or built-in self-service shelves or storage are required to be on accessible routes, but not all shelves are required to be within reach. Because the shelves are permitted to exceed the reach ranges, not all merchandise on the shelves will be accessible.

226 and 902 Dining Surfaces and Work Surfaces

The proposed standards at section 226.1 provide that where dining surfaces are provided for the consumption of food or drink, at least five percent (5%) of the seating spaces and standing spaces at the dining surfaces will comply with section 902. Section 902.2 requires the provision of accessible knee and toe clearance.

The U.S. Chamber of Commerce and others requested that cocktail style tables be exempt from the technical requirements for knee and toe clearance. ''Cocktail-style tables'' are not a defined term. The proposed standards apply to fixed or built-in tables provided for the consumption of food. If cocktail-style tables (that is, tables typically built for use by individuals who are standing) are fixed equipment, they will be subject to the rule. Furniture that is not fixed or built-in would be subject to the nondiscrimination requirements of the rule.

Commenters stated that basing accessible seating on seating spaces and standing spaces is problematic and urged a return to the 1991 Standard of requiring accessible seating based on fixed dining tables. Consistent with long-standing interpretation, the requirements in the ADA regulations will be applied to fixed building elements. The scoping change merely takes into account that tables may vary in size so that basing the calculation on the number of the tables rather than on the number of people that may be accommodated by the tables could unnecessarily restrict opportunities for people with disabilities.

227 and 904 Sales and Service, Check-out Aisles and Sales and Service Counters

The 1991 Standards at sections 7.2(1), (2), (i), (ii), and (iii), and the proposed changes at sections 904.4, Exception; 904.4.1, Exception; and 904.4.2 contain technical requirements for sales and service counters. The 1991 Standards generally require counters to have an accessible portion at least 36 inches long and no higher than 36 inches. The revised requirements will specify different lengths for the accessible portion of counters based on the type of approach. Where a forward approach is provided, the accessible portion of the counter must be at least 30 inches long and no higher than 36 inches, and knee and toe space must be provided under the counter. Where a parallel approach is provided, the accessible portion of the counter must be at least 36 inches long and no higher than 36 inches. The revised requirements add a new exception for alterations to counters in existing facilities that permits the accessible portion of the counter to be at least 24 inches long, where providing a longer accessible counter will result in a reduction in the number of existing counters or existing mailboxes.

The revised requirements clarify that the accessible portion of the counter must extend the same depth as the sales or service counter top. Where the counter is a single-height counter, this requirement applies across the entire depth of the counter top. Where the counter is a split-height counter, this requirement applies only to the customer side of the counter top. The employee-side of the counter top may be higher or lower than the customer-side of the counter top.

Proposed section 227.5 clarifies the requirements for food service lines. Queues and waiting lines serving counters or check-out aisles, including queues and waiting lines for food service must be accessible to individuals with disabilities.

Commenters recommended that the Department consider a regulatory alternative exempting small retailers from the new knee and toe clearance requirement and retaining existing wheelchair accessibility standards for sales and service counters. These commenters believed that the proposed knee and toe clearance requirements will cause a reduction in the sales and inventory space at check-out aisles and other sales and service counters.

The proposed standards, as do the current requirements, permit covered entities to determine whether they will provide forward or parallel approach. So any business that does not wish to provide the knee or toe clearance may avoid that option. However, the Department believes that permitting a forward approach without requiring knee and toe clearance is not adequate to provide accessibility because the person using a wheelchair will be prevented from coming close enough to the counter to see the merchandise or to transact business with a degree of convenience that is comparable to that provided for other customers. A parallel approach to sales and service counters also can provide accessibility required by the proposed standards. Individuals using wheelchairs can approach sales and service counters from a side, and, assuming the necessary elements, features, or merchandise necessary to complete a business transaction are within the reach range requirements for a side approach, the needs of individuals with disabilities can be met effectively.

229 Windows

A new requirement at section 229.1 provides that if operable windows are provided for building users, then at least one window in an accessible space must be equipped with controls that comply with section 309.

Commenters supported including this provision in the regulations, but some commenters asked whether the five-pounds (5 lbs.) of force requirement of section 309 applies to the window latch itself or only the force required to open the window. Section 309 applies to all controls and operating mechanisms, so the latch must comply.

230 and 708 Two-way Communication Systems

New provisions at sections 230.1 and 708 require two-way communications systems to be equipped with visible as well as audible signals.

231 and 808 Judicial Facilities and Courtrooms

Accessible Courtroom Stations. Proposed requirements at sections 231.2, 808, 304, 305, and 902 provide increased accessibility at courtroom stations. Clear floor space for a forward approach will be required for all courtroom stations (judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, court reporters' stations and litigants' and counsel stations). Other applicable specifications include accessible work surface heights and toe and knee clearance.

Accessible Jury Boxes and Witness Stands. Vertical access by ramp, elevator, or platform lift will have to be fully in place at the time of construction

or alteration as required by section 206.2.4.

Raised Courtroom Stations Not for Members of the Public. Proposed section 206.2.4, Exception 1 provides that raised courtroom stations that are used by judges, clerks, bailiff, and court reporters will not have to provide full vertical access when first constructed or altered if they are constructed to be easily adaptable to provide vertical accessibility.

A comment asserted that there is nothing inherent in clerks' stations, jury boxes, and witness stands that require them to be raised. While it would, of course, be easiest to provide access by eliminating height differences among courtroom elements, the Department recognizes that accessibility is only one factor that must be considered in the design process of a functioning courtroom. The need to ensure the ability of the judge to maintain order, the need to ensure sightlines between the judge, the witness, the jury, and other participants, and the need to maintain the security of the participants all affect the design of the space. The Department believes that the proposed standards have been drafted in a way that will achieve accessibility without unduly constraining the ability of a designer to address the other considerations that are unique to courtrooms.

Commenters argued that permitting courtroom stations to be adaptable rather than fully accessible at the time of new construction likely will lead to discrimination in hiring of clerks, court reporters, and other court staff. The Department believes that the provisions will facilitate, not hinder, the hiring of court personnel who have disabilities. All courtroom work stations will be on accessible routes and will be required to have all fixed elements designed in compliance with the proposed standards. Elevated work stations for court employees may be designed to add vertical access as needed. Because the original design must provide the proper space and electrical wiring to install vertical access, the change should be easily accomplished.

232 Detention Facilities and Correctional Facilities

New provisions at section 232 establish requirements for the design and construction of cells in detention and correctional facilities. Alterations to cells shall not be required to comply, except to the extent determined by the Attorney General. The Department has proposed new requirements in 28 CFR 35.152.

233 Residential Facilities

General. Revised provisions in section 233 will now include specific scoping and technical provisions that apply to new construction and alteration of residential facilities. As part of this revision, section 9.5, which established scoping and technical requirements for homeless shelters, group homes, and similar social service establishments, has been deleted. The Department has proposed language in the NPRM at section 28 CFR section 36.406 that will provide that most social service establishments now subject to section 9.5 will be subject to requirements for residential facilities rather than the requirements for transient lodging. This approach will harmonize federal accessibility obligations under both the ADA and section 504 of the Rehabilitation Act of 1973, as amended. Dwelling units provided by places of education will be subject to the design requirements for transient lodging.

Galley Kitchens. New requirements at section 804.2 require a 60-inch clearance space in so-called galley kitchens, which have cabinets and appliances on opposite walls, if there is only one entry to the kitchen.

New provisions at sections 804.2; 804.2.1; and 804.2.2 also specify clearances between opposing base cabinets, counters, appliances, or walls based on the layout of the kitchen:

- ''U-shaped'' kitchens, which are enclosed on three contiguous sides, are required to have 60 inches minimum clearance between opposing base cabinets, counters, appliances, or walls.
- ''Pass through'' kitchens, which have two entries, are required to have 40 inches minimum clearance between opposing base cabinets, counters, appliances, or walls.
- Kitchens that do not have a cooktop or conventional range are exempt from the clearance requirements.

The revision will impact small dead-end or single-entry ''galley'' kitchens with base cabinets, counters, and appliances on two opposing walls. The 1991 Standards require this ''galley'' kitchen to have 40 inches minimum clearance between the opposing base cabinets, counters, appliances, or walls. In multi-family residential facilities, kitchens, bathrooms, and closets are located along interior walls, and space constraints may limit adding a second entry to the kitchen.

If a ''galley'' kitchen does not have two entries, the revised provisions require the kitchen to have 60 inches minimum clearance between the opposing base cabinets, counters, appliances, or walls. For a typical small ''galley'' kitchen that is 8 feet long, increasing the width of the kitchen to provide 60 inches clearance will add approximately 13 square feet to the kitchen.

One commenter supported the provisions of section 804, Kitchens and Kitchenettes, but sought clarification whether this section applies to residential units only, or to lodging and office buildings as well. Section 212 makes section 804 applicable to all kitchens and kitchenettes in covered buildings.

Residential Facilities. The UFAS at section 4.1.4(11) contains scoping requirements for the new construction of housing. The proposed standards will revise and update these requirements. Sections 233.1; 233.2; 233.3; 233.3.1; 233.3.1.1; 233.3.1.2; and 233.3.2 differentiate between entities subject to the HUD regulations implementing section 504 of the Rehabilitation Act, and entities not subject to the HUD regulations. The HUD regulations apply to recipients of federal financial assistance through HUD, and require at least five percent (5%) of dwelling units in multi-family projects of five or more dwelling units to provide mobility features and at least two percent (2%) of the dwelling units to provide communication features. The HUD regulations define a project unique to its programs as ''one or more residential structures * * * which are covered by a single contract for federal financial assistance or application for assistance, or are treated as a whole for processing purposes, whether or not located on a common site.'' To avoid any potential conflicts with the HUD regulation, the proposed regulation requires entities subject to the HUD regulations to comply with the scoping requirements in the HUD regulations, instead of the scoping requirements in the Department's proposed regulation.

For entities not subject to the HUD regulations, the proposed regulations require at least five percent (5%) of the dwelling units in residential facilities provide mobility features, and at least two percent (2%) of the dwelling units provide communication features. The proposed regulations define facilities in terms of buildings located on a site. The proposed regulations permit facilities that contain 15 or fewer dwelling units to apply the scoping requirements to all the dwelling units that are constructed under a single contract, or are developed as whole, whether or not located on a common site.

The proposed regulation defers to HUD and agencies responsible for issuing regulations under Section 504 of the Rehabilitation Act to determine the

extent to which accessible features are to be provided in publicly funded dwelling units offered for sale.

Alterations to Residential Facilities. The UFAS at sections 4.1.6 require federal, state, and local government housing to comply with the general requirements for alterations to facilities. Applying the general requirements for alterations to housing can result in partially accessible dwelling units where single elements or spaces in dwelling units are altered.

The proposed regulations at sections 202.3 Exceptions 3; 202.4; 233.3; 233.3.4; 233.3.4.1; and 233.3.4.2 Exception contain specific scoping requirements for alterations to dwelling units. Dwelling units that are not required to be accessible are exempt from the general requirements for alterations to elements and spaces and for alterations to primary function areas.

The scoping requirements for alterations to dwelling units generally are based on the requirements in the current UFAS.

- Where a building is vacated for purposes of alterations and has more than 15 dwelling units, at least five percent (5%) of the altered dwelling units are required to provide mobility features and at least two percent (2%) of the dwelling units are required to provide communication features.
- Where a bathroom or a kitchen is substantially altered in an individual dwelling unit and at least one other room is also altered, the dwelling unit is required to comply with the scoping requirements for new construction until the total number of dwelling units in the facility required to provide mobility features and communication features is met.

As with new construction, the proposed regulations permit facilities that contain 15 or fewer dwelling units to apply the scoping requirements to all the dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site. The proposed regulations also permit a comparable dwelling unit to provide mobility features where it is not technically feasible for the altered dwelling unit to comply with the technical requirements.

234 and 1002 Amusement Rides

Section 234 provides accessibility guidelines for newly designed and constructed amusement rides. Mobile and temporary rides are exempt from these requirements. Altered rides will be required to provide accessible load or unload areas, but no changes will be required to the ride itself unless the structural or operational characteristics of the ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer.

Accessible Route. Proposed sections 206.2.9 and 1002.2 will require an accessible route to serve each ride, including the load/unload area.

One commenter asked that section 234, Amusement Rides, make clear that the requirements for accessible routes include the routes leading up to and including the loading and unloading areas of amusement rides. Sections 206.2.9, Amusement Rides, and 1002.2, Accessible Routes, make clear that the requirements for accessible routes include the routes leading up to and including the loading and unloading areas of amusement rides.

Wheelchair Space or Transfer Seat or Transfer Device. New sections 234.3 and 1002.4–6 provide that each new amusement ride, except for mobile/temporary rides and a few additional excepted rides, will be required to provide at least one type of access by means of one wheelchair space or one transfer seat or one transfer device (the design of the transfer device is not specified).

Commenters representing industry concerns urged the Department to revise the requirements for wheelchair space and transfer seats and devices because the majority of amusement rides are too complex to be reasonably modified or reengineered to accommodate the majority of individuals with disabilities. They argued that the experience of amusement rides will be significantly reduced if the proposed requirements are implemented.

These proposed standards were developed with the assistance of an advisory committee that included representation from the design staffs of major amusement venues and people with disabilities. The Department believes that the resulting guidelines reflect sensitivity to the complex problems posed in adapting existing rides by focusing on new rides that can be designed from the outset to be accessible. To permit maximum design flexibility, the guidelines permit the designers to determine whether it is more appropriate to permit people who use wheelchairs to remain in their chairs on the ride, or to provide for transfer access.

Maneuvering Space in Load and Unload Area. Specified maneuvering space as required by new sections 234.2 and 1002.3 in the load/unload area of each amusement ride will be required.

Sign. Section 216.12 requires signs at entries to queues and waiting lines identifying type and location of access for the amusement ride.

A member of the amusement parks and attractions industry raised concerns that smaller amusement parks tend to purchase used rides more frequently than new rides, and that the conversion of a used ride to provide the proposed accessibility may be difficult to ensure because of the possible complications in modifying equipment to provide accessibility.

The Department agrees with this commenter. The Department notes, however, that the proposed standards will require modifications to used amusement rides only if a ride is undergoing an alteration intended to change its structural or operational characteristics. The Department expects that the focus of the requirements for rides that are not new will be to ensure that these rides are served by an accessible route and have accessible load/unload areas for the benefit of those people with disabilities who are able to use the ride. Mobile or temporary amusement rides that are set up for short periods of time generally will not be covered by the proposed regulations. However, the ADA authorizes the Department to require covered entities to provide general nondiscrimination opportunities to individuals with disabilities. Therefore, the Department will require mobile or temporary amusement rides that are set up for short periods of time to be on an accessible route.

235 and 1003 Recreational Boating Facilities

These sections require accessible boat slips to be provided.

Accessible Route. Newly added sections 206.2.10 and 1003.2 require an accessible route to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps.

Commenters raised concerns that because of water level fluctuations it may be difficult to provide accessible routes to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps. The guidelines take this into account. A number of exceptions are provided from the general proposed standards requiring accessible routes in order to take into account the difficulty of meeting accessibility requirements due to fluctuations in water level.

Accessible Boarding Piers. If provided at boat launch ramps, new sections 235.3 and 1003.3.2 provide that five percent (5%) of boarding piers, but at least one, will have to be accessible.

Accessible Boat Slips. New sections 235.2 and 1003.3.1 provide that a

specified number of boat slips in each recreational boating facility will be required to meet specified accessibility standards. The greater the number of slips provided, then the larger number of slips must be accessible, *e.g.*, if 100 boat slips are provide, 3 must be accessible, or if 500 boat slips are provided, 7 must be accessible. Accessible slips will have to be dispersed throughout the boat slip area.

236 and 1004 Exercise Machines and Equipment

Accessible Route to Exercise Machines and Equipment. An accessible route will be required to serve accessible exercise machines and equipment by new provision 206.2.13.

Concerns were raised that the requirement to provide accessible routes to serve accessible exercise machines and equipment will be difficult for some facilities to provide, especially some transient lodging facilities that typically locate exercise machines and equipment in a single room. The Department thinks that this requirement is a reasonable one for new construction and alterations. Barrier removal issues are addressed separately in section 36.304.

Exercise Machines and Equipment. Newly added sections 236 and 1004 will require one of each type of exercise machine to meet clear floor space specifications. Types of machines are generally defined according to the muscular groups exercised or the kind of cardiovascular exercise provided.

Commenters were divided in response to this issue. Some supported requirements for accessible machines and equipment; others urged the Department not to require accessible machines and equipment because of the costs involved. The Department believes that this provision strikes an appropriate balance in ensuring that people with disabilities, particularly those who use wheelchairs will have the opportunity to use the exercise equipment provided by a public accommodation. Providing access to exercise machines and equipment recognizes the need and desires of individuals with disabilities to have the same opportunity as other patrons to enjoy the advantages of exercise and maintaining health.

237 and 1005 Fishing Piers and Platforms

Accessible Route. Sections 206.2.14 and 1005.1 will require an accessible route to each accessible fishing pier and platform. The exceptions described under recreational boating will apply to gangways and floating piers.

Accessible Fishing Piers and Platforms. Newly added sections 237 and 1005 will require at least twenty-five percent (25%) of railings (if provided) to be of a specified maximum height so that a person seated in a wheelchair could cast a fishing line over the railing and dispersed among the piers and platforms. If railings, guards, or handrails are provided, accessible edge protection, clear floor or ground space, and turning space will be required.

238 and 1006 Golf Facilities

Accessible Route. Sections 206.2.15 and 1006.2 and 1006.3 require an accessible route to connect all accessible elements within the boundary of the golf course and, in addition, to connect golf car rental areas, bag drop areas, teeing grounds, putting greens, and weather shelters. An accessible route also will be required to connect any practice putting greens, practice teeing grounds, and teeing stations at driving ranges that will be required to be accessible. An exception permits the accessible route requirements to be met, within the boundaries of the golf course, by providing a ''golf car passage'' (the path typically used by golf cars) if specifications for width and curb cuts are met.

Accessible Teeing Grounds, Putting Greens, and Weather Shelters. Sections 238.2 and 1006.4 will require that golf cars will have to be able to enter and exit each putting green and weather shelter. Where two teeing grounds are provided, the forward teeing ground, will be required to be accessible (golf car can enter and exit). Where three or more teeing grounds are provided, at least two, including the forward teeing ground, shall be accessible.

A national advocacy organization supported requirements for teeing grounds, particularly requirements for accessible teeing grounds. Accessible teeing grounds are essential to the full and equal enjoyment of the golfing experience.

Accessible Practice Putting Greens, Practice Teeing Grounds, and Teeing Stations at Driving Ranges. Newly added section 238.3 requires that five percent (5%) but at least one of each of practice putting greens, practice teeing grounds, and teeing stations at driving ranges must permit golf cars to enter and exit.

239 and 1007 Miniature Golf Facilities

Accessible Route to Holes. Sections 206.2.16, 239.3, and 1007.2 will require an accessible route to connect accessible miniature golf course holes and will be required from the last accessible hole on the course directly to the course entrance or exit; generally, the accessible holes will have to be consecutive ones. Specified exceptions will be available for accessible routes located on the playing surfaces of holes.

Accessible Holes. At least fifty percent (50%) of golf holes on miniature golf courses will be required by new sections 239.2 and 1007.3 to be accessible (includes specified clear space at start of play).

240 and 1008 Play Areas

Accessible Route to Play Components. Sections 206.2.17, 240.2.1–2, and 1008.2–3 will require that accessible routes be provided within each play area. Where required, accessible ground surfaces for play areas will follow special rules, incorporated by reference from nationally recognized standards for accessibility and safety in play areas, including those issued by the American Society for Testing and Materials (ASTM). The accessible route will have to connect to at least one ground level play component of each different type provided (*e.g.*, for different experiences such as rocking, swinging, climbing, spinning, and sliding); to at least fifty percent (50%) of elevated play components (some exceptions will be provided from general accessible route rules); and to one or two entry points to soft contained play structures. If elevated play components are provided, the play area will have the option of either locating a specified additional number of its different types of ground level components on the accessible route or meeting a higher standard of accessibility for the elevated components (namely, fifty percent (50%) of the elevated components will have to be connected by a ramp and the connected components will have to be of at least three different types).

A commenter noted that the proposed standards allow for the provision of transfer steps to elevated play structures based on the number of elevated play activities, but asserted that transfer steps have not been documented as effective means of access.

The guidelines recognize that play structures are designed to provide unique experiences and opportunities for children. The proposed rule provides for play components that are accessible to children who cannot transfer from their wheelchair, but it also provides opportunities for children who are able to transfer. Children often interact with their environment in ways that would be considered inappropriate for adults. Crawling and climbing, for example, are integral parts of the play experience for young children.

Permitting the use of transfer platforms in play structures provides some flexibility for creative playground design.

Accessible Play Components. Play components (including ground level, elevated, and soft contained play structures) will be required to be on an accessible route, including elevated play components that are required to be connected by ramps, and will themselves have to comply with accessibility requirements (including specifications for turning space and clear floor space and for play tables and transfer entry points and supports).

A commenter expressed concerns that the general requirements of section 240.2.1, Play Areas, and the advisory accompanying section 240.2.1, General, conflict. The comment asserts that section 240.2.1 provides that the only requirement for integration of equipment is where there are two or more required ground level play components, while the advisory appears to suggest that all accessible components must be integrated.

The commenter misinterprets the requirement. The ADA mandates that people with disabilities be able to participate in programs or activities in the most integrated setting appropriate to their needs. Therefore, all accessible playground equipment must be integrated into the general playground setting. Section 240.2.1 specifies that where there is more than one accessible ground level play component, the components must be both dispersed and integrated.

Ground Surfaces. Section 1008.2.6, Ground Surfaces, provides that ground surfaces on accessible routes must comply with ASTM requirements.

A commenter recommended that the Department closely examine the requirements for ground surfaces at play areas. The Department is aware that there is an ongoing controversy about ground surfaces arising from a concern that some surfaces that meet the ASTM requirements at the time of installation will become inaccessible if they do not receive constant maintenance. The Access Board is also aware of this issue and is undertaking research to explore solutions to the problems. The Department would caution covered entities selecting among the ground surfacing materials that comply with the ASTM requirements, that they must anticipate the maintenance costs that will be associated with some of the products. Permitting a surface to deteriorate so that it does not meet the proposed standards would be an independent violation of the Department's ADA regulations.

241 and 612 Saunas and Steam Rooms

Saunas and steam rooms will be required by sections 241 and 612 to meet accessibility requirements, including accessible turning space and an accessible bench. Where they are provided in clusters, five percent (5%), but at least one sauna or stream room in each cluster will have to be accessible.

Commenters raised concerns that the safety of individuals with disabilities outweighs the usefulness in providing accessible saunas and steam rooms. The Department believes that there is an element of risk in many activities available to the general public. One of the major tenets of the ADA is that individuals with disabilities should have the same opportunities as other people to decide what risks to take. It is not appropriate for covered entities to prejudge the abilities of people with disabilities.

242 Swimming Pools, Wading Pools, and Spas

Accessible Means of Entry to Pools. At least two accessible means of entry will be required for larger pools (300 or more linear feet) and one entry will be required for smaller pools as required by section 242.2. This section requires that at least one entry will have to be a sloped entry or a pool lift; the other could be a sloped entry, pool lift, a transfer wall, or a transfer system (technical specifications for each entry type are included).

Accessible Means of Entry to Wading Pools. Sections 242.3 and 1009.3 require that at least one sloped means of entry will be required into the deepest part of each wading pool.

Accessible Means of Entry to Spas. Sections 242.4 and 1009.2, 1009.4, and 1009.5 require spas to meet accessibility requirements, including an accessible means of entry. Where spas are provided in clusters, five percent (5%) but at least one spa in each cluster will have to be accessible. A pool lift, a transfer wall, or a transfer system will be permitted.

Commenters, including individuals with disabilities and state entities, supported the proposed scoping and technical requirements for swimming pools. A national association representing the interests of recreation and park providers recommended that existing inaccessible swimming pools need only provide one means of access when meeting program access requirements under Title II or readily achievable barrier removal obligations under Title III. These issues are addressed elsewhere in this proposed rule.

243 Shooting Facilities with Firing Positions

Sections 243 and 1010 will require an accessible turning space for each different type of firing position at a shooting facility if designed on site. Where fitting positions are provided in clusters, five percent (5%), but at least one position of each type in each cluster will have to be accessible.

Additional Technical Requirements

304 Turning Space

The turning space is required to be 60 inches diameter minimum and is permitted to include knee and toe clearance.

Commenters urged the Department to retain the turning space requirement, but exclude knee and toe clearance from being permitted as part of this space. They argued that wheelchairs and other mobility devices are becoming larger and that more individuals with disabilities are using electric three- and four-wheeled scooters.

The Department recognizes that there is a growing perception that the 1991 Standards, which are based on wheelchair dimensions, may not adequately meet the needs of people using some larger electric scooters. However, there is no consensus about the appropriate dimension on which to base revised requirements. The Department is aware that the Access Board is financing an extensive study of this issue in order to determine if new requirements are warranted. The Department plans to wait for the results of this study before changing the specifications in the Department's rules.

404 Doors, Doorways, and Gates

Automatic Door Break-out Openings. The proposed standards do not contain any technical requirement for automatic door break out openings. The proposed standards at sections 404.1; 404.3; 404.3.1; and 404.3.6 will require automatic doors that are part of a means of egress and that do not have standby power to have a 32 inch minimum clear break out opening when operated in emergency mode. The minimum clear opening width for automatic doors is measured with all leaves in the open position. Automatic bi-parting doors or pairs of swinging doors that provide a 32 inch minimum clear break out opening in emergency mode when both leaves are opened manually meet the technical requirement. The proposed regulation includes an exception that exempts automatic doors from the technical requirement for break-out openings when accessible manual

swinging doors serve the same means of egress.

Maneuvering Clearance or Standby Power for Automatic Doors. The 1991 Standards, section 4.13.6, do not require maneuvering clearance at automatic doors. Section 404.3.2, Exception of the proposed regulation will require automatic doors that serve as an accessible means of egress to either provide maneuvering clearance or to have standby power to operate the door in emergencies. This provision has limited application and will affect, among others, in-swinging automatic doors that serve small spaces.

Commenters urged the Department to reconsider provisions that would require maneuvering clearance or standby power for automatic doors. They assert that these requirements would impose unreasonable financial and administrative burdens on all covered entities, particularly smaller entities. The Department declines to change these provisions because they are fundamental life-safety issues. The requirement applies only to doors that are part of a means of egress that must be accessible in an emergency. If an emergency-related power failure prevents the operation of the automatic door, a person with a disability could be trapped unless there is either adequate maneuvering room to open the door manually, or there is a back-up power source.

Thresholds at Doorways. The 1991 Standards at section 4.13.8 require thresholds at doorways not to exceed ½ inch; and thresholds at exterior sliding doors not to exceed ¾ inch. Proposed sections 404.1 and 404.2.5 will require thresholds at all doorways that are part of an accessible route not to exceed ½ inch. The 1991 Standards and the proposed regulations require raised thresholds that exceed ¼ inch to be beveled on each side with a slope not steeper than 1:2. The proposed standards include an exception that exempts existing and altered thresholds that do not exceed ¾ inch and are beveled on each side from the requirement.

407 Elevators.

Section 407.4.8.2, Audible Indicators, and section 407.4.8.2.1, Signal Type, provide that an elevator signal shall be an automatic verbal annunicator that announces the floor at which the car is about to stop.

A commenter noted that requiring an audible signal for elevators is important; however, the requirement that the signal be a verbal annunicator, presumably in English, is troubling to building owners and operators whose buildings may be located in multi-lingual communities or international tourist destinations. The commenter suggested that the 1991 Standard's requirement for chimes or tones, once for up and twice for down, should be retained and the requirement for a verbal annunciation deleted from the proposed standards.

The proposed standards, at section 407.2.2.3 permit building operators to choose an audible signal or a verbal annunciator to indicate the direction in which the elevator is traveling. Section 407.4.8 provides an additional requirement for a verbal annunciator to identify the floor at which the elevator is stopping. This requirement is for an announcement within the elevator car to notify passengers of floor arrival. The Department will retain the requirement as drafted because the verbal annunciator provides more detailed locator information than would be provided by just the use of an audible signal. The Department notes, however, that nothing in the guidelines would preclude a building operator from providing this information in a language—or languages—other than English when the building operator deems it appropriate.

505 Handrails

The proposed standards add a new technical requirement for handrails along walking surfaces. The 1991 Standards at sections 4.8.5(2), (3); 4.9.4(2), (3); 4.26.2; and 4.26.4, and proposed sections 505.5; 505.6 Exception 2; 505.7; 505.7.1; 505.7.2; 505.8; 505.10 and Exception 3; and 505.10.3 contain technical requirements for handrails. The revised regulations provide more flexibility than the 1991 Standards as follows:

- The 1991 Standards require handrail gripping surfaces to have edges with a minimum radius of ⅛ inch. The revised regulations will require handrail gripping surfaces to have rounded edges.
- The 1991 Standards require handrail gripping surfaces to have a diameter of 1¼ inches to 1½ inches, or to provide an equivalent gripping surface. The revised regulations will require handrail gripping surfaces with a circular cross section to have an outside diameter of 1¼ inches to 2 inches. Handrail gripping surfaces with a non-circular cross section must have a perimeter dimension of 4 inches to 6¼ inches, and a cross section dimension of 2¼ inches maximum.
- The 1991 Standards require handrail gripping surfaces to be continuous, and to be uninterrupted by newel posts, other construction elements, or obstructions. The revised regulation will require handrail gripping surfaces to be continuous along their length and not to be obstructed along their tops or sides. The bottoms of handrail gripping surfaces must not be obstructed more than twenty percent (20%) of their length. Where provided, horizontal projections must occur at least 1½ inches below the bottom of the handrail gripping surface. An exception permits the distance between the horizontal projections and the bottom of the gripping surface to be reduced by ⅛ inch for each ½ inch of additional handrail perimeter dimension that exceeds 4 inches.
- The 1991 Standards require handrails at the bottom of stairs to extend at least 12 inches plus the width of one tread beyond the bottom riser. The revised regulations will require handrails at the bottom of stairs to extend a horizontal distance at least equal to one tread depth beyond the last riser nosing. The revised regulations add a new exception for alterations to existing facilities that exempts handrails at the top and bottom of ramps and stairs from providing full extensions where it will be hazardous due to plan configuration.

A commenter noted that handrail extensions are currently required at the top and bottom of stairs, but the proposed regulation does not include this requirement, and urged the Department to retain the current requirement. Other commenters questioned the need for the extension at the bottom of stairs.

The Department's proposed guidelines, in sections 505.10.2 and 505.10.3 will require handrail extensions at both the top and bottom of a flight of stairs. The requirement that handrails extend an additional 12 inches at the bottom of stairs was deleted by the Access Board in response to public comments.

Commenters noted that the revised regulations will require handrail gripping surfaces with a circular cross section to have an outside diameter of 2 inches, and that this requirement would impose a physical barrier to individuals with disabilities who need the handrail for stability and support while accessing stairs.

The requirement permits an outside diameter of 1¼ inches to 2 inches. This range allows flexibility in meeting the needs of individuals with disabilities and designers and architects. The Department is not aware of any data indicating that an outside diameter of 2 inches would pose any adverse impairment to use by individuals with disabilities.

Handrails Along Walkways

The 1991 Standards do not contain any technical requirement for handrails provided along walkways that are not ramps. The proposed standards regulations, section 403.6, will specify that where handrails are provided along walkways that are not ramps, they shall comply with certain technical requirements. The proposed change is expected to have minimal impact.

APPENDIX B: Initial Regulatory Assessment

Background

As directed by Executive Order 12866, as amended without substantial change to its requirements by Executive Order 13258, the Department is required to conduct an initial regulatory impact analysis (hereinafter ''RIA'' or ''regulatory assessment'') in order to assess the economic benefits and costs of its proposed regulations implementing titles II and III of the ADA. The purpose of regulatory analysis is to inform stakeholders in the regulatory process of the effects, both positive and negative, of the proposed regulations. In this context, the primary stakeholders are individuals with disabilities who will benefit from using accessible facilities and the owners and developers of covered entities that will incur the costs of compliance. In addition, as directed by the Regulatory Flexibility Act of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), as well as Executive Order 13272, the Department is required to consider the potential impact of its proposed regulations on small entities.

A key component of the Department's regulatory assessment is a comprehensive benefit-cost analysis of the proposed revisions to the ADA Standards. OMB Circular A–4 requires Federal agencies to conduct a full benefit-cost analysis for any regulation that is ''economically significant''—that is, a regulation that is expected to have an annual impact on the economy of $100 million or more. Such an analysis must include both quantitative and qualitative measurements of the benefits and costs of the proposed regulation, as well as a discussion of each potentially effective and reasonably feasible regulatory alternative. OMB Circular A–4 also stipulates that regulatory analyses should only assess those costs and benefits that arise as a result of the proposed regulations themselves—in other words, the incremental impact of the proposed regulations when compared to a baseline of the legal status quo that would continue to apply absent regulatory action.

Early on in this process, the Department concluded that the economic impact of its adoption of the proposed standards was likely to exceed this $100 million threshold, not only because it would be proposing to adopt several years' worth of revised and supplemental accessibility guidelines at once, but also because the proposed standards would apply to all newly constructed and existing facilities. Accordingly, the Department has conducted an initial RIA for the proposed standards. Consistent with the requirements for regulatory analyses, the RIA assumes a 40-year lifecycle for the longest lasting facilities subject to the regulations (here, a typical newly constructed building) before they must be substantially altered, torn down, or rebuilt. The RIA also assumes that the proposed regulations will remain in force for 15 years, after which time it is presumed they would be superseded by future revisions to the title II and title III regulations.

In September 2004, the Department issued an Advance Notice of Proposed Rulemaking (''ANPRM'') which, among other things, described its proposed methodology for the initial regulatory assessment and solicited public comment on this methodology generally. *See* 69 FR 58768 (Sept. 30, 2004). Additionally, section IV of the ANPRM entitled ''Regulatory Assessment Issues'' posed specific questions for public comment relating to the application of the proposed standards to existing facilities, including general sources for benefit and cost data, information on the impact of the proposed rules on small entities and suggestions for regulatory alternatives, and recommended sources of data for certain types of facilities or requirements. *Id.* at 58779–782 (Question Nos. 9–49). The Department received many comments in response to the ANPRM and it has taken those comments into consideration during the regulatory assessment process.

At the same time, the Department also received many comments expressing the view that economic analysis is irrelevant with respect to the implementation of a civil rights statute. Under this view, because the ADA is a civil rights statute protecting the rights of individuals with disabilities, regulations designed to implement its protections are necessary regardless of whether quantifiable benefits can be shown to outweigh costs. As these commenters noted, traditional benefit-cost analysis is not designed to measure the inherent value of civil rights protections or to make judgments about fairness or equity.

The Department is sympathetic to the views expressed by these commenters. However, the Federal laws and regulations that require agencies to express the benefits and costs of regulations in economic terms do not distinguish between regulations that implement civil rights statutes like the ADA and regulations that implement other kinds of laws. The Department also believes that there is much to be gained from the comprehensive identification and description of the benefits of accessibility standards, which are, after all, designed to ensure equal access for everyone. Such benefits include not only the measurable benefits to individuals with disabilities but also the more subtle and far-reaching benefits for society as a whole. The majority of commenters representing industry groups also expressed the belief that the proposed standards would not confer any measurable benefit on individuals with disabilities, and, consequently, were perceived by some business owners as ''punitive.'' In fact, not only do the revised requirements confer measurable benefits on individuals with disabilities, in many cases, they also lower the costs for businesses. By conducting a comprehensive assessment of the benefits and costs of the proposed standards, the Department hopes to promote greater understanding of the ADA and to further compliance with its civil rights protections.

Complete copies of the Department's RIA and accompanying Supplementary Results report are available on the Department's ADA Web site (*http://www.ada.gov*). The RIA itself is the work product of HDR/HLB Decision Economics, Inc., the economics firm with which the Department has contracted to conduct its initial regulatory assessment. The Department has adopted the results of the RIA as its assessment of the benefits and costs that the proposed standards will confer on society. The Department invites the public to read the RIA and to submit electronic comments by visiting the Department's Web site for public comments. *See http://www.regulations.gov*. When the Department publishes a final rule, it will also publish an accompanying final regulatory assessment. What follows is a general overview of the basic principles of the RIA, as well as the Department's responses to ANPRM comments concerning the methodology for this assessment.

Methodology for Data Collection

Several commenters proposed that the Department measure the relevant inputs for the RIA—such as the types of benefits individuals might realize from using a particular element or space in a facility, the unit costs that facilities will incur to comply with a requirement, or the likelihood that compliance will be readily achievable—by conducting surveys, focus groups, and similar types of studies. For example, commenters representing industry groups suggested that the Department conduct a nationwide survey of existing facilities representing a range of ages, sizes, and building methods in order to assess the unit costs to existing facilities of complying with the proposed regulations. Similarly, in order to measure the benefits to users, some commenters proposed that the Department conduct a national survey of people with disabilities using a broad sampling of ages, types of impairments and socioeconomic status. Other suggestions included interviewing support groups or State health officials and staff at long term care facilities, conducting a nationwide survey using the Social Security mailing list, and adding questions to the U.S. Census questionnaire.

The Department has determined that it would be infeasible to conduct surveys or otherwise collect information from (or about) all facilities and all persons with disabilities nationwide. Nor would surveys on the ''real world'' costs of compliance have aided the regulatory assessment; only the incremental costs of compliance are relevant to the analysis. Similarly, the Department also has determined that it would be infeasible to conduct a nationwide survey of individuals with disabilities with respect to the incremental benefits they might be likely to experience from the proposed regulations.

Instead, the RIA relies on publicly available data sources—supplemented as necessary with estimates generated or verified by expert cost and benefit panels—to calculate the incremental impact of the proposed regulations. *See* RIA, Ch. 4. Public data sources used in the RIA are wide-ranging and include: the 2002 Economic Census (to estimate the number and types of existing facilities); *RS Means* publications (to estimate unit costs); *Dodge Construction Potential Bulletins* (to estimate new construction rates); firm size data compiled by the Small Business Administration's Office of Advocacy (to estimate the total number and sales receipts of small businesses); the Annual Time Use Survey published by the Bureau of Labor Statistics (to estimate facility use and travel time); population surveys by the U.S. Census Bureau (to estimate the percentage of U.S. population with disabilities and types of disabilities); and average hourly wage statistics compiled by the Bureau of Labor Statistics (to estimate the value of time per facility group). For those aspects of the RIA model that lacked publicly available data, estimates were developed by HDR/HLB or Department architects (as appropriate) and then reviewed by expert cost and benefit panels. From the cost perspective, estimated values include the number and type of elements per typical facility. *See* RIA § 4.1.2, 4.1.7. With respect to benefits, the expert panel developed estimates concerning the time savings due to changes in accessibility, the expected number of uses for each requirement, and the likelihood that persons with disabilities would realize benefits from a requirement. *See* RIA §§ 4.2.4, 4.2.6.

The Access Board's Final Regulatory Assessment—2004 ADAAG

In July 2004, the Access Board published its final regulatory assessment for the 2004 Americans with Disabilities Act and Architectural Barrier Act Accessibility Guidelines (''2004 ADAAG''). *See* Regulatory Assessment of the Final Revised Accessibility Guidelines for the Americans with Disabilities Act and Architectural Barriers Act, *http://www.access-board.gov/ada-aba/reg-assess.htm* (July 2004). A few years earlier, the Access Board also issued final regulatory assessments for its supplemental guidelines for play areas (2000) and recreation facilities (2002).[1] The Access Board's final regulatory assessment for the 2004 ADAAG does not, however, incorporate these supplemental guidelines into its economic analysis since the costs of these guidelines had already been addressed in prior regulatory assessments.

In summary, the Access Board's final regulatory assessment for the 2004 ADAAG used a sampling approach to calculate the costs of the revised guidelines as applied to newly constructed and altered facilities. In this final regulatory assessment, the Board identified fourteen requirements that were projected to impose higher costs (relative to the 1991 ADAAG) for newly constructed or altered facilities. From this group of ''increased cost'' requirements, the Board selected ten requirements for direct economic analysis based on its determination that these requirements were likely to have the greatest cost impact on newly constructed and altered facilities. The Board then calculated the costs of applying these ten requirements to the new construction and alteration of four representative facility groups: Office buildings; hotels; hospitals and nursing homes; and public (government) housing. These four facility groups were selected based on the assumption that they would most likely incur relatively higher costs for the ten selected requirements as compared to other facilities. Using the foregoing methodology, the Board's final regulatory assessment estimated that the aggregate national cost of the ten selected final revised guidelines for newly constructed or altered office buildings, hotels, hospitals and nursing homes, and public housing ranged from $12.6 million (using IBC 2000 & 2003 as the ''lower bound'' baseline) to $26.7 million (using an ''upper bound'' baseline of the 1991 ADAAG) annually.

In the ANPRM, the Department stated that it expected to ''adopt'' the Access Board's final regulatory assessment for the 2004 ADAAG as its assessment of the cost impact that the proposed standards would have on newly constructed and altered facilities. At the same time, however, the Department recognized that its assessment of the costs for newly constructed and altered facilities would have to be broader than that of the Board. First, the Department's assessment would have to include the costs associated with the supplemental guidelines, which, because they had been adopted by the Board in earlier rulemaking initiatives, had not been included in the Board's final regulatory assessment of the 2004 ADAAG. In addition, as the Department noted in the ANPRM, the unit costs estimated by the Board, though they might serve as a starting point, would nonetheless have to be supplemented with indirect costs, balanced with reduced costs, and then spread out over the 40-year lifecycle of the regulations. Finally, because the Department was undertaking a comprehensive benefit-cost analysis, the Department—unlike

[1] The Access Board's final assessments for its supplemental guidelines for play areas and recreation facilities are available on its Web site. *See* Assessment of Benefits and Costs of Final Accessibility Guidelines for Recreation Facilities, *http://www.access-board.gov/recreation/reg-assessment.htm* (Sept. 2002); Final Accessibility Guidelines for Play Areas—Economic Assessment, *http://www.access-board.gov/play/assess.htm* (Oct. 2000). The Board conducted an initial, but not a final, regulatory assessment for its supplemental guidelines for State and local government facilities issued in 1998.

the Board—would have to include an assessment of benefits for each requirement.

In response to the ANPRM, several commenters representing industry groups urged the Department not to simply ''adopt'' the Board's assessment but, instead, to conduct its own assessment of the benefits and costs of the proposed standards for newly constructed and altered facilities. Questioning the accuracy of the sampling approach employed in the Board's assessment, as well as its decision not to estimate unit costs for requirements it had concluded would impose ''reduced cost'' or ''no or minimal cost,'' these commenters urged the Department to conduct a comprehensive benefit-cost analysis that would assess the benefits and costs of all requirements as applied to all types of facilities.

As a practical matter, the RIA does indeed follow the comprehensive benefit-cost approach suggested by these commenters. The Department had long planned to assess the incremental impact of revised and supplemental requirements at existing facilities on a per requirement and per facility basis with respect to barrier removal. Using a different methodology for newly constructed and altered facilities would have made it impossible to ''roll up'' the benefits and costs of the proposed regulations for each requirement, each facility group, and for the rule as a whole. The Department concluded that the most sensible approach would be to use the same methodology throughout its initial regulatory assessment. Thus, the Department did not ''adopt'' the Access Board's final regulatory assessment for the 2004 ADAAG, but, rather, conducted its own assessment of the proposed title II and title III regulations.

Moreover, while the Department suggested in the ANPRM that it might use the Board's unit cost estimates as a starting point for newly constructed and altered facilities, the RIA does not, in fact, rely on the Access Board's cost figures. Instead, the RIA uses detailed cost estimates for each requirement as provided by an independent professional cost estimator. *See* RIA §§ 4.1.3–4.1.6 & App. 3–H. These unit cost estimates were derived using standard industry practices and published sources for construction costs. Low, middle, and high unit cost estimates were developed for each requirement and separately applied to new construction, alterations and barrier removal. As with all data used in the RIA, the Department invites the public to comment on its unit cost estimates and to provide, where appropriate, any supporting information that might be necessary for the Department to properly consider the comment. Because this is an initial RIA, it will be followed by a final regulatory assessment when the Department publishes a final rule. The Department will carefully consider all comments relating to the initial RIA during the development of the final rules and final regulatory assessment.

Categorization of Requirements

The Department's RIA assesses the incremental benefits and costs of 110 proposed requirements (or series of closely-related requirements). For ease of reference, the RIA assigns a number to each proposed requirement. *See* RIA, Tbl. 1 & App. 2. The RIA's requirements largely follow the requirement categories developed by the Access Board in its final regulatory assessment for the 2004 ADAAG. The Department's categorization of requirements, however, does not track perfectly with the Board's final regulatory assessment for two primary reasons. First, the two assessments use different primary baselines. In the Access Board's final regulatory assessment, the 1991 ADAAG served as one of the two primary baselines, whereas the RIA employs the Department's 1991 Standards as the primary baseline. Second, the Board's final regulatory assessment only directly calculated the cost impact of a limited subset of revised guidelines as applied to four representative newly constructed or altered facility groups. For situations in which either of these considerations altered the incremental substantive or monetary impact of a proposed requirement, the RIA categorizes that requirement differently than the Access Board. *See* RIA § 2.2.

Requirements in the RIA are categorized as either ''supplemental'' or ''revised'' requirements. Supplemental requirements represent proposed requirements that have no scoping or technical counterpart in the 1991 Standards. There are 44 requirements in the RIA categorized as ''supplemental.'' *See* RIA, App. 2 (Req. ## 67–110) & App. 8 (Matrix of Changes). For the most part, these supplemental requirements come from the supplemental guidelines promulgated by the Access Board for judicial, detention, and correctional facilities (1998), play areas (2000), and recreational facilities (2002). The Department's title II and title III NPRMs also independently propose a handful of new regulatory requirements applicable to sports stadiums, post secondary school multistory dormitory facilities, accessible prison cells, and social service establishments. *See* RIA, App. 2 (Req. ## 106–110) & App. 8 (Matrix of Changes). In general, supplemental requirements apply to features or elements that are typically found only in specific types of facilities such as courthouses, jails, recreational boating and fishing facilities, golf courses, amusement rides, and playgrounds. However, a few supplemental requirements (*i.e.*, requirements relating to exercise facilities, swimming pools and play areas) apply to features or elements found in a broader range of facility types. Supplemental requirements in the RIA are assigned requirement numbers 67–110. *See* RIA, Apps. 2 & 8.

The RIA also identifies 66 proposed requirements as ''revised'' requirements. Unlike supplemental requirements, revised requirements apply to features or elements that are currently subject to (or specifically exempted from) scoping or technical provisions in the 1991 Standards. For the most part, revised requirements apply to elements that are found in a wide range of commonly used facility types, such as restaurants, retail stores, schools, hospitals, and office buildings. Also categorized as revised requirements in the RIA are requirements applicable to common building elements (such as windows) and commonly used facility types (such as residential dwelling units) that have long been subject to specific accessibility requirements, either through the Uniform Federal Accessibility Standards (''UFAS''), other Federal accessibility standards (such as the Fair Housing Act or Section 504 of the Rehabilitation Act), or the International Building Code (IBC). Each of the ''revised'' requirements in the RIA was adopted by the Board in 2004 and is, therefore, also described in the final regulatory assessment accompanying the 2004 ADAAG. ''Revised'' requirements in the RIA encompass requirement numbers 1 through 66. *See* RIA, Apps. 2 & 8.

For analytical purposes, the RIA also further divides ''revised'' requirements into two subcategories: ''more stringent'' and ''less stringent'' requirements. Generally speaking, more stringent requirements are requirements that have been modified to mandate greater accessibility as compared to the 1991 Standards. For the most part, the RIA's ''more stringent'' revised requirements generally correspond to requirements identified by the Board as ''no or minimal cost'' or ''increased cost'' requirements in its final regulatory assessment for the 2004 ADAAG. These differences in terminology arise out of

the dissimilar methodologies underlying the respective regulatory assessments—namely, while the Board's final regulatory assessment assessed only the costs of the revised guidelines, the Department's RIA includes both incremental benefit and the cost calculations for each proposed requirement. ''More stringent'' requirements in the RIA include the following requirement numbers: 2–11; 14–16; 19–24; 27–29; 32; 35–37; 40–42; 45–46; 48–49; 51–53; and, 58–62. *See* RIA, App. 8. Less stringent revised requirements, on the other hand, represent requirements that have been relaxed relative to the 1991 Standards. Requirements categorized as ''less stringent'' in the RIA generally equate to ''reduced cost'' requirements in the Access Board's final regulatory assessment. In the RIA, less stringent revised requirements are represented by the following requirement numbers: 1; 12–13; 17–18; 25–26; 30–31; 33–34; 38–39; 43–44; 47; 50; 54–57; and, 63–66. *See* RIA, App. 8.

Facilities—Categorization by Group

The RIA calculates the incremental benefits and costs of the proposed standards for all public and private facilities covered by the ADA. With respect to places of public accommodation covered by title III, commenters stressed the need to consider each type of facility—whether it is a restaurant, a hotel, a theater or an amusement park—in its own respective category. Commenters also encouraged the Department to break out facility groups in a way that reflects the homogeneity (or lack thereof) of the types of buildings and industries that fall within each group. For example, commenters representing the restaurant industry emphasized the diverse nature of the industry and urged the Department not to use a ''one size fits all'' approach. Similarly, commenters representing the amusement industry pointed out that their industry is ''not monolithic'' and encompasses amusement facilities of various types and sizes, ranging from large theme parks to small miniature golf courses. These commenters also related their view that amusement facilities have physical environments and construction costs that are fundamentally dissimilar from other types of facilities and should not be lumped in with places of public entertainment generally.

The Department appreciates the need for a facility categorization scheme that reflects, to the greatest extent possible, the wide range of facilities covered by titles II and III of the ADA. Accordingly, rather than simply relying on the twelve facility categories enumerated in the ADA, the RIA features more than 65 different facility groups. *See* RIA, Tbl. 2 & App. 3–A to 3–C. All public (title II) and private (title III) facilities are assigned separate facility groups. Additionally, public and private facilities are also grouped according to general similarities in size, in underlying economic characteristics (including the responsiveness of average customers to changes in price), or both. Some of the resulting facility groups represent single-purpose facilities (*i.e.*, elementary schools or hospitals), while other groups include classes of facilities (*i.e.*, single level stores). A few facilities—namely, swimming pools and parking garages—represent both individual facility groups and elements in larger facilities (such as hotels).

While the range of facility groups in the RIA is thus broad, it is not limitless. No regulatory assessment can account for every nuance across all industries and facility types nationwide. The Department has nonetheless endeavored to craft as many facility groups as necessary to properly estimate the incremental benefits and costs of the proposed regulations, as well as to afford stakeholders a meaningful opportunity to assess the regulations in terms of their own particular circumstances. For example, due to the wide variations between transient lodging facilities and the fact that several revised requirements are directly related to the number of rooms in such facilities, places of lodging have been divided into three size-specific groups: ''motels,'' ''inns,'' and ''hotels.'' Additionally, both because most of the supplemental requirements relate to specific types of recreation facilities and because such facilities vary greatly by size and features, the RIA includes distinct categories for each of the following public and private recreation-related facility groups: Amusement parks; exercise facilities and health spas; aquatic centers; bowling alleys; golf courses; recreational boating facilities; fishing piers and platforms; miniature golf courses; and shooting facilities. The RIA does not, however, differentiate restaurants and other eating establishments into multiple facility groups as suggested by some commenters. Since more than 75% of restaurants are owned by small businesses, their respective sizes, features, and elements are relatively homogenous. *See* RIA, Ch. 6, Tbl. 17. Thus, for purposes of the RIA, restaurants and other eating establishments are collectively assigned to a unitary facility group. The Department, however, welcomes public comment on these and other facility groups used in the initial RIA and will consider such comments carefully when preparing the final RIA.

Facilities—Estimation of Number of Elements per Facility

The primary building blocks for the RIA's economic analyses are the estimated number of elements in each facility. Elements represent the architectural features, amenities, or spaces that are subject to revised or supplemental proposed requirements. As noted previously, it was not feasible for the Department to conduct a nationwide survey of all buildings and facilities. Nor are published sources available that document the number and types of elements—as defined in the RIA—in all facilities across the country. Estimating the number of elements per facility thus required the development of specifications for each element, as well as a methodology for counting the number of elements in each facility. These estimates were initially developed by Department architects and HDR and then verified (or, as needed, modified) by a panel of experts with broad experience in architecture, code consulting, and cost estimation across a wide spectrum of facilities. *See* RIA sections 3.1, 4.1.2 & Apps. 3–D, 3–E, 7.

The end result of this element estimation process is a constructed element count for all types of ADA-covered facilities nationwide. Within each facility group, the RIA assumes a ''typical'' or average facility for each facility group that applies to all facilities in that group. *See* RIA, App. 3–C. Examples of assumptions about facility size include square footage, number of stories or elevators, and seating capacity. For each typical facility, in turn, the RIA assumes a specified set of elements. *See* RIA, App. 3–E. As a general rule, larger facilities have more elements, and smaller facilities have fewer elements. However, the specific number and type of elements in a typical facility are determined by the size and nature of the facility. For example, the typical restaurant is assumed to potentially have up to the following number of elements subject to change: Valet parking garages (1); passenger loading zones (1); parking spaces (1); urinals (1); water closet clearances in single-user toilet rooms (2); side reach (3); sales and service counters (1); limited access spaces and machinery spaces (1); detectable warnings (1); and small play area (1). *See* RIA, App. 3–E1.

In actuality, of course, not every facility will share precisely the same set

of elements that are assumed for the typical facility in the facility group. For example, even though it is estimated that the typical restaurant facility has one passenger loading zone, many restaurants are located on streets, in shopping malls, or other interior spaces where passenger loading zone requirements do not apply. The RIA takes this uncertainty factor into account by incorporating likelihood values into the model. That is, each element is assigned a range of values (low, medium, and high) representing the likelihood that the element is both located in the typical facility *and* subject to change in order to bring it into compliance with applicable revised or supplemental requirements. *See* RIA sections 3.1, 4.1.2 & Apps. 3–F, 3–G. Continuing with the restaurant example, the ''most likely'' value for passenger loading zones being located at a particular facility and requiring change is assumed to be 10%, with high and low values equal to plus or minus 5% respectively. *See* RIA, App. 3–G. Thus, by quantifying and incorporating likelihoods into the model with respect to facility element counts (and other estimated cost and benefit values), the RIA more realistically addresses some of the inherent uncertainties underlying benefit-cost analyses. *See* RIA §§ 3.3, 4.3.1 (discussing ''Risk Analysis'' approach) & App. 6 (RAP Primer).

Facilities—Application of Model to Newly Constructed and Existing Facilities

The universe of facilities required to comply with the Department's proposed standards will be divided into mutually exclusive categories—facilities that are ''newly constructed'' after the effective date, and facilities that are already ''existing'' as of the effective date. Facilities constructed after the effective date of the regulations will be required to build in conformance with the requirements governing new construction. Elements and spaces within existing facilities will be subject to the proposed standards through either alterations or barrier removal requirements. In the RIA, each of these types of construction is modeled separately with respect to each facility group (and each requirement) so that stakeholders will be able to better assess the impact of the proposed regulations on their own particular facilities or circumstances.

Application of the RIA cost model to new construction is relatively straightforward. The number of new facilities constructed each year after the effective date of the regulations (up to the 15th year) is generally based on published industry and sector-specific annual growth rates. *See* RIA sections 3.1, 4.1.1 & App. 3–B. In simplified form, the total incremental cost for a particular facility group in a given year is calculated by multiplying the number of newly constructed facilities for that group for the year by the total number of elements across all newly constructed facilities in that group and the unit cost per element (that includes both initial and recurring costs). As a general rule, new construction costs are typically lower than the costs for other types of construction. Indeed, many proposed requirements are expected to have zero costs for new construction either because the cost of the element is negligible, or because it is presumed that architects can ''design around'' the new requirement in the planning stages with no appreciable increase in design or construction costs.

For existing facilities, compliance with the proposed standards may come in the form of either alterations or barrier removal. The alterations requirement is only triggered when an entity voluntarily undertakes an alteration project, and, even then, generally applies only to the particular elements undergoing alteration. (Alterations affecting ''primary function areas'' are also required, absent certain circumstances, to ensure that the path of travel to the altered area is accessible to persons with disabilities.) Moreover, not all existing facilities would be altered within the presumed 15-year lifespan of the proposed regulations. The RIA thus incorporates a historically derived alterations schedule for each facility group based on published data. *See* RIA § 3.4 & App. 3–B. Based on this alterations schedule, the total incremental alterations cost for a particular facility group is then calculated using the same basic formula as described above for new construction costs. Alterations costs reflect only the incremental costs necessary to bring the affected element(s) into compliance and exclude costs otherwise attributable to other planned aspects of the alteration. Overall, alterations costs vary greatly by facility group, with some facilities experiencing minimal alterations costs (or even cost savings) under the proposed regulations (*e.g.*, stadiums, convention centers, airport terminals, depots, ski facilities, bowling alleys, fishing piers, and public amusement parks), and other facilities projected to incur relatively higher alterations costs (*e.g.*, single-level stores, indoor service establishments, offices of health care providers, office buildings, and courthouses). *See* Initial Regulatory Impact Analysis—Supplemental Results (''Supplemental Results''), pp. 14–147. The variability in alterations costs is largely driven by the mix of affected elements in each respective facility group.

Barrier removal, by contrast, is a continuing obligation that applies to all public areas of existing title III-covered facilities. For this reason, all elements in these existing facilities—irrespective of compliance with the current 1991 Standards—potentially would be required to satisfy applicable supplemental or revised proposed requirements to the extent barrier removal was readily achievable. Factors in the barrier removal calculus include whether elements are subject to more stringent revised requirements and, thereby, potentially exempt from barrier removal under the Department's safe harbor proposal; whether elements are subject to supplemental requirements for which safe harbor protection does not apply; when the facility was originally constructed; whether, or to what extent, elements have been altered; and whether removal of architectural barriers is readily achievable under the 1991 Standards or proposed requirements respectively.

Taking all of the foregoing factors into consideration makes barrier removal cost calculations potentially more complex (or, put another way, more variable-driven) as compared to costs for other types of construction. Figure 1 in the RIA fully illustrates the various conditions under which particular elements in an existing facility may become compliant and whether the costs associated with such compliance are assessed under barrier removal or alterations. As a practical matter, however, barrier removal cost calculations in the RIA can be distilled down to two essential considerations. First, the RIA assumes that elements in existing facilities subject to supplemental requirements may potentially incur barrier removal costs. Since the Department's proposed safe harbor is conditioned on compliance with the 1991 Standards, elements covered by supplemental requirements—which, by definition, have no counterpart in the 1991 Standards—are necessarily ineligible for safe harbor protection. Second, with respect to revised requirements, the RIA presumes no barrier removal costs will be incurred by virtue of the safe harbor provision. (Instead, modifications to existing elements subject to revised requirements proceed on the alterations schedule and are costed accordingly.)

The RIA presents the overall results for barrier removal under two

scenarios—a comparison of total net present value (''NPV'') under ''safe harbor'' and ''no safe harbor'' conditions, and a comparison of varying assumptions about readily achievable barrier removal rates (*i.e.*, 0%, 50%, and 100%). *See* RIA, Figures ES–3 & ES–4. (Total barrier removal costs are also presented for each respective facility group under the ''Safe Harbor'' scenario in the Supplemental Results.) In sum, many title III-covered facilities are expected to incur few—if any—costs for barrier removal due to the Department's proposed safe harbor provision. Indeed, when taking safe harbor into account, one-half of the 38 facility groups comprised of title III-covered (private) facilities are projected to incur no barrier removal costs. *See* Supplemental Results, pp. 14–147. Such facility groups include: motels; restaurants; movie theaters; single-level stores; shopping malls; museums and libraries; day care centers; and homeless shelters. Other facilities, on the other hand, are expected to incur barrier removal costs under the proposed regulations due to the presence of elements affected by supplemental requirements. For such existing facilities, barrier removal costs typically run higher than new construction costs because: (1) retrofitting existing buildings or facilities is often more expensive than new construction; and (2) from an economic perspective, the full cost of bringing existing elements into compliance with the proposed regulations is attributable to barrier removal whereas, for new construction, only the incremental cost differential between compliant and noncompliant elements is attributable to new construction. *See* RIA § 4.1.3. Title III-covered facility groups with expected barrier removal costs that are higher relative to their respective new construction costs include amusement parks; exercise facilities; aquatic centers; and golf courses.

Facilities—Assumption of Compliance With Current Law

In accordance with the principle that regulatory analyses should only assess the incremental benefits and costs attributable to proposed regulations, the RIA assumes that elements in existing facilities covered by the ADA are currently in compliance with applicable regulatory standards. Indeed, if the RIA did not make this assumption, the benefits and costs of entities' noncompliance with their legal obligations would be improperly charged to the proposed regulations.

While the RIA's assumption of compliance has implications throughout the assessment, its impact is most obvious with respect to existing private (title III) facilities subject to barrier removal. As discussed previously, the Department is proposing a safe harbor provision that would exempt elements in existing facilities that comply with the 1991 Standards from barrier removal that might otherwise be necessary to bring them into compliance with revised standards in the proposed regulations. In this context, the RIA presumes that existing facilities have already satisfied their legal obligations by removing architectural barriers to the extent readily achievable. Thus, any remaining barriers are those for which barrier removal has not yet been readily achievable under the 1991 Standards. Moreover, if barrier removal to date has not been readily achievable under the current Standards (which, by definition, are less stringent than the proposed revised requirements), it is reasonable to assume that barrier removal will also remain beyond reach under more stringent revised requirements.

For existing public (title II) facilities, however, the assumption of compliance with current law plays out differently. Existing public facilities are not subject to barrier removal requirements. Instead, title II-covered public entities must ensure that their programs and services, ''when viewed in their entirety,'' are accessible to individuals with disabilities. Compliance with program accessibility requirements thus does not necessarily require structural modifications to existing facilities since compliance is determined on a program-wide—rather than element-by-element—basis.

For these reasons, the RIA follows the methodology outlined in the ANPRM and generally does not assess the impact of the proposed regulations on existing public facilities covered by title II. However, there are two limited circumstances in which the regulatory assessment does include existing public facilities in the economic calculus. First, alterations to existing public facilities must still comply with the proposed regulations irrespective of program accessibility requirements. Thus, the RIA model assumes that when an existing title II-covered facility undergoes alteration, the incremental costs and benefits of that alteration are included in the regulatory assessment. Second, the RIA takes into account program access when calculating the estimated incremental impact of the proposed regulations with respect to supplemental requirements relating to existing swimming pools, saunas and steam rooms, and play areas. The RIA includes program accessibility in the regulatory calculus in the context of these three sets of requirements for several reasons. Even in the context of program accessibility, compliance with these supplemental requirements would undoubtedly require some structural modifications unless the facilities that compose the program were already—pursuant to program accessibility or otherwise—accessible in the same manner and to the same extent as required by the proposed standards. Moreover, the Department is proposing certain regulatory exemptions and exceptions that exclusively apply to existing title II-covered facilities with swimming pools, saunas and steam rooms, or play areas.

The Department's statement in the ANPRM that it did not intend to include existing title II-covered public facilities in the assessment generated several objections by commenters. In summary, these commenters asserted that existing public facilities should be included in the regulatory assessment since they would be affected by the proposed standards in various circumstances, including voluntary efforts to improve access, determinations that compliance with program accessibility requirements could only be met with structural changes or litigation.

As stated previously, however, the purpose of the RIA is to measure the incremental benefits and costs of the Department's proposed regulations. Because the program accessibility provisions in title II require public entities to ensure access to *programs*, rather than facilities, the necessity for structural modifications cannot be assumed.[2] (By comparison, the obligation to remove structural barriers in existing private facilities is both mandatory and amenable to assessment on an element-by-element basis.) Moreover, as with existing private facilities, public facilities newly constructed or altered since the effective date of the 1991 Standards should already be fully or largely accessible, and older facilities—those built before 1993—have been required to meet the program accessibility requirements for at least 15 years, if not longer. It is thus reasonable to assume that if structural modifications were necessary to provide program access, they likely would have been implemented by now.

[2] Nor will public entities be required to retrofit elements in existing title II-covered facilities to bring them into compliance with the applicable revised standards so long as such elements presently comply with either the 1991 Standards or UFAS. To make this clear, the Department is proposing a safe harbor provision for existing public facilities.

Benefits—Public Comments Relating to the Measurement of Benefits

The Department received many public comments with suggestions about how the RIA should measure the benefits of the proposed standards to individuals with disabilities. With the exception of those commenters who expressed the view that any form of economic analysis is inappropriate for regulations implementing a civil rights statute, commenters were unanimous that the assessment should balance costs against a comprehensive assessment of benefits, both economic and social. Generally speaking, commenters also recognized that quantifying benefits would be a difficult, if not impossible task, since the paucity of hard data on the economic benefits of accessibility would require the Department to generate such data from scratch.

Most comments relating to the assessment of benefits tended to be global in nature. That is, rather than suggesting methods for estimating the incremental benefits of the proposed regulations, the majority of proposals appeared better suited to a comprehensive assessment of the overall societal benefits of accessibility itself. For example, commenters representing disability groups recommended that the Department adopt a process of benefit-based analysis recommended to the President by the National Council on Disability (NCD) in its report entitled ''National Disability Policy: A Progress Report, December 2002–December 2003.'' Recognizing the need for ''vastly more data'' on the effects of societal decisions on people with disabilities, these commenters urged the Department to analyze the long-term benefits of the proposed regulations for people with disabilities, as well as economic activities foregone by persons with disabilities due to inaccessibility. As one commenter noted: ''An individual with a disability able to access the local aquatic center will be able to seek physical activity and recreation opportunities that promote healthy living and wellness, reduce the risk for disease and declining health, seek additional opportunities for community participation including employment and thereby reduce reliance on governmental subsidies for housing, welfare or health care.''

Other commenters representing disability groups recognized that, while certain short-term benefits could be measured, gauging the more enduring or meaningful benefits of the changes represented by the proposed regulations for people with disabilities and for society as a whole would be very difficult. For example, determining the incremental impact that one change—or even all of the changes—might have on the earning power of people with disabilities would ''require a much more complex exercise than construction cost estimating.'' Other unquantifiable benefits noted by commenters included the extent to which the incremental changes reflected in the proposed regulations might lower the liability exposure faced by facilities by making accessible elements and spaces safer for persons with disabilities.

Commenters representing industry groups suggested that the RIA assess the benefits of accessibility on an element-by-element basis in order to establish a ''breakeven'' value for each proposed requirement—that is, how much benefit an accessible element would need to provide to be worth the cost of making it accessible. One commenter representing the design and construction industry described this approach as measuring ''performance outcomes'' (*i.e.*, the quantifiable benefits and costs conferred by each proposed requirement), as compared to other types of analysis that measure ''social outcomes'' (*i.e.*, the overall impact of the proposed requirement on society). This comment suggested that ''cost effectiveness analyses'' focus on quantifiable performance outcomes, while ''cost utility analyses'' focus on qualitatively describing the range of social benefits and costs. In the RIA, the Department is doing both—quantifying the incremental benefits and costs of each proposed requirement to the extent they can be quantified, and, to the extent they cannot, describing the unquantifiable benefits and costs in qualitative terms.

Several commenters representing disability groups or industry groups suggested that the practical effect of accessibility requirements is to redistribute economic resources from society as a whole to the ''under served'' population of individuals with disabilities. Commenters representing disability groups hailed the redistribution as an obvious social good, asserting that civil rights regulations need not confer benefits on ''society as a whole'' to be worthwhile. By contrast, commenters representing industry groups questioned whether such redistribution was cost-efficient. These commenters referred the Department to Part D of OMB Circular A–4 (''Distributional Effects''), which applies when the benefits and costs of a regulation are unevenly distributed throughout the U.S. population or economy. Distributional effects may be imbalanced for different industrial sectors or regions of the country, or, as urged here, for different subpopulations of people. As OMB Circular A–4 puts it, the uneven distribution of regulatory impacts occurs when ''[t]hose who bear the costs of [the] regulation and those who enjoy its benefits * * * are not the same people.'' These commenters urged the Department to recognize that the proposed regulations would have uneven distributional effects because, in their view, those who will purportedly bear all the costs of compliance (facility owners and operators) and those who will enjoy its benefits (people with disabilities) are not the same groups.

From the Department's perspective, however, the redistribution analogy is inapposite. Accessibility requirements do not represent a transfer of resources from one group of people to another, but, rather, a dedication of shared resources to a particular end. In contrast to the types of subpopulations mentioned in OMB Circular A–4 (*i.e.*, race, sex, or income level), disability is not a fixed or even relatively static category; rather, it is inherent in the human condition. The vast majority of individuals who are fortunate enough to reach an advanced age will benefit personally from an accessible environment. Business owners and people with disabilities are not discrete subpopulations—just as people with disabilities own businesses, many business owners have or will acquire a disability during their lifetime. Moreover, while the direct costs of compliance with the proposed standards may be incurred initially by businesses, as commenters representing industry groups have repeatedly stated, such costs eventually may be passed along to consumers. In other words, all members of society will pay the price for accessibility, just as all will benefit from it. Rather than representing a transfer of resources between distinct groups of people, then, accessibility requirements represent—for all members of society, whether they will benefit from accessibility now or at some point in the future—a choice among different forms of societal benefits.

Benefits—Quantification and Monetization of User Benefits in the RIA

From an economic perspective, the value that people derive from accessibility can be divided into three categories: ''use value'' (the value that people derive from using accessible facilities), ''option value'' (the value that people with and without disabilities derive from the opportunity to obtain the benefit of accessible facilities in the

future) and ''existence value'' (the value that people with and without disabilities derive from the simple existence of accessible facilities including the fulfilment of constitutional guarantees of equal protection and nondiscrimination). The RIA, however, only quantifies and monetizes the incremental benefits to *users* (*i.e.*, persons with disabilities) conferred by changes in accessibility due to the proposed regulations. This is largely due to data constraints. The overall benefits of the proposed regulations will be experienced by nearly all members of society to a greater or lesser extent during the projected 40-year lifecycle of facilities affected by these regulations. However, quantification of these benefits is beyond the scope of the Department's regulatory assessment, and, likely, any regulatory assessment. Instead, the RIA is necessarily limited to assessing the value of specific types of benefits that can be quantified and assigned monetary values (*i.e.*, user benefits) for a demographically defined population of people (*i.e.*, persons with disabilities). In this sense, the regulatory assessment must be considered conservative since it almost certainly understates the overall value of the proposed regulations to society.

The RIA quantifies and monetizes user benefits in two ways. First, an expert panel developed estimates of the amount of time persons with disabilities can be expected to save time either gaining access to a facility (*e.g.*, a retail store), waiting to use a particular amenity in that facility (*e.g.*, a restroom), or using an amenity in the facility (*e.g.*, an ATM inside the store) as a result of the proposed regulations. *See* RIA §§ 3.2.2, 4.2.6 & Apps. 4–H, 4–K, 4–L, and 4–N. Second, for proposed requirements—primarily, supplemental requirements—that can be expected to create new users who previously were unable to visit a facility (*e.g.*, fishing piers) or to use a facility amenity independently (*e.g.*, hotel swimming pools), the assessment quantifies the value of the new uses generated by the change in accessibility. *See* RIA § 3.2.3 & App. 4–I. Each of these components of user benefits is then monetized using an appropriate ''value of time''—namely, an expression of a user's willingness to pay for changes at the facility. In keeping with common economic assumptions, user benefits associated with accessibility changes are monetized based on the value of the user's time. *See* RIA §§ 3.2, 4.2.5 & App. 4–J.

The benefits model in the RIA also places a ''premium'' on the value of certain types of time savings. The RIA describes the theory and mechanics of this approach in greater detail. *See* RIA § 4.2.5 & App. 4–J. Briefly stated, the assessment assumes that individuals would be willing to pay more for time saved gaining access to a facility due to improved accessibility than their respective typical uses of the same amount of time. This presumption derives from studies in the transportation industry concluding that the inherent discomfort of having to wait (as compared to the satisfaction of feeling like one is at least moving in the direction one wants to go) leads people waiting at a bus stop to prefer to have the bus arrive sooner, even if it means that the bus ride itself will take longer (so that the net travel time is the same). Essentially, people experience the time they spend waiting for the bus as a more negative experience—by a factor of two to one—as compared to the time they spend riding the bus and, consequently, ''value'' decreasing the time spent waiting more than they would an equivalent amount of bus time. In the RIA, this premium is applied, as applicable, to the incremental time savings benefit afforded by each revised or supplemental requirement.

In the end, the approach the Department has taken with respect to the assessment of benefits in the RIA is closest to the proposals of commenters representing industry groups. By calculating the incremental benefits (and costs) for each supplemental and revised requirement, the assessment generates a benefit-cost ratio for each such requirement. Although this approach has allowed the Department to gauge the incremental cost-effectiveness of the change represented by each revised or supplemental requirement as applied to a particular element, it should be understood that it is also fundamentally different from gauging the absolute cost-effectiveness of requiring a given element to be accessible. Most of the inherent value of an accessible element, as with accessibility generally, derives not from the incremental changes represented by the proposed standards, but from the fact that the element is required to be accessible at all.

Finally, not all of the revised requirements will confer increased benefits on persons with disabilities. The ''less stringent'' revised requirements generally reduce both benefits and costs, though such reductions may not be distributed equally. As a general matter, requirements have been made less stringent to clarify the meaning of the current requirement, or to provide an exception that takes into account special circumstances in specific facilities. For less stringent requirements that propose reductions in scoping, these revisions were typically based on the Access Board's determination that demand for the affected accessibility feature or communication device was not high enough to warrant the current numerical requirements. For purposes of the RIA, when less stringent revised requirements confer lower benefits relative to the current requirements, these reduced benefits have been assessed only with respect to new construction and alterations. Elements in existing facilities subject to less stringent requirements are assumed to be compliant already, either with current (more stringent) requirements or revised (less stringent) requirements. Facility owners would have neither a legal obligation nor a financial incentive to undergo barrier removal for such elements in order to ''comply'' with the revised standard. The RIA thus assumes that reductions in benefits due to less stringent revised requirements will not be realized for elements in existing facilities unless the affected elements are altered.

Benefits—Nature and Significance of Unquantified Benefits

In addition to the foregoing monetized user benefits, the RIA acknowledges that the proposed regulations would, if promulgated in final form, undoubtedly confer significant and important benefits on society that defy easy quantification or monetization. These benefits include the option and existence values discussed previously. Other benefits would also likely accrue to businesses through reduced administrative costs (from harmonization of the 2004 ADAAG with model codes) or increased worker productivity (due to greater workplace accessibility). The regulatory assessment discusses these types of benefits in *qualitative*, rather than quantitative, terms. *See* RIA § 5.4.

Perhaps the most significant unquantified benefit is the myriad ways in which the proposed standards—to the extent they make the built environment more accessible—would improve the lives of many persons with disabilities. Even on an incremental level, the beneficial domino effect of increased access to all types of facilities, for each individual and, ultimately, for society as a whole, simply cannot be measured, much less reduced to monetary terms. An example related by one commenter referred to the way in which the proposed regulations would enable many individuals with

disabilities to begin independently accessing various types of recreational facilities for the first time. This commenter observed how ''[r]egular involvement and participation in recreation, social, and leisure activities plays a significant role in living and maintaining a healthy lifestyle,'' and ensures that people ''remain physically active, develop social skills, and develop the skills necessary to enjoy lifelong leisure activities.'' Among the many collateral benefits of access to recreational opportunities are the ''prevention of obesity, [a] decrease of secondary conditions, improved social and problem solving skills, promotion of physical and emotional health and decreased likelihood of being hospitalized for another illness,'' not to mention ''increased independent living skills and preparation for employment.''

Unquantified benefits from the proposed regulations, moreover, are not limited to those accruing from the increased accessibility of recreational facilities. The revised requirements would increase accessibility throughout the entire range of public and private facility groups. For example, one commenter cited a study published in a recent issue of the *Journal of Consumer Affairs* presenting the perspectives of people with disabilities regarding the effectiveness of the ADA. Based on a national sample of one thousand noninstitutionalized individuals with disabilities, the study found that respondents who interacted more frequently with the marketplace, or even simply perceived the marketplace as more accessible, were more satisfied with life. According to this comment, study authors Carol Kaufman-Scarborough and Stacey Menzel Baker stated that their finding ''indicates the value behind efforts designed to empower consumers with disabilities by offering services that assist them * * * and by creating environments that enable them to experience full participation in society.'' Increased accessibility of the marketplace as a whole, which can be expected to heighten facility use across a wide range of facility groups, will also lead to greater benefits over time. A commenter representing a State government echoed this theme, citing potentially increased usage of public recreation areas and greater participation in the democratic process.

Additionally, the number of Americans with disabilities is expected to continue increasing over time. As many commenters pointed out, the proportion of the U.S. population that has a disability not only has been growing steadily over the last forty years, but also is projected to continue growing during the 40-year lifecycle of the regulations. Data provided by the Disability Statistics Center at the University of California at San Francisco demonstrates that the number of adults who use wheelchairs increased at a rate of 6% per year between 1969 and 1999; by 2010, it is projected that 2% of the adult population in the U.S. will use wheelchairs. In addition to people who use wheelchairs, in 1999, 3% of adults used crutches, canes, walkers, and other mobility devices; by 2010, that number is projected to have increased to 4%. Thus, by 2010, up to 6% of the U.S. population is projected to have mobility impairments. Moreover, because this figure was based on data from 1999, it does not take into account the influence of the current war in Iraq. This war is creating a new generation of young men and women with disabilities, the majority of whom are returning from war in their early twenties and can be expected to outlive the 40-year lifecycle of any building subject to these proposed regulations. Just as the original Federal disability rights legislation—Section 504 of the Rehabilitation Act of 1973—was enacted in direct response to the thousands of disabled war veterans returning home from Vietnam, the need to ensure an accessible built environment is now more critical than ever.

Benefits from the proposed regulations potentially would also extend to the public generally irrespective of disability status. For some, value may be derived simply from the existence of enhanced accessibility and improved social equity brought on by the proposed regulations. Others may take ''insurance'' value from the opportunity to make use of accessible features or facilities in the event they should need them in the future. Accessible facilities also benefit individuals without disabilities. Several commenters noted that improved accessibility features might benefit, for example, elderly persons, athletes temporarily on crutches, expectant mothers, or mail carriers using hand carts to deliver large packages. Moreover, because individuals tend to patronize facilities—especially places of public accommodation like hotels and restaurants—in pairs or groups, the benefits of accessibility also extend to the partners, companions, friends, family members, and personal assistants of people with disabilities. Finally, although requirements that apply to existing facilities pursuant to the barrier removal requirement are not primarily intended to benefit employees, employees with disabilities will certainly benefit from the accessibility of such features, which, given the importance of employment to the economic vitality of an individual, their family, and society as a whole, magnifies the benefits of accessibility throughout the economy.

Lastly, businesses—as well as State and local governments—would also likely experience benefits from the proposed regulations in ways that are not quantified in the RIA. Increased harmonization of the revised ADA Standards with model codes and consensus standards will yield substantial benefits to businesses, architects, and State and local governments by eliminating confusion and reducing administrative costs.[3] Harmonization will also make it easier for code-setting governmental entities to have their respective State or local codes certified as meeting or exceeding Federal standards. Businesses may also experience increased workforce efficiency and productivity as a result of accessibility changes in the proposed regulations. For example, one commenter representing the design and construction industry pointed out that greater independence for users of facilities confers a ''productive'' benefit for businesses, whose staff can be redirected from providing assistance to customers with disabilities to potentially more economically rewarding tasks.

[3] While the benefits of harmonization between the ADA Standards and the model codes are clear, a few commenters noted the potential short-run downsides of harmonization. For example, some commenters complained that it would be expensive for small businesses to purchase copies of the IBC which is privately published by the International Code Council. Other commenters expressed concern that, since the 2004 ADAAG has a revised organization and format, they will have to learn a whole new regulatory system should the Department adopt these guidelines as the revised ADA Standards. The Department recognizes that, while harmonization will make ADA compliance easier for all covered entities (including small business owners) over the lifespan of the regulation, this benefit may not be fully realized by all entities immediately. To assist in the transition to the 2004 ADAAG, the Access Board has published a side-by-side comparison between the 2004 ADAAG and IBC 2003—including the provisions that have been incorporated by reference in the 2004 ADAAG—on its Web site (*http://www.access-board.gov*). The ICC offers free downloads of a similarly detailed comparison between the 2004 ADAAG and IBC 2006 on its Web site (*http://www.iccsafe.org*). The Department is exploring the possibility of publishing a similar side-by-side analysis on its Web site that compares the ADA Standards (both current and as revised) to one or more editions of the IBC (including any IBC provisions incorporated by reference) following promulgation of the final regulations. Additionally, when the proposed regulations become final, the Department will publish small entity compliance guides required by SBREFA and other appropriate technical assistance.

Analytical Scenarios—Safe Harbor

The most significant of the regulatory alternatives proposed by the Department is the ''safe harbor'' for certain existing title III-covered facilities and elements. As noted previously, the safe harbor proposal exempts covered facilities from barrier removal obligations that might otherwise arise under the proposed regulations so long as the elements therein are in compliance with the 1991 Standards. The Department has proposed this safe harbor to mitigate the impact of the proposed regulations on existing private facilities.

The RIA results indeed reflect the significant impact of the safe harbor proposal. In order to both assist the Department with its consideration of the safe harbor provision and inform the public of the benefits and costs of its adoption, the RIA compares the total NPV for ''safe harbor'' versus ''no safe harbor'' scenarios. *See* RIA, Figures ES–3 & 13. These comparative scenarios use the 1991 Standards as the primary baseline and assume barrier removal is readily achievable for 50% of the elements in existing facilities. Based on these assumptions, the RIA shows that there is most likely a $4.3 billion difference in total NPV between the ''safe harbor'' scenario ($7.6 billion) and the ''no safe harbor'' scenario ($3.3 billion).

Analytical Scenarios—Barrier Removal

By statute, an action to remove barriers is considered ''readily achievable'' if, for a particular entity, it is ''easily accomplishable and able to be carried out without much difficulty or expense.'' 42 U.S.C. 12182(b)(2)(A)(iv). In practice, what is readily achievable for any given entity with respect to a given element must be determined on a case-by-case basis, and has no monetary or other absolute parameters—it is specific to the individual facility and to the particular time, place, and context in which that facility operates. The Department's current title III regulations provide a list of factors that should be considered in determining whether an action is readily achievable. Only one of those factors—the nature and cost of the action—relates to the element itself. All of the other factors specifically relate to the business entity, including the impact of the action on the operation of the site; the overall financial resources of the entity and any parent corporation; the type of operation of the entity or parent corporation (including the composition, structure, and functions of the relevant workforce); the geographic, administrative and fiscal relationships between the facility, entity, and parent company; and the effect of the action on any legitimate safety requirements that may be necessary for safe operation.

Recognizing the infeasibility of conducting an empirical assessment of the individualized barrier removal efforts by facility owners and operators nationwide, the Department proposed in the ANPRM to develop a computer simulation model that would assess the statistical probability that existing facilities would be required to remove barriers in order to comply with supplemental or revised requirements. Several commenters expressed concern that the lack of reliable data would make the results of a simulation model useless. Other commenters suggested that the same indefinite parameters that make compliance with the barrier removal requirement difficult would also complicate any attempt to accurately calculate the likelihood that compliance would be required. In addition, these commenters stated that modeling readily achievable barrier removal as a function of the financial resources of an entity would underestimate the costs of compliance since entities, faced with an ambiguous definition of ''readily achievable,'' purportedly often spend more on barrier removal efforts than required by the ADA. Rather than using definite parameters to evaluate an indefinite requirement, these commenters proposed that the Department simply make an honest attempt to quantify the costs of compliance and to describe the distributional impacts of the rule across individuals and industries.

The Department agrees that the lack of reliable data on existing facilities' barrier removal efforts would render any statistical analysis too indefinite to be of value. Therefore, rather than basing calculations of total incremental benefits and costs on potentially arbitrary assumptions about whether (or to what extent) elements at existing facilities have undergone barrier removal, the RIA takes a more practical approach. First, with respect to existing elements subject to supplemental requirements, the RIA calculates an expected total NPV based on the assumption that barrier removal would be readily achievable for every element (100%) in a manner that is fully compliant with the new standards. Second, the RIA then calculates total NPV under two other compliance scenarios (0% and 50%) to show how varying barrier removal rates impact the overall results. Taken together, these three barrier removal scenarios reflect the range of probabilities of barrier removal obligations that existing facilities would have under the proposed regulations. Presenting the data this way enables the facility owner who could potentially incur the costs of compliance, as well as the individual with a disability who could potentially benefit from that compliance, to gauge the impact that the proposed standards might have on a particular facility by selecting the scenarios that most closely match the level of compliance and resources of the covered entity.

Primary Baseline

The 1991 Standards serve as the primary baseline for the RIA because they are the only uniform set of accessibility standards that apply to every place of public accommodation, every commercial facility, and every State or local government facility in the country. According to statistics compiled by the International Code Council (which publishes the IBC), a version of the IBC—either IBC 2000, IBC 2003 or IBC 2006—has been adopted at the State or local level in all 50 States and the District of Columbia. Nonetheless, there is still variation among States with respect to model code adoption. For example, because model codes such as the IBC are voluntary, public entities sometimes modify or carve out particular provisions or sections or leave adoption to the discretion of local jurisdictions. By contrast, because the ADA is a mandatory Federal law, it applies the same standards to every facility in the country, ensuring a uniform level of accessibility—as well as a uniform means of baseline assessment—nationwide.

Because of this uniformity, the 1991 Standards baseline is the only baseline against which the incremental costs and benefits of the proposed regulations are estimated on a requirement-by-requirement and facility-by-facility basis. The results for the primary baseline are summarized in the main RIA text and presented in full in the accompanying Supplemental Results. It also bears noting that the primary baseline assumes that facilities subject to the 1991 Standards are *not* also required to comply with equivalent provisions in model codes (such as the IBC) that have been adopted as State or local building codes—even though compliance with State or local building codes necessarily is compulsory. In other words, the primary baseline does not take into account the substantial overlap between requirements in the proposed regulations and model code provisions in the IBC. While this approach likely leads to significant overstatement of the costs (and benefits) of the proposed regulations with respect

to many requirements, it also nonetheless represents the only means of uniformly assessing the incremental impact of the proposed regulations across all facilities nationwide.

Some commenters representing industry groups expressed the view that the Department should not use the 1991 Standards as a baseline because, in their view, the benefits and costs of the current requirements were not adequately measured when the requirements were first adopted in 1991. Instead, these commenters propose that the Department assess the absolute benefits and costs of the proposed standards as measured against a zero baseline—that is, the full cost of compliance with the proposed regulations irrespective of the current level of accessibility of facilities due to the 1991 Standards.

The Department disagrees with these comments. OMB Circular A–4 is very clear that regulatory analyses should only account for those incremental benefits and costs that arise as a result of the proposed regulatory action itself. To assess the absolute (or total) benefits and costs of compliance with the proposed regulations would improperly attribute to the proposed standards all of the benefits and costs of the 1991 Standards, thereby distorting the economic impact of the proposed regulations. The 1991 Standards are the law of the land and facilities have been subject to the current requirements for 15 years. Assessing the benefits and costs of the proposed standards as if the ADA had just been enacted would thus drastically overstate both the benefits and the costs of the proposed regulations. For these reasons, the RIA uses the 1991 Standards as the primary baseline and assesses the incremental impact of the proposed standards accordingly.

Alternate Baselines

While the RIA uses the 1991 Standards as the primary baseline, the assessment nonetheless still accounts for the impact of the widespread adoption of model codes by using alternate IBC baselines for several analyses. Due to the high degree of overlap between the IBC, the 2004 ADAAG, and the Department's proposed standards, the widespread adoption of various versions of the IBC by State and local jurisdictions means that most buildings and facilities nationwide are already being constructed or altered in compliance with many of the proposed standards. (Indeed, one of the Access Board's goals in revising ADAAG was to harmonize these guidelines with model codes, such as the IBC, precisely because they form the basis of most State and local building codes.) Thus, for facilities located in one of the many jurisdictions that have adopted—in whole or in part—a version of the IBC, the Department's adoption of the proposed regulations will have far less impact as compared to other facilities.

For these reasons, several commenters representing disability groups urged the Department to use the IBC, in conjunction with other accessibility standards that have been adopted by States or local governments, as the primary baseline in lieu of the 1991 Standards. Commenters representing industry groups also recognized that versions of the IBC had been adopted in many States and localities, but suggested that the Department only use the IBC as a baseline for those jurisdictions in which its provisions had actually been adopted into law by code-making authorities.

As noted in the Regulatory Framework section of the ANPRM, the Department considered following a State-by-State approach in which the relevant baseline for newly constructed and altered facilities would vary from State to State, depending on which IBC version each State or local jurisdiction had adopted. Under this approach, the 1991 Standards would only have been used as a default baseline for jurisdictions that had not yet adopted any version of the IBC. However, the many variations among State and local jurisdictions concerning the extent to which various IBC-related accessibility provisions (*i.e.*, IBC Chapter 11, IBC Appendix E, and ANSI A117.1) have been adopted without revision, adopted in a modified fashion, or carved out completely, make the creation of State-by-State baselines infeasible for every supplemental and revised requirement across all facilities nationwide. First, given these variations among States, use of State-by-State baselines would effectively require the creation of over one hundred separate baselines in order to accurately reflect which jurisdictions have adopted IBC provisions that are equivalent to each of the revised and supplemental requirements assessed in the RIA. Moreover, State-by-State baselines would also necessarily require information concerning the precise geographical location, age, and type of occupancy of all existing facilities nationwide. The Department, however, is not aware of any publicly available ''facility census'' to provide this requisite information. Such considerations would have made State-by-State (or, as applicable, locality-by-locality) baselines both extremely time-consuming to create and likely unreliable in application.

Thus, while the RIA applies alternate baselines for three different versions of the IBC (*i.e.*, IBC 2000, IBC 2003, and IBC 2006) to assess the overall impact of the proposed regulations, it employs a simplified approach to the creation of these baselines. Specifically, the RIA assumes that the applicable version of the IBC applies equally to all facilities nationwide, and that relevant provisions of ANSI A117.1, IBC Chapter 11 and IBC Appendix E have been incorporated by all State and local jurisdictions. This latter assumption is necessary because these three sources establish most of the accessibility standards that apply under the IBC. If none of them were assumed to apply, adoption of the IBC by a jurisdiction would tell us little about the accessibility of its facilities, and, if some but not all of them were assumed to apply, predicting which provisions would apply to which facilities would be impossible. The alternate IBC baselines in the RIA, therefore, do not present the overall results on a State-by-State basis. However, these baselines nonetheless still permit facilities to see how the impact of the proposed standards varies depending on which version of the IBC the State or local code authorities have or might adopt in the future

The RIA presents the comparative results for the three alternate IBC baselines in summary ''rolled-up'' fashion that combines all proposed requirements and facility groups. That is, for each alternate IBC baseline, the regulatory assessment provides a graphic representation (in the shape of a so-called ''S-Curve'') of the NPV at various likelihoods of occurrence. *See* RIA, Figure ES–5 & 15. Unlike the primary (1991 Standards) baseline, the results for each of the alternate IBC baseline scenarios are not further broken down to show the incremental benefits and costs for each requirement or facility group. Since requirement-by-requirement and facility-by-facility results are already calculated for the primary baseline, similarly detailed analyses for each IBC baseline effectively would have amounted to conducting four separate regulatory assessments.

Moreover, to further assist stakeholders in assessing the impact of the proposed regulations, the RIA also presents several more limited analyses that assess the incremental impact of four illustrative proposed requirements against requirement-specific alternate IBC/ANSI baselines. When constructing these four requirement-specific IBC baselines, the Department endeavored to

determine (or approximate) the actual extent to which the relevant equivalent IBC provisions have been adopted by every State or local jurisdiction nationwide. The results of these analyses underscore the point that consideration of alternate requirement-specific IBC baselines on a requirement-by-requirement basis would likely lead to markedly lower incremental costs and benefits for many proposed requirements. For example, the first scenario in the RIA uses requirement-specific IBC baselines to assess the incremental impact of the proposed revisions with respect to two proposed requirements—alterations to existing stairs and elevators—that have equivalent provisions in the ''main'' IBC chapters (Chapters 10 and 34) and, thus, have been adopted by virtually every State and local jurisdiction nationwide. *See* RIA, Table 10. This first scenario shows that the incremental costs for these two requirements collectively would be reduced by about $ 1.1 billion over the lifespan of the regulations when using the requirement-specific alternate IBC baselines as compared to the primary baseline (1991 Standards). A second scenario in the RIA employs requirement-specific alternate IBC/ANSI baselines to assess the incremental impact of proposed revisions to two other requirements—relating to side reach and water closed clearances—whose corresponding IBC provisions are only incorporated by reference into the IBC (through Chapter 11 and ANSI A117.1). *See* RIA, Table 11. These incorporated provisions have not been as uniformly adopted as other IBC provisions. Nonetheless, the incremental costs for these latter two requirements still would be reduced by about $660 million over the lifespan of the regulations when using requirement-specific IBC baselines as compared to the primary baseline (1991 Standards).

Regulatory Alternatives—Existing Facilities

As required by the Regulatory Flexibility Act of 1980, as amended by SBREFA, as well as Executive Order 13272, the Department has considered regulatory alternatives that would achieve the same statutory and regulatory goals but impose less cost on society. With respect to new construction and alterations, the ADA requires the Department to adopt standards that are ''consistent with'' the minimum guidelines issued by the Access Board. The Department does not have the statutory authority to modify the 2004 ADAAG. The Department does, however, have the discretion to determine whether—or to what extent—those guidelines should apply to existing facilities.

The most far-reaching regulatory alternative in the proposed regulations is the safe harbor provision that potentially exempts certain elements at existing facilities from barrier removal obligations under the proposed regulations. The RIA results demonstrate that this safe harbor proposal is expected to reduce substantially the total monetary impact of revised (more stringent) requirements on existing facilities, whether owned by small entities or larger groups or organizations. *See* RIA, Table ES–3.

Another regulatory alternative being proposed by the Department would—for the first time—place a monetary limit on the barrier removal obligations of qualifying small businesses. Qualifying small businesses are those small entities that satisfy small business size standards promulgated by the Small Business Administration. Pursuant to this proposal, a ''qualified small business'' would have met its readily achievable barrier removal obligations for a given year if, in the preceding tax year, that entity had spent at least one percent (1%) of its gross revenues removing architectural barriers.

The RIA does not, however, incorporate this monetary cap on barrier removal expenditures for qualifying small businesses into its cost or benefit models. Assessing the incremental impact of this provision would have required assumptions regarding the number of small businesses satisfying the definition of ''qualified small business'' in any given year, as well as the nature and extent of barrier removal efforts by such businesses in the preceding year. For example, even assuming it could be determined (or assumed) that a particular small retail establishment satisfied the ''qualified small business'' definition in a particular year, several sets of assumptions would nonetheless still be required to model the presumed barrier removal efforts made by that small retailer in the preceding year. For example, should it be assumed that the small retailer had removed architectural barriers related to a ramp, accessible routes, and accessible parking spaces in the preceding year? Or had this small retailer instead focused its barrier removal efforts on removing barriers concerning sales and service counters, doorways, and a single-user toilet room? In either case, did the small retailer's efforts result in complete or partial removal of the affected architectural barriers? Such questions underscore the difficulty in creating a reliable framework for modeling the individualized determinations that are necessarily part of the barrier removal calculus. The Department thus determined that incorporating the provision for qualifying small businesses into the RIA would have been neither feasible nor useful. Nonetheless, interested parties may still get a rough gauge of the potential impact of this proposed safe harbor by reviewing the ''Small Business Impact Analysis'' in Chapter Six of the RIA.

Lastly, the Department is also proposing several regulatory alternatives directed at lessening the monetary impact of certain supplemental requirements relating to existing play areas, swimming pools, and saunas and steam rooms at public and private facilities. Smaller existing and unaltered play areas, pools, and saunas (meeting specified size limits) would be exempt from technical and scoping standards in the supplemental requirements. Facilities exceeding the proposed size threshold would nonetheless have reduced scoping requirements for elevated play components (play areas) or accessible means of entry (swimming pools). Because there are few sources of reliable data concerning the number and relative size of existing play areas, swimming pools, and saunas and steam rooms in the United States, the RIA does not incorporate this proposed regulatory alternative into the model. However, to the limited extent such information was available, it is used in the RIA to modify, as appropriate, the likelihood of occurrence or unit cost of the element. *See* RIA, Apps. 3–E, 3–G, and 3–H.

Commenters representing small business groups expressed appreciation for the Department's efforts—represented by the foregoing regulatory proposals—to mitigate the potential impact of the proposed regulations. These commenters noted that such regulatory alternatives ''have the potential to remove much regulatory uncertainty and provide a level playing field for small businesses anxious to provide accessibility to their customers.''

Summary of Results—Main Regulatory Assessment

From an economic perspective (as specified in OMB Circular A–4), the primary determinant of whether proposed regulations increase social resources and thus represent a public good is whether monetized benefits exceed monetized costs—that is, whether the regulations have a positive net present value. The Department's proposed regulations indeed have a positive NPV under each of the four scenarios calculated in the regulatory

assessment. The RIA's first scenario examines the incremental impact of the proposed regulations using the ''main'' set of assumptions (*i.e.*, assuming a primary baseline (1991 Standards), safe harbor applies, and barrier removal readily achievable for 50% of elements subject to supplemental requirements). Under this first set of assumptions, the proposed regulations have an expected NPV of $ 31.1 billion (3% discount rate) and $7.5 billion (7% discount rate). *See* RIA, Table ES–1 & Figure ES–2. The second RIA scenario calculates the incremental impact of ''safe harbor'' versus ''no safe harbor'' scenarios with all other assumptions remaining equal. The expected NPV for the proposed regulations under a ''no safe harbor'' scenario would still remain positive, albeit at a significantly reduced level. *See* RIA, Table ES–3. Third, the RIA explores the incremental impact of varying the assumptions concerning the percentage of existing elements subject to supplemental requirements for which barrier removal would be readily achievable. Readily achievable barrier removal rates are modeled at 0%, 50%, and 100% levels. The results of this third scenario show that, while the expected NPV is positive for each readily achievable barrier removal rate, varying this assumed rate has little impact on expected NPV. See RIA, Table ES–4. Lastly, the RIA's fourth scenario demonstrates the impact of using three alternate baseline scenarios (*i.e.*, IBC 2000, IBC 2003, and IBC 2006) instead of the primary baseline. As with the other scenarios, use of these alternate IBC baselines results in positive expected NPVs in all cases. *See* RIA, Table ES–5. These results also indicate that IBC 2000 and IBC 2006 have the respective highest and lowest expected NPVs. These results are due to changes in the make-up of the set of requirements that are included in each alternative baseline.

Summary of Results—Small Business Impact Analysis

In addition to its benefit-cost analysis of the impact of the proposed standards on all entities subject to titles II or III of the ADA, the Department is required under the Regulatory Flexibility Act (''RFA'') to analyze the impact of its proposed regulations on ''small entities''— namely, small businesses, small non-profit organizations, and small governmental jurisdictions with populations of less than 50,000. If the proposed regulations are projected to have a ''significant economic impact on a substantial number of small entities,'' the RFA requires an agency to prepare and make available for public comment an initial regulatory flexibility analysis (''IRFA''). On the other hand, no IRFA need be prepared should the head of the agency certify that the proposed rules—if promulgated—would not have such an economic impact on a substantial number of small entities.

The Access Board certified, in both its NPRM and final rule promulgating the 2004 ADAAG, that its revised guidelines would not have a significant economic impact on a substantial number of newly constructed and altered small facilities. *See* 64 FR 62,248 (Nov. 16, 1999) (NPRM); 69 FR 44,084 (July 23, 2004) (final rule). Consequently, the Access Board was not statutorily required to prepare either an initial or final regulatory flexibility analysis for the 2004 ADAAG.

In the ANPRM, the Department encouraged small entities to provide cost data on the potential economic impact of applying specific provisions of the 2004 ADAAG to existing facilities and to recommend less burdensome alternatives. Small businesses were well represented among ANPRM commenters. Many commenters representing industry groups of all sizes said that ''the possibility of having to modify existing facilities presents the most severe and burdensome compliance scenario for most businesses'' and that the biggest potential cost of the proposed standards was represented by the ''no safe harbor'' scenario. By contrast, several commenters representing disability groups urged the Department not to adopt a safe harbor, asserting that the ''readily achievable'' defense provided in the ADA adequately addresses the concerns of small businesses.

The Department agrees with the commenters representing small businesses that a safe harbor provision is a reasonable means of lowering the potential costs of the regulation and, with these NPRMs, is proposing to adopt the safe harbor scenario. Because the potential costs of compliance with the proposed standards pursuant to the barrier removal requirement was consistently identified by commenters as their paramount concern, the Department's adoption of the safe harbor should go a long way toward addressing the concerns of small businesses.

Some commenters representing small businesses also suggested that the Department employ a different methodology for its regulatory assessment than the Access Board. Specifically, these commenters recommended that the Department assess the incremental benefits and costs for all facilities, rather than just a few. These comments noted that many of the facility groups for which the Board did not provide a direct assessment of costs—including retail stores, restaurants, small manufacturers, and small service providers—are more typically small businesses. By comparison, as noted previously, the Department's RIA assesses the impact of the proposed regulations on all public and private facilities. Moreover, the Department's small business impact analysis includes all facility groups (for which statistical information was available) that could potentially be affected by the proposed regulations, including facility groups within which small businesses predominate.

Several commenters representing industry groups pointed to particular revised requirements as likely to have a disproportionate cost impact on small businesses, including the requirement relating to public entrances (which they suggest could impose greater costs on small businesses, which are more likely to have only two entrances, both of which would now be required to be accessible), and the requirement relating to operable windows (which are more typically found in small or rural motels rather than large urban high rises). Commenters also noted that small businesses are more likely to be located in older buildings, which cost more to renovate than newer buildings, and discussed the greater marginal impact that any regulation (particularly one as complex as the proposed standards) has on small businesses due to their smaller economies of scale. The Department notes that the revised requirement relating to public entrances is expected to effect no change for small facilities, and to the extent it effects a change at all, it will be for very large facilities for which it will be ''less stringent'' than the current requirement. Similarly, the operable windows requirement can be met using inexpensive add-on hardware (similar to a light switch extension handle).

More generally, with respect to requirements that may impose a fixed cost, several commenters representing small businesses suggested that the Department provide small businesses with a lower cost alternative by permitting equivalent facilitation. In the proposed regulations for title III, the Department has specifically recognized the continued legitimacy of equivalent facilitation as a means of lowering the potential costs associated with barrier removal. In all cases, measures to remove barriers are only required when they are readily achievable, but if substantially equivalent access can be provided at less cost through alternative

measures, entities are entitled to use them.

Chapter Six of the RIA sets forth the Department's comprehensive assessment of the estimated impact of the proposed regulations on small entities. For the most part, this analysis uses the same methodology as the underlying ''main'' regulatory assessment except that some additional publicly available statistics (from, for example, the Census Bureau and the Office of Advocacy of the Small Business Administration) are incorporated into the model in order to permit particularized calculations for small entities.

In sum, the Department's small business impact analysis uses the following methodological approach. First, the analysis estimates (by facility group) the total number of facilities owned or operated by small entities and their respective total annual sales receipts. Since governmental entities typically do not have sales receipts, expenditures—broken down by category (*e.g.*, education, hospitals, parks, museums)—serve as a proxy for ''sales receipts'' for small governmental jurisdictions. The resulting figures for small entity-owned facilities and sales receipts are compared to the ''typical'' facility. *See* RIA, Table 17. Second, the analysis compares the net costs of the proposed regulations on small entities and the ''typical'' facility for each facility group. *See id.*, Table 18. Lastly, the analysis estimates total annual costs and annual costs as a percentage of sales for both small entities and ''typical'' facilities. *See id.*, Table 19.

The results of the Department's small business impact analysis demonstrate that the proposed regulations would not have a significant economic impact on a substantial number of small entities. *See* RIA, Ch. 6. For small government jurisdictions, annualized costs are not expected to be greater than 0.5% of sales for any type of facility. Similarly, for all but a handful of small private entities, annualized costs are not expected to be greater than 0.5% of sales. Only with respect to two types of facilities owned or operated by small private entities—aquatic centers and miniature golf courses—are annualized costs estimated to exceed 0.5% of sales. However, as noted previously, the RIA does not incorporate the Department's proposed monetary limit (*i.e.*, 1% of gross revenue) on barrier removal obligations for qualified small entities. Application of this monetary cap on barrier removal costs for qualifying small businesses that own or operate aquatic centers or miniature golf courses would mitigate the incremental impact of the proposed regulations on these (or any other) qualified small entities.

Dated: June 19, 2008.

Rosemary Hart,

Federal Register Liaison Officer.

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DEPARTMENT OF JUSTICE

28 CFR Parts 35 and 36

Nondiscrimination on the Basis of Disability in State and Local Government Services and Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities; Hearing

AGENCY: Department of Justice, Civil Rights Division.

ACTION: Notice of hearing.

SUMMARY: On June 17, 2008, the Department of Justice (Department) published two Notices of Proposed Rulemaking in the **Federal Register** to amend regulations issued under Titles II and III of the Americans with Disabilities Act (ADA). Nondiscrimination on the Basis of Disability in State and Local Government Services, 73 FR 34466; Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities, 73 FR 34508. In this issue of the **Federal Register**, the Department published corrections for the proposed rules that included two appendices inadvertently omitted from the June 17, 2008, publication. In order to provide an opportunity for interested persons to express their views directly to Department officials, the Department will hold a public hearing in Washington, DC, on the proposed regulatory amendments.

DATES: The public hearing is scheduled for July 15, 2008, 9 a.m. to 5 p.m., Eastern Daylight Time.

ADDRESSES: The hearing will be held at the Marriott Hotel at Metro Center, 775 12th Street, NW., Washington, DC 20005, (202) 737–2200.

FOR FURTHER INFORMATION CONTACT: Linda Garrett, Civil Rights Program Specialist, Disability Rights Section, Civil Rights Division at (202) 353–0423 (TTY). This is not a toll-free number. Information also may be obtained from the Department's toll-free ADA Information Line at (800) 514–0301 (Voice) or (800) 514–0383 (TTY), 9:30 a.m. to 5:30 p.m. Monday, Tuesday, Wednesday, and Friday, and 12:30 p.m. to 5 p.m. on Thursday.

SUPPLEMENTARY INFORMATION: On June 17, 2008, the Department published two Notices of Proposed Rulemaking to amend the Department's regulations issued under Titles II and III of the ADA. Title II of the ADA prohibits discrimination on the basis of disability in the activities of State and local governments, whereas Title III prohibits discrimination in public accommodations and commercial facilities. The Department has scheduled a public hearing on the proposed amendments in order to provide an opportunity to interested persons, including individuals with disabilities, to express their views about the proposed changes. Entities, organizations, and individuals who wish to present comments at the hearing are encouraged to register in advance by calling the ADA Information Line at (800) 514–0301 (Voice) or (800) 514–0383 (TTY) by July 7, 2008. Organizations should designate no more than one individual to speak on behalf of the organization. Commenters who are not able to testify in person will have the option to present their comments using a speaker telephone, telephone relay service, or video relay service. The Department will attempt to provide an approximate time for the receipt of comments from those who register in advance; however, persons who register in advance should report to the registration desk at the hearing at least one-half hour prior to their scheduled time in order to confirm the time and order of their presentations. Those who register to comment via speaker telephone, telephone relay service, or video relay service should be available at the number they provided during pre-registration at least one-half hour before their scheduled time.

Some time at the hearing will be reserved for those who do not register in advance. These persons may register on-site at the registration desk, which will open one hour before the hearing is scheduled to begin and will operate throughout the day. Time to make their presentations will be assigned when open slots are available.

Comments will be limited to five minutes per person or organization, but commenters who wish to may supplement their testimony with written statements that will be made part of the official hearing record. If the Department determines that there is not enough time to hear from all those wishing to present comments, the Department will select among those wishing to testify in order to ensure representation of a range of viewpoints and interests. A laptop computer and projection screen will be available for

commenters wishing to use a PowerPoint presentation in conjunction with their testimony.

The hearing site will be accessible to individuals with disabilities. Sign language interpreters, real-time captioning, and assistive listening devices will be provided. Individuals who require other accommodations, auxiliary aids, or foreign language translation should contact Linda Garrett at (202) 353–0423 (TTY) or by e-mail at *Linda.Garrett@usdoj.gov* no later than July 7, 2008. Additional information, including information about accessible public transportation and parking, will be available on the ADA Home Page at *http://www.ada.gov*. The proposed rules and the initial regulatory impact analysis are available electronically in accessible formats at *http://www.regulations.gov* and *http://www.ada.gov*. This hearing notice is available electronically in accessible formats at *http://www.ada.gov*, Copies of this notice also are available in formats accessible to individuals who are blind or have low vision and may be obtained by calling the ADA Information Line.

Those persons who are not able to participate in the public hearing are encouraged to submit written comments electronically to *http://www.regulations.gov* or by mail as follows: ADA NPRM, P.O. Box 2846, Fairfax, VA 22031–0846. Overnight deliveries should be sent to the Disability Rights Section, Civil Rights Division, U.S. Department of Justice, located at 1425 New York Avenue, NW., Suite 4039, Washington, DC 20005. All comments will be made available for public viewing online at *http://www.regulations.gov* and must be received by August 18, 2008.

Dated: June 19, 2008.

Grace Chung Becker,

Acting Assistant Attorney General for Civil Rights.

[FR Doc. E8–14306 Filed 6–27–08; 8:45 am]

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Part III

Department of Energy

Federal Energy Regulatory Commission

18 CFR Part 284

Promotion of a More Efficient Capacity Release Market; Final Rule

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

18 CFR Part 284

[Docket No. RM08–1–000; Order No. 712]

Promotion of a More Efficient Capacity Release Market

Issued June 19, 2008.

AGENCY: Federal Energy Regulatory Commission, DOE.

ACTION: Final rule.

SUMMARY: In this Final Rule the Federal Energy Regulatory Commission revises its regulations governing interstate natural gas pipelines to reflect changes in the market for short-term transportation services on pipelines and to improve the efficiency of the Commission's capacity release program. The Commission permits market based pricing for short-term capacity releases and facilitates asset management arrangements by relaxing the Commission's prohibition on tying and on its bidding requirements for certain capacity releases. The Commission further clarifies that its prohibition on tying does not apply to conditions associated with gas inventory held in storage for releases of firm storage capacity. Finally, the Commission waives its prohibition on tying and bidding requirements for capacity releases made as part of state-approved retail open access programs.

DATES: This rule will become effective July 30, 2008.

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SUPPLEMENTARY INFORMATION:

Order No. 712

Final Rule

TABLE OF CONTENTS

TABLE OF CONTENTS—Continued

Before Commissioners: Joseph T. Kelliher, Chairman; Suedeen G. Kelly, Marc Spitzer, Philip D. Moeller, and Jon Wellinghoff.

Order No. 712

Final Rule

Issued June 19, 2008.

1. In this Final Rule, the Commission revises its Part 284 regulations concerning the release of firm capacity by shippers on interstate natural gas pipelines. First, as proposed in its Notice of Proposed Rulemaking,[1] the Commission will remove, on a permanent basis, the rate ceiling on capacity release transactions of one year or less. Second, the Commission will modify its regulations to facilitate the use of asset management arrangements (AMAs), under which a capacity holder releases some or all of its pipeline capacity to an asset manager who agrees to either purchase from, or supply the gas needs of, the capacity holder. Specifically, the Commission will exempt capacity releases made as part of AMAs from the prohibition on tying and from the bidding requirements of section 284.8. Third, the Commission clarifies that its prohibition on tying does not apply to conditions associated with gas inventory held in storage for releases of firm storage capacity. Fourth, the Commission will modify its regulations to facilitate retail open access programs by exempting capacity releases made under state-approved retail access programs from the prohibition on tying and from the bidding requirements of section 284.8. This Final Rule is designed to enhance competition in the secondary capacity release market and to increase shipper gas supply options. This rule will become effective 30 days after publication in the **Federal Register**.

I. Background

A. The Capacity Release Program

2. The Commission adopted its capacity release program as part of the restructuring of natural gas pipelines required by Order No. 636.[2] In Order No. 636, the Commission sought to foster two primary goals. The first goal was to ensure that all shippers have meaningful access to the pipeline transportation grid so that willing buyers and sellers can meet in a competitive, national market to transact the most efficient deals possible. The second goal was to ensure consumers have ''access to an adequate supply of gas at a reasonable price.'' [3]

3. To accomplish these goals, the Commission sought to maximize the availability of unbundled firm transportation service to all participants in the gas commodity market. The linchpin of Order No. 636 was the requirement that pipelines unbundle their transportation and storage services from their sales service, so that gas purchasers could obtain the same high quality firm transportation service whether they purchased from the pipeline or another gas seller. In order to create a transparent program for the reallocation of interstate pipeline capacity to complement the unbundled, open access environment created by Order No. 636, the Commission also adopted a comprehensive capacity release program to increase the availability of unbundled firm transportation capacity by permitting firm shippers to release their capacity to others when they were not using it.[4]

4. The Commission reasoned that the capacity release program would promote efficient load management by the pipeline and its customers and would, therefore, result in the efficient use of firm pipeline capacity throughout the year. It further concluded that, ''because more buyers will be able to reach more sellers through firm transportation capacity, capacity reallocation comports with the goal of improving nondiscriminatory, open access transportation to maximize the benefits of the decontrol of natural gas at the wellhead and in the field.'' [5]

5. In Order No. 636, the Commission expressed concerns regarding its ability to ensure that firm shippers would reallocate their capacity in a non-discriminatory manner to those who placed the highest value on the capacity up to the maximum rate. The Commission noted that prior to Order No. 636, it authorized some pipelines to permit their shippers to ''broker'' their capacity to others. Under such capacity brokering, firm shippers were permitted to assign their capacity directly to a replacement shipper, without any requirement that the brokering shipper post the availability of its capacity or allocate it to the highest bidder.[6] However, in Order No. 636, the Commission found ''there [were] too many potential assignors of capacity and too many different programs for the Commission to oversee capacity brokering.'' [7]

[1] *Promotion of a More Efficient Capacity Release Market*, 72 FR 65,916, FERC Stats. and Regs. ¶ 32,625 (November 26, 2007) 121 FERC ¶ 61,170 (2007) (NOPR).

[2] *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation; and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 636, 57 FR 13,267 (April 16, 1992), FERC Stats. and Regs., Regulations Preambles January 1991–June 1996 ¶ 30,939 (April 8, 1992), *order on reh'g*, Order No. 636–A., 57 FR 36,128 (August 12, 1992), FERC Stats. and Regs., Regulations Preambles January 1991–June 1996 ¶ 30,950 (August 3, 1992), *order on reh'g*, Order No. 636–B, 57 FR 57,911 (Dec. 8, 1992), 61 FERC ¶ 61,272 (1992), *notice of denial of reh'g*, 62 FERC ¶ 61,007 (1993); *aff'd in part, vacated and remanded in part, United Dist. Companies* v. *FERC*, 88 F.3d 1105 (DC Cir. 1996), *order on remand*, Order No. 636–C, 78 FERC ¶ 61,186 (1997).

[3] Order No. 636 at 30,393 (citations omitted).

[4] In brief, under the Commission's current capacity release program, a firm shipper (releasing shipper) sells its capacity by returning its capacity to the pipeline for reassignment to the buyer (replacement shipper). The pipeline contracts with, and receives payment from, the replacement shipper and then issues a credit to the releasing shipper. The replacement shipper may pay less than the pipeline's maximum tariff rate, but not more. 18 CFR 284.8(e) (2007). The results of all releases are posted by the pipeline on its Internet web site and made available through standardized, downloadable files.

[5] Order No. 636 at 30,418.

[6] *See Algonquin Gas Transmission Corp.*, 59 FERC ¶ 61,032 (1992).

[7] Order No. 636 at 30,416.

6. The Commission sought to ensure that the efficiencies of the secondary market were not frustrated by unduly discriminatory access to the market.[8] Therefore, the Commission replaced capacity brokering with the capacity release program designed to provide greater assurance that transfers of capacity from one shipper to another were transparent and not unduly discriminatory. This assurance took the form of several conditions that the Commission placed on the transfer of capacity under its new program.

7. First, the Commission prohibited private transfers of capacity between shippers and, instead, required that all release transactions be conducted through the pipeline. Therefore, when a releasing shipper releases its capacity, the replacement shipper must enter into a contract directly with the pipeline, and the pipeline must post information regarding the contract, including any special conditions.[9] In order to enforce theprohibition on private transfers of capacity, the Commission required that a shipper must have title to any gas that it ships on the pipeline.[10]

8. Second, the Commission determined that the record of the proceeding that led to Order No. 636 did not reflect that the market for released capacity was competitive. The Commission reasoned that the extent of competition in the secondary market may not be sufficient to ensure that the rates for released capacity will be just and reasonable. Therefore, the Commission imposed a ceiling on the rate that the releasing shipper could charge for the released capacity.[11] This ceiling was derived from the Commission-approved monthly maximum tariff rates, necessary for the pipeline to recover its annual cost-of-service revenue requirement.[12]

9. Third, the Commission required that capacity offered for release at less than the maximum rate must be posted for bidding, and the pipeline must allocate the capacity ''to the person offering the highest rate (not over the maximum rate).'' [13] The Commission permitted the releasing shipper to choose a pre-arranged replacement shipper who can retain the capacity by matching the highest bid rate. The bidding requirement, however, does not apply to releases of 31 days or less or to any release at the maximum rate. But all releases, whether or not subject to bidding, must be posted.[14]

10. Finally, the Commission prohibited tying the release of capacity to any extraneous conditions so that the releasing shippers could not attempt to add additional terms or conditions to the release of capacity. The Commission articulated the prohibition against the tying of capacity in Order No. 636–A, where it stated:

> The Commission reiterates that *all* terms and conditions for capacity release must be posted and non-discriminatory and must relate solely to the details of acquiring transportation on the interstate pipelines. Release of capacity cannot be tied to any other conditions. Moreover, the Commission will not tolerate deals undertaken to avoid the notice requirements of the regulations. Order No. 636–A at 30,559 (emphasis in the original).

11. Subsequent to the Commission's adoption of its capacity release program in Order No. 636, the Commission conducted two experimental programs to provide more flexibility in the capacity release market. In 1996, the Commission sought to establish an experimental program inviting individual shipper and pipeline applications to remove price ceilings related to capacity release.[15] The Commission recognized that significant benefits could be realized through removal of the price ceiling in a competitive secondary market. Removal of the ceiling permits more efficient capacity utilization by permitting prices to rise to market clearing levels and by permitting those who place the highest value on the capacity to obtain it.[16]

12. In 2000, in Order No. 637, the Commission conducted a broader experiment in which the Commission removed the rate ceiling for short-term (less than one year) capacity release transactions for a two-year period ending September 30, 2002. In contrast to the experiment that it conducted in 1996, in the Order No. 637 experiment the Commission granted blanket authorization in order to permit all firm shippers on all open access pipelines to participate. The Commission stated that it undertook this experiment to improve shipper options and market efficiency during peak periods. The Commission reasoned that during peak periods, the maximum rate cap on capacity release transactions inhibits the creation of an effective transportation market by preventing capacity from going to those that value it the most and therefore the elimination of this rate ceiling would eliminate this inefficiency and enhance shipper options in the short-term marketplace.[17]

13. Upon an examination of pricing data on basis differentials between points,[18] the Commission found that the price ceiling on capacity release transactions limited the capacity options of short-term shippers because firm capacity holders were able to avoid

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[8] Order No. 636–A at 30,554.

[9] Order No. 636 emphasized:

> The main difference between capacity brokering as it now exists and the new capacity release program is that under capacity brokering, the brokering customer could enter into and execute its own deals without involving the pipeline. Under capacity releasing, all offers *must* be put on the pipeline's electronic bulletin board and contracting is done directly with the pipeline. Order No. 636 at 30,420 (emphasis in original).

[10] As the Commission subsequently explained in Order No. 637, ''the capacity release rules were designed with [the shipper-must-have-title] policy as their foundation,'' because, without this requirement, ''capacity holders could simply transport gas over the pipeline for another entity.'' *Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services,* Order No. 637, FERC Stats. & Regs. ¶ 31,091 at 31,300, *clarified,* Order No. 637–A, FERC Stats. & Regs. ¶ 31,099, *reh'g denied,* Order No. 637–B, 92 FERC ¶ 61,062 (2000), *aff'd in part and remanded in part sub nom. Interstate Natural Gas Ass'n of America* v. *FERC,* 285 F.3d 18 (DC Cir. 2002), *order on remand,* 101 FERC ¶ 61,127 (2002), *order on reh'g,* 106 FERC ¶ 61,088 (2004), *aff'd sub nom. American Gas Ass'n* v. *FERC,* 428 F.3d 255 (DC Cir. 2005).

[11] Order No. 636–A at 30,560.

[12] Order No. 637 at 31,270–71.

[13] 18 CFR 284.8(e) (2007) provides in pertinent part that ''[t]he pipeline must allocate released capacity to the person offering the highest rate (not over the maximum rate) and offering to meet any other terms or conditions of the release.''

[14] 18 CFR 284.8(h)(1) provides that a release of capacity for less than 31 days, or for any term at the maximum rate, need not comply with certain notification and bidding requirements, but that such release may not exceed the maximum rate. Notice of the release ''must be provided on the pipeline's electronic bulletin board as soon as possible, but not later than forty-eight hours, after the release transaction commences.''

[15] *Secondary Market Transactions on Interstate Natural Gas Pipelines, Proposed Experimental Pilot Program to Relax the Price Cap for Secondary Market Transactions,* 61 FR 41,401 (Aug. 8, 1996), 76 FERC ¶ 61,120, *order on reh'g,* 77 FERC ¶ 61,183 (1996).

[16] 77 FERC ¶ 61,183 at 61,699 (1996).

[17] Order No. 637 at 31,263. The Commission also explained why it was lifting the price cap on an experimental basis, instead of permanently, stating:

> While the removal of the price cap is justified based on the record in this rulemaking, the Commission recognizes that this is a significant regulatory change that should be subject to ongoing review by the Commission and the industry. No matter how good the data suggesting that a regulatory change should be made, there is no substitute for reviewing the actual results of a regulatory action. The two year waiver will provide an opportunity for such a review after sufficient information is obtained to validly assess the results. Due to the variation between years in winter temperatures, the waiver will provide the Commission and the industry with two winter's worth of data with which to examine the effects of this policy change and determine whether changes or modifications may be needed prior to the expiration of the waiver. Order No. 637 at 31,279–80.

[18] Among other things, the data showed that the value of pipeline capacity, as shown by basis differentials, was generally less than the pipelines' maximum interruptible transportation rates, except during the coldest days of the year, and capacity release prices also averaged somewhat less than pipelines' maximum interruptible rates.

price ceilings on released capacity by substituting bundled sales transactions at market prices (where the market place value of transportation is an implicit component of the delivered price). As a consequence, the Commission determined that the price ceilings did not limit the prices paid by shippers in the short-term market as much as the ceilings limit transportation options for shippers. In short, the Commission found that the rate ceiling worked against the interests of short-term shippers, because with the rate ceilings in place, a shipper looking for short-term capacity on a peak day who was willing to offer a higher price in order to obtain it, could not legally do so; this reduced its options for procuring short-term transportation at the times that it needed it most.[19] Throughout this experiment, the Commission retained the rate ceiling for firm and interruptible capacity available from the pipeline as well as for long-term capacity release transactions.

14. On April 5, 2002, the United States Court of Appeals for the District of Columbia Circuit, in *Interstate Natural Gas Association of America* v. *FERC,*[20] upheld the Commission's experimental price ceiling program for short-term capacity release transactions as set forth in Order No. 637.[21] The court found that the Commission's ''light handed'' approach to the regulation of capacity release prices was, given the safeguards that the Commission had imposed, consistent with the criteria set forth in *Farmers Union Cent. Exch.* v. *FERC.*[22] The court found that the Commission made a substantial record for the proposition that market rates would not materially exceed the ''zone of reasonableness'' required by *Farmers Union.* The court also found that the Commission's inference of competition in the capacity release market was well founded, that the price spikes shown in the Commission's data were consistent with competition and reflected scarcity of supply rather than monopoly power, and that outside of such price spikes, the rates were well below the estimated regulated price.[23] The Commission's experiment in lifting the price ceiling for short term capacity releases ended on September 20, 2002.[24]

B. The NOPR

15. On January 3, 2007, the Commission, in response to petitions from various gas industry participants concerning issues related to capacity releases,[25] issued a request for comments on the operation of the capacity release program and whether changes in any of its capacity release policies would improve the efficiency of the natural gas market.[26] The Commission also included in its request for comments a series of questions asking whether the Commission should lift the price ceiling, remove its capacity release bidding requirements, modify its prohibition on tying arrangements, and/or remove the shipper-must-have-title requirement.

16. After review of the petitions, comments, responses to its questions, and available data, the Commission issued a Notice of Proposed Rulemaking (NOPR), proposing two major changes to its capacity release regulations and policies. First, the Commission proposed to lift the price ceiling for short-term capacity release transactions of one year or less. The Commission determined that the traditional cost-of-service price ceilings in pipeline tariffs, which are based on annual costs recovered over twelve equal monthly payments, are not well suited to the short-term capacity release market, because they do not reflect short-term variations in the market value of the capacity. Therefore, removing the price ceiling for short-term capacity releases would permit more efficient utilization of capacity by allowing prices to rise to market clearing levels, thereby permitting those who place the highest value on the capacity to obtain it. The Commission determined that the data obtained by the Commission both during the Order No. 637 experiment and more recently indicated that short-term release prices reflect market value of the capacity as revealed by basis differentials, rather than the exercise of market power. Moreover, the Commission reasoned that shippers purchasing capacity would be adequately protected because the pipeline's firm and interruptible services will provide just and reasonable recourse rates limiting the ability of releasing shippers to exercise market power. Finally, the Commission stated that reporting requirements in Order No. 637 and the Commission's implementation of the Energy Policy Act of 2005, specifically with respect to market manipulation, give the Commission an enhanced ability to monitor the market and detect and deter abuses. The Commission did not propose to remove the price ceiling on either long-term capacity releases or the pipelines' sale of their own primary capacity.

17. Second, the Commission proposed to revise its capacity release policies to give releasing shippers greater flexibility to negotiate and implement AMAs, based on the Commission's findings that AMAs provide significant benefits to participants in the natural gas and electric marketplaces.[27] Recognizing that the linking of transportation capacity with gas supply arrangements would violate the Commission's prohibition against ''tying'' released capacity to any extraneous conditions, the Commission proposed to exempt pre-arranged capacity release transactions that met certain criteria[28] from the prohibition against tying.[29] This proposal would permit a releasing shipper in a pre-arranged release to require that the replacement shipper agree to supply the releasing shipper's gas requirements and take assignment of the releasing shipper's gas supply contracts, as well as released transportation capacity on one or more pipelines and storage capacity with the gas currently in storage.[30]

[19] Order No. 637 at 31,280–81.

[20] 285 F.3d 18 (DC Cir. 2002) (*INGAA*).

[21] Specifically, the court found that: ''[g]iven the substantial showing that in this context competition has every reasonable prospect of preventing seriously monopolistic pricing, together with the non-cost advantages cited by the Commission and the experimental nature of this particular ''light handed'' regulation, we find the Commission's decision neither a violation of the NGA, nor arbitrary or capricious.'' *INGAA* at 35.

[22] 734 F.2d 1486 (DC Cir. 1984) (*Farmers Union*) (finding that a move from heavy-handed to light-handed regulation can be justified by a showing that under current circumstances, the goals and purposes of the Natural Gas Act (NGA) will be accomplished through substantially less regulatory oversight.

[23] *Id.* at 33.

[24] *Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services,* FERC Stats. & Regs., Regulations Preambles July 1996–December 2000, ¶ 31,091 (Feb. 9, 2000), *order on rehearing,* Order No. 637–A, FERC Stats. & Regs., Regulations Preambles July 1996–December 2000, ¶ 31,099 (May 19, 2000), *order on rehearing*, Order No. 637–B, 92 FERC ¶ 61,062 (July 26, 2000), *aff'd in part and remanded in part, Interstate Natural Gas Association of America* v. *FERC,* 285 F.3d 18 (DC Cir. Apr. 5, 2002).

[25] In August 2006, Pacific Gas and Electric Co. (PG&E) and Southwest Gas Corp. (Southwest) filed a petition requesting the Commission to amend sections 284.8(e) and (h)(1) of its regulations to remove the maximum rate cap on capacity releases. Subsequently, in October 2006, a group of large natural gas marketers (Marketer Petitioners) requested clarification of the operation of the Commission's capacity release rules in the context of asset (or portfolio) management services.

[26] *Pacific Gas & Electric Co.,* 118 FERC ¶ 61,005 (2007).

[27] NOPR at P 67–74.

[28] The Commission's definition of AMA as proposed in the NOPR is discussed in detail below.

[29] NOPR at P 75–82.

[30] In addition, the releasing shipper could require that, upon expiration of the AMA, the replacement shipper must return storage capacity included in the release with an appropriate level of inventory,

Continued

18. The Commission's second proposal to facilitate AMAs was to exempt pre-arranged releases to implement AMAs from competitive bidding.[31] The Commission stated that, because the asset manager will manage the releasing shipper's gas supply operations on an ongoing basis, it is critical that the releasing shipper be able to release the capacity to its chosen asset manager. Requiring releases made in order to implement an AMA to be posted for bidding would thus interfere with the negotiation of beneficial AMAs by potentially preventing the releasing shipper from releasing the capacity to its chosen asset manager. The Commission concluded that in the AMA context the bidding requirement creates an unwarranted obstacle to the efficient management of pipeline capacity and supply assets. The Commission emphasized that AMAs would remain subject to all existing posting and reporting requirements.[32]

C. Comments

19. Over 60 entities from all segments of the natural gas industry filed comments on the NOPR. The vast majority of those who filed comments regarding the Commission's proposal to permanently remove the price cap for short-term capacity releases of one year or less support the proposal, generally agreeing with the Commission's reasoning in support of removing the cap. Many of the local distribution companies (LDC), marketers, producers, and end-users who support lifting the price cap on short-term capacity releases also support retaining the price cap on long-term capacity releases [33] and/or primary pipeline capacity.[34] These parties generally view retention of these price caps as providing valuable safeguards in preventing the exercise of market power in the uncapped short-term capacity release market.

20. Two commenters oppose the Commission's proposal to lift the price cap for the short-term capacity release market, arguing that the Commission has not supported its proposed rule and that the proposed rule would fail a cost-benefit test.[35] Other commenters express concern over the potential for capacity owners to exercise market power under the proposed rule.[36] For example, some end-users of gas express concerns about the concentration of capacity ownership on lateral pipelines and therefore argue that the Commission should either not remove the price cap for laterals or do so on a case-by-case basis.[37] Other parties generally urge the Commission to carefully monitor markets to ensure that they are functioning properly. Some suggest a final test period before permanently removing the cap, periodic reassessments of the uncapped market, or a process to revisit the determination if the market becomes dysfunctional.[38]

21. In general, commenters also overwhelmingly supported the Commission's efforts to facilitate the development of AMAs.[39] Those commenters agree with the Commission's assessment that AMAs provide value and benefits to market participants and to natural gas markets overall. Virtually all who commented support the steps proposed by the Commission to facilitate AMAs, though many of those that support the Commission's proposal regarding AMAs request that the Commission modify or clarify the proposal in various ways in order to permit broader use of AMAs and greater flexibility in the terms of permitted AMAs. They request, for example, that the Commission permit uncapped AMA releases of a year or less to be rolled over without bidding, clarify that profit sharing arrangements in an AMA do not violate any applicable price cap, relax the requirements concerning the replacement shipper's obligation to deliver gas to the releasing shipper, exempt AMAs from the Commission's prohibition against buy/sell arrangements, and allow supply side AMAs. Williston Basin commented that exempting AMAs from the tying prohibition and bidding requirements would encourage discrimination against pipelines and provide preferential treatment to asset managers.

22. The Commission also received favorable comments on whether it should clarify its prohibition against tying agreements to allow a releasing shipper to include conditions in a storage release concerning the sale and/or repurchase of gas in storage inventory outside the AMA context. All comments that addressed this issue supported removing this prohibition for storage services. They assert that a shipper releasing storage capacity should be permitted to require the replacement shipper to take assignment of any gas that remains in the released storage capacity at the time the release takes effect; and/or to return the storage capacity to releasing shipper at end of the release with a specified amount of gas in storage.[40] Commenters note that tying storage capacity with storage inventory will enable transactions to be consummated more readily and that the nature of the relationship between storage capacity and storage inventory calls out for a waiver of the tying rule. Others add that the ability of releasing shippers to ''tie'' storage capacity with storage inventory such that releasing

e.g., to promise to replenish storage inventories to a mutually agreed upon level.

[31] *See* NOPR at P 83–90. Section 284.8 of the Commission's regulations require capacity release transactions to be posted for competitive bidding unless the transactions are at the maximum tariff rate or are for a term of 31 days or less.

[32] While the NOPR originally required that any comments were due January 10, 2008, a number of entities filed for an extension of that deadline until February 8, 2008. On January 14, the Commission granted an extension of time for filing comments until January 25, 2008.

[33] Those commenters include Direct Energy Services, LLC (Direct Energy), New Jersey Natural Gas Company (NJNG), Oklahoma Independent Petroleum Association (OIPA), Reliant Energy Inc. (Reliant), Statoil Natural Gas, LLC (Statoil), and Weyerhaeuser Company (Weyerhaeuser).

[34] Such commenters include Edison Electric Institute (EEI), NJNG, NJR Energy Services Company (NJR), Nstar Gas Company (Nstar), OIPA, Piedmont Natural Gas Company, Inc. (Piedmont), Statoil, Weyerhaeuser, and the Wisconsin Distributor Group (WDG). American Gas Association (AGA), American Public Gas Association (APGA), and Independent Petroleum Producers of America (IPAA) oppose lifting the price cap for primary capacity, arguing that doing so would undercut a major premise for lifting the price cap in the short-term secondary market, namely, that the availability of recourse rates from the pipeline will constrain the exercise of market power in the secondary market.

[35] Tenaska Marketing Ventures (Tenaska) and National Energy Marketers Association (NEM).

[36] *See* Comments of NEM.

[37] Weyerhaeuser, Northwest Industrial Gas Users (NWIGU), and Process Gas Consumers (PGC).

[38] Direct Energy, OIPA, Honeywell International, Inc. (Honeywell), Arizona Public Service Company (APS) (arguing that the market currently served by El Paso Natural Gas Pipeline east of California is not competitive). Commerce Energy Group, Inc. (Commerce Energy) suggests including a contingency for replacing the price cap in ''exceptional capacity situations.''

[39] *See e.g.*, Comments of the AGA at 1–2, Comments of APGA at 2–4; Comments of Atmos Energy Corporation (Atmos) at 2–4, Comments of BG Energy Merchants (BGEM) at 1–2, Comments of BP Energy Company (BP) at 2, Comments of Direct Energy at 3–4, Comments of Duke Energy Corporation (Duke Energy) at 3, Comments of the EEI at 6, Comments of the Electric Power Supply Association (EPSA) at 2, Comments of Florida Cities at 2, Comments of the Interstate Natural Gas Association of America (INGAA) at 6, Comments of Marketer Petitioners at 2, Comments of National Grid Delivery Companies (National Grid) at 2, Comments of NJNG at 1, Comments of the Natural Gas Supply Association (NGSA) at 3, Comments of NJR at 1, Comments of NWIGU at 6, Comments of Nstar at 1–2, Comments of the Ohio Gas Marketers Group (OGMG) at 1, Comments of Piedmont at 1, Comments of PPM Energy, Inc., (PPM) at 1–3, Comments of PGC at 5, Comments of the Public Utilities Commission of Ohio (PUCO) at 5–7, Comments of Puget Sound Energy, Inc. (Puget Sound) at 8–9, Comments of Sequent Energy Management, L.P. (Sequent) at 5–6, Comments of the Financial Institutions Energy Group (FEIG) at 6–7, Comments of Turlock Irrigation District (Turlock) at 5, Comments of Ultra Petroleum Corporation (Ultra) at 4, Comments of the WDG at 3, and Comments of the Wyoming Pipeline Authority at 5.

[40] Public Service Commission of New York (PSCNY) comments at 20–21.

shippers would be permitted to require that replacement shippers take inventory as a condition of release, even in circumstances outside the AMA context, will provide benefits to the marketplace similar to those provided by AMAs.[41]

23. The Commission also received numerous comments on its inquiry whether pre-arranged capacity release deals necessary to implement retail access programs should be treated as similar to releases made as part of an AMA, and thus accorded the same exemptions. The majority of comments on this issue advocated affording capacity releases under state retail choice programs the same blanket exemptions from the tying prohibition [42] and bidding requirements as those granted to asset managers.[43] AGA, for example, recommends that the Commission add an exemption from the bidding requirements for any prearranged, recallable capacity release from an LDC to a natural gas marketer in accordance with the terms of a retail choice program approved by a State commission. AGA also asks that the Commission clarify that LDC releases to retail choice marketers would be entitled to the same partial exemption from the tying prohibition as would be releases under AMAs. The SPSCNY would extend the AMA exemption from the tying prohibition to releases of storage capacity conducted according to state retail access programs.

II. Overview of the Final Rule

24. In this Final Rule, the Commission is modifying its policies and regulations concerning the release of capacity by firm shippers on interstate pipelines in order to enhance the efficiency and effectiveness of the secondary capacity release market. The Commission's capacity release program has created a successful secondary market for capacity.[44] As a result, natural gas markets in general, and the secondary release market in particular, have undergone significant development and change in the sixteen years since Order No. 636 and the inception of the capacity release program. As this market has developed, shippers and potential shippers have sought greater flexibility in the use of capacity. They seek to better integrate capacity with the underlying gas transactions, and are looking for more flexible methods of pricing capacity to better reflect the value of that capacity as revealed by the market price of gas at different trading points. They also seek to implement AMAs, in which capacity holders release their capacity to asset managers (generally marketers) that have greater expertise in maximizing the value of pipeline capacity and negotiating beneficial transactions in the gas commodity markets.

25. In this Final Rule the Commission is taking actions to respond to the industry's request for greater flexibility in the capacity release market and to revise its policies and regulations to reflect the changes and developments in the marketplace. The first major revision is the removal of the price ceiling on short term capacity releases. The permanent elimination of the price ceiling for short term releases will enable shippers to offer competitively-priced alternatives to pipelines' negotiated rate offerings and will permit short-term capacity release prices to rise to market clearing levels, thereby allocating capacity to those that value it the most. It will also provide more accurate price signals concerning the market value of pipeline capacity.

26. The Commission is also revising its regulations and policies to accommodate and facilitate AMAs, a relatively recent development in the industry. AMAs provide significant benefits to many participants in the natural gas and electric marketplaces and to the secondary marketplace itself. They maximize the utilization and value of capacity by creating a mechanism for capacity holders to use third party experts to both (1) manage their gas supply arrangements and (2) use that capacity to make gas sales or re-releases of the capacity to others when the capacity is not needed to serve the releasing shipper. AMAs result in ultimate savings for end-use customers by providing for lower gas supply costs and more efficient use of the pipeline grid.[45] The Commission's goal in facilitating AMAs in this rule is to make the capacity release program more efficient by bringing it into line with the realities of today's secondary gas marketplace.

27. To that end, the Commission in this rule is adopting its NOPR proposal to exempt capacity releases made to implement AMAs from the prohibition on tying and the bidding requirements of section 284.8. The Commission is also making several revisions to the definition of AMAs as proposed in the NOPR. The Final Rule modifies the definition of AMAs proposed in the NOPR to relax the delivery obligation of the replacement shipper to the releasing shipper and to permit supply side AMAs. The Final Rule also clarifies that short term AMAs may be rolled over without bidding. Further, the Final Rule clarifies that the price ceiling does not apply to any consideration provided by an asset manager to the releasing shipper as part of an AMA. These steps, requested by many industry commenters that support the Commission's efforts in the NOPR to facilitate AMA's, will further enhance the efficiency of AMAs by allowing greater flexibility for parties to customize arrangements to meet unique customer needs while at the same time ensuring that capacity releases that qualify for the exemptions from tying and bidding granted in this rule are *bona fide* AMAs. The rule also extends the benefits of AMAs to sellers of natural gas, creating an even greater diversity of potential suppliers and participants in the secondary market.

28. The Commission is also revising its policies to reflect the realities of today's marketplace by allowing a releasing shipper to include conditions in a release concerning the sale/and repurchase of gas in storage inventory, even outside the AMA context. Allowing such arrangements reflects the fact that in the storage context, storage capacity is inextricably linked to storage inventory. By permitting the tying of releases of storage capacity to conditions on storage inventory, the Commission will enhance the efficient use of storage capacity while at the same time ensuring that releasing shippers will have adequate storage inventories for the winter.

29. The Final Rule also extends the blanket exemptions from the prohibition against tying and from bidding granted to AMAs to capacity releases made to a

[41] Comments of Marketer Petitioners.

[42] Those commenters include AGA, Commerce Energy, Duke Energy, Hess Corporation (Hess), Interstate Gas Supply (IGS), NJNG, New York State Electric and Gas Corporation (NYSEG), Rochester Gas & Electric Corporation (RG&E), OGMG, the Public Service Commission of North Carolina (PSNC), South Carolina Electric and Gas Company (SCE&G), SCANA Energy Marketing (SEMI), PSCNY, and Sequent.

[43] Those commenters include the AGA, Boardwalk Pipeline Partners (Boardwalk), BP, Commerce Energy, Direct Energy, Duke Energy, FPL Energy, LLC (FPL Energy), Hess, IGS, NJNG, NYSEG, RG&E, Nstar, OGMG, Peoples Gas System, a Division of Tampa Electric Company (Peoples), PG&E, PSCNY, PUCO, SEMI, Sequent, and the WDG.

[44] As the Commission observed in 2005, the ''capacity release program together with the Commission's policies on segmentation, and flexible point rights, has been successful in creating a robust secondary market where pipelines must compete on price.'' *Policy for Selective Discounting by Natural Gas Pipelines*, 111 FERC ¶ 61,309, at P 39–41, *order on reh'g*, 113 FERC ¶ 61,173 (2005).

[45] *See Comments of BGEM at 2, Comments of BP at 5, Comments of Nstar at 8*, Comments of Piedmont at 4–5, Comments of PUCO at 7, Comments of WDG at 3.

marketer participating in a state approved retail access program, finding that such programs provide benefits similar to AMAs.

III. Price Cap Issues

A. Removal of Maximum Rate Ceiling for Short-Term Capacity Releases

30. In this Final Rule, the Commission amends section 284.8 of its regulations to eliminate the price ceiling for short-term capacity release transactions of one year or less. The Commission finds that this action will improve shipper options and market efficiency, particularly during peak periods, by allowing the prices of short-term capacity release transactions to reflect short-term variations in the market value of that capacity. This will enable shippers to better integrate capacity with the underlying gas transactions, and will permit more flexible methods of pricing capacity to better reflect the value of that capacity as revealed by the market price of gas at different trading points. The Commission has previously provided pipelines with the flexibility to enter into negotiated rate transactions which are permitted to exceed the maximum rate ceiling, and this rule will permit releasing shippers similar flexibility in pricing release transactions.

31. At the same time, we are convinced that the rates resulting from removal of the price cap for capacity release will be just and reasonable. The data collected over many years shows that the value of short term capacity only exceeds the price ceiling in times when capacity is scarce. These data are confirmed by the data gathered during the experimental release of the price ceiling which showed that capacity release prices exceed the price ceiling only for brief periods of constraint. Moreover, we are not relying solely on competition to ensure just and reasonable prices. We are maintaining the rate cap on pipeline services that will provide the same protection for capacity release transactions as it now does for pipeline negotiated rate transactions. Further, we have required informational postings of capacity release transactions that will provide transparency and facilitate the filing of complaints if circumstances warrant. The Commission will also continue to actively monitor the release market.

1. Maximum Rate Ceiling Interferes With Efficient Transactions

32. As we explained in Order No. 637,[46] the traditional cost-of-service maximum rates in pipeline tariffs are not well suited to the short-term capacity release market.[47] Under the traditional ratemaking methodology, the Commission develops a maximum annual transportation rate for each pipeline that, when applied to the pipeline's contract demand and throughput levels, will enable the pipeline to recover its annual cost-of-service revenue requirement. Each pipeline's maximum rates for services of less than a year are simply the maximum annual rate prorated over the shorter period.

33. Such prorated annual rates bear no relationship to the competitive rates that would be established in the short-term capacity market, particularly during peak periods. The market value of transportation service from the production area to the downstream market may be inferred by comparing the downstream delivered gas price in bundled sales to the market price at upstream market centers in the production area.[48] As the DC Circuit recognized in *INGAA*, ''if the difference between field prices and city gate prices in a particular pathway is only $.07, people will not pay more than $.07 for the unbundled transportation.''[49] As discussed in more detail below, the data set forth in Order No. 637 and the updated data in Figures 1 through 3 below concerning the implicit value of transportation in the bundled sales market demonstrates the variability of transportation value in the short-term market and the divergence between the transportation value and cost-of-service rates. This data shows that during most of the year, the value of transportation service is significantly less than the pipelines' annual cost-of-service maximum transportation rates, but during brief, peak demand periods, the value of transportation service is measurably greater than the maximum transportation rates.

34. Because the existing capacity release price ceiling does not reflect short-term variations in the market value of the capacity, the price ceiling inhibits the efficient allocation of capacity and harms, rather than helps, the short-term shippers it is intended to protect. The price ceiling operates to prevent the shipper most valuing short-term capacity on a peak day from being able to obtain it, because that shipper cannot offer a releasing shipper the full value the shipper places on that capacity. The price ceiling may also reduce the amount of released capacity available during peak periods. As the Commission explained in Order No. 637, ''As a result of the maximum rate, firm capacity holders may not find it sufficiently profitable to make their capacity available for release. For instance, a dual fuel industrial customer might determine that it would be more economic not to use gas, and to substitute a different fuel, if it could obtain a sufficiently high price for its released capacity.''[50] Thus, during a peak day the price ceiling may only serve to limit a purchasing shipper's capacity options, with the result that it must purchase gas in a bundled transaction in the downstream market at a price reflecting the market-determined value of the transportation.

35. The increased use by pipelines and shippers of negotiated rate transactions based on gas price differentials demonstrates that buyers and sellers value the ability to calibrate the price of transportation to its value in the market. The maximum rate ceiling applied to capacity release transactions denies releasing and replacement shippers the same ability to negotiate transactions that reflect the market value of capacity at all times. As the Commission has found, providing the ability to negotiate capacity release transactions based on price differentials will help in providing short-term capacity to replacement shippers, such as gas-fired electric generators.[51] With the price ceiling in effect, releasing shippers are unable to effectively use price differentials as a measure of capacity value because they are denied the ability to recover the value of capacity during peak periods when that value exceeds the maximum rate cap.

36. The price ceiling also harms captive customers holding long-term contracts on the pipeline. Those customers pay maximum rates for both peak and off-peak periods. During off-

[46] Order No. 637 at 31,271–75.

[47] While the Commission offered pipelines the opportunity to propose other types of rate designs, such as seasonal and term-differentiated rates, only a very few pipelines have sought to make such rate design changes, although many pipelines have taken advantage of negotiated rate authority.

[48] In Order No. 637, the Commission explained ''gas commodity markets now determine the economic value of pipeline services in many parts of the country. Thus, even as FERC has sought to isolate pipeline services from commodity sales, it is within the commodity markets that one can see revealed the true price for gas transportation.'' Order No. 637 at 31,274 (*quoting* M. Barcella, *How Commodity Markets Drive Gas Pipeline Values*, Public Utilities Fortnightly, February 1, 1998 at 24–25).

[49] *INGAA* at 31.

[50] Order No. 637 at 31,279.

[51] *Standards for Business Practices for Interstate Natural Gas Pipelines*, Notice of Proposed Rulemaking, 71 FR 64,655 (November 3, 2006), FERC Stats. & Regs. Proposed Regulations ¶ 32,609, P 17 (Oct. 25, 2006), Order No. 698, 72 FR 38,757 (July 16, 2007), FERC Stats. & Regs. Regulations Preambles ¶ 31,251 at P 51 (Jun. 25, 2007).

peak periods, they can only recover a small portion of the capacity cost through capacity release because of the low market value of off-peak capacity. However, during peak periods, the price ceiling prevents those customers from releasing their capacity for its full market value.

37. Finally, the price ceiling reduces the dissemination of accurate capacity pricing information. That is because the price ceiling causes transactions to move to the bundled sales market during peak periods, so that there is no separate capacity transaction to be reported.

2. Assurance of Just and Reasonable Rates

38. As the court stated in *INGAA*, the Commission may depart from cost of service ratemaking upon:

> A showing that * * * the goals and purposes of the statute will be accomplished 'through the proposed changes.' To satisfy that standard, we demanded that the resulting rates be expected to fall within a 'zone of reasonableness, where [they] are neither less than compensatory nor excessive.' [citation omitted]. While the expected rates' proximity to cost was a starting point for this inquiry into reasonableness, [citation omitted], we were quite explicit that 'non-cost factors may legitimate a departure from a rigid cost-based approach,' [citation omitted]. Finally, we said that FERC must retain some general oversight over the system, to see if competition in fact drives rates into the zone of reasonableness 'or to check rates if it does not.' [52]

Accordingly, we analyze below (1) the extent to which market conditions and other factors may be expected to keep short-term capacity release prices within a reasonable zone despite the removal of the price ceiling, (2) the non-cost factors supporting a removal of the price ceiling, and (3) our oversight of the short-term capacity release market after removal of the price ceiling.

a. Market Conditions Ensure Just and Reasonable Rates

39. The Commission finds that the short-term capacity release market is generally competitive. Therefore competition, together with our continuing requirement that pipelines must sell short-term firm and interruptible services to any shipper offering the maximum rate, and the Commission's ongoing monitoring efforts will keep short-term capacity release rates within the ''zone of reasonableness'' required by *INGAA* and *Farmers Union*.

40. In Order Nos. 636 and 637, the Commission instituted a number of policy revisions which have enhanced competition between releasing shippers as well as between releasing shippers and the pipeline. These revisions provide shippers with enhanced market mechanisms that will help ensure a more competitive market and mitigate the potential for the exercise of market power. The Commission required pipelines to permit releasing shippers to use flexible point rights and to fully segment their pipeline capacity. Flexible point rights enable shippers to use any points within their capacity path on a secondary basis, which enables shippers to compete effectively on release transactions with other shippers. Segmentation further enhances the ability to compete because it enables the releasing shipper to retain the portion of the pipeline capacity it needs while releasing the unneeded portion. Effective segmentation makes more capacity available and enhances competition. As the Commission explained in Order No. 637:

> The combination of flexible point rights and segmentation increases the alternatives available to shippers looking for capacity. In the example,[53] a shipper in Atlanta looking for capacity has multiple choices. It can purchase available capacity from the pipeline. It can obtain capacity from a shipper with firm delivery rights at Atlanta or from any shipper with delivery point rights downstream of Atlanta. The ability to segment capacity enhances options further. The shipper in New York does not have to forgo deliveries of gas to New York in order to release capacity to the shipper seeking to deliver gas in Atlanta. The New York shipper can both sell capacity to the shipper in Atlanta and retain the right to inject gas downstream of Atlanta to serve its New York market.[54]

41. In addition to enhancing competition through expansion of flexible point rights and segmentation, the Commission in Order No. 637 also required pipelines to provide shippers with scheduling equal to that provided by the pipeline, so that replacement shippers can submit a nomination at the first available opportunity after consummation of the capacity release transaction. The change makes capacity release more competitive with pipeline services and increases competition between capacity releasers by enabling replacement shippers to schedule the use of capacity obtained through release transactions quickly rather than having to wait until the next day.

42. The data accumulated by the Commission during the Order No. 637 experiment, as well as review of more recent data, confirm that capacity release prices reflect competitive conditions in the industry. On May 30, 2002, the Commission issued a notice of staff paper presenting data on capacity release transactions during the experimental period when the capacity release ceiling price was waived.[55] The staff paper provided analysis of capacity release transactions on 34 pipelines during the 22-month period from March 2000 to December 2001.[56]

43. In brief, the data gathered during the 22-month period show that without the price ceiling, prices exceeded the maximum rate only during short time periods and appear to be reflective of competitive conditions in the industry. The following table shows the distribution of above ceiling price releases among the pipelines studied.

[52] *INGAA* at 31.

[53] In the example used in Order No. 636, a shipper holding firm capacity from a primary receipt point in the Gulf of Mexico to primary delivery points in New York could release that capacity to a replacement shipper moving gas from the Gulf to Atlanta while the New York releasing shipper could inject gas downstream of Atlanta and use the remainder of the capacity to deliver the gas to New York.

[54] Order No. 637 at 31,301.

[55] On May 30, 2002, a staff paper was posted on the Commission's web site presenting, and analyzing data on capacity release transactions relating to the experimental period when the rate ceiling on short-term released capacity was waived.

[56] Many of these release transactions would have occurred prior to completion of the pipeline's Order No. 637 compliance proceedings and the implementation of the changes to flexible point rights, segmentation and scheduling described above.

TABLE I.—ABOVE CAP RELEASES BY PIPELINE

[Releases Awarded Between March 26, 2000 and December 31, 2001]

Pipeline	Releases above max rate (number of transactions)	% of total releases	Release quantity above max rate (MMBtu/day)	% of total release quantity
Algonquin	1	0.1	18,453	0.2
ANR Pipeline	1	0.1	30,000	0.2
CIG	19	6.5	109,984	4.4
Dominion (CNGT)	21	1.0	65,789	0.7
Columbia Gas	101	4.4	374,727	2.7
Columbia Gulf	.....	.....	.....	.....
East Tennessee	.....	.....	.....	.....
El Paso	135	13.3	631,683	12.5
Florida Gas	25	1.7	43,526	1.4
Great Lakes	3	1.3	15,000	0.6
Iroquois	.....	.....	.....	.....
Kern River	2	3.9	55,000	2.5
KMI (KNEnergy)	3	1.0	1,409	0.0
Gulf South (Koch)	.....	.....	.....	.....
Midwestern	1	0.6	50,000	2.3
Mississippi River	.....	.....	.....	.....
Mojave Pipeline Co	1	2.6	40,000	4.7
Natural Gas Pipeline Co	16	3.2	270,489	2.3
Reliant (Noram)	.....	.....	.....	.....
Northern Border	.....	.....	.....	.....
Northern Natural	12	1.6	23,273	0.5
Northwest Pipeline	24	1.8	139,850	4.1
Paiute Pipeline	.....	.....	.....	.....
Panhandle Eastern	1	0.4	1,000	0.1
Southern Natural	7	0.3	24,101	0.2
Tennessee Gas	11	0.4	36,421	0.2
TETCO	122	3.8	645,856	3.3
Texas Gas	6	0.5	103,237	1.0
Trailblazer	3	25.0	15,000	10.0
Transco	183	3.3	1,540,885	4.1
Transwestern	11	4.5	64,058	6.5
Trunkline	.....	.....	.....	.....
Williams	4	0.4	16,500	0.3
Williston Basin	.....	.....	.....	.....
Total	713	2.2	4,316,241	2.1

44. These data show that during periods without capacity constraints, prices remained at or below the maximum rate. The staff paper does identify 713 releases above the ceiling price, representing an average total capacity release contract volume of 4.3 billion cubic feet (Bcf) per day. However, the staff paper reflects that these above-ceiling price releases represented only a small portion of the total releases on these pipelines, comprising approximately two percent of total transactions on the pipelines studied for the entire period, and two percent of gas volumes. Further, above ceiling releases accounted for no more than six or seven percent of transactions during any given month of the period. As one would expect, the percentages of releases occurring above the ceiling increased during peak periods. However, average release rates were higher by only one cent per MMBtu per day or five and one-half percent higher than they would have been with the price ceiling in place. Of the 34 pipelines in the study, 10 reported no releases above the ceiling price, and 20 pipelines reported fewer than 25 above-ceiling price releases. The data gathered during this 22-month period reflects the Commission's expectations and affirms the Commission's findings in the Order No. 637 proceeding. As the court stated in *INGAA:*

> The data represented in the graph [ ] do support the Commission's view that the capacity release market enjoys considerable competition. The brief spikes in moments of extreme exigency are completely consistent with competition, reflecting scarcity rather than monopoly. * * * [citation omitted] A surge in the price of candles during a power outage is no evidence of monopoly in the candle market.[57]

45. The Commission has gathered additional current data and has replicated the evidence presented in Order No. 637. The current data shows that the conditions that existed at the time of Order No. 637 and during the past experimental period continue in today's marketplace.

46. For example, Figure 1 illustrates the fluctuations in the market value of transportation service, as shown by the basis differentials between Louisiana and New York City. This graph compares the daily difference in gas prices between Louisiana and New York City to Transcontinental Gas Pipe Line Corporation's maximum interruptible transportation rate, including fuel retainage, during the 12 months ending July 31, 2007. This graph shows that for most of the year, the value of transportation service, as indicated by the basis differentials, is less than the maximum transportation rate. However, during brief, peak demand periods, the value of transportation service is measurably greater than the maximum transportation rate. For example, on

[57] *INGAA* at 32.

February 5, 2007, the basis differential between Louisiana and New York City was in excess of $27.00 per MMBtu, while the maximum tariff rate plus the cost of fuel was approximately $1.08 per MMBtu.[58]

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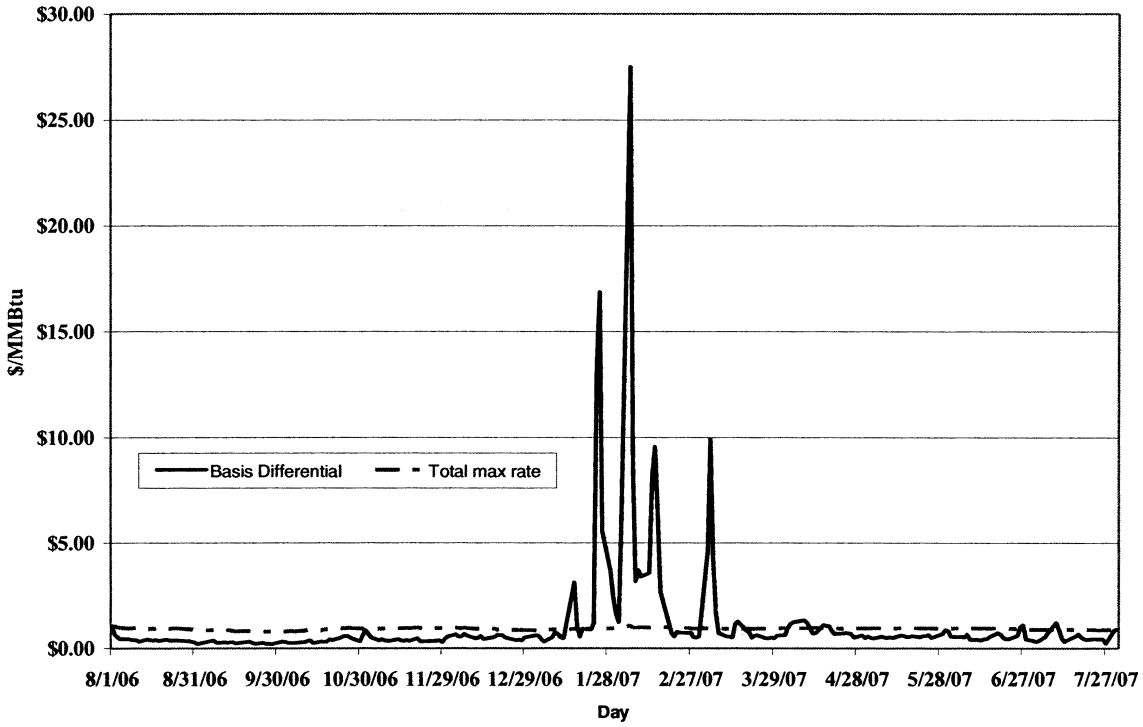


47. Figures 2 and 3 below reflect that a similar pattern of transportation value is evident in other areas of the country. Focusing on fluctuations in the market value of transportation service as shown by basis differentials between Louisiana and Chicago and between the Permian Basin and the California border, respectively, these figures show that for most of the year, the value of transportation service is less than the maximum transportation rate of Natural Gas Pipeline Company of America and El Paso Natural Gas Company, respectively. However, similar to figure 1, these figures also reflect that during brief peak-demand periods the value of transportation service is measurably greater than the maximum transportation rate.

[58] In Order No. 637, the Commission presented similar data in figure 6 showing the implicit transportation value between South Louisiana and Chicago. Order No. 637 at 31,274.

Figure 2 -- Gas Price Differentials NGPL La. To Chicago

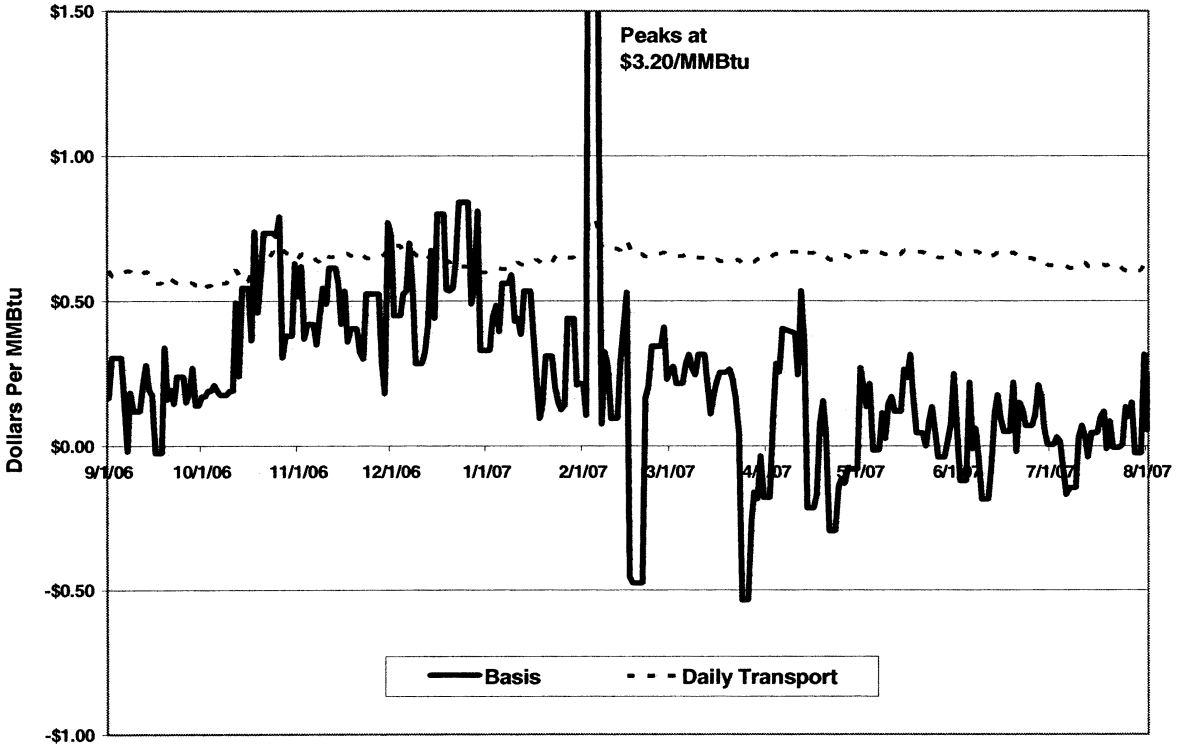
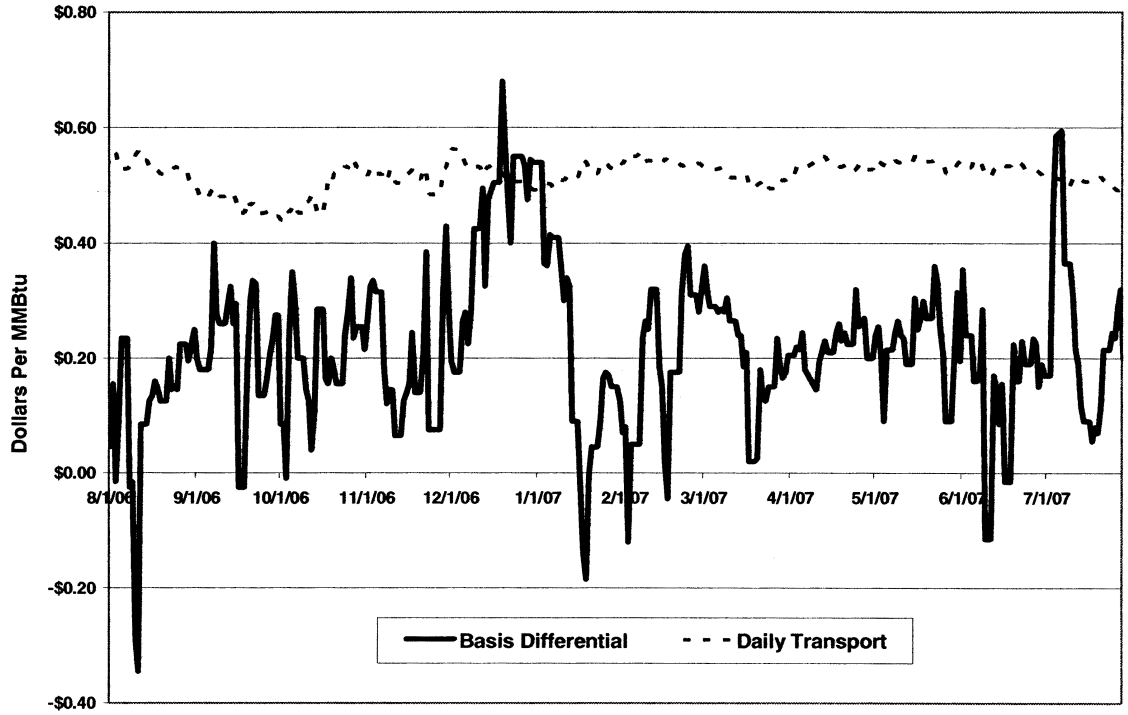


Figure 3 -- Gas Price Differentials for Permian Basin to California Border (SoCal Gas)



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The data in all three of the above figures reflect similar market conditions to the data that the Commission relied upon in lifting the price ceiling for short-term capacity releases in Order No. 637, with the market value of capacity generally below the pipeline's maximum rate except for relatively brief price spikes.[59] In affirming the Commission's actions, the court in *INGAA* found that the data presented by the Commission constituted a substantial basis for the conclusion that a considerable amount of competition existed in the capacity release market. Further, the *INGAA* court concluded that the price spikes reflected in the data were consistent with competition and that such spikes reflected scarcity rather than monopoly power.[60]

b. Recourse Rate Protection

48. Moreover, the Commission is not relying only on a competitive market to ensure just and reasonable rates. The pipeline's maximum rates for short-term firm and interruptible services serve as recourse rate protection for negotiated rate transactions,[61] and will provide the same protection to replacement shippers by giving them access to a just and reasonable rate if the releasing shipper seeks to exercise market power.[62] As the Commission explained in Order No. 637:

> The Commission is continuing to protect against the possibility that, in an oligopolistic market structure, the pipeline and firm shipper will have a mutual interest in withholding capacity to raise the price because the Commission is continuing cost based regulation of pipeline transportation transactions. The pipeline will be required to sell both short-term and long-term capacity at just and reasonable rates. In the short-term, a releasing shipper's attempt to withhold capacity in order to raise prices above maximum rates will be undermined because the pipeline will be required to sell that capacity as interruptible capacity to a shipper willing to pay the maximum rate. Shippers also have the option of purchasing long-term firm capacity from the pipelines at just and reasonable rates.[63]

49. The court in *INGAA* similarly recognized the value of the pipeline's recourse rate protecting against possible abuses of market power by releasing shippers stating that:

> [i]f holders of firm capacity do not use or sell all of their entitlement, the pipelines are required to sell the idle capacity as interruptible service to any taker at no more than the maximum rate—which is still applicable to the pipelines.[64]

c. Short-Term Customers Are Not Captive

50. The releasing shippers' ability to exercise market power in the short-term capacity release market also is limited because short-term customers are not captive, even if only connected to one pipeline. Short-term customers, those using interruptible or short-term firm pipeline service or relying on capacity release transactions, are by the very nature of the service for which they are contracting, expressly taking the risk that they may have to forgo the use of gas entirely if short-term capacity is too expensive, or not available, when they need it.[65] Thus, short-term shippers always have the option simply not to take service, if the price demanded is above competitive market levels.

d. Non-Cost Factors

51. Removal of the price ceiling on short-term capacity release transactions provides a number of advantages which ''offset whatever harm the occasional high rate might entail.'' [66] Most importantly, removal of the price cap permits more efficient utilization of capacity by permitting prices for short-term capacity releases to rise to market clearing levels, thereby permitting those who place the highest value on the capacity to obtain it. Removal of the price ceiling also will provide potential customers with additional opportunities to acquire capacity. Without the price ceiling, firm capacity holders will have a greater incentive to release capacity during times of scarcity, because they will be able to obtain the full market value of the capacity.[67] Therefore, a shipper needing gas on a peak day will have a greater opportunity to obtain the capacity it needs from a firm capacity holder, instead of having only the choices of purchasing a bundled sale or taking gas out of the pipeline and paying the pipeline's scheduling or overrun penalties.[68] Thus, removal of the price ceiling benefits short-term shippers because the shipper placing a high value on the capacity has a greater assurance of obtaining the capacity it needs than it does under a price cap where that shipper may be unable to obtain any capacity.

52. Second, even if replacement shippers do end up paying higher prices for capacity during peak periods than they did with the regulated rate in effect, it is appropriate for shippers using the system only during peak periods to pay higher prices reflecting the greater demand on the system. Short-term shippers currently receive the benefit of paying reduced capacity release prices during off-peak periods but face a cap on the market price during peak periods. Removal of the price ceiling on short-term capacity releases will ensure that those shippers that receive the benefit of lower market prices during off-peak periods face the higher market prices during peak periods.

53. Third, removing the price ceiling on short-term capacity releases should benefit the ''primary intended beneficiaries of the NGA—the 'captive' shippers'' [69] by removing the regulatory bias built into the current rate structure. Those shippers typically have long-term firm contracts with the pipeline. Long-term shippers pay the same rate for capacity during both peak and off-peak periods. During off-peak periods they can recover only a small portion of their capacity cost through capacity release, because the market value for release capacity is generally quite low due to the reduced demand for capacity and the increased availability of released capacity. But during peak periods, the price cap limits long-term captive customers (who cannot make bundled sales) from receiving the full market value of their capacity. Long-term shippers pay for the largest proportion of the pipeline's fixed costs through their annual reservation charges, and

[59] Order No. 637 at 31,273–75.

[60] *INGAA* at 31–32.

[61] *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines*, 74 FERC ¶ 61,076, *reh'g denied*, 75 FERC ¶ 61,024 (1996), *petitions for review denied sub nom., Burlington Resources Oil & Gas Co.* v. *FERC*, 172 F.3d 918 (DC Cir. 1998). *See also Natural Gas Pipelines Negotiated Rate Policies and Practices; Modification of Negotiated Rate Policy*, 104 FERC ¶ 61,134 (2003), *order on reh'g and clarification*, 114 FERC ¶ 61,042, order *dismissing reh'g and denying clarification*, 114 FERC ¶ 61,304 (2006). As the Commission explained in its negotiated rate policy statement, ''[t]he availability of a recourse service would prevent pipelines from exercising market power by assuring that the customer can fall back to traditional cost-based service if the pipeline unilaterally demands excessive prices or withholds service.'' 74 FERC ¶ 61,076 at 61,240 (1996).

[62] The pipeline is obligated to sell capacity at the just and reasonable rate. *Tennessee Gas Pipeline Co.*, 91 FERC ¶ 61,053 (2000), *reh'g denied*, 94 FERC ¶ 61,097 (2001), *petitions for review denied sub nom., Process Gas Consumers Group* v. *FERC*, 292 F.3d 831, 837 (*DC* Cir. 2002).

[63] Order 637 at 31,282.

[64] *INGAA* at 32.

[65] Order No. 637 at 31,285, 31,336–42.

[66] *INGAA* at 33.

[67] For example, an LDC shipper may hold capacity on one or more pipelines and have access to storage and peak shaving facilities. Using these facilities may cost the LDC more to deliver gas than purchasing gas in the upstream markets and using its transportation capacity to transport that gas to the city gate. However, the LDC might be willing to release its transportation capacity and use its peak shaving device instead if it could receive a price above the maximum rate for its transportation capacity so that the price it receives will cover the costs of the peak shaving device. Order No. 637 at 31,277.

[68] Order No. 637 at 31,280; *INGAA* at 34.

[69] *INGAA* at 33.

permitting them to receive more revenue from capacity release during peak periods will help them defray those costs. In short, the captive customers will ''continue to receive whatever benefits the rate ceilings generally provide,'' while also ''reaping the benefits of [the] new rule, in the form of higher payments for their releases of surplus capacity.'' [70]

54. Finally, by providing more accurate price signals concerning the market value of pipeline capacity, removal of the price ceiling for short-term capacity releases will promote the efficient construction of new capacity by highlighting the location, frequency, and severity of transportation constraints. Correct capacity pricing information will also provide transparent market values that will better enable pipelines and their lenders to calculate the potential profitability and associated risk of additional construction designed to alleviate transportation constraints.

e. Oversight

55. The reporting requirements in Order No. 637 and the Commission's implementation of the Energy Policy Act of 2005, specifically with respect to market manipulation, provide the Commission with enhanced ability to monitor the market and detect and deter abuses.

56. Order No. 637 improved the Commission's and the industry's ability to monitor capacity release transactions by requiring daily posting of these transactions on pipeline Web sites.[71] This has increased the information available to buyers while at the same time making it easier for the Commission to identify situations in which shippers are abusing their market power.[72] Further, the Commission will entertain complaints and respond to specific allegations of market power on a case-by-case basis if necessary. Furthermore, the Commission directs staff to monitor the capacity release program and, using all available information, issue a report on the general performance of the capacity release program, within six months after two years of experience under the new rules.

3. Comments

57. The vast majority of comments support the removal of the price ceiling for capacity release transactions. But some commenters have raised limited concerns.

a. Lack of Competition in Certain Areas

58. A few commentors have alleged that certain discrete portions of the short term capacity release market may not be competitive at all times. For example, Arizona Public Service states that the transportation markets served by El Paso Natural Gas Company (El Paso) located east of California are not currently competitive. It asserts that during the 2000–2002 California energy crisis, when the Commission had lifted the price cap on short term capacity releases, prices of releases of El Paso capacity spiked to levels in excess of $20 per Dth. Honeywell similarly argues that the Commission has failed to address the fact that many geographical areas do not operate as a free market and that areas in the Northeast, East, and Southwest portions of the country faced constrained capacity and difficulties in building new pipeline facilities. Honeywell argues that lifting the price cap on short term capacity release will only exacerbate prices while not addressing the underlying problem of these constrained markets. In addition, some end-users of gas express concerns about the concentration of capacity ownership on lateral pipelines and therefore argue that the Commission should either not remove the price cap for laterals or do so on a case-by-case basis, after a review of market concentration and a demonstration that the releasing shipper does not have market power on the lateral.[73]

59. While the Commission has not conducted a detailed market analysis for each discrete area of the interstate pipeline grid, the data previously discussed shows that the short-term capacity release market is generally competitive. Indeed, with respect to the El Paso market, the data in Table 1 shows that during the period March 26, 2000 to December 31, 2001, which included the California energy crisis referred to by APS, only 12.5 percent of the total volume of capacity released on El Paso was released at prices above the maximum rate. Moreover, the updated data in Figure 3 for August 2006 through July 2007 shows that the market value of transportation service from the Permian Basin to the California border was less than El Paso's maximum transportation rate, except during brief, peak-demand periods when the value of transportation service was somewhat greater than the maximum transportation rate. Similar data for deliveries to East of California markets on El Paso's South Mainline reflects the same overall pattern, as shown in the following graph.[74]

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[70] *Id.*

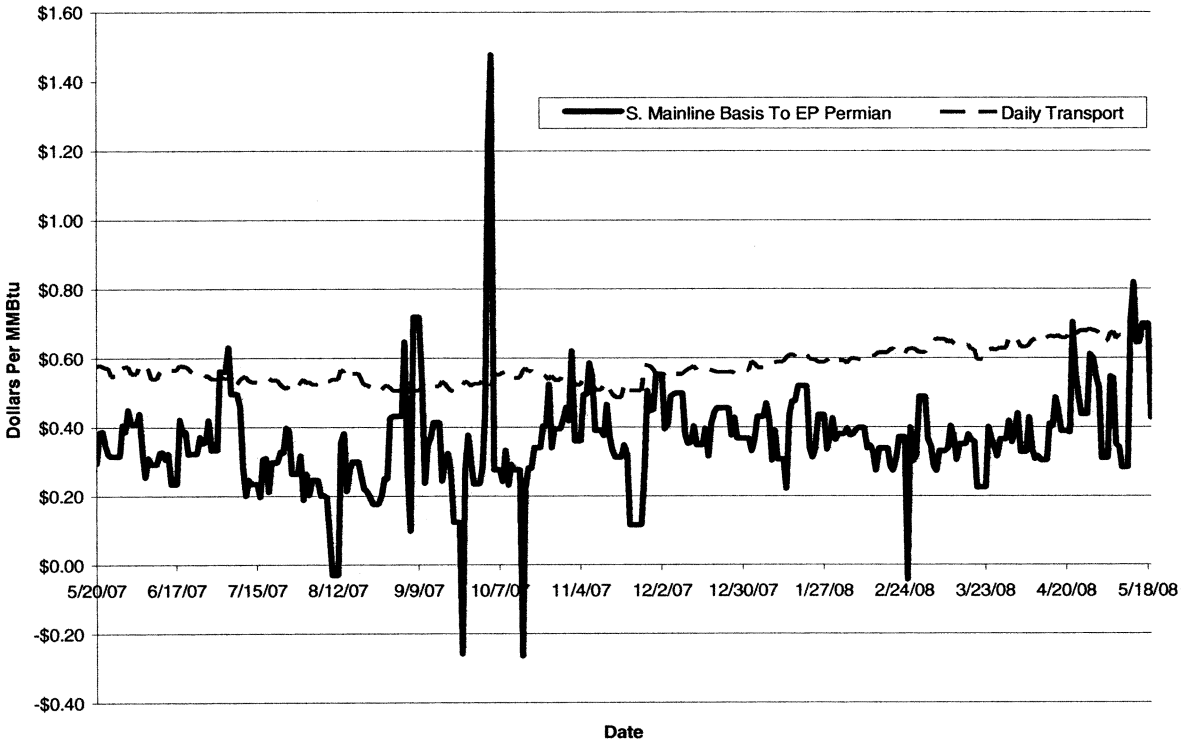
[71] 18 CFR 284.8 (2007).

[72] Order No. 637 at 31,283; Order No. 637–A at 31,558.

[73] Weyerhaeuser, NWIGU, and PGC.

[74] The data for this chart comes from ICE, an on-line electronic trading platform. The El Paso South Mainline area is described on ICE as: El Paso-South Mainline—buyers' choice west of Cornudas.

Figure 4 El Paso Permian-to-South Main Line Basis Differentials vs. Maximum Transport Charge



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60. Similarly, while Honeywell suggests that capacity is constrained in areas in the East and Northeast, the data in Figure 1 shows that for most of the year the value of transportation service from Louisiana to New York City is less than the maximum transportation rate on Transco, with only brief spikes above that level during peak demand periods.

61. These data are consistent with the proposition that prices will exceed the maximum rate only during periods of constraint. Moreover, it is precisely for these reasons that the Commission is continuing to insist on the maintenance of the pipeline's recourse rate as protection against the exercise of market power. Even on laterals or other parts of the pipeline grid where all firm capacity may be held by only a few or one firm shipper, those shippers cannot withhold their capacity in order to charge a price above competitive levels. The pipeline's cost-based interruptible rate is always available as an alternative when a releasing shipper attempts to withhold its capacity. For example, assume that a releasing shipper with available capacity on a little used lateral seeks to exercise market power by withholding capacity unless a potential replacement shipper pays a higher than justified rate. If market demand for capacity at that rate does not exist,[75] the replacement shipper has the option of turning down the deal and purchasing the capacity from the pipeline at the just and reasonable interruptible rate.

62. NEM remains concerned that in spite of the Commission's finding that the short term capacity release market is competitive, market power may exist for some market participants resulting in historically high natural gas prices reaching even higher levels. However, the data reflects the competitive nature of the short term capacity release market and the safeguards that the Commission employs in the instant Final Rule to mitigate any residual market power. The Commission accordingly finds that NEM's speculative concerns are unwarranted.[76]

[75] In other words, the market is not constrained.

[76] NEM also posits that the lifting of the short term capacity release market price ceiling in states where LDCs are required to release their capacity to marketers as part of a state retail unbundling program will place the marketer in a position where they would no longer be guaranteed the same underlying capacity costs as if the capacity had remained with the utility, and this could increase the costs the marketers must pass on to their state retail customers. To the extent that this feature causes problems in states where capacity release assignments are a mandatory part of a state retail unbundling program, the Commission would expect that the State would consider this in its policies.

b. Benefits From Removing the Price Ceiling

63. Tenaska contests some of the benefits the Commission has cited for removing the price ceiling. It argues there will be no overall increase in allocative efficiency from removal of the short term release price cap. It asserts that capacity that is in excess to the current capacity holder's needs already finds it way to those who value it more by a variety of means, including bundled downstream sales, short and long term capacity releases, and pipeline sales of short-term firm and interruptible service. It also argues that releasing shippers with excess capacity are more likely to release that capacity over a longer term, perhaps multiple years, rather than speculate that it could profit by making very short-term releases during peak period price spikes. It states that releases over relatively long term with few exceptions allow the releasing shipper to realize its full market value without being constrained by maximum pipeline rates.[77]

[77] Tenaska explains, ''[c]apacity that basis markets show to be worth more than the applicable pipeline maximum rate in the prompt month will almost always drop in value to a level below that maximum rate at some future point. Such capacity can be sold for its full value within the pipeline maximum rate cap simply by extending the term.'' Tenaska comments at 4–5.

64. Rather than undercutting the removal of the price cap, Tenaska's argument that releasing shippers can now avoid the price ceiling by making gas sales (in effect bundled sales of gas and transportation) supports our determination. Shippers may well find that releasing transportation alone is far more efficient than making a bundled sales transaction, and therefore, removal of the price ceiling will serve only to promote efficiency with negligible effect, if any, on price levels. Similarly, requiring shippers to execute long-term contracts in order to effectuate short-term transactions is inefficient, and would mask more accurate short-term price signals. Moreover, as discussed earlier, releasing and replacement shippers want to contract based on price differentials between markets even when such differentials exceed the maximum rate, and executing long term contracts at some approximate capped rate would not achieve that goal.

65. Tenaska also argues that holders of long term pipeline contracts, that are ''net long'' compared to their actual capacity needs will be the only shippers to benefit. Market participants that are ''net short'' hold less capacity than they need and choose to match some portion of their demand with short term services and delivered gas purchases rather than to rely exclusively on long term pipeline contracts. Tenaska argues that the effect of the removal of the short term release rate cap, if there is any effect on reallocation of capacity at all, will be a transfer of value from net short companies to net long companies and states that there will be no net market benefit of the type the Commission must show to justify the proposed removal of the cap.

66. Tenaska ignores the fact that ''net short'' holders of capacity under its scenario will benefit from the removal of the price cap from short term capacity release because they may be able to gain access to capacity in a constrained market that they could not if the price cap remained. A releasing shipper, subject to a rate ceiling, may well hold onto capacity if the maximum rate is less than its opportunity cost, such as using an alternative fuel, using expensive storage, or conservation of gas.[78] Moreover, the fact low load factor ''net long'' holders of capacity of the type described by Tenaska can profit from above-cap short term releases is one of the benefits of removing the short-term price cap.

[78] Order No. 637 at 31,554.

c. Promotion of Construction

67. Honeywell argues that the Commission has failed to show that more accurate price signals concerning the value of pipeline capacity will, in fact, promote construction of needed capacity. First, higher prices should serve as price signals indicating where capacity shortages exist and where potentially profitable construction can take place. If prices are ''exacerbated'' as Honeywell argues, replacement shippers paying such prices have every incentive to go to the pipeline and support economically efficient construction to rectify the shortage. While political and environmental obstacles are also a factor in construction, this factor has not stymied construction. The Commission has processed a large number of certificate applications for new construction of capacity, storage, and liquefied natural gas terminals in every region.[79] Third, providing incentives for new construction is not the only benefit of removing the price ceiling. As discussed earlier, removal of the price ceiling will benefit the market even in the short term by providing for a more efficient allocation of capacity to those who value that capacity.

d. Changed Circumstances

68. Tenaska and APS argue that even if the Commission's conclusion that all pipeline capacity release markets are competitive is supportable at this time, circumstances could change dramatically in this industry. As a result, they assert that the Commission must include a process for promptly revisiting its determination that the market is competitive if there is evidence that the market is dysfunctional. Honeywell also states that the Commission also proposes to blind itself for almost three years to any problems in the capacity release market by directing its staff to issue a report within six months after gaining two years of experience under the new rules.

69. As set forth above, we are maintaining oversight over the market and can act if market power is being abused in particular circumstances. Order No. 637 improved the Commission's and the industry's ability to monitor capacity release transactions by requiring daily posting of these transactions on pipeline Web sites.[80] This has increased the information available to buyers while at the same time making it easier for the Commission to identify situations in which shippers are abusing their market power.[81] Such information allows the Commission to monitor, with the assistance of all industry participants, the overall competitiveness of the market including discrete portions of the market that may not be competitive at all times. Moreover, the Commission will entertain complaints and respond to specific allegations of market power on a case-by-case basis if necessary. This action will also guard against the use of market power by any market participant.

70. Further, Honeywell misreads the Commission's directives and intent when it claims the Commission has voluntarily blinded itself to market forces for some three years. While the Commission directs its staff to monitor the capacity release program and issue a report on the general performance of the capacity release program within six months after two years of experience under the new rules, nothing in this directive precludes staff from alerting the Commission to any irregularities in the capacity release market before it issues its general report.

71. Moreover, while Tenaska refers to the Commission lifting of the short term price cap as permanent, and notes that the *INGAA* court reviewed a proposal by the Commission to lift the price ceiling only on a temporary basis, it is important to note that, although the Commission will remove the price ceiling on short term capacity releases it will monitor the capacity release market and review its staff's report on the effects of the new rule and the overall functioning of the capacity release market.

e. Exemption From Bidding for Short-Term Releases at the Maximum Rate

72. The NGSA and others request that the Commission continue to allow market participants to enter into a pre-arranged capacity release transaction without bidding for releases of capacity with a term of a year or less as long as those releases are made at the pipeline's maximum tariff rate. NGSA asserts that prearranged releases at the pipeline's maximum rate without the competitive bidding requirement have been proven to provide significant market benefits and should not be eliminated, solely

[79] In 2007 alone, approximately 34 major pipeline projects were authorized by the Commission which was comprised of approximately 2,782 miles of pipeline, 850 thousand horsepower of compression and the capacity to transport some 23,000 million MMd/t of gas. See the ''2007'' data at *http://www.ferc.gov/industries/gas/indus-act/pipelines/approved-projects.asp.* See similar data for storage at *http://www.ferc.gov/industries.asp* and liquefied natural gas terminals at *http://www.ferc.gov/industries/lng.asp.*

[80] 18 CFR 284.8 (2007).

[81] Order No. 637 at 31,283; Order No. 637–A at 31,558.

because the Commission removes the rate cap on short-term capacity release transactions.

73. The reason for the prior exemption from bidding for pre-arranged capacity release transactions at the maximum rate was based solely on the fact that with the rate cap in place, no one could submit a higher bid and win the capacity. As discussed earlier, one of the reasons for removing the price ceiling for short-term releases is to ensure that capacity is allocated to the shipper that values it the most. NGSA has not provided a sufficient justification for permitting shippers to consummate a capacity release at the maximum rate when another potential shipper places a greater value on that capacity.

B. Removal of Price Ceiling for Long-Term Releases

74. Several commenters to the NOPR request that the Commission remove the price ceiling on long-term capacity releases in addition to eliminating the price ceiling on short-term capacity releases. [82] These commenters assert that the same arguments that support removal of the price cap for short-term capacity releases apply equally to lifting the price cap for long-term capacity releases. For example, commenters argue that lifting the price ceiling on long-term capacity releases would increase liquidity and competition in the market for capacity release and primary pipeline capacity, thereby promoting the goals of allocative efficiency. Moreover, commentors assert that lifting the price cap on long-term capacity releases will promote the construction of additional pipeline capacity by providing more accurate price signals reflecting the value of such capacity.

75. Commentors also point out that the Commission's concern over replacement shippers being ''locked in'' to high price long-term contracts is misplaced because such releases of capacity would likely be priced using basis differentials at different price index locations.[83] Other commentors such as Duke assert that the Commission's concerns are misplaced because replacement shippers accepting such multi-year deals are sophisticated market participants capable of negotiating fair agreements.

76. Allegheny argues that the pipelines' recourse rates will serve as a check on over-priced long-term capacity releases because replacement shippers would have the ability to negotiate for capacity from a pipeline at the recourse rate if the releasing shippers were seeking excessive prices. Allegheny also points to the Commission's reporting requirements, complaints process, and enhanced civil penalty authority as additional safeguards against the exercise of market power.

77. Several commenters support the retention of the price ceiling on long term capacity releases and argue that it protects customers from being locked into a long term contract without price cap protection, that the price cap provides protection against possible abuse of market power and that removal of the price cap for long term capacity releases does not provide the efficiency gains provided by the removal of the price ceiling on short term capacity release.[84]

78. In this instant Final Rule, the Commission will not extend the removal of price ceilings to long term releases as urged by these commentors. The data discussed above indicate only that removal of the price cap for short-term releases is needed to reflect market values. The Commission removed the price ceiling to permit shippers to quickly align their capacity prices with the fluctuating short term market for capacity releases. Such flexibility is not relevant to long-term releases.

79. Limiting this rulemaking to short-term transactions is a reasonable response to the circumstances the Commission is trying to address, *i.e.,* short term price spikes. Only under these conditions do Commission-approved maximum rates prevent the market from rationally allocating scarce capacity to those shippers who value it most. Removing the price cap only for short-term transactions allows a more efficient market-driven allocation of capacity during those brief peak demand periods, and provides more detailed price signals to the market on the value of peak capacity, while retaining valuable consumer protections provided by the price ceiling for longer term transactions. The Commission's policy emphasis in this rule is on short-term transactions, because that is where there is a problem to be solved. No commenter has made a convincing argument that price ceilings on longer term transactions create significant allocative inefficiencies or market failures. Accordingly, the Commission concludes that the current record does not warrant removal of the price ceiling on long-term capacity releases.

80. Moreover, as we said in the NOPR,[85] limiting the release to one year will not prevent the releasing and replacement shipper from continuing an index-based release past one year, because they could repost the release for another year, and the price ceiling would not apply to the release. However, such reposting provides additional assurance to the market that capacity will be allocated to those who value it the most. Any transaction in which the parties want to continue the release past one year would have to be re-posted for bidding to ensure that the capacity is allocated to the highest valued use.[86] This bidding process could provide an opportunity for re-determining the current market value of the capacity.

C. Removal of Price Ceiling for Pipeline Short-Term Transactions

81. Pipelines request that the Commission remove the price ceiling for short-term primary pipeline capacity whether firm or interruptible. In sum, the Interstate Natural Gas Association of America (INGAA) and the commenting pipelines argue that if the Commission lifts the price cap for short-term capacity releases, it should also lift the price cap for primary pipeline capacity.[87]

1. Removal of the Price Ceiling Is Not Justified

82. The Commission declines to remove the ceiling from short-term pipeline capacity. In the Alternative Rate Design Policy statement, we offered the pipelines the flexibility to exceed the price cap in one of two ways: either pipelines can make a filing with appropriate information to establish the market is competitive or pipelines can negotiate rates as long as the shipper has the option of purchasing capacity at the recourse (maximum) tariff rate.[88] These two approaches assured shippers that the pipelines were not exercising market power. The pipelines request for lifting the maximum rate on short-term releases would effectively negate the recourse rate protection we included in the negotiated rate program.

83. Our action here is designed to permit releasing shippers some of the

[82] *See, e.g.,* Comments of Allegheny Energy Supply Co. (Allegheny), Duke Energy, Dynegy Marketing and Trade (Dynegy), and Southwest .

[83] *See e.g.,* Comments of Southwest at 10; Allegheny at 6–7.

[84] *See, e.g.,* Comments of NJNG at 33, OIPA at 3, Statoil at 14, Weyerhaeuser at 11.

[85] NOPR at P 44–45.

[86] As discussed below, however, short term capacity releases made in context of an AMA need not be re-posted for bidding at the end of their term.

[87] *See e.g.,* Comments of Boardwalk, Spectra Energy Transmission, LLC and Spectra Energy Partners, LP (Spectra), and Williston Basin Interstate Pipeline Co. (Williston Basin).

[88] *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines,* 74 FERC ¶ 61,076 (1996).

same flexible pricing authority the Commission has already granted pipelines through the negotiated rate program. But, as discussed earlier, the Commission is retaining the maximum rate ceiling on pipeline capacity because it acts as the recourse rate for both pipeline transactions as well as release transactions. Removing the rate ceiling for pipeline transactions would therefore remove an important protection both for pipeline customers and for replacement shippers on capacity release transactions.

84. In addition, pipelines are the principal holders of capacity. As the court recognized in *INGAA*:

> There seems every reason to suppose that [releasing shipper] ownership of such capacity (in any given market) is not so concentrated as that of the pipelines themselves—the concentration that prompted Congress to impose rate regulation in the first place.
>
> * * * * *
>
> Here, the distinction between pipelines and other holders of unused capacity, based on probable likelihood of wielding market power, seems to us to pass muster.[89]

85. Unlike releasing shippers, the pipeline holders of primary capacity have a greater ability to exercise market power by withholding capacity and not constructing facilities. Because pipelines are in the best position to expand their own systems, cost-of-service rate ceilings help to ensure that pipelines have appropriate incentives to construct new facilities when needed. As the Commission found, ''the only way a pipeline [can] create scarcity to force shippers to accept longer term contracts would be to refuse to build additional capacity when demand requires it.'' [90] As long as cost-of-service rate ceilings apply, however, ''pipelines [will] have a greater incentive to build new capacity to serve all the demand for their service, than to withhold capacity, since the only way the pipeline could increase current revenues and profits would be to invest in additional facilities to serve the increased demand.'' [91] Similarly, as long as pipeline short-term services are subject to a cost of service rate, the pipelines will not limit their construction of new capacity to meet demand in order to create scarcity that increases short-term prices. Indeed, releases at prices above the maximum rate will indicate that pipeline capacity is constrained and demonstrate that constructing additional capacity could be profitable.

86. Further, pipelines already have significant pricing discretion. As discussed above, pipelines can enter into negotiated rate transactions above the maximum rate. Pipelines also may seek market-based rates by making a filing with the Commission establishing that they lack market power in the markets they serve.[92] In addition, pipelines have the ability to propose seasonal rates for their systems, and therefore, recover more of their annual revenue requirement in peak seasons.[93] The proposed rule is designed solely to give releasing shippers some of the same flexibility enjoyed by the pipelines, subject to the same recourse rate protection. But removing the ceiling price from the release market does not justify removing all regulatory protections applicable to the primary capacity holder.

2. Response to Specific Comments

a. Evidentiary Record

87. INGAA states that the same evidentiary record relied upon by the Commission to propose lifting the ceiling on capacity releases reflects that the entire market, including short-term pipeline services, is competitive, and therefore contends that the Commission should lift the rate ceilings on the entire short-term market. Spectra adds that the evidence cited by the Commission supports the existence of competition by all participants in the single market for short-term capacity, not just competition in the capacity release sector of the overall market. INGAA asserts that if the market is competitive, the identity of the seller should be irrelevant.

88. As we have explained above, while the data indicates that the short-term secondary market is competitive in general, we have not made a finding that every segment of every pipeline is competitive; we retained the recourse rate as a protection against the potential exercise of market power by both pipelines and releasing shippers in those cases in which the market may not be competitive. While the purpose of capacity release, segmentation, and flexible point rights is to encourage competition between the pipeline's sale of its own capacity and capacity release, and those policies have successfully created a robust secondary market as demonstrated by the data discussed earlier in this rule, that does not necessarily mean that every pipeline faces competition in the sale of its short-term capacity on all segments of its system. For example, the Commission's selective discounting policy permits pipelines to restrict a shipper's discount to specific points, so that the shipper must pay the pipeline's maximum rate if it releases the capacity to a replacement shipper who uses different points where the pipeline faces less competition.[94] This may reduce that shipper's incentive to release its capacity to a replacement shipper who will use points on a segment with less competition.[95] Retaining the recourse rate helps protect against the pipeline's abuse of market power in the sale of capacity on any such segments of its system.

89. Further, the repercussions of removing price ceilings for pipeline transactions are more serious than for released capacity, because the exercise of market power by pipelines could reduce the total amount of primary pipeline capacity available to the market. Finally, to the extent pipelines believe their markets are competitive, they have a full opportunity to make a filing with the Commission to obtain market based rates based on a showing of lack of market power.[96]

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[89] *INGAA* at 35.

[90] *Regulation of Short-Term Natural Gas Transportation Services,* 101 FERC ¶ 61,127, at P 12 (2002), *aff'd, American Gas Ass'n* v. *FERC,* 428 F.3d 255 (*DC* Cir. 2005). *See also Tennessee Gas Pipeline Co.,* 91 FERC ¶ 61,053 (2000), *reh'g denied,* 94 FERC ¶ 61,097 (2001), aff'd, 292 F.3d 831 (*DC* Cir. 2002).

[91] *Id.*

[92] *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines,* 74 FERC ¶ 61,076 (1996).

[93] *See* Order No. 637 at 31,574–81.

[94] *Williston Basin Interstate Pipeline Co.,* 110 FERC ¶ 61,210 at P 22, *order on reh'g,* 112 FERC ¶ 61, 038 (2005). These orders responded to a decision by the United States Court of Appeals for the District of Columbia Circuit in *Williston Basin Interstate Pipeline Co.* v. *FERC,* 358 F.3d 45 (*DC* Cir. 2004) (*Williston*), vacating orders in an Order No. 637 compliance proceeding permitting releasing shippers to retain primary point discounts when their replacement shippers used different points. The *DC* Circuit held that the policy could undermine the benefits of selective discounting, stating that ''economic theory tells us price discrimination, of which selective discounting is a species, is least practical where arbitrage is possible—that is, where a low price buyer can resell to a high price buyer * * * yet this is precisely what the Commission's policy would appear not only to allow but to encourage.'' 358 F.3d at 50 (cite omitted).

[95] In addition, a particular shipper's incentive to release capacity in competition with the pipeline could be reduced, if its discounted or negotiated rate agreement contains a provision, as permitted by Commission policy, providing that the pipeline will share any revenues the shipper receives from a capacity release in excess of its discounted or negotiated rate. *See LSP Cottage Grove, L.P.* v. *Northern Natural Gas Co.,* 111 FERC ¶ 61,108 at P58–59 (2005), and cases cited.

[96] Pipelines so far have not been successful in demonstrating that their major markets are competitive. *See e.g., Gas Transmission Northwest Corp.,* 119 FERC ¶ 61,288 (2007); *Koch Gateway Pipeline Co.,* 85 FERC ¶ 61,013 (1998), *order on reh'g,* 89 FERC ¶ 61,046 (1999).

b. Infrastructure Incentives

90. INGAA alleges that maintaining cost-based recourse rates for pipelines is not required to preserve an incentive for pipelines to construct needed pipeline infrastructure. It asserts this runs counter to the general presumption that market-based rates send the proper signals as to whether new pipeline construction is needed and can be constructed economically. In their comments, INGAA and Spectra argue that pipelines actually compete to build new capacity, and that there is no reason to assume that non-pipeline investment will not fill any void caused by pipelines withholding capacity.[97]

91. Neither INGAA nor Spectra have shown that the entry barriers to constructing capacity on existing pipeline rights of way are so low that there is effective competition. Moreover, they have the opportunity to present any such detailed evidence in a proceeding seeking to show that they do not have market power, and other parties would have an opportunity to challenge such evidence. This is not a finding we can make on a generic basis in this proceeding.

c. Competitive Market Structure

92. INGAA asserts that the Commission's concern that pipelines own more pipeline capacity than their firm shippers is based on a pre-restructuring, pre-open access view of the industry, and not based on any empirical study of pipeline market power. Moreover, INGAA and Spectra assert that control of the short-term market is now primarily in the hands of pipelines' firm shippers, which have substantial rights such as capacity release, flexible point rights and segmentation rights. These shipper rights produce a competitive short-term market that cannot reasonably be bifurcated based on the identity of the seller. INGAA and Spectra state that the Commission should focus its concern not on formal ownership, but rather on the entity that controls access to or use of the capacity.

93. Spectra points out that a check on prices is not needed to prevent the exercise of market power because sufficient safeguards—in the form of competition between shippers seeking to release or acquire capacity in the short-term markets, as well as the competition between shippers and pipelines themselves—will protect the market from abuse. Further, Spectra asserts that construction of new capacity, the open access tariff, reporting and posting requirements, and the Commission's oversight and enforcement authority will also serve as added safeguards.

94. However, as the Court of Appeals found, these arguments are comparing ''apples and oranges.'' [98] First, the available capacity of the pipeline is on hand and ready to be sold, whereas the capacity held by releasing shippers is not necessarily available, since much of it may be needed to serve its native loads:

> The petitioning pipelines assert that pipelines hold only about 7% of pipeline transportation capacity, while shippers hold the remaining 93%. This is classic apples and oranges. The Commission points out that whereas the uncontracted capacity of a pipeline is presumptively available for the short-term market, no such presumption makes sense for the non-pipeline capacity holders: they presumably contracted for the capacity in anticipation of actually using it.[99]

Second, using the market shares for already existing capacity does not reflect the more important relationship of the price ceiling to construction of new capacity infrastructure which is far more critical to ensuring that the pipeline grid is expanded to meet demand. Because the pipelines are the principal parties constructing additional capacity, it is crucial that their incentive to build is not diluted by the ability to earn scarcity rents in the short-term market.

d. Differences in Flexibility Between Pipeline Capacity and Released Capacity

95. INGAA and the pipelines argue that the pricing flexibility available to the pipelines does not allow pipelines to compete with shippers offering short-term capacity releases without a price ceiling. They argue that market-based pricing for pipelines is subject to a strenuous market-power test that involves lengthy and costly administrative proceedings. They argue that the Commission rarely finds that a pipeline meets this market-power test, and therefore it is impractical for pipelines to engage in competition with capacity releases.[100]

96. In regard to negotiated rates, the pipelines argue that their flexibility is limited because the maximum rate is always subject to the shipper's right to elect the recourse rate, and implementation is subject to regulatory delays. INGAA and Williston also argue that the negotiated rate program offers pipelines very little, if any, opportunity to employ market-based pricing to efficiently allocate capacity to those who desire it most.

97. Third, INGAA asserts that seasonal rates do not provide the flexibility necessary to address the pipelines' competitive disadvantage under the Commission's proposal because seasonal rates result in new recourse rates, capped at the pipeline's annual revenues, not the ability to charge rates in excess of recourse rates. Spectra adds that seasonal rates do not allow pipelines to award the capacity to the customers who value it most because there is still a maximum rate. In addition, Spectra notes that pipelines are unable to respond to market signals in the short-term market using seasonal recourse rates. Williston asserts that seasonal rates are not a substitute for the removal of a price ceiling because they do not necessarily align prices with what the market will bear.

98. We agree that the flexibility offered to pipelines and releasing shippers is not identical, due to the differences already noted between the primary and secondary markets. The recourse rate, for example, may operate somewhat differently in the two markets by virtue of the design of these markets; but as we have found, the retention of the recourse rate is necessary to provide an effective check on both markets. Thus, we have sought to provide both pipelines and shippers with reasonably comparable flexibility consistent with the differences between these entities and the need to provide protection against market power.

99. For example, the commentors assert that the Commission has rarely granted a pipeline authority to price its capacity upon market based rates. INGAA and the pipelines make this allegation to show that it is administratively difficult to obtain market-based rates from the Commission and that is a difference from the pricing authority the

[97] Spectra also argues that the Commission should remove the price caps for pipeline short-term firm and interruptible capacity, and suggests that to the extent the Commission retains its concerns regarding withholding of capacity, the Commission could retain the price caps for interruptible service. Spectra further argues that this action would provide shippers with a recourse alternative that would be available if the pipeline attempted to withhold short-term firm capacity or the releasing customer tried to withhold short-term release capacity.

[98] *INGAA* at 24.

[99] *Id.* In addition, as previously discussed, there may be circumstances in which shippers' discounted or negotiated rate agreements contain provisions that have the effect of reducing competition from capacity release on some segments of the pipeline.

[100] *INGAA* at 12 *(citing, KN Interstate Gas Transmission Co.,* 76 FERC ¶ 61,134 (1996); and *Rendezvous Gas Services, LLC,* 112 FERC ¶ 61,141, at 61,792–94 (2005)). Spectra notes that the Commission has never approved market based rates for a major natural gas pipeline. Spectra comments at 24.

Commission grants capacity releases in this rule. On the other hand, the fact that the pipelines have not been granted market based rates based on their factual showings is strong evidence that the recourse rate is still needed to protect shippers against the exercise of market power.[101] This fact also leaves the Commission reluctant to find that it should remove the ceiling from primary short term pipeline capacity.

100. Spectra argues that the Commission uses a stricter market power analysis to determine whether to grant a pipeline market based rates than it did to conclude that it would remove the price caps for short term capacity releases. Spectra asserts that the Commission, in removing the price ceiling from short term capacity releases, did not define the relevant product market and the relevant geographic market, nor did it calculate a Herfindahl-Hirschman Index to measure market concentration of the releasing shippers and other competing sellers in the market. Spectra argues that the Commission should remove the price caps on short-term pipeline capacity on the same basis it used for removing the caps on short-term capacity releases.

101. The Commission is not using the same analysis to remove the price ceiling from short term capacity releases as it does to determine whether a pipeline lacks market power and should therefore be permitted market based rates. As we have explained, one of the principal reasons for removing the price ceiling on released capacity is the existence of the pipeline's service as recourse in the event market power is exercised.[102] As the court in INGAA observed:

> If holders of firm capacity do not use or sell all of their entitlement, the pipelines are required to sell the idle capacity as interruptible service to any taker at no more than the maximum rate—which is still applicable to the pipelines. [footnote omitted] Even though interruptible service may not be as desirable as firm service, the Commission concluded that it would provide an adequate substitute, whose availability would place a meaningful check on whatever anti-competitive tendencies the resellers might have.[103]

102. The analysis we have employed in removing the price ceiling for released capacity is therefore more comparable to that used for pipeline negotiated rates than for the market power analysis under the Alternative Rate Design Policy statement. The continuation of the recourse rate provides sufficient protection to enable us to remove the price ceiling for short term capacity releases without doing a more detailed market power analysis.[104] The Commission finds, however, that there are sufficient concerns about the ability of pipelines to exercise market power in short-term transactions on at least some segments of their systems, that a blanket removal of the price cap on all such pipeline transactions in this rulemaking proceeding, without consideration of specific circumstances on individual pipeline systems, would be inappropriate.

e. Bifurcation of the Markets

103. The pipelines maintain that continuing the price ceiling on pipeline short term services will create a bifurcated market with higher market prices in the uncapped release market. The premise of this argument is that if shippers that place a lower value on transportation are able to acquire the capped pipeline service, the prices in the uncapped market will be higher than if all capacity were sold without a price ceiling. In the NOPR, the Commission responded to similar arguments.[105] The Commission pointed out that interruptible service has lower priority than firm service so that even if a shipper placing a relatively low value on the capacity has a higher position on the pipeline's queue for price-controlled interruptible transportation, it is not guaranteed that it can acquire that capacity, leading to the supposed higher market clearing price. A firm shipper could always release its unused firm capacity to a replacement shipper who places a higher value on that capacity, thereby displacing the lower-value interruptible shipper.

104. With respect to short-term firm service, the Commission stated that higher market clearing prices would not occur as long as arbitrage exists. Any shipper with a higher queue position that acquires the pipeline capacity at the lower capped rate would have an incentive to resell that capacity to another shipper who places a higher value on the capacity, thus ensuring that the market clearing price will reflect all relevant demand.

105. INGAA asserts that the Commission's observation that pipeline short-term capacity is interruptible and inferior to firm released capacity is a partial answer to its argument that a bifurcated market will produce higher prices in the regulated portion of the market than would otherwise be the case. But INGAA and Spectra assert that short-term pipeline capacity is not always interruptible—unsubscribed pipeline capacity can be sold on a firm basis during periods of peak demand, and would, if treated on a par with released capacity, compete on a head to head basis. INGAA and Spectra argue that if the rate for that short-term firm pipeline capacity is capped, the pricing inefficiencies will occur because the arbitrage opportunities relied upon by the Commission in the above-quoted text often entail high costs, making reliance on such opportunities inefficient. For example, Spectra cited articles for the proposition that arbitrage opportunities ''often entail high costs, making the reliance on them also inefficient.'' [106]

106. The only arbitrage costs at issue in this case are the costs of releasing that capacity, which is precisely the same cost releasing shippers must incur and we have sought to reduce the costs

[101] *See e.g., Gas Transmission Northwest Corp.,* 119 FERC ¶ 61,288 (2007); *Koch Gateway Pipeline Co.,* 85 FERC ¶ 61,013 (1998), *order on reh'g,* 89 FERC ¶ 61,046 (1999).

[102] *Tennessee Gas Pipeline Co.,* 91 FERC ¶ 61,053 (2000), reh'g denied, 94 FERC ¶ 61,097 (2001), *petitions for review denied sub nom., Process Gas Consumers Group* v. *FERC,* 292 F.3d 831, 837 (*DC* Cir. 2002).

[103] *INGAA* at 22.

[104] Moreover, the Commission's use of stricter standard in reviewing petitions by a pipeline for alternative pricing authority for its primary transportation is not a new concept and is based upon the different risks of abuses of market power. In *Koch Gateway Pipeline Co.,* 89 FERC ¶ 61,046 (1999), the Commission stated:

> As reflected in the market power analysis set forth in the Policy Statement, the Commission has taken a conservative and cautious approach concerning the showing a pipeline must make in order to justify a finding that it lacks market power in its primary transportation market, i.e., the pipeline's own sale of its transportation capacity. In fact, many commenters asserted that it would be unlikely that the pipeline's primary market would meet the proposed criteria for market-based rates. The Commission recognizes that it has taken a more relaxed and light-handed approach toward market-based rates in other contexts, including for example, the pipeline's sales of storage service and unbundled sales of the gas commodity. Purchasers of such other services are more likely to have good alternatives to purchasing from the pipeline; for example, barriers to entry in the storage and gas commodity markets are likely to be less. The Commission also recognizes that its Short-Term Transportation NOPR proposed a different approach for justifying removal of the price cap on short term (less than one year) transportation services in both the pipeline's primary transportation market and the secondary, capacity release market. That proposal included the establishment of mandatory capacity auctions to control market power. *Id.* at 61,129 (footnote omitted).

[105] NOPR at P 51.

[106] Spectra comments at 12, *citing,* Stephen J. Choi and A.C. Pritchard, *Behavioral Economics and the SEC,* 56 Stan. L. Rev. 1, n. 11 (2003) (discussing that ''arbitrage is costly, which may limit its effect''). See also Lynn A. Stout, *The Mechanics of Market Inefficiency: An Introduction to the New Finance,* 28 J. Corp. L. 635, 655 (2003) (observing that ''arbitrage is costly and imperfect'') and Andrei Shleifer & Robert W. Vishny, *The Limits of Arbitrage,* 52 J. Fin. 35 (1997) (explaining why the capital costs required to engage in arbitrage opportunities can hamper market efficiency).

of capacity release over the years. In particular, the Commission's action in Order No. 637, where the Commission instituted a number of policy revisions that were designed to enhance competition and improve efficiency across the pipeline grid should reduce arbitrage costs. There the Commission required pipelines to permit releasing shippers to use flexible point rights in order to compete effectively on release transactions with other shippers and to fully segment their pipeline capacity which permits the releasing shipper to retain the portion of the pipeline capacity it needs while releasing the unneeded portion.[107] This combination of flexible point rights and segmentation increases the alternatives available to shippers looking for capacity. Moreover, the Commission also required that pipelines provide shippers with scheduling equal to that provided by the pipeline, so that replacement shippers can submit a nomination at the first available opportunity after consummation of the capacity release transaction. This action also makes the two types of capacity more interchangeable and should reduce arbitrage costs.

107. On the other hand, we have to recognize that arbitrage can never be perfect. If it were, no interruptible transportation would be sold on fully subscribed pipelines. Moreover, as previously discussed, in order to preserve at least some of the benefits of selective discounting, the Commission permits pipelines to include provisions in discounted rate agreements which may reduce a shipper's incentive to engage in arbitrage in certain circumstances. It is also important to recognize that the pipelines' argument for removing the price ceiling for pipeline interruptible and short-term firm capacity is predicated on arbitrage. Their essential argument is that as long as long-term prices are regulated, short-term price ceilings can be removed because shippers can purchase firm capacity in the long-term market and arbitrage that capacity by releasing it in the short-term market. If such arbitrage is costly or ineffective, as the pipelines argue here, or if a pipeline uses selective discounting to discourage arbitrage on some parts of its system, the pipelines retain market power over their sales of short-term capacity. Thus, even if arbitrage is not fully effective, that fact does not require removal of the price ceiling because impediments to arbitrage may enhance pipeline market power.[108]

108. In balancing the risks of creating a somewhat bifurcated market against the possibility of the exercise of market power by the pipelines in the short-term market, we have determined to err on the side of enhanced protection against market power. In *INGAA,* the court recognized the importance of the same trade-off between the possible bifurcation of the market and the need to continue to regulate pipeline short-term capacity. It recognized that while price distortions might occur if arbitrage is not effective,[109] the recourse rate applied to the pipelines provided protection with respect to both pipeline and released capacity:

> If holders of firm capacity do not use or sell all of their entitlement, the pipelines are required to sell the idle capacity as interruptible service to any taker at no more than the maximum rate—which is still applicable to the pipelines.[110]

The Court concluded, and we agree that, the essential differences between pipelines and releasing shippers justified their differential treatment:

> Here, the distinction between pipelines and other holders of unused capacity, based on probable likelihood of wielding market power, seems to us to pass muster.[111]

IV. Asset Management Arrangements

109. In this Final Rule, the Commission is revising its capacity release policies to give releasing shippers greater flexibility to negotiate and implement AMAs. AMAs are a relatively recent development in the capacity release market, and are beneficial to numerous market participants and to the market in general. However, the Commission's existing regulations and policies concerning capacity release interfere with the ability of releasing shippers to implement the most efficient AMAs. Accordingly, as discussed below, the Commission is adopting its NOPR proposals to grant an exemption from the prohibition against tying and an exemption from bidding for AMAs. The Commission is also revising the definition of AMAs proposed in the NOPR so as to relax the requirements concerning an asset manager's obligation to deliver gas to the releasing shipper and to allow supply side AMAs. In addition, the Final Rule clarifies that uncapped AMA capacity releases of one-year or less may be rolled over without competitive bidding, and that profit sharing arrangements included in an AMA will not violate any applicable price cap. The Commission also exempts certain AMAs from the buy/sell prohibition.

A. Background

110. In general, AMAs are contractual relationships where a party agrees to manage gas supply and delivery arrangements, including transportation and storage capacity, for another party. Typically a shipper holding firm transportation and/or storage capacity on a pipeline or multiple pipelines temporarily releases all or a portion of that capacity along with associated gas production and gas purchase agreements to an asset manager. The asset manager uses that capacity to serve the gas supply requirements of the releasing shipper, and, when the capacity is not needed for that purpose, uses the capacity to make releases or bundled sales to third parties.

111. While AMAs may be fashioned in a myriad of ways, there are several common components of these arrangements. First, the releasing shipper generally enters into a pre-arranged capacity release to an asset manager ostensibly at the maximum rate in order to avoid the bidding requirement. Second, the releasing shipper makes payments to the asset manager for the gas supply service performed by the asset manager for the releasing shipper. These payments may include the releasing shipper paying the asset manager: (1) The full cost of the released capacity (*e.g.,* maximum rate) on the theory that the asset manager is using the released capacity to transport the releasing shipper's gas supplies, (2) a management fee for transportation-related tasks (*e.g.* nominations, scheduling, storage injections, etc.) associated with the asset manager's obligation to provide gas supplies to the releasing shipper, and (3) the asset manager's cost of purchasing gas supplies for the releasing shipper. Third, the asset manager generally shares with the releasing shipper the value it is able to obtain from the releasing shipper's capacity and supply contracts when those assets are not

[107] Order No. 637 at 31,300.

[108] Further, even if maintenance of the price ceiling on short-term firm capacity serves to bifurcate the market, we are concerned that lifting the price ceiling on short term firm capacity would create a perverse incentive for pipelines to forgo the sale of firm capacity for periods of more than a year in order to reap the uncapped rates that would be available in the short term.

[109] ''The basic proposition asserted by the pipelines (and, as we say, recognized by the Commission) is that where (1) a portion of the supply of a good or service is subject to price controls, and (2) demand exceeds (the price-controlled) supply at the fixed price, the market-clearing price in the uncontrolled segment will be normally higher than if no price controls were imposed on any of the supply.'' *INGAA* at 33.

[110] *Id.*

[111] *Id* at 36.

needed to supply the releasing shipper's gas needs. The asset manager obtains such value either by re-releasing the capacity or by using it to make bundled sales to third parties. The asset manager may share that value by: (1) Paying a fixed ''optimization'' fee to the releasing shipper, (2) sharing profits pursuant to an agreed-upon formula, or (3) making its gas sales to the releasing shipper at a price below market levels.

112. In many instances the asset manager is chosen through a request for proposal (RFP) process. The RFP describes the details and terms and conditions of the proposed deal and seeks bids from service providers willing to provide the requested services. The methodology for choosing a winning bidder under an RFP often reflects many different factors, including price, creditworthiness, experience, reliability, and flexibility, and it is clear that price is not always the determining factor. Some RFP procedures are state mandated, and thus, in those situations, the LDC must get approval from the state for the final agreement.

113. As the Commission described in the NOPR, there are several ways in which the Commission's current capacity release regulations may interfere with the ability of shippers to negotiate and implement AMAs. The first relates to the Commission's prohibition against the ''tying'' of release capacity to any condition. The Commission established this prohibition in Order No. 636–A, using the following language:

> [t]he Commission reiterates that *all* terms and conditions for capacity release must be posted and non-discriminatory and must relate solely to the details of acquiring transportation on the interstate pipelines. Release of capacity cannot be tied to any other conditions. Moreover, the Commission will not tolerate deals undertaken to avoid the notice requirements of the regulations. Order No. 636–A at 30,559.[112]

A critical component of many AMAs is that the releasing shipper be able to require the replacement shipper (asset manager) to satisfy the supply needs of the releasing shipper and take assignment of the releasing shipper's gas supply agreements as a condition of obtaining the released capacity. However, such requirements could be considered prohibited tying conditions that go beyond ''the details of acquiring transportation on the interstate pipelines,'' because they relate to the purchase and sale of the gas commodity.[113]

114. AMAs also have implications for the rate cap and bidding regulations. Section 284.8 of the Commission's regulations requires capacity release transactions to be posted for competitive bidding, unless the transactions are at the maximum rate or are for 31 days or less.[114] Section 284.8 also allows the releasing shipper to enter into a ''pre-arranged'' release with a designated replacement shipper before any posting for bidding.[115] Prearranged releases are subject to the same bidding requirements as other releases; however, the prearranged replacement shipper will receive the capacity if it matches the highest bid submitted by any other bidder.[116]

115. As noted, in an AMA, the releasing shipper typically enters into a prearranged deal to release all of its pipeline capacity at the maximum rate to the marketer. It is reasonable to surmise that the main reason for the maximum release rate is so the release will qualify for the exemption from bidding of all maximum rate prearranged capacity releases. By avoiding the requirement to post the release for bidding, the releasing shipper can ensure that the capacity will go to the asset manager whom the releasing shipper has determined will provide the most effective asset management services.

116. As described above, however, the releasing shipper may agree to rebate some or all of the demand charge to the marketer so that the marketer's actual cost of obtaining the capacity is something less than the maximum rate. The Commission has held that such rebates render the release to be at less than the maximum rate, thereby requiring that the prearranged release be posted for bidding.[117]

117. Moreover, as described above, some AMAs may require the asset manager (replacement shipper) to pay fees to the releasing shipper. The Commission has ruled that if the prearranged release is at the maximum rate, such additional payments violate the maximum rate ceiling on capacity releases.[118]

B. Discussion

118. In this rule, the Commission is revising its capacity release regulations and policies in order to facilitate the use of AMAs. Based on the industry-wide support for AMAs as shown in the comments, the Commission finds that AMAs are in the public interest because they are beneficial to numerous market participants and to the market in general. Thus, the Commission is modifying the prohibition on tying, the section 284.8 regulations concerning bidding, and making additional policy changes requested by the commenters discussed below in order to eliminate obstacles to the utilization and implementation of AMAs.

119. AMAs are a relatively recent development in the natural gas market, which the Commission did not anticipate when it adopted the capacity release program in Order No. 636. The purpose of that program was to permit shippers to ''reallocate unneeded firm capacity'' to those who do need it.[119] The bidding requirements of section 284.8 and the prohibition against tying the release to extraneous conditions were all part of the Commission's fundamental goal of ensuring that such unneeded capacity would be reallocated to the person who values it the most. The Commission found that such ''capacity reallocation will promote

[112] The Commission stated in Order No. 636–A that releasing shippers may include in their offers to release capacity reasonable and non-discriminatory terms and conditions to accommodate individual release situations, including provisions for evaluating bids. All such terms and conditions applicable to the release must be posted on the pipeline's electronic bulletin board and must be objectively stated, applicable to all potential bidders, and non-discriminatory. For example, the terms and conditions could not favor one set of buyers, such as end users of an LDC, or grant price preferences or credits to certain buyers. The pipeline's tariff also must require that all terms and conditions included in offers to release capacity be objectively stated, applicable to all potential bidders, and non-discriminatory. Order No. 636–A at 30,557.

[113] Since Order No. 636–A, the Commission has granted several waivers of the prohibition against tying, *Tennessee Gas Pipeline Co.,* 113 FERC ¶ 61,106 (2005); *Northwest Pipeline Corp. and Duke Energy Trading and Marketing,* 109 FERC ¶ 61,044 (2004), but only where an entity sought the waiver to exit the natural gas transportation business. *See Louis Dreyfus Energy Services, L.P.,* 114 FERC ¶ 61,246, at 61,780 (2006), denying a waiver request.

[114] 18 CFR 284.8(h).

[115] 18 CFR 284.8(b).

[116] 18 CFR 284.8(e).

[117] In *Louis Dreyfus Energy Services, L.P,* 114 FERC ¶ 61,246 (2006), the Commission stated that:

> [t]he Commission has held that any consideration paid by the releasing shipper to a prearranged replacement shipper must be taken into account in determining whether the prearranged release is at the maximum rate. For instance, where the replacement shipper agrees to pay the pipeline the maximum rate for the released capacity, but the releasing shipper agrees to make a payment to the replacement shipper, the release must be treated as a release at less than the maximum rate to which the posting and bidding requirements of sections 284.8(c) through (e) apply. *Id.* at P 15, *citing, Pacific Gas Transmission Co. and Southern California Edison Co.,* 82 FERC ¶ 61,227 (1998).

[118] *See Consumers Energy Co.,* 82 FERC ¶ 61,284, *order approving settlement,* 84 FERC ¶ 61,240 (1998). *See also* Order No. 636–A at 30,561, where the Commission stated that capacity cannot be ''resold at a rate including the pipeline marketing fee. The marketing fee is not part of the cost of transportation being released and the replacement shipper should not pay more than the maximum transportation rate for the capacity it is acquiring.''

[119] Order No. 636 at 30,418.

efficient load management by the pipeline and its customers and, therefore, efficient use of pipeline capacity on a firm basis throughout the year.'' [120]

120. The Commission thus developed its capacity release policies and regulations based on the assumption that shippers would handle their own gas purchase and transportation arrangements and release their capacity only when they were not using the capacity to serve their own needs. For example, the Commission envisioned that LDCs with long-term contracts for firm transportation service up to the peak needs of their retail customers would, during off-peak periods, release that portion of capacity not needed to serve the lower off-peak demand of its retail customers but otherwise would retain the capacity to serve their own needs.

121. However, this basic assumption underlying the capacity release program does not hold true in the context of AMAs. As the Commission stated in the NOPR, a distinguishing factor between standard capacity releases and AMAs is that in the AMA context, the releasing shipper is not releasing unneeded capacity, but capacity that it needs to serve its own supply function. Releasing shippers in the AMA context are releasing capacity for the primary purpose of transferring the capacity to entities that they perceive have greater skill and expertise both in purchasing low cost gas supplies, and in maximizing the value of the capacity when it is not needed to meet the releasing shipper's gas supply needs. In short, AMAs entail the releasing shipper transferring its capacity to a third party expert who will perform the functions the Commission expected releasing shippers would do for themselves—purchase their own gas supplies and release capacity or make bundled sales when the releasing shipper does not need the capacity to satisfy its own needs. The goal of the changes adopted by the Commission herein is to make the capacity release program more efficient by bringing it in line with these developments in today's secondary gas markets.

122. As virtually all the commenters on the NOPR agree, AMAs provide significant benefits to a variety of participants in the natural gas and electric marketplaces and to the secondary natural gas market itself. One of the most important aspects of AMAs is that they provide broad benefits to the marketplace in general. By permitting capacity holders to use third party experts to manage their gas supply arrangements and their pipeline capacity, AMAs provide for lower gas supply costs and more efficient use of the pipeline grid. Asset managers have resources and market knowledge not necessarily available to natural gas capacity holders, such as trading platforms, credit portfolios, hedge fund and risk management experience, cost containment and counterparty credit and contracting expertise, which allow asset managers to better maximize the value of the releasing party's assets and manage the associated risk. AMAs bring diversity to the mix of capacity holders and customers that are served through the capacity release program, thus enhancing liquidity and diversity for natural gas products and services. AMAs result in an overall increase in the use of interstate pipeline capacity, as well as facilitating the use of capacity by different types of customers in addition to LDCs. AMAs benefit the natural gas market by creating efficiencies as a result of more load responsive gas supply, and an increased utilization of transportation capacity.

123. AMAs are an important mechanism used by LDCs to enhance their participation in the secondary market and allow LDCs to increase the utilization of facilities and lower gas costs. They provide the needed flexibility to customize arrangements to meet unique customer needs. AMAs allow LDCs to use an entity with more expertise to manage their gas supply and thus relieve LDCs of administrative burdens. The ability of LDCs to use AMAs as a means of relieving the burdens of administering their capacity or supply needs on a daily basis also works to the benefit of the entire market because that burden may at times result in LDCs not releasing unused capacity.

124. AMAs also provide LDCs and their customers an increased ability to offset their upstream transportation costs. The profit sharing arrangements in AMAs often allow an LDC to reduce reservation costs that it normally passes on to its customers. They foster market efficiency by allowing the releasing shipper to reduce its costs to the extent that its capacity is used to facilitate a third party sale that also benefits that third party.

125. LDCs are not the only entities that benefit from AMAs. As evidenced by certain comments on the NOPR, many other large gas purchasers, including electric generators and industrial users, may desire to enter into such arrangements.[121] AMAs increase the ability of wholesale electric generators to provide customer benefits through superior management of fuel supply risk, allow generators to focus their attention on the electric market, and eliminate administrative burdens relating to multiple suppliers, overheads, capital requirements and the risks associated with marketing excess gas and pipeline imbalances.

126. Finally, AMAs bring benefits to consumers, mostly through reductions in consumer costs. AMAs provide in general for lower gas supply costs, resulting in ultimate savings for end use customers. The overall market benefits described above also inure to consumers. These benefits have been recognized by state commissions and the National Regulatory Research Institute.[122] In light of these substantial benefits provided by AMAs, the Commission is modifying its capacity release regulations and policies in the specific respects discussed below.

1. Tying

127. First, the Commission adopts its proposal to exempt AMAs from the prohibition against tying in order to permit a releasing shipper in a pre-arranged release to require that the replacement shipper (1) agree to supply the releasing shipper's gas requirements and (2) take assignment of the releasing shipper's gas supply contracts, as well as released transportation capacity on one or more pipelines [123] and storage capacity with the gas currently in storage. This exemption will allow firm shippers to pre-arrange releases of capacity to an asset manager (replacement shipper) along with upstream assets and gas purchase agreements in a bundled transaction where the capacity being released will

[120] *Id.*

[121] *See e.g.*, Comments of the EPSA, Comments of the EEI, Comments of FPL and Comments of the NWIGU. *See also* Comments of NJNG to the Commission's January 3, 2007 request for comments (''in addition to LDCs, there are many other types of large natural gas purchasers, such as electric generation facilities and large gas process industrial users, who face the same challenges with managing and optimizing their natural gas portfolios. These customers, whose core business lies outside the natural gas industry—are also likely consumers of third party portfolio management services.'') at 9, n.9.

[122] *See e.g.*, Comments of BGEM to the January 3, 2007 request for comments at 8–9, citing to the Indiana Utility Regulatory Commission's order in Case No. 42, 973, approved April 25, 2006. *See also* Orders of the Massachusetts Department of Telecommunications and Energy, attached to the Marketer Petitioners comments on the January 3, 2007 request for comments, which describe and approve certain asset management arrangements.

[123] Commission policy already permits a releasing shipper to require a replacement shipper to take a release of aggregated capacity contracts on one or more pipelines, at least in some circumstances. *See* Order No. 636–A at 30,558 and n.144.

be used to meet that party's gas supply requirements.[124]

128. As discussed above, AMAs provide recognizable benefits to market participants and the marketplace overall in terms of more load-responsive use of gas supply, greater liquidity, increased utilization of transportation capacity and the overall efficiencies these arrangements bring to the marketplace. However, AMAs require that the releasing shipper be able to release both its capacity and its natural gas supply arrangements in a single package. The very purpose of the transaction would be frustrated if the releasing shipper could not combine the supply and capacity components of the deal. This tying is meant to ensure that the released capacity will continue to be used to support the releasing shipper's acquisition of needed gas supplies. Based on the fact that AMAs provide benefits to the market, and that tying of capacity and supply is necessary to implement beneficial AMAs, it is reasonable to allow the tying conditions discussed above in the AMA context in order to foster and facilitate the use and implementation of such arrangements.

129. All the commenters support this change in Commission policy, except Williston. Williston argues that approval of the proposed changes to exempt AMAs from the prohibition on tying (as well as the bidding requirements discussed in the next section) would encourage discrimination and preferential treatment toward asset managers by allowing participants in the secondary capacity release market to engage in activities prohibited to pipelines.[125] According to Williston, allowing releasing shippers to tie releases to a requirement that the replacement shipper provide asset management services, and exempting such releases from bidding, will give releasing shippers a strong competitive edge over the pipelines for the sale of similar types of services. Williston asserts the pipelines' reduced sale of similar types of services will result in increased firm transportation rates charged by pipelines. Williston also claims that exempting AMAs from tying will nullify the goal of awarding capacity to the shipper that values it most and that removing the bidding requirement will inhibit transparency.[126]

130. Williston has failed to show that exempting capacity releases to implement AMAs from the prohibition against tying and bidding will subject pipelines to unfair competition. Pipelines' core business is providing unbundled transportation services. By contrast, a major component of asset management service is the purchase and sale of gas as a commodity. Williston does not assert that it has any interest in either providing or purchasing asset management services. Therefore, Williston has no need or reason to tie the sale of its transportation services to the provision of asset management services. Many shippers, by contrast, have indicated a desire to purchase (or provide) asset management services, and as discussed above, the Commission has found that such services provide substantial benefits to the natural gas and electric markets as a whole. Williston has not identified any tying requirement that it would desire to impose on the sale of its unsubscribed capacity that would provide comparable benefits to the market as a whole.

131. The Commission recognizes that, to the extent asset managers are more skilled at releasing and managing capacity in competition with the pipelines' interruptible services, pipelines may face increased competition from capacity release as a result of this rule. The Commission, however, has always intended that capacity releases would compete with the pipelines' short-term firm and interruptible transportation services.[127] Accordingly, the fact that this rule may result in greater competition for pipelines' interruptible services is not a compelling reason for the Commission to decline to facilitate AMAs as set forth in this Final Rule.

2. Bidding

132. Second, the Commission adopts its proposal to exempt pre-arranged releases to implement AMAs from the bidding requirements of section 284.8 of its regulations. In light of its experience with capacity releases and the comments discussed above, the Commission concludes that, in the AMA context, the bidding requirement creates an unwarranted obstacle to the efficient management of pipeline capacity and supply assets.

133. All capacity releases made to implement AMAs are pre-arranged because it is important that a releasing shipper be able to use the asset manager of its choice to effectuate the components of the agreement. Unlike a normal capacity release where the releasing shipper is often shedding excess capacity and has no intention of an ongoing relationship with the replacement shipper, in the AMA context the identity of the replacement shipper is often critical because it will manage the releasing shipper's portfolio for some time into the future. During the process of choosing an asset manager (often an RFP process), the releasing shipper considers a number of factors, including experience in managing capacity and gas sales, experience with a particular pipeline or area of the country, flexibility, creditworthiness and price. Because the asset manager will manage the releasing shipper's gas supply operations on an ongoing basis, it is critical that the releasing shipper be able to release the capacity to its chosen asset manager. Requiring releases made in order to implement an AMA to be posted for bidding would thus interfere with the negotiation of beneficial AMAs, by potentially preventing the releasing shipper from releasing the capacity to its chosen asset manager. Moreover, AMAs at their core entail a bundling of commodity sales with capacity release. As a result, it is difficult to have meaningful bidding on the released capacity as a stand-alone component of the arrangement, because the values of the commodity and capacity components of the arrangement are not easily separated. The Commission concludes that the benefits of facilitating AMAs outweigh any disadvantages in exempting such releases from bidding.

134. The exemption from bidding adopted by this rule will apply to all releases to asset managers, made for the purpose of implementing an AMA, regardless of the term of the AMA and whether the release is subject to the price ceiling. As discussed above, in this rule the Commission is removing the price ceiling for all short-term capacity release transactions of one year or less, but is continuing the price ceiling for capacity release transactions of more than one year. In the NOPR, the Commission stated that, if the parties wanted to continue an uncapped short-term capacity release beyond one year, the release ''would have to be re-posted for bidding to ensure the capacity is

[124] The exemption is limited to releases to an asset manager to implement an AMA, and does not apply to re-releases to third parties during the term of the AMA.

[125] Comments of Williston Basin at 12–14.

[126] The Commission explains in the next section how the benefits AMAs outweigh any disadvantages in exempting such releases from bidding and how the Final Rule will continue to satisfy the goals of disclosure and transparency.

[127] *See* Order No. 636–A at 30,553 and 30,556 (stating ''the Commission views the competition between interruptible transportation and capacity releasing as part of a healthy secondary market'' and finding ''pipeline capacity (firm and interruptible) must compete with released capacity''); *see also UDC* v. *FERC, 88 F.3d 1105,* 1149 (DC Cir. 1996) (recognizing that capacity release is intended to develop an active secondary market with holders of unutilized firm capacity rights reselling those rights in competition with capacity offered directly by the pipeline).

allocated to the highest valued use.'' [128] Some commenters [129] request that the Commission clarify that the reposting and bidding requirements for extending uncapped, short-term capacity releases beyond one year do not apply in the context of short-term AMAs. They assert that the proposed exemption from bidding for capacity releases to asset managers should apply in all circumstances, including the circumstance of an expiring short-term release related to an AMA. In essence, they inquire whether the reposting and bidding requirements for extensions of short-term capacity releases would trump the general exemption from bidding requirements proposed by the Commission for AMAs.

135. The Commission clarifies that the exemption from bidding for AMAs adopted in this rule applies to all releases to an asset manager, including those made for the purpose of extending a short-term AMA.[130] The rationale for exempting releases to an asset manager from bidding applies equally to releases made for the purpose of extending a short-term AMA as to any other release to an asset manager. In all such releases, the identity of the asset manager is critical to the releasing shipper, because the releasing shipper will be relying on the asset manager to obtain its gas supplies. Therefore, as with any other release to an asset manager, requiring releases made for the purpose of extending a short-term AMA to be posted for bidding could interfere with the negotiation of beneficial AMAs by potentially preventing such releases to be made to the releasing shipper's chosen asset manager.

136. While the Commission is exempting releases made to implement AMAs from the capacity release bidding requirements, those releases will remain subject to existing posting and reporting requirements, including the section 284.13(c)(2)(viii) requirement to post the name of any asset manager. In addition, as discussed below, the Commission is adding a requirement to post the asset manager's delivery obligation to the releasing shipper. Therefore, the Commission's goals of disclosure and transparency will still be met. Williston's argument that the exemption from bidding for AMAs will impair transparency and allow deals to be consummated without Commission or market participant knowledge thus fails.[131]

137. The exemption from bidding adopted by this rule does not extend to releases made outside the AMA context. There has been no showing that non-AMA prearranged releases provide benefits of the type we have found justify exempting AMA releases from bidding. Moreover, in the typical non-AMA pre-arranged release, price is the primary factor, and therefore the releasing shipper should generally be indifferent as to the identity of the replacement shipper so long as it receives the highest possible price. Accordingly, non-maximum rate capacity releases of more than 31 days, made outside the AMA context, will still need to be posted for bidding in order to ensure that the capacity is allocated to the highest valued use.

3. Definition of AMAs

a. NOPR Proposal

138. In the NOPR, the Commission proposed to define AMAs that would qualify for the tying and bidding exemptions, as follows:

> Any pre-arranged release that contains a condition that the releasing shipper may, on any day, call upon the replacement shipper to deliver to the releasing shipper a volume of gas equal to the daily contract demand of the released transportation capacity. If the capacity release is a release of storage capacity, the asset manager's delivery obligation need only equal the daily contract demand under the release for storage withdrawals (emphasis added).

139. The Commission developed this definition in order to address two concerns relating to its facilitation of AMAs. It wanted to limit the exemptions from tying and bidding to *bona fide* AMAs, that is, arrangements that place a significant delivery obligation on the replacement shipper so as to distinguish AMAs eligible for the exemptions from standard capacity releases. The Commission also sought to avoid a definition that was too narrow and would effectively limit efficient and innovative AMAs. The Commission focused on what it understood to be the fundamental purpose of AMAs, namely that the asset manager would use the released capacity to deliver gas supplies to the releasing shipper. Thus, it included the requirement that the replacement shipper contractually commit itself to deliver to the releasing shipper, on any day, gas supplies equal to the daily contract demand of the released capacity. The Commission reasoned this would achieve the goal of exempting only *bona fide* AMA transactions from bidding and the prohibition against tying.

140. The Commission also believed that the proposed definition was sufficiently flexible to allow releasing shippers to use AMAs to obtain only a portion of its required gas supplies or to enter into multiple AMAs with different asset managers. In addition, the Commission noted that the proposed definition does not require that the asset manager make all its deliveries to the releasing shipper over the released capacity, nor did it limit the types of entities that can use AMAs and take advantage of the exemptions. The Commission recognized that electric generators and industrial end-users may make use of AMAs, and thus the exemption is not limited to LDCs utilizing AMAs.

b. Comments

141. Numerous commenters [132] requested that the Commission revise or clarify the ''on any day'' and/or the ''equal to'' phrases highlighted in the definition above. They claim that ''on any day'' may be interpreted as requiring the asset manager to stand ready to deliver the contract quantity on ''every day'' in order for the arrangement to be considered an AMA. Commenters assert that such a requirement would severely inhibit the asset manager's flexibility and its ability to maximize the value of the capacity. Many commenters also seek to replace ''equal to'' the daily contract demand of the released capacity with ''up to.'' Again, commenters cite a lack of flexibility and devaluation of the released capacity because it would inhibit the asset manager from re-releasing the capacity. Commenters note that the beneficial aspects of AMAs are hindered if the asset manager must hold in reserve the entire portfolio of its

[128] NOPR at P 44.

[129] *See e.g.*, comments of Southwest and BGEM.

[130] Section 284.8(h)(1), as adopted by this rule, provides a blanket exemption from posting and bidding for all releases to an asset manager:

> A release of capacity by a firm shipper to a replacement shipper for any period of 31 days or less, a release of capacity for more than one year at the maximum tariff rate, *or a release to an asset manager as defined in (h)(3) of this section need not comply with the notification and bidding requirements of paragraphs (c) through (e) of this section.* (*emphasis added*).

The section 284.8(h)(2) prohibition on extending exempt releases without posting and bidding expressly applies only to the first category of releases included in the section 284.8(h)(1) exemption: Releases for a period of 31 days or less.

[131] Williston Basin is also incorrect in suggesting that the Commission requires pipelines to sell their available capacity in a bidding auction. *See Northern Natural Gas Co.*, 110 FERC ¶ 61,361, at P 10 (2005) (''[T]he Commission has not required pipelines to sell capacity solely through open seasons. Rather, so long as the pipeline posts all available firm capacity, it may sell that capacity on a first-come, first-served basis'').

[132] Those commenters include the AGA, BGEM, BP, Canadian Association of Petroleum Producers (CAPP), FPL Hess, the Marketer Petitioners, National Grid, NJNG, NGSA, Nicor Enerchange (Nicor), NJR, Piedmont, PPM, PSNC, SCE&G, SEMI, Sequent, Statoil and WDG.

assets even on days when the releasing shipper does not need the capacity for its supply needs.

142. Commenters suggest several general language changes to remedy these perceived problems. AGA recommends that the Commission clarify the definition by adding ''but not necessarily every day'' after the phrase ''on any day.'' It also suggests changing ''equal to'' to ''up to'' as noted above.[133] BGEM agrees with this latter change, as do FPL, National Grid, PPM, and PSNC. Others take a broader view, suggesting that the delivery obligation should be left to the parties to negotiate. BP, for example, advocates permitting the parties to determine by mutual agreement when the releasing shipper may call upon the replacement shipper to deliver to it a volume of gas equal to the daily contract demand.[134] Numerous parties agree with the concept that the details of the delivery obligation should be left to the parties and spelled out in the contract. NGSA comments that ''may, on any day, call upon'' should be revised to ''may, as agreed by the parties, require. * * *''[135] Nicor would add the phrase ''pursuant to the terms of its contract'' after ''any day''. It would also clarify that the replacement shipper should be required to deliver gas to a ''location'' specified in the agreement.[136] Piedmont suggests that parties be permitted to negotiate call rights ''as necessary and appropriate for the contracting parties.''[137] SCANA suggests that because the releasing shipper is in the best position to know the appropriate level of delivery obligation it will require, the definition should be revised to clarify that the delivery requirement is limited to specified days set forth in the agreement.[138] The WDG suggests that parties should be given the flexibility to ''tailor'' capacity recall rights in AMA transactions to the releasing shipper's market and supply needs.[139]

143. NJNG also recommends that the definition of AMA be clarified such that a releasing shipper's recall rights up to the maximum daily quantity of the released capacity is limited to use by the releasing shipper for its ''own load'' requirements—either its utility retail service obligation or its own system generation or consumption needs.

[133] AGA provides a revised definition on page 21 of its comments.

[134] See BP comments at 2, 5–8.

[135] NGSA comments at 10.

[136] Nicor comments at 2–3.

[137] Piedmont comments at 6.

[138] Scana comments at 4–7.

[139] WDG comments at 4–5.

c. Modified Definition

144. In light of the comments received, the Commission has reconsidered its definition of AMAs and in this rule is modifying the definition to strike a balance between facilitating flexible and innovative AMAs and drawing a clear line between AMAs and standard capacity releases.[140] The specific modifications to the definition which the Commission is making for this purpose are shown in bold below:

> Any pre-arranged release that contains a condition that the releasing shipper may, on any day during a minimum period of five months out of each twelve-month period of the release, call upon the replacement shipper to deliver to the releasing shipper a volume of gas up to one-hundred percent of the daily contract demand of the released transportation capacity. If the capacity release is for a period of less than one year, the asset manager's delivery obligation described in the previous sentence must apply for the lesser of five months or the term of the release. If the capacity release is a release of storage capacity, the asset manager's delivery obligation need only be one-hundred percent of the daily contract demand under the release for storage withdrawals.[141]

145. The Commission finds that this definition of AMA will further its goal of delineating AMAs from standard capacity releases. First, it continues to differentiate *bona fide* AMAs from standard capacity releases by placing a significant delivery obligation, applicable during at least five months out of each 12 month period of the release, on the asset manager, while alleviating the concerns of those commenters that assert the NOPR definition was too restrictive. The Commission has replaced ''equal'' in the definition with ''up to'' in order to clarify that the asset manager does not have to actually make deliveries equal to the daily contract demand on every day the delivery obligation is in effect. However, by using the phrase ''up to'' in the adopted definition, the Commission doest not intend to allow the parties to negotiate a potential delivery obligation of less than one hundred percent of the daily contract demand for the required time period, even though that amount may not actually be delivered to the releasing shipper every day. Before entering into an AMA an asset manager should be able to make reasonable judgments about the releasing shipper's requirements based upon the releasing shipper's gas usage in earlier years, and thus make reliable estimations as to when it can use the capacity for bundled sales or re-releases. Thus, under the definition adopted in this rule, the releasing shipper will have the right to call upon the asset manager to deliver the full contract volume on every day of the five month minimum, though it need not actually do so. This delivery obligation for the asset manager will adequately distinguish AMAs from standard capacity releases as well as ensure that AMAs eligible for the exemptions from tying and bidding will fulfill the primary purpose of using the releasing shipper's capacity to supply its gas needs during peak periods.

[140] As discussed in detail below, the Commission is also revising the AMA definition to allow for supply AMAs and to extend to retail state unbundling programs the same blanket exemption from bidding granted for AMAs.

[141] The annual five month minimum would apply to AMAs with terms of one year or longer. The delivery obligation for any AMA between five months and a year would be for five months of the release. The delivery obligation would apply to the entire term for any AMA of less than five months.

146. The definition also furthers the goal of defining AMAs in such a way that they will be flexible enough to allow diverse parties to enter into AMAs and for those parties to be able to maximize the value of pipeline capacity within the context of an AMA. The definition only requires a delivery obligation on behalf of the replacement shipper for a portion of each twelve month period, thus giving the asset manager additional assurance it can utilize the capacity during non peak periods. The definition adopted in this rule also allows for releasing shippers to only release a portion of their capacity, places no limitations on the asset manager that would require it to use the released capacity to make its deliveries to the releasing shipper, and does not limit the type of party that can enter into an AMA.

147. The Commission considered the comments that the extent of the asset manager's delivery obligation should be left to the parties to negotiate themselves but ultimately determined that approach would not further the primary goal of AMAs that they be used to serve the releasing shipper's supply needs. Absent a specific delivery obligation in the definition, there would be no assurances that capacity releases meant to implement an AMA would actually contain a substantial delivery obligation that would differentiate it from a standard capacity release. Parties would be able to enter into arrangements that may require an asset manager to deliver supply to the releasing shipper on only one day of the year for instance. Such arrangements would technically qualify as AMAs but would not serve the Commission's goal to ensure that AMAs be used to serve the releasing shipper's needs.

Accordingly, the Commission does not deem it appropriate to grant the benefits of the exemptions from tying and bidding to such arrangements.

4. Supply AMAs

148. In the NOPR the Commission sought comments on whether it should expand the definition of AMAs and if so, how supply side AMAs should be distinguished from other capacity releases. The Commission in this Final Rule is revising its regulations and the proposed definition of AMAs to allow for supply side AMAs. Pursuant to the revised definition for AMAs discussed below, a supply AMA will be distinguishable from a standard capacity release, and thus eligible for the tying and bidding exemptions, only if it includes a condition that requires the replacement shipper to purchase a volume from the releasing shipper up to the maximum daily contract demand of the released capacity.

149. In general, gas supply AMAs are arrangements where a production area capacity holder releases capacity to an asset manager that commits to purchase (receive) the releasing shipper's gas and use the capacity to transport and market that gas. The asset manager nets back to the producer a fixed percentage of the price that the asset manager is able to obtain for resale of the gas on a delivered basis. Numerous producer and marketer commenters filed in favor of AMAs for gas sellers.[142] No commenter opposed expanding the AMA definition to include gas supply AMAs.

150. Based on the comments received, the Commission finds that the benefits of AMAs as identified in the NOPR apply with equal weight to producers that want to optimize the value of their capacity and minimize costs. The Commission understands from producer commenters that producers often acquire firm pipeline capacity for flow assurance, that is, to ensure that there will be sufficient capacity to transport the gas they produce to relevant markets.[143] Because of the fluctuation in flows related to new wells in particular, producers often purchase capacity in excess of their immediate needs to ensure that there is sufficient capacity for their gas to flow once the production volumes ramp up. The Commission's approval of supply AMAs will allow a producer to release all of its capacity to an asset manager who could maximize the value of that capacity during the start-up period when producers may not need it, resulting in increased and efficient use of capacity.

151. The Commission also finds that the rationale supporting AMAs for end users equally supports supply AMAs. Supply AMAs will help to alleviate a producer's burden of administering capacity on a day to day basis, will maximize the value of pipeline capacity, and will further diversify the mix of capacity holders and customers served through capacity releases. Similar to delivery AMAs, supply AMAs involve an ongoing relationship between the releasing shipper and the asset manager that differentiates the deals from normal capacity releases.[144] Further, supply AMA capacity will be used for its original purpose, that is, to transport the producer's gas to the market place. The Commission finds reasonable comments that the purchase obligation in a supply side AMA is a mirror image of the delivery obligation required by the Commission for the downstream AMA's facilitated in the NOPR.[145]

152. As discussed above, in the Commission's view the most important aspect of a supply AMA is the requirement that the asset manager commit to purchasing the releasing shipper's gas as a part of the agreement. While several commenters suggest definitional language for gas supply AMAs that would require the replacement shipper to ''receive'' the releasing shipper's gas,[146] the Commission finds that the condition must be to ''purchase'' the gas in order to avoid running afoul of the shipper must have title rule.[147] This condition would also help ensure that such arrangements are *bona fide* AMAs because it imposes a significant purchase obligation on the asset manager.

153. Based on the determination to allow supply AMAs, the Commission will further modify the proposed definition of capacity releases to asset managers to accommodate supply AMAs. Thus, the full definition of the capacity releases that will be eligible for the tying and bidding exemptions adopted by this rule is as follows:

Any pre-arranged release that contains a condition that the releasing shipper may, on any day during a minimum period of five months out of each twelve-month period of the release, call upon the replacement shipper to (i) deliver to the releasing shipper a volume of gas up to one-hundred percent of the daily contract demand of the released transportation capacity or (ii) purchase a volume of gas up to the daily contract demand of the released transportation capacity. If the capacity release is for a period of less than one year, the asset manager's delivery or purchase obligation described in the previous sentence must apply for the lesser of five months or the term of the release. If the capacity release is a release of storage capacity, the asset manager's delivery or purchase obligation need only be one-hundred percent of the daily contract demand under the release for storage withdrawals or injections, as applicable.

5. AMA Profit Sharing Arrangements

154. AMAs generally include provisions for the asset manager to share with the releasing shipper the value it is able to obtain from the releasing shipper's capacity and other assigned assets when those assets are not used to serve the releasing shipper. The manager may share that value by: (1) Paying a fixed ''optimization'' fee to the releasing shipper; (2) sharing with the releasing shipper the asset manager's profits from the use of the released capacity and other assigned assets[148] pursuant to an agreed-upon formula; (3) making gas sales to the releasing shipper at a below-market commodity price; or (4) in some other way mutually agreed to by the contracting parties.[149]

[142] *See e.g.*, comments of NGSA, BGEM, BP, Dominion Marketers, FPL, Marketer Petitioners, Mewbourne Oil, NEM, Nicor, NJR, Statoil, Ultra, Walter Oil and Gas, and the Wyoming Pipeline Authority.

[143] *See e.g.*, comments of BP.

[144] *See e.g.*, comments of NGSA at 14.

[145] Comment of NGSA at 13, comments of Ultra at 8.

[146] For example, Statoil states that the Commission should extend the exemption to include supply-side AMAs by expanding its proposed section 284.8(h) as follows:

(h)(3) A release to an asset manager exempt from bidding requirements under paragraph (h)(1) of this section is any prearranged capacity release that contains a condition that the releasing shipper may, on any day, call upon the replacement shipper to (i) deliver to the releasing shipper a volume of gas equal to the daily contract demand of the released transportation capacity or the daily contract demand for storage withdrawals or (ii) receive from the releasing shipper a volume of gas equal to the daily contract demand of the released transportation capacity or the daily contract demand for storage withdrawals. Statoil comments at 12–13.

[147] As described in the comments, a typical supply AMA could involve a requirement that the replacement shipper accept delivery of the releasing shipper's gas, and use the capacity released to ship and market that gas. Under that scenario, where the replacement shipper would accept the releasing shipper's gas and transport that gas on the released capacity to the releasing shippers' customers, the arrangement would violate the Commission's requirement that the shipper hold title to the gas. The shipper in that situation would be the replacement shipper, and it would be transporting gas that was owned by the releasing shipper. Thus, in order for there to be a valid supply AMA, the replacement shipper must purchase and take title to the gas that it will ship for the releasing shipper.

[148] These uses could include re-releases of the capacity or bundled sales to third parties.

[149] The AMA may also require the releasing shipper to make payments to the manager for the services performed by the manager for the releasing shipper under the AMA. These payments may include the releasing shipper paying the manager: (1) A management fee for transportation related tasks (*e.g.* nominations, scheduling, storage

Continued

155. As discussed above, while this rule removes the price ceiling for all short-term capacity release transactions of one year or less, the Commission is continuing the price ceiling for capacity release transactions of more than one year. Numerous commenters, including marketers, LDCs, and producers are concerned that AMA profit sharing arrangements, such as those described above, may be considered to violate the price ceiling for long-term capacity releases. Accordingly, they contend that the Commission should either (1) exempt long-term capacity releases to asset managers from the price ceiling or (2) determine that the maximum rate does not apply to the asset manager's payments to the releasing shipper under such profit sharing arrangements.

156. AGA, FPL, Integrys,[150] the Marketer Petitioners, NGSA, PGC, NWIGU, Southwest, and others request that the Commission clarify that the various payments made by or to an asset manager under an AMA will not be attributed or imputed to the transportation component of an AMA, and that payments by the parties to one another will not be viewed as causing the maximum rate ceiling to be exceeded for any releases made pursuant to an AMA. Alternatively, they request that the Commission clarify that the price ceiling is removed for all capacity releases associated with an AMA, regardless of their term.

157. These commenters explain that applying the price ceiling to profit sharing arrangements in long-term releases to an asset manager could significantly hinder parties' ability to successfully structure an acceptable AMA. They assert that limiting the compensation the releasing shipper can collect from the asset manager under long-term releases would prevent the releasing shipper from sharing in the full market value the asset manager is able to obtain from the capacity, contrary to the basic purpose of an AMA. This could discourage parties from entering into AMAs with terms of more than a year. These commenters further state that the parties frequently desire to enter into AMAs with terms of two or three years, because longer-term AMAs provide the parties with a greater ability to plan their business operations for a longer period of time and are administratively more efficient.

158. In response to these comments, the Commission is modifying section 284.8(b) of its regulations to clarify that the price ceiling does not apply to any consideration provided by an asset manager to the releasing shipper as part of an AMA. However, apart from this clarification, capacity releases of more than one year to an asset manager will, like any other long-term capacity release, remain subject to the price ceiling. This modification of the Commission's regulations will provide the parties to an AMA the flexibility to negotiate mutually acceptable arrangements under which the asset manager shares with the releasing shipper the value it obtains from the released capacity, without running afoul of the capacity release price ceiling. However, the price ceiling will continue to apply to the rates the asset manager pays to the pipeline for the released capacity.[151]

159. The Commission finds that this change in its regulations is consistent with the overall goal of this rulemaking of facilitating beneficial AMAs. In the AMA context, unlike in other capacity release situations, the releasing shipper is not releasing unneeded capacity, but capacity that is needed to serve its own supply function and will be so used during the term of the release. Releasing shippers enter into AMAs ''for the primary purpose of transferring the[ir] capacity to entities they perceive have greater skill and expertise both in purchasing low cost gas supplies and in maximizing the value of the capacity when it is not needed to meet the releasing shipper's gas supply needs. In short, AMAs entail the releasing shipper transferring its capacity to another entity that will perform the functions the Commission expected releasing shippers would do for themselves—purchase their own gas supplies and release capacity or make bundled sales when the releasing shipper does not need the capacity to satisfy it owns needs.'' [152]

160. Thus, a fundamental purpose of an AMA is for the asset manager to extract as much value from the released capacity and assigned assets as possible and to share that value with the releasing shipper, who has contracted with the asset manager precisely because of the asset manager's expertise in this area. The asset manager generally obtains revenues related to the released capacity from two basic revenue sources. First, the asset manager may earn money through the re-release of the releasing shipper's capacity for a higher value. For example, the asset manager could enter into short-term re-releases of the capacity that are not subject to the price cap. Second, the asset manager could garner funds through utilizing the released capacity to make bundled sales to third parties. In either situation, the releasing shipper could have attempted to garner these revenues by itself, but instead it utilized the asset manager's skills through the use of an AMA to increase the value of its capacity.[153]

161. Given that the purpose of an AMA is to allow a releasing shipper to maximize the value of its capacity by obtaining the services of an asset manager with greater expertise at accomplishing that goal, it makes little sense to apply the price ceiling on long-term capacity releases in a manner which limits the amount of that value which the asset manager can share with the releasing shipper. As discussed above, permitting the asset manager to maximize the value of released capacity and share that value with the releasing shipper provides numerous benefits, including reducing the releasing shipper's costs of reserving pipeline capacity, and these benefits ultimately serve to reduce consumer costs. Moreover, as some commenters point out, applying the long-term capacity release price ceiling to AMA profit sharing arrangements would likely

injections) associated with the manager's obligation to provide gas supplies to the releasing shipper, and (2) the manager's cost of purchasing gas supplies for the releasing shipper.

[150] The Integrys Gas Group (Integrys) consists of the Michigan Gas Utilities Corporation, Minnesota Energy Resources Corporation, North Shore Gas Company, The Peoples Gas Light and Coke Company, and Wisconsin Public Service Corporation.

[151] As pointed out in the NOPR, in *Consumers Energy Co.*, 82 FERC ¶ 61,284, *order approving settlement*, 84 FERC ¶ 61,240 (1998), the Commission investigated certain joint marketing agreements whereby replacement shippers agreed either to share with the releasing shipper revenues obtained by the replacement shippers on the sales of the gas transported by means of the released capacity or to pay the releasing shipper prices based on the amount of gas bought and sold. The Commission found in this situation that Consumers had collected money in excess of the pipeline's maximum rate, thereby violating the capacity release price ceiling. Recently, the Commission similarly held in *Louis Dreyfus Energy Services, L.P.*, 114 FERC ¶ 61,246, at 61,779 (2006), that if a pre-arranged release is at the maximum rate, additional payments by the replacement shipper to the releasing shipper are deemed to render the release price above the maximum rate. As a result of the modification to section 284.8(b) adopted in this rule, these precedents will not apply in the context of capacity releases to asset managers. However, these precedents will continue to apply to all other capacity releases.

[152] NOPR at P 66.

[153] There are a number of other potential methods for an asset manager to gain additional revenues from a releasing shipper's transportation, storage, gas supply, and hedging ''assets''. An asset manager may use the full range of acquired ''assets'' to enter into a variety of financial, commodity, transportation, or storage-related arrangements which allows the asset manager to generate more revenues from these ''assets,'' when they are not needed to serve the releasing shipper's direct needs, than the releasing shipper would have generated on its own. We do not mean to suggest here any limit to the range of legally-allowed transactions that an asset manager may pursue, but merely provide illustrative examples.

discourage parties from negotiating AMAs with terms of more than a year in order to avoid the price ceiling. However, longer-term AMAs may provide the parties significant advantages, for example, by enabling the parties to obtain greater certainty concerning their gas supply and sale arrangements for a longer period of time and by minimizing the administrative costs of negotiating multiple AMA arrangements over a relatively short period of time.

162. Thus, the Commission concludes that profit sharing agreements between the releasing shipper and the replacement shipper in the context of an AMA, where the releasing shipper could have earned the monies itself, should not violate the price ceiling just because the releasing shipper utilized the skills of an asset manager. Modifying our regulations to exempt all such profit sharing arrangements from the price ceiling will permit the parties flexibility to craft AMAs in a manner that they perceive as capturing the true value of the release and related assignments of other assets, consistent with our goal of facilitating the use of AMAs.

6. Exemption From Buy/Sell Prohibition

163. Some commenters state that they wish to enter into AMAs whereby they would release their capacity to an asset manager, but would continue to negotiate their own gas purchase contracts. Because such gas supply contracts would be competitively negotiated arrangements containing confidential pricing information, these commenters do not want to assign such contracts to the asset manager.[154] Instead, they want to sell the gas they purchase from their supplier to their asset manager and then direct the asset manager to transport the gas to their city gate and resell the gas to them. These commenters ask that the Commission exempt such arrangements from the Commission prohibition on buy/sell arrangements.

164. The Commission prohibited buy/sell arrangements in Order No. 636 and companion orders in *El Paso Natural Gas Company*.[155] Order No. 636 stated that ''[u]nder those arrangements, an LDC will purchase gas in the production area from an end-user or a merchant designated by an end-user. The LDC will ship the gas on its own firm capacity and sell the gas to the end-user at the retail delivery point.'' [156] The Commission explained that it had adopted a nationally uniform capacity release program in order to provide greater assurance that transfers of capacity from one shipper to another were transparent and not unduly discriminatory. The Commission found that permitting buy/sell arrangements would frustrate this goal, because such arrangements ''would provide a major loophole, potentially inviting substantial circumvention of the capacity release mechanism.'' [157]

165. The Commission grants an exemption from the buy/sell prohibition for AMAs that qualify for the exemptions from bidding and tying, but only for volumes of gas delivered to the releasing shipper. In this proceeding, the Commission is modifying its regulations and policies in order to facilitate the development of efficient and beneficial AMAs. Consistent with this objective, the Commission will permit shippers to hire an asset manager solely for the purpose of managing their interstate pipeline capacity, while they continue to purchase their gas supplies from a different marketer under contracts which they do not assign to the asset manager.

166. As the commenters explain, the marketer having the best terms and price for asset management services is not always the marketer who is able to supply the gas commodity at the lowest cost. Moreover, such marketers may be in direct competition with each other, both in the asset management field and in the commodity supply area. Such competition helps the end-user obtain the lowest possible delivered cost for its gas supplies. The commenters state, however, that in such circumstances, the releasing shipper may prefer not to assign its gas purchase contracts to the marketer providing asset management services for their pipeline capacity because this would reveal competitively sensitive information concerning the commodity prices offered by the other marketer. Rather, the releasing shipper could avoid this result by entering into what is in essence a buy/sell transaction, in which the releasing shipper would purchase the gas commodity from someone other than its asset manager and sell that gas to the asset manager.[158] The asset manager would then use the released capacity to transport the gas to the shipper and resell the gas to the shipper at the delivery point.

167. The Commission finds that exempting such transactions from the buy/sell prohibition is appropriate, in light of the above-described benefits of AMAs in which the asset manager only manages the releasing shipper's pipeline capacity. This exemption will not undercut the Commission's goal in adopting the prohibition on buy/sell arrangements of preventing circumvention of the capacity release program. As we have previously explained, capacity releases to an asset manager differ from other releases, because the releasing shipper is not releasing unneeded capacity, but capacity that will continue to be used to serve its own supply function during the term of the release. The purpose of the buy/sell transactions at issue here is to permit the releasing shipper to negotiate its own gas purchase arrangements with a third party, while having its asset manager transport the gas over the released capacity to the releasing shipper. Thus, the asset manager's purchase from the releasing shipper and resale to that shipper enables the released capacity to be used to meet the releasing shipper's own gas requirements and is a condition of the capacity release. This is unlike the buy/sell transactions prohibited by Order No. 636, where the purchases, transportation, and re-sales were for the purpose of meeting the gas requirements of a third party, and there was no capacity release to any participant in the transactions. While, here, the asset manager would be buying gas from, and reselling it to, the releasing shipper, the capacity release to the asset manager would be done in accordance with the Commission's capacity release regulations and as such, would be transparent to the market. The parties would need to comply with all the notice and posting provisions currently in place. Further, the Commission has found that AMAs are beneficial to the secondary gas markets. By providing a limited exemption from the buy/sell prohibition for AMAs, the Commission is further facilitating the flexibility of AMAs and promoting enhanced competition in the capacity release market.

168. The Commission also clarifies, as requested by several commenters, that an AMA does not necessarily need to involve an assignment of gas supply contracts.[159] Those commenters suggest

[154] *See e.g.*, NWIGU comments at 7, PGC comments at 6, Weyerhaeuser comments at 3–11.

[155] 59 FERC ¶ 61,031, *reh'g denied*, 60 FERC ¶ 61,117 (1992).

[156] Order No. 636 at 30,416. In Order No. 636–B, 61 FERC ¶ 61,272, at 61,997 (1992), the Commission clarified that the buy/sell prohibition applies to all firm capacity holders, not just LDCs. *See also, In re BP Energy Co.*, 121 FERC ¶ 61,088, at P 14 (2007).

[157] *El Paso*, 59 FERC at 61,080.

[158] The sale to the asset manager is necessary to avoid a violation of the shipper-must-have title requirement.

[159] Commenters supportive of this general view include the AGA, BGEM, Direct Energy, NWIGU, Nstar, PPM, PGC, Sequent and Weyerhaeuser.

that while an AMA may involve an assignment of gas supply agreements, an AMA should not be so limited because the asset manager may have different supply sources from which to draw. For example, the releasing shipper may enter into a supply agreement directly with the asset manager, or the asset manager itself may be responsible for acquiring supply for delivery to the releasing shipper. Some commenters seek clarification that an end use customer need not assign actual gas supply contracts under which it takes service to an asset manager but that it may avail itself of ''any lawful mechanism for transferring title to gas supply.'' [160]

169. The Commission notes that the definition for AMAs approved in this rule does not include a requirement that the releasing shipper assign gas supply contracts. As discussed above, the releasing shipper may want to negotiate its own gas supply contracts. Alternatively, the releasing shipper may not currently have any of its gas supply contracts to assign, but is hiring an asset manager in part for the purpose of having the asset manager negotiate and enter into gas supply contracts for the purpose of supplying the releasing shippers' gas supply needs. Consistent with the Commission's desire to give the parties the flexibility to negotiate the most efficient AMA arrangements to fit their needs, the definition of AMA-related releases adopted in this rule only requires that the replacement shipper enter into a contractual commitment to make the requisite delivery of gas supplies to the releasing shipper. The mechanism by which the replacement shipper will obtain those supplies is left to the parties to negotiate.

7. Other AMA Terms and Conditions

170. Several commenters request that the Commission clarify that parties are free to negotiate all relevant terms and conditions of an AMA, and the Commission does not intend to preclude parties from including in their AMA agreements terms and conditions relating to matters beyond the asset manager's delivery obligation to the releasing shipper. For example, Sequent comments that the definition of AMA should not preclude parties from negotiating terms and conditions in addition to capacity release and delivery/receipt requirements, such as form of service and other related agreements, compensation, operating and communication protocols, asset descriptions and risk allocations.[161] NJNG likewise seeks clarification that the tying exemption for AMAs applies to all aspects of an AMA, including financial risk management products and services, nominations and scheduling services, asset optimization fees and profit sharing arrangements and other products and services reasonably related to an AMA.

171. The Commission clarifies that its definition of AMAs is not meant to preclude the parties from negotiating the terms and conditions of other agreements necessary to implement AMAs, provided the elements of the AMA definition are satisfied. It is the Commission's intention in this rule to facilitate innovative and efficient AMAs. The Commission recognizes that in order to successfully implement an AMA, the parties will need to negotiate and agree upon certain other practical elements of the transaction aside from the release terms and delivery aspects of the deal. Those items may include communication protocols, risk management arrangements, nominations and scheduling services, asset optimization fees and profit sharing arrangements and other products and services reasonably related to an AMA. It would be counterproductive to the Commission's goal of facilitating AMAs to disallow parties to tie these other necessary aspects of AMAs to the deal. Thus, the Commission clarifies that if the arrangement meets the essential elements of the definition of AMAs, then the tying exemption applies to all other agreements necessary to implement the AMA. The Commission also clarifies that payments made by or to an asset manager under an AMA that are separate and apart from the cost of the released capacity do not violate the prohibition against tying.

8. Posting and Reporting Requirements

172. In the NOPR, the Commission stated that, while it proposed to exempt capacity releases implementing AMAs from bidding, such releases would remain subject to all existing posting and reporting requirements. Accordingly, the Commission stated, pipelines would still be obligated to provide notice of the release pursuant to 18 CFR section 284.8(d). In addition, the details of the release transaction would have to be posted on the pipeline's Internet web site under 18 CFR section 284.13(b)(1)(viii), which requires the posting of ''special terms and conditions applicable to a capacity release transaction.'' The Commission also stated that sections 284.13(c)(2)(viii) and (ix) require that the pipeline's index of customers include the name of any agent or asset manager managing a shipper's transportation service and whether that agent or asset manager is an affiliate of the releasing shipper.

173. Several parties filed comments regarding the posting and reporting requirements for AMAs.[162] While most support the Commission's goals of transparency and disclosure, they seek clarification as to what exactly must be posted. Essentially these comments request clarification that commercially sensitive details of an AMA, such as the structure, assets available for use by the asset manager, and the compensation to be paid, do not need to be posted as ''special terms and conditions'' of the release pursuant to section 284.13(b)(1)(viii). They assert that only the fact that the release is an AMA needs to be disclosed. FPL requests that the Commission specifically define the facts that must be reported for there to be a valid AMA. Hess makes a similar request, and emphasizes that releasing shippers should not be required to post an RFP or any other details of the AMA because they are proprietary, confidential and commercially sensitive. Hess also requests the Commission confirm that it is not expanding the details that it expects to be disclosed as special terms and conditions. Hess and Integrys assert that posting and reporting on AMAs should be limited to the fact that the release is part of an AMA and describing the terms and conditions of the release associated with the AMA.[163] NGSA also requests clarification that the posting of a capacity release in the context of an AMA should require only the information normally posted for a typical release of capacity (receipt and delivery points, term), along with a statement that acknowledges that it is part of an AMA.

174. In response to these comments, the Commission clarifies in this rule the posting and reporting requirements that will be applicable to release transactions implementing AMAs. By stating in the NOPR that existing section 284.13(b)(1)(viii) requires that any ''special terms and conditions'' of such releases must be posted, the Commission did not intend to require that commercially sensitive details of an AMA be disclosed, particularly information concerning the gas commodity aspects of the AMA.[164] The

[160] Weyerhaeuser comments at 2–5.

[161] Sequent comments at 8–9.

[162] *See e.g.,* Comments of AGA; Comments of FPL, Comments of Hess; Comments of Integrys, and NGSA comments.

[163] Integrys comments at 6–7.

[164] The Commission retains the right, however, to require a releasing shipper to make all relevant

Commission recognizes that in order to promote competition certain details of the AMA are commercially sensitive and thus should remain confidential.

175. However, the Commission finds that any posting under section 284.13(b) that relates to a release to implement an AMA should include (1) the fact that the release is to an asset manager and (2) the delivery or purchase obligation of the AMA, in addition to the information required to be posted for all capacity releases. As discussed in detail above, the requirement that the asset manager deliver or purchase gas to fulfill the releasing shipper's supply or marketing obligations is the cornerstone for differentiating AMAs from standard capacity releases. In order to ensure that capacity releases posited as AMAs eligible for the exemptions from tying and bidding are *bona fide* AMAs, the Commission must have a means to monitor this critical component of the arrangement. Other information specifically related to the AMA, however, such as the pricing of any sales of gas commodity and any profit sharing arrangements between the releasing and replacement shipper need not be posted pursuant to section 284.13(b). Consistent with this discussion, the Commission is revising section 284.13(b)(1) of its regulations to add a new subsection (x) specifying the information concerning an AMA that must be included in the posting of any capacity release meant to implement an AMA. The required posting concerning the delivery or purchase obligation that qualifies the release as an AMA under the definition discussed above should specify the volumetric level of the replacement shipper's delivery or purchase obligation and the time periods during which that obligation is in effect.

176. INGAA and other pipeline commenters state that as pipelines already have a substantial role in administering the Commission's capacity release program, pipelines should not be overburdened by the proposed changes nor should they be responsible for policing asset managers' compliance therewith. They assert that pipelines' obligations should be limited to posting offers submitted by releasing shippers using the terms and conditions provided to the pipeline.[165]

177. The Commission hereby clarifies in this rule that pipelines are responsible for posting offers submitted by releasing shippers that are meant to implement AMAs using the terms and conditions provided by the releasing shipper to the pipeline. It is incumbent upon the releasing shipper to include the details discussed above to qualify the release as an AMA. The Commission further clarifies that the pipeline has no obligation to act on any information other than is provided to it by its customers. The pipeline must of course, comply with all applicable elements of section 284.13 of the Commission's regulations.

9. Part 157 Capacity

178. Several commentors[166] urge the Commission to permit Part 157 individually certificated transportation and storage agreements to be used in the AMA context.[167] The Commission's Part 284 regulations, including the provisions for flexible receipt points and capacity release, do not apply to Part 157 services. This is because pipelines perform Part 157 services pursuant to an individual certificate rather than a Part 284 blanket certificate for open access transportation. Under Part 157, a pipeline negotiates a service with a particular shipper, including the terms and conditions of service. Such an agreement generally would only provide for service between specified receipt and delivery points. Subsequently, the pipeline would apply to the Commission under NGA section 7 for a certificate to perform this individual service.

179. NJNG states that the Commission should permit a capacity holder desiring to enter into an AMA ''to release Part 157, as well as Part 284, capacity to the asset manager.'' However, it qualifies its request to explain that while it believes that a release of Part 157 capacity should be permitted in this context, it does not request all the flexibility of Part 284 capacity. NJNG states that a limited expansion of flexibility afforded to Part 157 transactions will facilitate the asset manager's ability to optimize the customer's portfolio of transactions.[168] NGNJ also suggests that inclusion of Part 157 service in AMAs could be achieved ''either by making Part 157 services releasable for this limited purpose, or it could be effectuated by affording the asset manager a waiver of the Shipper Must Have Title requirement * * *.''[169]

180. National Grid also requests that the Commission clarify that ''as part of an AMA, a shipper can include all of its pipeline contracts, including individually certificated Part 157 contracts and upstream sales agreements without violating any otherwise applicable Commission rules or policies * * *.''[170] AGA recommends that the Commission allow Part 157 capacity to be included in the portfolio of assets that a releasing shipper may assign to an asset manager, but does not advocate that Part 157 capacity be permitted to be released or assigned on a stand-alone basis.[171] PPM and Nstar request that the Commission permit customers to include Part 157 service as part of an AMA. They argue that inclusion of Part 157 capacity in AMAs would further advance the Commission's goal of facilitating AMAs and warrants an exception from the rules that otherwise prohibit shippers from releasing their Part 157 capacity, while exclusion of Part 157 capacity, would serve as an obstacle to the maximization of efficient capacity.

181. On February 15, 2008, Spectra filed a reply to these comments. Spectra supports the ability of customers to have asset managers act as their agents in managing Part 157 service agreements, so long as the agreements themselves are not released or otherwise assigned to the asset manager and the customer and asset manager follow all other Commission policies and regulations related to Part 157 service. Spectra opposes requests that the Commission allow Part 157 service to be released or, in any way, be treated in the same manner as Part 284 services and states that such suggestions are inconsistent with Commission policy and are outside the scope of the NOPR.

182. On March 3, 2008, Nstar filed a response to Spectra and clarifies that commentors requesting this treatment for Part 157 capacity are not arguing for flexibility equal to that the Commission provides shippers under Part 284 service. Rather, they simply urge the Commission to clarify that Part 157 rights may be among the assets conveyed under an AMA, and that they seek no additional Part 284 service flexibilities. Nstar argues that the Commission should not require shippers to convert Part 157 service to Part 284 service as a condition of subjecting such capacity to an AMA. Nstar argues that such conversion

agreements and supporting documents available to the Commission for review if questions arise as to whether a purported AMA satisfies the Commission's regulations.

[165] INGAA comments at 21; Spectra comments at 29.

[166] *See e.g.,* comments of AGA, National Grid, NJNG, Nstar, and PPM.

[167] Individually-certificated service agreements are transportation and storage services that have been certificated pursuant to Part 157 of the Commission's regulations and under the authority of Section 7(c) of the NGA. *See* 18 CFR 157 Subpart A (2007).

[168] NJNG comments at 3.

[169] *Id.*

[170] National Grid comments at 5.

[171] AGA comments at 22.

would be costly and the added flexibilities would not warrant the cost of conversion as they are unnecessary.

183. The Commission did not propose in the NOPR to require pipelines to allow shippers to transfer their Part 157 service agreements to an AMA, because the essence of an AMA, as defined by Commission, is a pre-arranged capacity release, pursuant to the Part 284 regulations, from the holder of the capacity to the asset manager. The Commission's policies regarding the release of Part 157 capacity are well set:

> In Order No. 636–A, the Commission determined that holders of individually certificated transportation under section 7(c) of the Natural Gas Act and Part 157 of the Commission's regulations (Part 157 shippers), *i.e.* not Part 284 shippers, are not eligible to release capacity under section 284.243 since they are not governed by Part 284 or affected by the provisions of Order No. 636 that amended the Part 284 regulations.[172]

184. In its Order No. 636 proceeding, the Commission recognized that shippers under Part 157 service would not have the same rights and flexibility as Part 284 shippers such as flexible receipt and delivery points and the right to release their capacity to another shipper. However, the Commission stated that shippers with Part 157 service could convert their Part 157 service to Part 284 service if they wanted to release capacity or use flexible receipt and delivery points.[173] Further, in Order No. 636–B, the Commission recognized that while its open access program under Part 284 granted shippers benefits not enjoyed by Part 157 shippers, it also imposed obligations upon Part 284 shippers that were not imposed on Part 157 shippers, such as requiring non-discriminatory access for all shippers under Part 284 while Part 157 arrangements may include unique terms and conditions.[174] The Commission also pointed out that, because the Part 284 capacity releasing program permits releases at discounted rates but Part 157 capacity cannot be discounted, Part 157 shippers cannot simply be included in the Part 284 capacity release program.[175]

185. For the reasons stated above, the Commission is not persuaded to revise its longstanding policy of not permitting Part 157 shippers to participate in the capacity release program without converting their services to service under Part 284 blanket authority. Further, to the extent that Nstar argues that the commentors do not seek capacity release rights such as those enjoyed by Part 284 shippers but, rather the ability to assign a Part 157 individually certificated service agreement to its asset manager, such a request entails a change of the contract between the pipeline and the shipper. That is because such a modification would replace the existing shipper under a contract individually certificated by the Commission with another shipper. If the contract does not include a provision permitting such an assignment, the Commission could only require the pipeline to permit the assignment by acting under NGA section 5. The Commission finds that such modifications to individually certificated agreements should be addressed on a case by case basis, rather than in this rulemaking proceeding.

V. Tying of Storage Capacity and Inventory

186. In its decision in *Texas Eastern Transmission, LP*,[176] the Commission found that a proposed tariff provision stating that ''[i]f the Releasing Customer proposes or requires a transfer of all or a portion of its Storage Inventory in conjunction with its release of storage capacity rights, it shall so specify in its offer to release capacity'' constituted a broad authorization for shippers on Texas Eastern's system to tie their release of storage capacity to an extraneous condition (*i.e.* the taking of gas inventory) in all situations. The Commission held that this proposed tariff provision violated the Commission's current prohibition against tying a release of its capacity to any extraneous conditions. The Commission thus required Texas Eastern to delete the proposed language.

187. Subsequent to the *Texas Eastern* decision, the Commission in the NOPR requested comment on whether it should clarify its prohibition concerning tying agreements outside of the AMA context to allow a releasing shipper to include conditions in a storage release concerning the sale and/or repurchase of gas in storage inventory.[177] All commenters that addressed this issue supported removing the tying prohibition for storage services to allow a shipper that releases storage capacity to condition a release of storage capacity on the sale and/or repurchase of gas in storage inventory. They want to be able to require that a replacement shipper take title to any gas that remains in the storage at the time the release takes effect and/or to require the releasing shipper to return the storage capacity to the releasing shipper at the end of the release with a specified amount of gas in storage.[178] Commenters supporting this change argue that there is nothing extraneous about a releasing shipper addressing gas in storage at the time it releases storage capacity, and thus the requisite ''tying'' should be permitted.

188. Commenters note that tying storage capacity with storage inventory will allow the releasing shipper greater ease in releasing capacity and will enable transactions to be consummated more readily.[179] Further, because releasing shippers may want to release storage capacity in the summer when they do not need it, they need to get the capacity back with gas in storage or there will not be enough time to re-fill it for the winter season.

189. Commenters also assert that the nature of the relationship between storage capacity and storage inventory calls out for a waiver of the tying rule. They add that the ability of releasing shippers to ''tie'' storage capacity with storage inventory such that releasing shippers would be permitted to require that replacement shippers take inventory as a condition of release, even outside the AMA context, will provide benefits to the marketplace similar to those provided by AMA.[180] Finally, the NYPSC asserts that the AMA exemption from tying prohibition should be extended to releases of storage capacity performed pursuant to state retail access programs.

190. Based on the substantial support expressed in the comments, the Commission is clarifying in this rule its prohibition on tying to allow a releasing shipper to include conditions in a release concerning the sale and/or repurchase of gas in storage inventory even outside the AMA context. Specifically, this exception to the tying

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[172] Order No. 636–B, 61 FERC ¶ 61,272 at 61,992 (1992), *citing,* Order No. 636–A at 30,569.

[173] Order No. 636–A at 30,569. Moreover, in Order No. 636–B, the Commission stated:

> Although the Commission is denying the requests for rehearing, the Commission reemphasizes that it finds conversions from individually certificated transportation to open access transportation to be in the public interest. The Commission anticipates that pipelines and their customers will be able to reach agreement on proposals for implementing such conversions and encourages them to do so. *Id.* at 61,994. (footnote omitted)

[174] Order No. 636–B at 61,992.

[175] Order No. 636–B at 61,993.

[176] *Texas Eastern Transmission LP,* 120 FERC ¶ 61,199, *order on compliance filing,* 121 FERC ¶ 61,026 (2007), *reh'g denied without prejudice,* 122 FERC 61,014 (2008) (*Texas Eastern*). The Commission stated in its rehearing order that the issues raised in the requests for clarification and/or rehearing in the *Texas Eastern* case were general policy issues that would be more appropriately addressed in this rulemaking proceeding.

[177] NOPR at P 82.

[178] *See e.g.* Comments of the AGA, Duke Energy, Florida Cities, INGAA, the NGSA, Piedmont, National Grid, NYSEG and RG&E.

[179] *See e.g.* Comments of Piedmont at 7.

[180] Comments of Marketer Petitioners at 15–16.

rule is meant to allow a shipper that releases storage capacity to require the replacement shipper to (1) take title to any gas in the released storage capacity at the time the release takes effect and/or (2) return the storage capacity to the releasing shipper at the end of the release with a specified amount of gas in storage. The Commission is persuaded in the storage context, storage capacity is inextricably attached to the gas in storage. By allowing releasing shippers to condition the release of storage capacity on sale and or repurchase of gas in storage inventory and on there being a certain amount of gas left in storage at the end of the release, the Commission will enhance the efficient use of storage capacity while at the same time ensuring that the releasing shipper will have gas in storage for the winter. The Commission also agrees that allowing the tying of storage capacity to storage inventory will provide benefits to the market by enabling more active release of storage capacity into the wholesale market.

VI. Liquefied Natural Gas

191. Statoil seeks clarification that akin to the exemption for AMAs that would allow the tying of released capacity to gas sales agreements, it would be permissible to link throughput agreements and/or sales of gas at the outlet of an NGA Section 3 liquefied natural gas (LNG) terminal with a prearranged capacity release on an interstate pipeline connected to the terminal. Statoil comments that LNG importers often hold firm capacity on interstate pipelines adjacent to the terminals to ensure that re-gasified LNG can exit the terminal efficiently and be transported to the markets on the interstate pipeline grid. Noting that while the contracts governing the use of NGA section 3 capacity are not subject to the Commission's open access or capacity release policies, and that the terms of agreements for the sale of LNG are not governed by the Commission, the NGA section 7 pipelines that connect the terminals to the interstate grid are subject to those regulations. Accordingly, Statoil suggests that the Commission should recognize and permit the natural link between an LNG terminal throughput agreement and an agreement to release downstream pipeline capacity and clarify that such a tie is permissible. Shell LNG filed in support of Statoil's comments.[181]

192. The Commission declines to grant the requested clarification in this generic rulemaking proceeding. In this rule, the Commission is providing an exemption from bidding and the prohibition on tying in order to permit gas sellers to use supply AMAs. Statoil and other LNG importers holding firm capacity on interstate pipelines connected to an LNG terminal can use a supply AMA. The comments of Statoil and other LNG importers do not provide adequate detail on the types of transactions for which they seek a tying exemption to explain why a further exemption beyond that provided for supply AMAs is required for LNG facilities. Likewise, it is unclear from the comments how far downstream they seek to have the exemption apply. For example, while some terminals may have direct connection to a dedicated lateral line, others interconnect directly with a major interstate natural gas pipeline. Nor do we have a sufficient record at this time to evaluate the possible benefits of such an exemption or the effect on open access competition that such an exemption might have.

193. While the Commission declines to grant the clarification in this general rulemaking proceeding, the Commission is open to considering this issue on a case-by-case basis if presented to it in a fully justified proposal.

VII. State Mandated Retail Unbundling

194. Section 284.8(h)(1) of the Commission's current capacity release regulations exempts prearranged releases of more than 31 days from bidding only if they are at the ''maximum tariff rate applicable to the release.'' States with retail open access gas programs (in which customers can buy gas from marketers rather than LDCs) have relied on this ''safe harbor'' exemption from bidding in structuring their programs. Specifically, a key component of most such programs is a provision for the LDC to make periodic releases, at the maximum rate, of its interstate pipeline capacity to the marketers participating in the program. The marketers then use the released capacity to transport the gas supplies that they sell to their retail customers. The exemption from bidding ensures that the LDC's capacity is transferred only to the marketers participating in the state retail unbundling program and is not obtained by non-participating third parties.

195. However, the Commission's removal of the price ceiling for releases of one year or less in this rule eliminates the bidding exemption for releases with terms of between 31 days and one year. That is because there will no longer be a maximum tariff rate applicable to such releases. As a result, absent some additional modification of the regulations concerning bidding, LDCs will have to post for bidding all releases of between 31 days and one year that are made as part of a state retail unbundling program. This would mean that the marketers participating in the program could only obtain the capacity if they matched any third party bid for the capacity.

196. In the NOPR, the Commission proposed to address this issue in a manner generally consistent with its actions in Order No. 637, when a similar issue arose with respect to the experimental lifting of the price ceiling for short-term capacity releases. In Order Nos. 637–A and 637–B,[182] the Commission denied the request by LDCs for a blanket exemption from bidding of all capacity releases made as part of a state retail unbundling program. The Commission explained that, with the price ceiling removed, posting and bidding was necessary to protect against undue discrimination and ensure that the capacity is properly allocated to the shipper placing the greatest value on the capacity. The Commission nevertheless provided that, if an LDC considered an exemption from bidding essential to further a state retail unbundling program, the LDC could request a waiver of the bidding regulation to allow the LDC to consummate pre-arranged capacity release deals at the maximum rate, subject to certain conditions.[183]

197. In the NOPR, the Commission similarly proposed to permit LDCs to request a waiver of the bidding regulation to allow them to consummate short-term pre-arranged capacity release deals necessary to implement retail access at the maximum rate without bidding. The Commission stated that this limited waiver of the bidding requirement would enable retail access programs to continue to operate with the same exemption from bidding which they now have. While the Commission did not propose a blanket exemption from bidding for releases made by LDCs under state retail choice programs comparable to the blanket exemption for AMAs, the Commission requested

[181] Chevron also filed late supporting comments on May 27, 2008.

[182] Order No. 637–A at 31,569; Order No. 637–B, 92 FERC at 61,163.

[183] On appeal of Order No. 637, the court in *INGAA* affirmed the Commission's refusal to grant a blanket waiver of the bidding requirement for releases made as part of a state retail unbundling program, finding that the Commission's concern about discrimination was reasonable. However, the court remanded the issue of the reasonableness of the Commission's condition that an LDC seeking a waiver must agree to subject all its releases to the maximum rate. The Commission did not address this issue in its order on remand, because the price ceiling had been re-imposed by the time of the remand order, thus rendering the issue moot.

comment on whether such releases should be treated as similar to releases made as part of an AMA and thus accorded the same full exemption from bidding. The Commission recognized that there are similarities between releases made pursuant to a state retail unbundling program and those made as part of an AMA, but requested comment on whether a blanket exemption for state programs would entail greater potential for undue discrimination.

198. The vast majority of comments that addressed this issue supported treating capacity releases under state retail choice programs the same way as AMAs, advocating that those capacity releases be afforded the same blanket exemptions from capacity release bidding requirements as those granted to releases to implement AMAs.[184] Commenters assert that releases made by LDCs for state unbundling programs closely resemble AMAs in that the capacity is committed to be used for its original purpose, to serve the LDC's customers. Commenters also note that the reasons given by the Commission in the NOPR for the bidding and tying exemptions for AMAs apply with equal force to releases to implement state approved retail access programs. Others argue that the Commission's case-by-case exemption analysis creates a greater potential for discrimination than a blanket exemption would. As pointed out by the NYPSC, requiring LDCs seeking to participate in state approved unbundling programs will inject a level of uncertainty into the process as well as impose additional expensive burdens on those LDCs. AGA urges the Commission to permit LDCs to make exempt releases at the price the LDC paid for the capacity as opposed to the applicable maximum tariff rate.[185] FPL Energy provides the Commission with an alternative suggestion that would continue to allow a general exemption from bidding for prearranged releases where the replacement shipper agrees to pay the maximum tariff rate.[186]

199. The Commission finds that capacity releases by LDCs to implement state approved retail access programs should be granted the same blanket exemptions from the prohibition against tying and the bidding requirements as capacity releases made in the AMA context. As the Commission stated in *Georgia Public Service Commission*,[187] ''state retail unbundling is consistent with the Commission's overall goals in Order No. 636 of improving the competitive structure of the natural gas industry by promoting access to the interstate pipeline transportation grid and the wellhead market so that willing buyers and sellers can meet in a competitive, national market to transact the most efficient deals possible. Therefore the Commission does not wish to discourage state retail unbundling programs that give retail end-users a greater choice of suppliers from whom to purchase their gas.'' State retail unbundling programs provide benefits similar to AMAs.

200. Accordingly, this rule clarifies that the prohibition against tying does not apply to releases by an LDC to a marketer that agrees to sell gas to the LDC's retail customers under a state approved retail access program. The final rule also amends section 284.8(h) in order to provide for such an exemption from bidding. The exemption from bidding will apply regardless of the rate at which the LDC makes its releases to the marketers participating in the state retail unbundling program. In order to qualify for the exemption, the capacity release must be used by the replacement shipper to provide the gas supply requirement of retail consumers pursuant to a retail access program approved by the state agency with jurisdiction over the LDC that provides delivery service to such retail consumers. The exemption does not apply to re-releases made by marketers participating in the retail access program.

201. In light of our granting this blanket bidding exemption, the Commission is also modifying section 284.13(b)(1) of its regulations to add a requirement that the pipeline's posting of a capacity release must state whether the release is to a marketer participating in an eligible state retail access program.

VIII. Implementation Schedule

202. The regulatory changes in this rule will become effective as of the effective date of this rule, at which time parties may act in accordance with the revised regulations adopted by this rule. Pipelines must file within 180 days of the effective date of this rule to remove any inconsistent tariff provisions and can incorporate this filing into any other tariff filing made by the pipeline within the 180 day period.

IX. Information Collection Statement

203. The Office of Management and Budget (OMB) regulations require that OMB approve certain reporting, recordkeeping, and public disclosure (collections of information) imposed by an agency.[188] Accordingly, pursuant to OMB regulations, the Commission is providing notice of its proposed information collections to OMB for review under section 3507(d) of the Paperwork Reduction Act of 1995.[189]

204. The Commission identifies the information provided under Part 284.13 as contained in FERC–549B. As mentioned above, natural gas pipelines must also amend their tariffs to remove inconsistent language and to incorporate the provisions from this rule into another tariff filing as covered under FERC–545 and file with the Commission.

205. The Commission did not receive specific comments concerning its burden estimates and uses the same estimates here in the Final Rule, as modified to reflect the addition of what must be included in the posting of any capacity release to implement an asset management agreement or a release made as part of a state retail access program and to make the require tariff filings. The burden estimates for complying with additional filing requirements of this rule pursuant to the procedures in proposed new sections 284.13(b)(1) are set forth below. For the most part, the burden on respondents to comply with the existing reporting requirements in section 284.13 of the Commission's regulations will not be changed by this proposed rule. In 1992 in Order No. 636 the Commission established a capacity release mechanism under which shippers could release firm transportation and storage capacity on either a short or long term basis to other shippers wanting to obtain capacity. This Final Rule modifies policies and regulations concerning capacity releases by shippers on interstate pipelines in order to enhance the efficiency and effectiveness of the secondary capacity release market. The Commission is responding to industry's request for greater flexibility in the capacity release market and to reflect changes and developments in the marketplace. On average, we expect the burden of making the corresponding changes under this Final Rule to be 35 hours. This estimate is based on the modification of Web sites to account for the posting of the delivery and/or purchase obligation and whether a release is to a marketer serving as an asset manager or a shipper who is

[184] Those commenters include the AGA, Boardwalk, BP, Commerce Energy, Direct Energy, Duke Energy, FPL, Hess, IGS, NJNG, NStar, NYSEG, RG&E, Ohio OGMG, PG&E, PSCNY, PUCO, SEMI, Sequent and WDG.

[185] AGA comments at 7.

[186] FPL Energy comments at 23.

[187] 110 FERC ¶ 61,048 at P 20 (2005).

[188] 5 CFR 1320.11 (2007).

[189] 44 U.S.C. 3507(d) (2000).

participating in a state unbundling program, as well as to make the required tariff changes.

Data collection	Number of respondents	Number of responses per respondent	Hours per response	Total annual hours
FERC–549B	102	1	10	1,020
FERC–545	102	1	25	2,550
Totals	102	1	25	3,570

Total Annual Hours for Collection: 3570 hours.

206. *Information Collection Costs:* The Commission sought comments on the cost to comply with these requirements. No comments were received. The Commission has projected the average annualized cost for all respondents to be $$145,350. This takes into account IT technical support 5 hours @ $125 an hour, legal review 3 hours @ $250 an hour and administrative support 22 hours @ $25 an hour.

207. *Title:* Capacity Information (FERC–549B), Gas Pipeline Rates: Rate Change (Non-Formal) (FERC–545).

208. *Action:* Proposed Information Collection.

209. *OMB Control Nos.:* 1902–0169, 1902–0154.

210. The applicant shall not be penalized for failure to respond to these collections of information unless the collections of information display valid OMB control numbers.

211. *Respondents:* Business or other for profit.

212. *Frequency of Responses:* On occasion.

213. *Necessity of Information:* This Final Rule will permit market based pricing for short-term capacity releases and facilitate AMAs by relaxing the Commission's prohibition on tying and its bidding requirements for certain capacity releases. Elimination of the price ceiling for short-term capacity releases will provide more accurate price signals concerning the market value of pipeline capacity. Further, implementation of AMAs will make the capacity release program more efficient as releasing shippers can transfer their capacity to entities with greater expertise both in purchasing low cost gas supplies, and in maximizing the value of the capacity when it is not needed to meet the releasing shipper's gas supply needs. Such arrangements free up the time, expense and expertise involved with managing gas supply arrangements and serve as a means of relieving the burdens of administering their capacity or supply needs.

214. Interested persons may obtain information on the reporting requirements by contacting the following: Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426 (Attention: Michael Miller, Office of the Executive Director, 202–502–8415, fax: 202–273–0873, e-mail: *michael.miller@ferc.gov*).

215. For submitting comments concerning the collection of information and the associated burden estimate(s) including suggestions for reducing this burden, please send your comments to the contact listed above and to the Office of Management and Budget, Room 10202 NEOB, 725 17th Street, NW., Washington, DC 20503 (Attention: Desk Officer for the Federal Energy Regulatory Commission, 202–395–7345, fax: 202–395–7285).

X. Environmental Analysis

216. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment.[190] The Commission has categorically excluded certain actions from these requirements as not having a significant effect on the human environment.[191] The actions proposed to be taken here fall within categorical exclusions in the Commission's regulations for rules that are corrective, clarifying or procedural, for information gathering, analysis, and dissemination, and for sales, exchange, and transportation of natural gas that requires no construction of facilities.[192] Therefore an environmental review is unnecessary and has not been prepared in this rulemaking.

XI. Regulatory Flexibility Act

217. The Regulatory Flexibility Act of 1980 (RFA) [193] generally requires a description and analysis of the impact the proposed rule will have on small entities or a certification that the proposed rule will not have significant economic impact on a substantial number of small entities. The amendments to our regulations would apply only to natural gas companies, most of which are not small businesses. Under the industry standards used for purposes of the RFA, a natural gas pipeline company qualifies as a ''small entity'' if it has annual revenues of $6.5 million or less. As we stated in both the NOPR and in this Final Rule, removal of the price ceiling will enable releasing shippers to offer competitively-priced alternatives to the pipelines' negotiated rate offerings. Further, removal of the ceiling also permits more efficient utilization of capacity by permitting prices to rise to market clearing levels, allowing those entities that place the highest value on the capacity to obtain it.

218. The RFA directs agencies to consider at a minimum four regulatory alternatives in drafting a rulemaking to lessen the impact on small entities: Tiering or establishment of different compliance or reporting requirements for small entities; classification, consolidation, clarification or simplification of compliance and reporting requirements; performance rather than design standards; and exemptions. In this Final Rule, the Commission has revised its regulations to lift the ceiling price from the release market and provided a different compliance regime for shippers making short-term capacity release transactions. This gives releasing shippers some of the same flexibility that is currently enjoyed by jurisdictional pipelines. In addition, the Commission will exempt capacity releases made as part of AMAs from the prohibition of tying and from the bidding requirements of section 284.8. AMAs provide significant benefits to many participants in the natural gas and electric marketplaces particularly by allowing greater flexibility for entities to customize arrangements to meet unique customer needs. Sellers of natural gas by using the

[190] Order No. 486, *Regulations Implementing the National Environmental Policy Act,* 52 FR 47,897 (Dec. 17, 1987), FERC Stats. & Regs., Regulations Preambles 1986–1990 ¶ 30,783 (1987).

[191] 18 CFR 380.4 (2007).

[192] *See* 18 CFR 380.4(a)(2)(ii), 380.4(a)(5) and 380.4(a)(27)(2007).

[193] 5 U.S.C. 601–612, *citing* to Section 3 of the Small Business Act, 15 U.S.C. 623 (2000). Section 3 defines a ''small business concern'' as a business which is independently owned and operated and which is not dominant in its field of operation.

benefits of AMAs create a greater diversity of potential suppliers and participants in the secondary markets. AMAs benefits also include better management of risks to the fuel supply which in turn allows generators to focus on the electric market and not to be consumed with administrative burdens relating to multiplier suppliers, overheads and capital requirements for and the risks associated with marketing excess gas. In addition, capacity releases made under state-approved retail access programs are also exempt from the prohibition on tying and bidding requirements of section 284.8 A small entity that participates in the market will no longer be constrained by a ceiling price for its unused capacity.

219. Accordingly, pursuant to section 605(b) of the RFA, the Commission certifies that the Final Rule would not have a significant economic impact on a substantial number of small entities.

XII. Document Availability

220. In addition to publishing the full text of this document in the **Federal Register**, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through FERC's Home Page (*http://www.ferc.gov*) and in FERC's Public Reference Room during normal business hours (8:30 a.m. to 5 p.m. Eastern time) at 888 First Street, NE., Room 2A, Washington, DC 20426.

221. From FERC's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

222. User assistance is available for eLibrary and the FERC's Web site during normal business hours from FERC Online Support at 202–502–6652 (toll free at 1–866–208–3676) or e-mail at *ferconlinesupport@ferc.gov*, or the Public Reference Room at (202) 502–8371, TTY (202) 502–8659. E-mail the Public Reference Room at *public.referenceroom@ferc.gov*.

XIII. Effective Date and Congressional Notification

223. These regulations are effective July 30, 2008. The Commission has determined, with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of OMB, that this rule is not a ''major rule'' as defined in section 351 of the Small Business Regulatory Enforcement Fairness Act of 1996.

List of Subjects in 18 CFR Part 284

Continental shelf, Natural gas, and Reporting and recordkeeping requirements.

By the Commission. Commissioner Moeller dissenting in part with a separate statement attached.

Kimberly D. Bose,

Secretary.

■ In consideration of the foregoing, the Commission amends part 284, Chapter I, Title 18, *Code of Federal Regulations*, as follows:

PART 284—CERTAIN SALES AND TRANSPORTATION OF NATURAL GAS UNDER THE NATURAL GAS POLICY ACT OF 1978 AND RELATED AUTHORITIES

■ 1. The authority citation for part 284 continues to read as follows:

Authority: 15 U.S.C. 717–717w, 3301–3432; 42 U.S.C. 7101–7352; 43 U.S.C. 1331–1356.

■ 2. Amend § 284.8 as follows:

■ a. In paragraph (e), remove the words ''(not over the maximum rate)''.

■ b. Remove paragraph (i).

■ c. Add two sentences to the end of paragraph (b) and revise paragraph (h) to read as follows:

§ 284.8 Release of firm capacity on interstate pipelines.

* * * * *

(b) * * * The rate charged the replacement shipper for a release of capacity for more than one year may not exceed the applicable maximum rate. Payments or other consideration exchanged between the releasing and replacement shippers in a release to an asset manager as defined in (h)(3) of this section are not subject to the maximum rate. No rate limitation applies to the release of capacity for a period of one year or less.

* * * * *

(h)(1) A release of capacity by a firm shipper to a replacement shipper for any period of 31 days or less, a release of capacity for more than one year at the maximum tariff rate, a release to an asset manager as defined in (h)(3) of this section, or a release to a marketer participating in a state-regulated retail access program as defined in (h)(4) of this section need not comply with the notification and bidding requirements of paragraphs (c) through (e) of this section. Notice of a firm release under this paragraph must be provided on the pipeline's electronic bulletin board as soon as possible, but not later than the first nomination, after the release transaction commences.

(2) When a release of capacity for 31 days or less is exempt from bidding requirements under paragraph (h)(1) of this section, a firm shipper may not roll-over, extend, or in any way continue the release without complying with the requirements of paragraphs (c) through (e) of this section, and may not re-release to the same replacement shipper under this paragraph at less than the maximum tariff rate until 28 days after the first release period has ended.

(3) A release to an asset manager exempt from bidding requirements under paragraph (h)(1) of this section is any pre-arranged release that contains a condition that the releasing shipper may, on any day during a minimum period of five months out of each twelve-month period of the release, call upon the replacement shipper to (i) deliver to the releasing shipper a volume of gas up to one-hundred percent of the daily contract demand of the released transportation capacity or (ii) purchase a volume of gas up to the daily contract demand of the released transportation capacity. If the capacity release is for a period less than one year, the asset manager's delivery or purchase obligation described in the previous sentence must apply for the lesser of five months or the term of the release. If the capacity release is a release of storage capacity, the asset manager's delivery or purchase obligation need only be one-hundred percent of the daily contract demand under the release for storage withdrawals or injections, as applicable.

(4) A release to a marketer participating in a state-regulated retail access program exempt from bidding requirements under paragraph (h)(1) of this section is any prearranged capacity release that will be utilized by the replacement shipper to provide the gas supply requirement of retail consumers pursuant to a retail access program approved by the state agency with jurisdiction over the local distribution company that provides delivery service to such retail consumers.

■ 3. In § 284.13 add paragraphs (b)(1)(x) and (b)(1)(xi) to read as follows:

§ 284.13 Reporting requirements for interstate pipelines.

* * * * *

(b) * * *

(1) * * *

(x) Whether a capacity release is a release to an asset manager as defined in § 284.8(h)(3) and the asset manager's obligation to deliver gas to, or purchase gas from, the releasing shipper.

(xi) Whether a capacity release is a release to a marketer participating in a state-regulated retail access program as defined in § 284.8(h)(4).

Note: The following text will not appear in the Code of Federal Regulations.

United States of America Federal Energy Regulatory Commission

Promotion of a More Efficient Capacity Release Market; Docket No. RM08–1–000

Issued June 19, 2008.

MOELLER, Commissioner *dissenting, in part:*

Several commenters with interests in the importation of liquefied natural gas (LNG) seek clarification that a prohibited tying arrangement would not occur if an LNG importer combines an LNG throughput agreement (or the sale of regasified LNG at the outlet of the terminal) with a prearranged release of pipeline transportation capacity *on the terminal's directly connected pipeline.* In the alternative, the parties seek a limited exception from the Commission's tying prohibition. Today's final rule declines to grant either the requested clarification or the limited tying exception, but instead provides for adjudication on a case-by-case basis. I cannot support this determination.

While LNG imports admittedly have characteristics that are similar to both natural gas production and storage, LNG imports have important differences that merit a somewhat different policy. LNG cargo owners and terminal operators may have less flexibility as they enter into negotiations and supply arrangements in the global market on the high seas, and the Commission should provide the regulatory certainty to permit the linkage of such agreements without fear of running afoul of the tying prohibition. Providing such an assurance could benefit the public interest by encouraging increased LNG supply deliveries and the efficiencies associated with linking the terminal capacity and pipeline capacity (since the commodity would flow uninterrupted from the terminal to its directly connected pipeline—although separately contracted arrangements on other pipeline(s) may be necessary to deliver the gas to its final destination.) However, separating these arrangements risk stranding capacity at the import terminal or may even result in LNG suppliers serving more flexible markets that do not have such regulatory obstacles. Moreover, due to the limited nature of the exception being sought, I would not expect that either domestic producers or interstate shippers would be placed at a competitive disadvantage.

The need for LNG imports will undoubtedly increase in the coming years and the Commission should take steps to provide regulatory certainty to ensure that LNG tankers can reach our domestic markets without unnecessary risk. Accordingly, I believe that this narrow exception is appropriate in light of the unique position of LNG terminals in the interstate pipeline system.

Philip D. Moeller,
Commissioner.

[FR Doc. E8–14444 Filed 6–27–08; 8:45 am]

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Federal Register

Monday,
June 30, 2008

Part IV

Environmental Protection Agency

40 CFR Parts 9, 85, et al.
Control of Emissions of Air Pollution From Locomotive Engines and Marine Compression-Ignition Engines Less Than 30 Liters per Cylinder; Republication; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9, 85, 86, 89, 92, 94, 1033, 1039, 1042, 1065, and 1068

[EPA–HQ–OAR–2003–0190; FRL–8545–3]

RIN 2060–AM06

Control of Emissions of Air Pollution From Locomotive Engines and Marine Compression-Ignition Engines Less Than 30 Liters per Cylinder; Republication

Editorial Note: FR Doc. E8–7999 was originally published at pages 25098 to 25352 in the issue of Tuesday, May 6, 2008. This document included numerous typographical and other errors that were inadvertently introduced in the printing process. Because of the number of errors, this document is being republished in its entirety. This republication does not change the effective date of the original document.

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is adopting a comprehensive program to dramatically reduce pollution from locomotives and marine diesel engines. The controls will apply to all types of locomotives, including line-haul, switch, and passenger, and all types of marine diesel engines below 30 liters per cylinder displacement, including commercial and recreational, propulsion and auxiliary. The near-term emission standards for newly-built engines will phase in starting in 2009. The near-term program also includes new emission limits for existing locomotives and marine diesel engines that apply when they are remanufactured, and take effect as soon as certified remanufacture systems are available, as early as 2008. The long-term emissions standards for newly-built locomotives and marine diesel engines are based on the application of high-efficiency catalytic aftertreatment technology. These standards begin to take effect in 2015 for locomotives and in 2014 for marine diesel engines. We estimate particulate matter (PM) reductions of 90 percent and nitrogen oxides (NO_X) reductions of 80 percent from engines meeting these standards, compared to engines meeting the current standards.

We project that by 2030, this program will reduce annual emissions of NO_X and PM by 800,000 and 27,000 tons, respectively. EPA projects these reductions will annually prevent up to 1,100 PM-related premature deaths, 280 ozone-related premature deaths, 120,000 lost work days, 120,000 school day absences, and 1.1 million minor restricted-activity days. The annual monetized health benefits of this rule in 2030 will range from $9.2 billion to $11 billion, assuming a 3 percent discount rate, or between $8.4 billion to $10 billion, assuming a 7% discount rate. The estimated annual social cost of the program in 2030 is projected to be $740 million, significantly less than the estimated benefits.

DATES: This rule is effective on July 7, 2008. The incorporation by reference of certain publications listed in this regulation is approved by the Director of the Federal Register as of July 7, 2008.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–2003–0190. All documents in the docket are listed on the *www.regulations.gov* web site. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the Air Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: John Mueller, U.S. EPA, Office of Transportation and Air Quality, Assessment and Standards Division (ASD), Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; telephone number: (734) 214–4275; fax number: (734) 214–4816; e-mail address: *Mueller.John@epa.gov,* or Assessment and Standards Division Hotline; telephone number: (734) 214–4636.

SUPPLEMENTARY INFORMATION:

Does This Action Apply to Me?

- *Locomotives*

Entities potentially affected by this action are those that manufacture, remanufacture or import locomotives or locomotive engines; and those that own or operate locomotives. Regulated categories and entities include:

Category	NAICS code [1]	Examples of potentially affected entities
Industry	333618, 336510	Manufacturers, remanufacturers and importers of locomotives and locomotive engines.
Industry	482110, 482111, 482112	Railroad owners and operators.
Industry	488210	Engine repair and maintenance.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your company is regulated by this action, you should carefully examine the applicability criteria in 40 CFR 92.1, 1033.1, 1065.1, and 1068.1. If you have questions, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

- *Marine Engines and Vessels*

Entities potentially affected by this action are companies and persons that manufacture, sell, or import into the United States new marine compression-ignition engines, companies and persons that rebuild or maintain these engines, companies and persons that make vessels that use such engines, and the owners/operators of such vessels. Affected categories and entities include:

[1] North American Industry Classification System (NAICS).

Category	NAICS code [1]	Examples of potentially affected entities
Industry	333618	Manufacturers of new marine diesel engines.
Industry	33661 and 346611	Ship and boat building; ship building and repairing.
Industry	811310	Engine repair, remanufacture, and maintenance.
Industry	483	Water transportation, freight and passenger.
Industry	487210	and Sightseeing Transportation, Water.
Industry	4883	Support Activities for Water Transportation.
Industry	1141	Fishing.
Industry	336612	Boat building (watercraft not built in shipyards and typically of the type suitable or intended for personal use).

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your company is regulated by this action, you should carefully examine the applicability criteria in 40 CFR 94.1, 1042.1, 1065.1, and 1068.1. If you have questions, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Outline of This Preamble

I. Overview

This final rule completes an important step in EPA's ongoing National Clean Diesel Campaign (NCDC) by adding new programs for locomotives and marine diesel engines to the clean diesel initiatives we have already undertaken for highway, other nonroad, and stationary diesel engines. As detailed below, it significantly strengthens the locomotive and marine diesel programs we proposed last year (72 FR 15938, April 3, 2007), especially in controlling emissions during the critical early years through the early introduction of advanced technologies and the more complete coverage of existing engines. When fully implemented, this coordinated set of new programs will reduce harmful diesel engine emissions to a small fraction of their previous levels.

The new programs address all types of diesel locomotives— line-haul, switch, and passenger rail, and all types of marine diesel engines below 30 liters per cylinder displacement (hereafter referred to as ''marine diesel engines''). [2] These engines are used to power a wide variety of vessels, from small fishing and recreational boats to large tugs and Great Lakes freighters. They are also used to generate auxiliary vessel power, including on ocean-going ships.

Emissions of fine particulate matter ($PM_{2.5}$) and nitrogen oxides (NO_X) from these diesel engines contribute to nonattainment of the National Ambient Air Quality Standards (NAAQS) for $PM_{2.5}$ and ozone. Today, locomotives and marine diesel engines account for about 20 percent of mobile source NO_X emissions and 25 percent of mobile source diesel $PM_{2.5}$ emissions in the U.S. Absent this final action, by 2030 the relative contributions of NO_X and $PM_{2.5}$ from these engines would have grown to 35 and 65 percent, respectively.

We are finalizing a comprehensive three-part program to address this problem. First, we are adopting stringent emission standards for existing locomotives and for existing commercial marine diesel engines above 600 kilowatt (kW) (800 horsepower (hp)). These standards apply when the engines are remanufactured. This part of the program will take effect as soon as certified remanufacture systems are available, for some engines as early as a few months from now. Under our existing program, locomotives have been certified to one of three tiers of standards: Tier 0 for locomotives originally built between 1973 and 2001, Tier 1 for those built between 2002 and 2004, and Tier 2 for those built in or after 2005. Under this new program, certified locomotive remanufacture systems must be made available by 2010 for Tier 0 and Tier 1 locomotives, and by 2013 for Tier 2 locomotives. Remanufacture systems that are certified for use in marine engine remanufactures are likewise required to be used. We are not, however, setting a specific compliance date for certified marine diesel remanufacture systems because we expect that engine manufacturers will be well motivated by the market opportunity to certify emissions-compliant systems.

Second, we are adopting a set of near-term emission standards, referred to as Tier 3, for newly-built locomotives and

[2] Marine diesel engines at or above 30 liters per cylinder, called Category 3 engines, are typically used for propulsion power on ocean-going ships. EPA is addressing Category 3 engines through separate actions, including a planned rulemaking for a new tier of federal standards (see Advance Notice of Proposed Rulemaking published December 7, 2007 at 72 FR 69522) and participation on the U.S. delegation to the International Maritime Organization for negotiations of new international standards (see *http://www.epa.gov/otaq/oceanvessels.com* for information on both of those actions), as well as EPA's Clean Ports USA Initiative (see *http://www.epa.gov/cleandiesel/ports/index.htm*).

marine engines. The Tier 3 standards reflect the application of technologies to reduce engine-out particulate matter (PM) and NO_X.

Third, we are adopting longer-term standards, referred to as Tier 4, for newly-built locomotives and marine engines. Tier 4 standards reflect the application of high-efficiency catalytic aftertreatment technology enabled by the availability of ultra-low sulfur diesel fuel (ULSD). These standards take effect in 2015 for locomotives, and phase in over time for marine engines, beginning in 2014. Finally, we are adopting provisions in all three parts of the program to eliminate emissions from unnecessary locomotive idling.

Locomotives and marine diesel engines designed to these Tier 4 standards will achieve PM reductions of 90 percent and NO_X reductions of 80 percent, compared to engines meeting the current Tier 2 standards. The new standards will also yield sizeable reductions in emissions of nonmethane hydrocarbons (NMHC), carbon monoxide (CO), and hazardous compounds known as air toxics. Table I–1 summarizes the PM and NO_X emission reductions for the new standards compared to today's (Tier 2) emission standards; for remanufactured engines, the comparison is to the current standards for each tier of locomotives covered, and to typical unregulated levels for marine engines.

TABLE I–1.—REDUCTIONS FROM LEVELS OF EXISTING STANDARDS

Sector	Standards tier	PM (percent)	NO_X (percent)
Locomotives	Remanufactured Tier 0	60	15–20.
	Remanufactured Tier 1	50	
	Remanufactured Tier 2	50	
	Tier 3	50	
	Tier 4	90	80.
	All tiers—idle emissions	50	50.
Marine Diesel Engines [a]	Remanufactured Engines	25–60	Up to 20.
	Tier 3	50	20.
	Tier 4	90	80.

Note: (a) Standards vary by displacement and within power categories. Reductions indicated are typical.

On a nationwide annual basis, these reductions will amount to 800,000 tons of NO_X and 27,000 tons of PM by 2030, resulting annually in the prevention of up to 1,100 PM-related premature deaths, 280 ozone-related premature deaths, 120,000 lost work days, 120,000 school day absences, and 1.1 million minor restricted-activity days. We estimate the annual monetized health benefits of this rule in 2030 will range from $9.2 billion to $11 billion, assuming a 3 percent discount rate, or between $8.4 billion to $10 billion, assuming a 7% discount rate.[3] The estimated annual social cost of the program in 2030 is projected to be $740 million, significantly less than the estimated benefits.

A. What Is EPA Finalizing and How Does it Differ From the Proposal?

This final rule makes a number of important changes to the program set out in our Notice of Proposed Rulemaking (NPRM). Among these are changes that will yield significantly greater overall NO_X and PM reductions, especially in the critical early years of the program: The adoption of standards for remanufactured marine engines and a 2-year pull-ahead of the Tier 4 NO_X requirements for line-haul locomotives and for 2000–3700 kW (2760–4900 hp) marine engines.

The major elements of the final program are summarized below. We are also revising existing testing, certification, and compliance provisions to better ensure emissions control in use. Detailed provisions and our justifications for them are discussed in sections III and IV. Section VII of this preamble describes a number of alternatives that we considered in developing the rule. After evaluating the alternatives, we believe that our new program provides the best opportunity for achieving timely and very substantial emissions reductions from locomotive and marine diesel engines. It balances a number of key factors: (1) Achieving very significant emissions reductions as early as possible, (2) providing appropriate lead time to develop and apply advanced control technologies, and (3) coordinating requirements in this final rule with existing highway and nonroad diesel engine programs. The provisions we are finalizing that are different from the proposed program are:

- The adoption of standards for remanufactured marine diesel engines to address emissions from the existing fleet (this was presented as one of the proposal alternatives),
- Inclusion of Tier 4 NO_X controls on 2015–2016 model year locomotives at initial build rather than at first remanufacture,
- A two-year pull-ahead of the Tier 4 NO_X standard for 2000–3700 kW marine engines to 2014,
- Inclusion of Class II railroads in the remanufactured locomotives program,
- No Tier 4 standards for the small fleet of large recreational vessels at this time,
- A revised approach to migratory vessels that spend part of their time overseas,
- Credit for locomotive design measures that reduce emissions as part of efforts to improve efficiency,
- A number of changes to test and compliance requirements detailed in sections III and IV.

Overall, our comprehensive three-part approach to setting standards for locomotives and marine diesel engines will provide very large reductions in PM, NO_X, and toxic compounds, both in the near-term (as early as 2008), and in the long-term. These reductions will be achieved in a manner that: (1) Leverages technology developments in other diesel sectors, (2) aligns well with the clean diesel fuel requirements already being implemented, and (3) provides the lead time needed to deal with the significant engineering design workload that is involved.

(1) Locomotive Emission Standards

We are setting stringent exhaust emission standards for newly-built and remanufactured locomotives, furthering

[3] Low and high benefits estimates are derived from a range of ozone-related premature mortality studies (including an assumption of no causality) and $PM_{2.5}$-related premature mortality based on the ACS study (Pope et al., 2002). Benefits also include $PM_{2.5}$- and ozone-related morbidity benefits. See section VI for a complete discussion and analysis of benefits associated with the final rule.

the initiative for cleaner locomotives started in 2004 with the establishment of the ULSD locomotive fuel program, and adding this important category of engines to the highway and nonroad diesel applications already covered under EPA's National Clean Diesel Campaign.

Briefly, for newly-built line-haul locomotives we are setting a new Tier 3 PM standard of 0.10 grams per brake horsepower-hour (g/bhp-hr), based on improvements to existing engine designs. This standard will take effect in 2012. We are also setting new Tier 4 standards of 0.03 g/bhp-hr for PM and 1.3 g/bhp-hr for NO_X, based on the evolution of high-efficiency catalytic aftertreatment technologies now being developed and introduced in the highway diesel sector. The Tier 4 standards will take effect in 2015. We are requiring that remanufactured Tier 2 locomotives meet a PM standard of 0.10 g/bhp-hr, based on the same engine design improvements as Tier 3 locomotives, and that remanufactured Tier 0 and Tier 1 locomotives meet a 0.22 g/bhp-hr PM standard. We are also requiring that remanufactured Tier 0 locomotives meet a NO_X standard of 7.4 g/bhp-hr, the same level as current Tier 1 locomotives, or 8.0 g/bhp-hr if the locomotive is not equipped with a separate loop intake air cooling system. Section III provides a detailed discussion of these new standards, and section IV details improvements being made to the applicable test, certification, and compliance programs.

In setting our original locomotive emission standards in 1998, the historic pattern of transitioning older line-haul locomotives to road- and yard-switcher service resulted in our making little distinction between line-haul and switch locomotives. Because of the increase in the size of new locomotives in recent years, that pattern cannot be sustained by the railroad industry, as today's 4000+ hp (3000+ kW) locomotives are poorly suited for switcher duty. Furthermore, although there is still a fairly sizeable legacy fleet of older smaller line-haul locomotives that could find their way into the switcher fleet, essentially the only newly-built switchers put into service over the last two decades have been of radically different design, employing one to three smaller high-speed diesel engines designed for use in nonroad applications. We are establishing new standards and special certification provisions for newly-built and remanufactured switch locomotives that take these factors into account.

Locomotives spend a substantial amount of time idling, during which they emit harmful pollutants, consume fuel, create noise, and increase maintenance costs. We are requiring that idle controls, such as Automatic Engine Stop/Start Systems (AESS), be included on all newly-built Tier 3 and Tier 4 locomotives. We also are requiring that they be installed on all existing locomotives that are subject to the new remanufactured engine standards, at the point of first remanufacture under the standards, unless already equipped with idle controls. Additional idle emissions control beyond AESS is encouraged in our program by factoring it into the certification test program.

(2) Marine Engine Emission Standards

We are setting emissions standards for newly-built and remanufactured marine diesel engines with displacements up to 30 liters per cylinder (referred to as Category 1 and 2, or C1 and C2, engines). Newly-built engines subject to the new standards include those used in commercial, recreational, and auxiliary power applications, and those below 37 kW (50 hp) that were previously regulated in our nonroad diesel program.

The new marine diesel engine standards include stringent engine-based Tier 3 standards for newly-built marine diesel engines that phase in beginning in 2009. These are followed by aftertreatment-based Tier 4 standards for engines above 600 kW (800 hp) that phase in beginning in 2014. The specific levels and implementation dates for the Tier 3 and Tier 4 standards vary by engine size and power. This yields an array of emission standards levels and start dates that help ensure the most stringent standards feasible at the earliest possible time for each group of newly-built marine engines, while helping engine and vessel manufacturers implement the program in a manner that minimizes their costs for emission reductions. The new standards and implementation schedules, as well as their technological feasibility, are described in detail in section III of this preamble.

We are also adopting standards to address the considerable impact of emissions from large marine diesel engines installed in vessels in the existing fleet. These standards apply to commercial marine diesel engines above 600 kW when these engines are remanufactured, and take effect as soon as certified remanufacture systems are available. The final requirements are different from the programmatic alternative on which we sought comment in that there is no mandatory date by which marine remanufacture systems must be made available. However, systems for the larger Category 2 marine diesel engines are expected to become available at the same time as the locomotive remanufacture systems for similar engines, as early as 2008, because Category 2 marine diesel engines are often derived from locomotive engines. This new marine remanufacture program is described in more detail in section III.B(2)(b). We intend to revisit this program in the future to evaluate the extent to which remanufacture systems are being introduced into the market without a mandatory requirement, and to determine if the program should be extended to small commercial and recreational engines as well.

Taken together, the program elements described above constitute a comprehensive program that addresses the problems caused by locomotive and marine diesel emissions from both a near-term and long-term perspective. It does this while providing for an orderly and cost-effective implementation schedule for the railroads, vessel owners, manufacturers, and remanufacturers.

B. Why Is EPA Taking This Action?

(1) Locomotives and Marine Diesels Contribute to Serious Air Pollution Problems

As we discuss extensively in both the proposal and today's action, EPA strongly believes it is appropriate to take steps now to reduce future emissions from locomotive and marine diesel engines. Emissions from these engines generate significant emissions of $PM_{2.5}$ and NO_X that contribute to nonattainment of the National Ambient Air Quality Standards for $PM_{2.5}$ and ozone. NO_X is a key precursor to ozone and secondary PM formation. These engines also emit hazardous air pollutants or air toxics, which are associated with serious adverse health effects. Finally, emissions from locomotive and marine diesel engines cause harm to public welfare, including contributing to visibility impairment and other harmful environmental impacts across the U.S.

The health and environmental effects associated with these emissions are a classic example of a negative externality (an activity that imposes uncompensated costs on others). With a negative externality, an activity's social cost (the cost borne to society imposed as a result of the activity taking place) exceeds its private cost (the cost to those directly engaged in the activity). In this case, as described below and in section

II, emissions from locomotives and marine diesel engines and vessels impose public health and environmental costs on society. However, these added costs are not reflected in the costs of those using these engines and equipment. The current market and regulatory scheme do not correct this externality because firms in the market are rewarded for minimizing their production costs, including the costs of pollution control, and do not benefit from reductions in emissions. In addition, firms that may take steps to use equipment that reduces air pollution may find themselves at a competitive disadvantage compared to firms that do not. The emission standards that EPA is finalizing help address this market failure and reduce the negative externality from these emissions by providing a regulatory incentive for engine and locomotive manufacturers to produce engines and locomotives that emit fewer harmful pollutants and for railroads and vessel builders and owners to use those cleaner engines.

Emissions from locomotive and marine diesel engines account for substantial portions of the country's current ambient $PM_{2.5}$ and NO_X levels. We estimate that today these engines account for about 20 percent of mobile source NO_X emissions and about 25 percent of mobile source diesel $PM_{2.5}$ emissions. Under this rulemaking, by 2030, NO_X emissions from these diesel engines will be reduced annually by 800,000 tons and $PM_{2.5}$ emissions by 27,000 tons, and these reductions will grow beyond 2030 as fleet turnover to the cleanest engines continues.

EPA has already taken steps to bring emissions levels from highway and nonroad diesel vehicles and engines to very low levels over the next decade, while the per horsepower-hour emission levels for locomotive and marine diesel engines remain at much higher levels—comparable to the emissions for highway trucks in the early 1990s.

Both ozone and $PM_{2.5}$ contribute to serious public health problems, including premature mortality, aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions and emergency room visits, school absences, loss work days, and restricted activity days), changes in lung function and increased respiratory symptoms, altered respiratory defense mechanisms, and chronic bronchitis. Diesel exhaust is of special public health concern, and since 2002 EPA has classified exposure to diesel exhaust as likely to be carcinogenic to humans by inhalation from environmental exposures.[4] Recent studies are showing that populations living near large diesel emission sources such as major roadways, rail yards, and marine ports are likely to experience greater diesel exhaust exposure levels than the overall U.S. population, putting them at greater health risks.[5, 6]

EPA recently conducted an initial screening-level analysis [7] of selected marine port areas and rail yards to better understand the populations that are exposed to diesel particulate matter (DPM) emissions from these facilities.[8, 9] This screening-level analysis focused on a representative selection of national marine ports and rail yards.[10] Of the 47 marine ports and 37 rail yards selected, the results indicate that at least 13 million people, including a disproportionate number of low-income households, African-Americans, and Hispanics, living in the vicinity of these facilities, are being exposed to ambient DPM levels that are 2.0 $\mu g/m^3$ and 0.2 $\mu g/m^3$ above levels found in areas further from these facilities. Because those populations exposed to DPM emissions from marine ports and rail yards are more likely to be low-income and minority residents, these populations will benefit from the controls being finalized in this action. The detailed findings of this study are available in the public docket for this rulemaking.

Today, millions of Americans continue to live in areas that do not meet existing air quality standards. Currently, ozone concentrations exceeding the 8-hour ozone NAAQS occur over wide geographic areas, including most of the nation's major population centers. As of October 10, 2007, approximately 88 million people live in 39 designated areas (which include all or part of 208 counties) that either do not meet the current $PM_{2.5}$ NAAQS or contribute to violations in other counties, and 144 million people live in 81 areas (which include all or part of 368 counties) designated as not in attainment for the 8-hour ozone NAAQS. These numbers do not include the people living in areas where there is a significant future risk of failing to maintain or achieve either the current or future $PM_{2.5}$ or ozone NAAQS.

In addition to public health impacts, there are public welfare and environmental impacts associated with ozone and $PM_{2.5}$ emissions. Ozone causes damage to vegetation which leads to crop and forestry economic losses, as well as harm to national parks, wilderness areas, and other natural systems. NO_X and direct emissions of $PM_{2.5}$ can contribute to the impairment of visibility in many parts of the U.S., where people live, work, and recreate, including national parks, wilderness areas, and mandatory class I federal areas. The deposition of airborne particles can also reduce the aesthetic appeal of buildings and culturally important objects through soiling and can contribute directly (or in conjunction with other pollutants) to structural damage by means of corrosion or erosion. Finally, NO_X emissions from diesel engines contribute to the acidification, nitrification, and eutrophication of water bodies.

While EPA has already adopted many emission control programs that are expected to reduce ambient ozone and $PM_{2.5}$ levels, including the Clean Air Interstate Rule (CAIR) (70 FR 25162, May 12, 2005) and the Clean Air

[4] U.S. EPA (2002) Health Assessment Document for Diesel Engine Exhaust. EPA/600/8–90/057F. Office of Research and Development, Washington DC. This document is available electronically at *http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060*.

[5] Kinnee, E.J.; Touman, J.S.; Mason, R.; Thurman, J.; Beidler, A.; Bailey, C.; Cook, R. (2004) Allocation of onroad mobile emissions to road segments for air toxics modeling in an urban area. Transport. Res. Part D 9: 139–150.

[6] State of California Air Resources Board. Roseville Rail Yard Study. Stationary Source Division, October 14, 2004. This document is available electronically at: *http://www.arb.ca.gov/diesel/documents/rrstudy.htm* and State of California Air Resources Board. Diesel Particulate Matter Exposure Assessment Study for the Ports of Los Angeles and Long Beach, April 2006. This document is available electronically at: *http://www.arb.ca.gov/regact/marine2005/portstudy0406.pdf*.

[7] This type of screening-level analysis is an inexact tool and not appropriate for regulatory decisionmaking; it is useful in beginning to understand potential impacts and for illustrative purposes. Additionally, the emissions inventories used as inputs for the analyses are not official estimates and likely underestimate overall emissions because they are not inclusive of all emission sources at the individual ports in the sample. For example, most inventories included emissions from ocean-going vessels (powered by Category 3 engines), as well as some commercial vessel categories, including harbor crafts, (powered by Category 1 and 2 engines), cargo handling equipment, locomotives, and heavy-duty vehicles. This final rule will not address emissions from ocean-going vessels, cargo handling equipment or heavy-duty vehicles.

[8] ICF International. September 28, 2007. Estimation of diesel particulate matter concentration isopleths for marine harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[9] ICF International. September 28, 2007. Estimation of diesel particulate matter population exposure near selected harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[10] The Agency selected a representative sample of the top 150 U.S. ports including coastal, inland, and Great Lake ports. In selecting a sample of rail yards the Agency identified a subset from the hundreds of rail yards operated by Class I Railroads.

Nonroad Diesel Rule (69 FR 38957, June 29, 2004), the Heavy Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (66 FR 5002, Jan. 18, 2001), and the Tier 2 Vehicle and Gasoline Sulfur Program (65 FR 6698, Feb. 10, 2000), the additional $PM_{2.5}$ and NO_X emission reductions resulting from this rule will assist states in attaining and maintaining the Ozone and the $PM_{2.5}$ NAAQS both near term and in the decades to come.

In September 2006, EPA finalized revised $PM_{2.5}$ NAAQS standards and over the next few years the EPA will undergo the process of designating areas that do not meet this new standard. EPA modeling, conducted as part of finalizing the revised NAAQS, projects that in 2015 up to 52 counties with 53 million people may violate either the daily or annual standards for $PM_{2.5}$ (or both), while an additional 27 million people in 54 counties may live in areas that have air quality measurements within 10 percent of the revised NAAQS. Even in 2020 up to 48 counties, with 54 million people, may still not be able to meet the revised $PM_{2.5}$ NAAQS and an additional 25 million people, living in 50 counties, are projected to have air quality measurements within 10 percent of the revised standards. The locomotive and marine diesel $PM_{2.5}$ reductions resulting from this rulemaking are needed by a number of states to both attain and maintain the revised $PM_{2.5}$ NAAQS.

State and local governments continue working to protect the health of their citizens and comply with requirements of the Clean Air Act (CAA or ''the Act''). As part of this effort they recognize the need to secure additional major reductions in both diesel $PM_{2.5}$ and NO_X emissions by undertaking numerous state-level actions.[11] However, they have also urged Agency action to finalize a strong locomotive and marine diesel engine program that will provide crucial emission reductions both in the near and long-term.

The federal program finalized today results in earlier and significantly greater NO_X and PM reductions from the locomotive and marine sector than the proposed program because of the first-ever national standards for remanufactured marine engines and the starting of Tier 4 NO_X requirements for line-haul locomotives and for 2000–3700 kW (2760–4900 hp) marine engines two years earlier than proposed. These changes reflect important cooperative efforts by the regulated industry to implement cleaner technology as early as possible. While the program finalized today will help many states and communities achieve cleaner air, for some areas, such as the South Coast of California, the reductions achieved through this rule will not alone enable them to meet their near-term ozone and PM air quality goals. This was also the case for our 1998 locomotive rulemaking, where the State of California worked with Class I railroads operating in southern California to develop a Memoranda of Understanding (MOU) ensuring that the cleanest technologies enabled by federal rules were expeditiously introduced in areas of California with greatest air quality improvement needs. EPA continues to support California's efforts to reconcile likely future growth in the locomotive and marine sector with the public health protection needs of the area, and today's final rule includes provisions which are well-suited to encouraging early deployment of cleaner technologies through the development of similar programs.

In addition to these new standards, EPA has a number of voluntary programs that help enable government, industry, and local communities to address challenging air quality problems. The EPA SmartWay program has worked with railroads to encourage them to reduce unnecessary locomotive idling and will continue to promote the use of innovative idle reduction technologies that can substantially reduce locomotive emissions while reducing fuel consumption. EPA's National Clean Diesel Campaign, through its Clean Ports USA program is working with port authorities, terminal operators, and trucking and rail companies to promote cleaner diesel technologies and emission reduction strategies through education, incentives, and financial assistance. Part of these efforts involves voluntary retrofit programs that can further reduce emissions from the existing fleet of diesel engines. Finally, EPA is implementing a new Sustainable Ports Strategy which will allow EPA to partner with ports, business partners, communities and other stakeholders to become world leaders in sustainability, including achieving cleaner air. This new strategy builds on the success of collaborative work EPA has been doing in partnership with the American Association of Port Authorities (AAPA), and through port related efforts of Clean Ports USA, SmartWay, EPA's Regional Diesel Collaboratives and other programs. Together these approaches augment the regulations being finalized today, helping states and communities achieve larger reductions sooner in the areas of our country that need them the most.

(2) Advanced Technologies Can Be Applied

Air pollution from locomotive and marine diesel exhaust is a challenging problem. However, we believe it can be addressed effectively through a combination of engine-out emission reduction technologies and high-efficiency catalytic aftertreatment technologies. As discussed in greater detail in section III.C, the development of these aftertreatment technologies for highway and nonroad diesel applications has advanced rapidly in recent years, so that new engines can achieve very large emission reductions in PM and NO_X (in excess of 90 and 80 percent, respectively).

High-efficiency PM control technologies are being broadly used in many parts of the world and are being used domestically to comply with EPA's heavy-duty truck standards that started taking effect in the 2007 model year. These technologies are highly durable and robust in use and have proved extremely effective in reducing exhaust hydrocarbon (HC) and carbon monoxide emissions.

Control of NO_X emissions from locomotive and marine diesel engines can also be achieved with high-efficiency exhaust emission control technologies. Such technologies are expected to be used to meet the stringent NO_X standards included in EPA's heavy-duty highway diesel and nonroad Tier 4 programs and have been in production for heavy-duty trucks in Europe since 2005 and in many stationary source applications throughout the world.

Section III.C discusses additional engineering challenges in applying these technologies to newly-built locomotive and marine engines, as well as the development steps that we expect to be taken to resolve the challenges. With the lead time available and the assurance of ULSD for the locomotive and marine sectors in 2012, as provided by our 2004 final rule for nonroad engines and fuel, we are confident the application of advanced technology to locomotives and marine diesel engines will proceed at a reasonable rate of progress and will result in systems

[11] Two examples of state and local actions are: California Air Resources Board (2006). Emission Reduction Plan for Ports and Goods Movements (April 2006), Available electronically at *www.arb.ca.gov/gmp/docs/finalgmpplan090905.pdf*; Connecticut Department of Environmental Protection (2006). Connecticut's Clean Diesel Plan (January 2006). See *http://www.dep.state.ct.us/air2/diesel/index.htm* for description of initiative.

capable of achieving the new standards on time.

(3) Basis for Action Under the Clean Air Act

Authority for the actions promulgated in this document is granted to the EPA by sections 114, 203, 205, 206, 207, 208, 213, 216, and 301(a) of the Clean Air Act as amended in 1990 (42 U.S.C. 7414, 7522, 7524, 7525, 7541, 7542, 7547, 7550 and 7601(a)).

Authority to Set Standards. EPA is promulgating emissions standards for new marine diesel engines pursuant to its authority under section 213(a)(3) and (4) of the CAA. EPA is promulgating emission standards for new locomotives and new engines used in locomotives pursuant to its authority under section 213(a)(5) of the CAA.

EPA has previously determined that certain existing locomotive engines, when they are remanufactured, are returned to as-new condition and are expected to have the same performance, durability, and reliability as freshly-manufactured locomotive engines. Consequently we set emission standards for these remanufactured engines that apply at the time of remanufacture (defined as ''to replace, or inspect and qualify, each and every power assembly of a locomotive or locomotive engine, whether during a single maintenance event or cumulatively within a five-year period * * *'' (see 61 FR 53102, October 4, 1996; 40 CFR 92.2). In this action we are adopting new tiers of standards for both freshly manufactured and remanufactured locomotives and locomotive engines.

In the proposal for this rulemaking we also discussed applying a similar approach to marine diesel engines. Many marine diesel engines, particularly those above 600 kW (800 hp), periodically undergo a maintenance process that returns them to as-new condition. A full rebuild that brings an engine back to as-new condition includes a complete overhaul of the engine, including piston, rings, liners, turbocharger, heads, bearings, and geartrain/camshaft removal and replacement. Engine manufacturers typically provide instructions for such a full rebuild. Marine diesel engine owners complete this process to maintain engine reliability, durability, and performance over the life of their vessel, and to avoid the need to repower (replace the engine) before their vessel wears out. A commercial marine vessel can be in operation in excess of 40 years, which means that a marine diesel engine may be remanufactured to as-new condition three or more times before the vessel is scrapped.

Because these remanufactured engines are returned to as-new condition, section 213(a)(3) and (4) give EPA the authority to set emission standards for those engines. We are adopting requirements for remanufactured marine diesel engines, described in section III.B(2)(b) of this action. For the purpose of this program, we are defining remanufacture as the replacement of all cylinder liners, either in one maintenance event or over the course of five years (for the purpose of this program, ''replacement'' includes the removing, inspecting and requalifying a liner). While replacement of cylinder liners is only one element of a full rebuild, it is common to all rebuilds. Marine diesel engines that do not have their cylinder liners replaced all at once or within a five-year period, or that do not perform cylinder liner replacement at all, are not considered to be returned to as-new condition and therefore are not considered to be remanufactured. Those engines will not be subject to the marine remanufacture requirements.

Pollutants That Can Be Regulated. CAA section 213(a)(3) directs the Administrator to set NO_X, volatile organic compounds (VOCs), or carbon monoxide standards for classes or categories of engines such as marine diesel engines that contribute to ozone or carbon monoxide concentrations in more than one nonattainment area. These ''standards shall achieve the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the engines or vehicles, giving appropriate consideration to cost, lead time, noise, energy, and safety factors associated with the application of such technology.''

CAA section 213(a)(4) authorizes the Administrator to establish standards to control emissions of pollutants which ''may reasonably be anticipated to endanger public health and welfare'' where the Administrator determines, as it has done for emissions of PM, that nonroad engines as a whole contribute significantly to such air pollution. The Administrator may promulgate regulations that are deemed appropriate, taking into account costs, noise, safety, and energy factors, for classes or categories of new nonroad vehicles and engines which cause or contribute to such air pollution.

Level of the Standards. CAA section 213(a)(5) directs EPA to adopt emission standards for new locomotives and new engines used in locomotives that achieve the ''greatest degree of emissions reductions achievable through the use of technology that the Administrator determines will be available for such vehicles and engines, taking into account the cost of applying such technology within the available time period, the noise, energy, and safety factors associated with the applications of such technology.'' Section 213(a)(5) does not require any review of the contribution of locomotive emissions to pollution, though EPA does provide such information in this rulemaking. As described in section III of this preamble and in chapter 4 of the final Regulatory Impact Analysis (RIA), EPA has evaluated the available information to determine the technology that will be available for locomotives and engines subject to EPA standards.

Certification and Implementation. EPA is also acting under its authority to implement and enforce both the marine diesel emission standards and the locomotive emission standards. Section 213(d) provides that the standards EPA adopts for both new locomotive and marine diesel engines ''shall be subject to sections 206, 207, 208, and 209'' of the Clean Air Act, with such modifications that the Administrator deems appropriate to the regulations implementing these sections. In addition, the locomotive and marine standards ''shall be enforced in the same manner as [motor vehicle] standards prescribed under section 202'' of the Act. Section 213(d) also grants EPA authority to promulgate or revise regulations as necessary to determine compliance with, and enforce, standards adopted under section 213.

Technological Feasibility and Cost of Standards. The evidence provided in section III.C of this Preamble and in chapter 4 of the RIA indicates that the stringent emission standards we are setting today for newly-built and remanufactured locomotive and marine diesel engines are feasible and reflect the greatest degree of emission reduction achievable through the use of technology that will be available in the model years to which they apply. We have given appropriate consideration to costs in setting these standards. Our review of the costs and cost-effectiveness of these standards indicate that they will be reasonable and comparable to the cost-effectiveness of other emission reduction strategies that EPA has required in prior rulemakings. We have also reviewed and given appropriate consideration to the energy factors of this rule in terms of fuel efficiency as well as any safety and noise factors associated with these standards.

Health and Environmental Need for the Standards. The information in

section II of this Preamble and chapter 2 of the RIA regarding air quality and public health impacts provides strong evidence that emissions from marine diesel engines and locomotives significantly and adversely impact public health or welfare. EPA has already found in previous rules that emissions from new marine diesel engines contribute to ozone and carbon monoxide concentrations in more than one area which has failed to attain the ozone and carbon monoxide NAAQS (64 FR 73300, December 29, 1999). EPA has also previously determined that it is appropriate to establish PM standards for marine diesel engines under section 213(a)(4), and the additional information on the carcinogenicity of exposure to diesel exhaust noted above reinforces this finding. In addition, we have already found that emissions from nonroad engines as a whole significantly contribute to air pollution that may reasonably be anticipated to endanger public welfare due to regional haze and visibility impairment (67 FR 68241, Nov. 8, 2002). We find here, based on the information in the NPRM and in section II of this preamble and Chapters 2 and 3 of the final RIA, that emissions from the new marine diesel engines likewise contribute to regional haze and to visibility impairment.

The PM and NO_X emission reductions resulting from these standards are important to states' efforts in attaining and maintaining the ozone and the $PM_{2.5}$ NAAQS in the near term and in the decades to come. As noted above, the risk to human health and welfare will be significantly reduced by the standards finalized in today's action.

II. Air Quality and Health Impacts

The locomotive and marine diesel engines subject to this final rule generate significant emissions of particulate matter (PM) and nitrogen oxides (NO_X) that contribute to nonattainment of the National Ambient Air Quality Standards (NAAQS) for $PM_{2.5}$ and ozone. These engines also emit hazardous air pollutants or air toxics that are associated with serious adverse health effects and contribute to visibility impairment and other harmful environmental impacts across the U.S.

By 2030, these standards are expected to reduce annual locomotive and marine diesel engine $PM_{2.5}$ emissions by 27,000 tons; NO_X emissions by 800,000 tons; and volatile organic compound (VOC) emissions by 43,000 tons as well as reducing carbon monoxide (CO) and toxic compounds known as air toxics.[12]

We project that reductions of $PM_{2.5}$, NO_X, and VOC emissions from locomotive and marine diesel engines will produce nationwide air quality improvements. According to air quality modeling performed in conjunction with this rule, all 39 current $PM_{2.5}$ nonattainment areas will experience a decrease in their projected 2030 design values. Likewise the 133 mandatory class I federal areas that EPA modeled will all see improvements in their visibility. This rule will also result in nationwide ozone benefits. In 2030, 573 counties (of 579 that have monitored data) experience at least a 0.1 ppb decrease in their ozone design values.

A. Overview

From a public health perspective, we are concerned with locomotive and marine diesel engines' contributions to atmospheric levels of particulate matter in general, diesel $PM_{2.5}$ in particular, various gaseous air toxics, and ozone. Today, locomotive and marine diesel engine emissions represent a substantial portion of the U.S. mobile source diesel $PM_{2.5}$ and NO_X inventories, approximately 20 percent of mobile source NO_X and 25 percent of mobile source diesel $PM_{2.5}$. Over time, the relative contribution of these diesel engines to air quality problems is expected to increase as the emission contribution from other mobile sources decreases and the usage of locomotives and marine vessels increases. By 2030, without the additional emissions controls finalized in today's rule, locomotive and marine diesel engines will emit about 65 percent of the total mobile source diesel $PM_{2.5}$ emissions and 35 percent of the total mobile source NO_X emissions.

Based on the most recent data available for this rule, air quality problems continue to persist over a wide geographic area of the United States. As of October 10, 2007 there are approximately 88 million people living in 39 designated areas (which include all or part of 208 counties) that either do not meet the current $PM_{2.5}$ NAAQS or contribute to violations in other counties, and 144 million people living in 81 areas (which include all or part of 366 counties) designated as not in attainment for the 8-hour ozone NAAQS. These numbers do not include the people living in areas where there is a significant future risk of failing to maintain or achieve either the current or future $PM_{2.5}$ or ozone NAAQS. Figure II–1 illustrates the widespread nature of these problems. This figure depicts counties which are currently designated nonattainment for either or both the 8-hour ozone NAAQS and $PM_{2.5}$ NAAQS. It also shows the location of mandatory class I federal areas for visibility.

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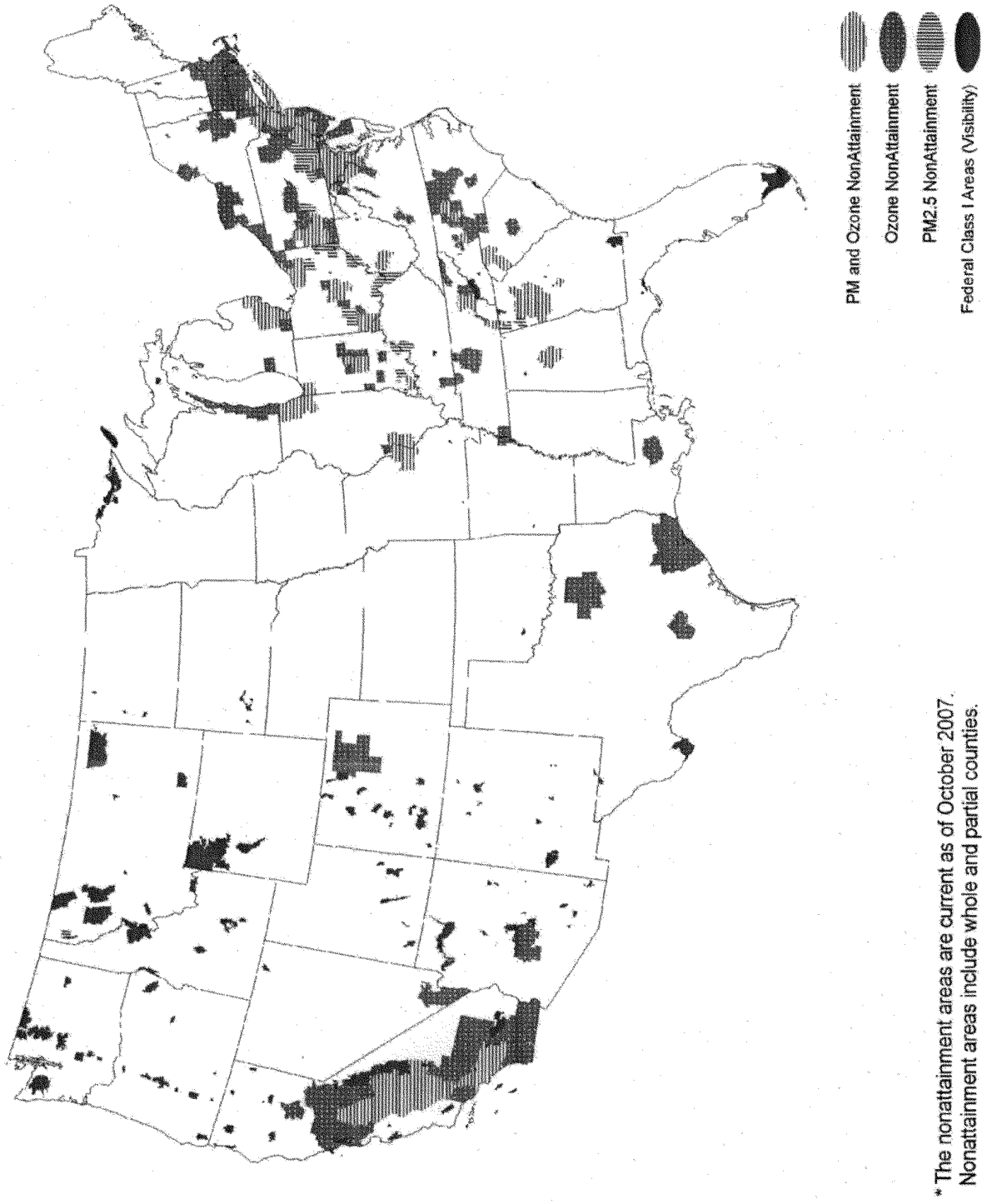
[12] Nationwide locomotive and marine diesel engines comprise approximately 3 percent of the nonroad mobile sources hydrocarbon inventory. EPA National Air Quality and Emissions Trends Report 1999. March 2001, Document Number: EPA 454/R–0–004. This document is available in Docket EPA–HQ–OAR–2003–0190. This document is available electronically at: *http://www.epa.gov/air/airtrends/aqtrnd99/*.

Figure II-1 Air Quality Problems are Widespread



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The engine standards finalized in this rule will help reduce emissions of PM, NO_X, VOCs, CO, and air toxics and their associated health and environmental effects. Emissions from locomotives and diesel marine engines contribute to PM and ozone concentrations in many, if not all, of these nonattainment areas.[13] The engine standards being finalized today will become effective as early as 2008, making the expected $PM_{2.5}$, NO_X, and VOC inventory reductions from this rulemaking critical to a number of states as they seek to either attain or maintain the current $PM_{2.5}$ or ozone NAAQS.

Beyond the impact locomotive and marine diesel engines have on our nation's ambient air quality the diesel exhaust emissions from these engines are also of particular concern since exposure to diesel exhaust is classified as likely to be carcinogenic to humans by inhalation from environmental levels of exposure.[14] Many people spend a large portion of time in or near areas of concentrated locomotive or marine diesel emissions, near rail yards, marine ports, railways, and waterways. Recent studies show that populations living near large diesel emission sources such as major roadways,[15] rail yards [16] and marine ports [17] are likely to experience greater diesel exhaust exposure levels than the overall U.S. population, putting them at a greater health risk.

EPA recently conducted an initial screening-level analysis [18] of selected marine port areas and rail yards to better understand the populations that are exposed to diesel particulate matter (DPM) emissions from these facilities.[19, 20] This screening-level analysis focused on a representative selection of national marine ports and rail yards.[21] Of the 47 marine ports and 37 rail yards selected, the results indicate that at least 13 million people, including a disproportionate number of low-income households, African-Americans, and Hispanics, living in the vicinity of these facilities, are being exposed to ambient DPM levels that are 2.0 $\mu g/m^3$ and 0.2 $\mu g/m^3$ above levels found in areas further from these facilities. Because those populations exposed to DPM emissions from marine ports and rail yards are more likely to be low-income and minority residents, these populations will benefit from the controls being finalized in this action. The detailed findings of this study are available in the public docket for this rulemaking.

In the following sections we review important public health effects linked to pollutants emitted from locomotive and marine diesel engines. First, the human health effects caused by the pollutants and their current and projected ambient levels are discussed. Following the discussion of health effects, the modeled air quality benefits resulting from this action and the welfare effects associated with emissions from diesel engines are presented. Finally, the locomotive and marine engine emission inventories for the primary pollutants affected by this rule are provided. In summary, the emission reductions from this rule will contribute to controlling the health and welfare problems associated with ambient PM and ozone levels and with diesel-related air toxics.

Taken together, the materials in this section and in the proposal describe the need for tightened emission standards for both locomotive and marine diesel engines and the air quality and public health benefits resulting from this program. This section is not an exhaustive treatment of these issues. For a fuller understanding of the topics treated here, you should refer to the extended presentations in Chapter 2, 3 and 5 of the Regulatory Impact Analysis (RIA) accompanying this final rule.

B. Public Health Impacts

(1) Particulate Matter

The locomotive and marine engine standards detailed in this action will result in significant reductions in primary (directly emitted) $PM_{2.5}$ emissions. In addition, the standards finalized today will reduce emissions of NO_X and VOCs, which contribute to the formation of secondary $PM_{2.5}$. Locomotive and marine diesel engines emit high levels of NO_X, which react in the atmosphere to form secondary $PM_{2.5}$ (namely ammonium nitrate). These engines also emit SO_2 and VOC, which react in the atmosphere to form secondary $PM_{2.5}$ composed of sulfates and organic carbonaceous $PM_{2.5}$. This rule will reduce both primary and secondary PM.

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[13] See section II.B.(1)(c) and II.B.(2)(c) for a summary of the impact emission reductions from locomotive and marine diesel engines will have on air quality in current $PM_{2.5}$ and ozone nonattainment areas.

[14] U.S. EPA (2002) Health Assessment Document for Diesel Engine Exhaust. EPA/600/8–90/057F. Office of Research and Development, Washington, DC. This document is available in Docket EPA–HQ–OAR–2003–0190. This document is available electronically at *http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060*.

[15] Kinnee, E.J.; Touma, J.S.: Mason, R.; Thurman, J.; Beidler, A.; Bailey, C.; Cook, R. (2004) Allocation of onroad mobile emissions to road segments for air toxics modeling in an urban area. Transport. Res. Part D 9:139–150; also see Cohen, J.; Cook, R; Bailey, C.R.; Carr, E. (2005) Relationship between motor vehicle emissions of hazardous pollutants, roadway proximity, and ambient concentrations in Portland, Oregon. Environ. Modeling & Software 20: 7–12.

[16] Hand, R.; Di, P; Servin, A.; Hunsaker, L.; Suer, C. (2004) Roseville Rail Yard Study. California Air Resources Board. This document is available in Docket EPA–HQ–OAR–2003–0190. [Online at *http://www.arb.ca.gov/diesel/documents/rrstudy.htm*].

[17] Di P.; Servin, A.; Rosenkranz, K.; Schwehr, B.; Tran, H. (April 2006); Diesel Particulate Matter Exposure Assessment Study for the Ports of Los Angeles and Long Beach. State of California Air Resources Board.

[18] This type of screening-level analysis is an inexact tool and not appropriate for regulatory decision-making; it is useful in beginning to understand potential impacts and for illustrative purposes. Additionally, the emissions inventories used as inputs for the analyses are not official estimates and likely underestimate overall emissions because they are not inclusive of all emission sources at the individual ports in the sample. For example, most inventories included emissions from ocean-going vessels (powered by Category 3 engines), as well as some commercial vessel categories, including harbor crafts (powered by Category 1 and 2 engines), cargo handling equipment, locomotives, and heavy-duty vehicles. This final rule will not address emissions from ocean-going vessels, cargo handling equipment or heavy-duty vehicles.

[19] ICF International. September 28, 2007. Estimation of diesel particulate matter concentration isopleths for marine harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[20] ICF International. September 28, 2007. Estimation of diesel particulate matter population exposure near selected harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[21] The Agency selected a representative sample of the top 150 U.S. ports including coastal, inland and Great Lake ports. In selecting a sample of rail yards the Agency identified a subset from the hundreds of rail yards operated by Class I Railroads.

(a) Background

Particulate matter (PM) represents a broad class of chemically and physically diverse substances. It can be principally characterized as discrete particles that exist in the condensed (liquid or solid) phase spanning several orders of magnitude in size. PM is further described by breaking it down into size fractions. PM_{10} refers to particles generally less than or equal to 10 micrometers (μm) in diameter. $PM_{2.5}$ refers to fine particles, generally less than or equal to 2.5 μm in diameter. Inhalable (or ''thoracic'') coarse particles refer to those particles generally greater than 2.5 μm but less than or equal to 10 μm in diameter. Ultrafine PM refers to particles less than 100 nanometers (0.1 μm) in diameter. Larger particles tend to be removed by the respiratory clearance mechanisms (e.g. coughing), whereas smaller particles are deposited deeper in the lungs.

Fine particles are produced primarily by combustion processes and by transformations of gaseous emissions (e.g., SO_x, NO_X and VOC) in the atmosphere. The chemical and physical properties of $PM_{2.5}$ may vary greatly with time, region, meteorology, and source category. Thus, $PM_{2.5}$ may include a complex mixture of different pollutants including sulfates, nitrates, organic compounds, elemental carbon and metal compounds. These particles can remain in the atmosphere for days to weeks and travel hundreds to thousands of kilometers.

The primary $PM_{2.5}$ NAAQS includes a short-term (24-hour) and a long-term (annual) standard. The 1997 $PM_{2.5}$ NAAQS established by EPA set the 24-hour standard at a level of 65 $\mu g/m^3$ based on the 98th percentile concentration averaged over three years. The annual standard specifies an expected annual arithmetic mean not to exceed 15 $\mu g/m^3$ averaged over three years.

EPA has recently amended the NAAQS for $PM_{2.5}$ (71 FR 61144, October 17, 2006). The final rule, signed on September 21, 2006, addressed revisions to the primary and secondary NAAQS for PM to provide increased protection of public health and welfare, respectively. The level of the 24-hour $PM_{2.5}$ NAAQS was revised from 65 $\mu g/m^3$ to 35 $\mu g/m^3$ and the level of the annual $PM_{2.5}$ NAAQS was retained at 15 $\mu g/m^3$. With regard to the secondary standards for $PM_{2.5}$, EPA has revised these standards to be identical in all respects to the revised primary standards.

(b) Health Effects of $PM_{2.5}$

Scientific studies show ambient PM is associated with a series of adverse health effects. These health effects are discussed in detail in the 2004 EPA Particulate Matter Air Quality Criteria Document (PM AQCD), and the 2005 PM Staff Paper.[22, 23] Further discussion of health effects associated with PM can also be found in the RIA for this rule.

Health effects associated with short-term exposures (hours to days) to ambient PM include premature mortality, increased hospital admissions, heart and lung diseases, increased cough, adverse lower-respiratory symptoms, decrements in lung function and changes in heart rate rhythm and other cardiac effects. Studies examining populations exposed to different levels of air pollution over a number of years, including the Harvard Six Cities Study and the American Cancer Society Study, show associations between long-term exposure to ambient $PM_{2.5}$ and both total and cardiovascular and respiratory mortality.[24] In addition, a reanalysis of the American Cancer Society Study shows an association between fine particle and sulfate concentrations and lung cancer mortality.[25]

The health effects of $PM_{2.5}$ have been further documented in local impact studies which have focused on health effects due to $PM_{2.5}$ exposures measured on or near roadways. These studies take into account all air pollution sources, including both spark-ignition (gasoline) and diesel powered vehicles, and indicate that exposure to $PM_{2.5}$ emissions near roadways, which are dominated by mobile sources, are associated with potentially serious health effects. For instance, a recent study found associations between concentrations of cardiac risk factors in the blood of healthy young police officers and $PM_{2.5}$ concentrations measured in vehicles.[26] Also, a number of studies have shown associations between residential or school outdoor concentrations of some fine particle constituents that are found in motor vehicle exhaust, and adverse respiratory outcomes, including asthma prevalence in children who live near major roadways.[27, 28, 29] Although the engines considered in this rule differ from those in these studies with respect to their applications and fuel qualities, these studies provide an indication of the types of health effects that might be expected to be associated with personal exposure to $PM_{2.5}$ emissions from large marine diesel and locomotive engines.

Recent new studies from the State of California provide evidence that $PM_{2.5}$ emissions within marine ports and rail yards can contribute significantly to elevated ambient concentrations near these sources.[30, 31] A substantial number of people experience exposure to locomotive and marine diesel engine emissions, raising potential health concerns. The controls finalized in this action will help reduce exposure to $PM_{2.5}$, specifically exposure to marine port and rail yard related diesel $PM_{2.5}$ sources. Additional information on marine port and rail yard emissions and ambient exposures can be found in Chapter 2 of the RIA.

(c) Current and Projected $PM_{2.5}$ Levels

[22] U.S. EPA (2004) Air Quality Criteria for Particulate Matter (Oct 2004), Volume I Document No. EPA600/P–99/002aF and Volume II Document No. EPA600/P–99/002bF. This document is available in Docket EPA–HQ–OAR–2003–0190.

[23] U.S. EPA (2005) Review of the National Ambient Air Quality Standard for Particulate Matter: Policy Assessment of Scientific and Technical Information, OAQPS Staff Paper. EPA–452/R–05–005. This document is available in Docket EPA–HQ–OAR–2003–0190.

[24] Dockery, DW; Pope, CA III: Xu, X; et al. 1993. An association between air pollution and mortality in six U.S. cities. N Engl J Med 329:1753–1759.

[25] Pope, C. A., III; Burnett, R. T.; Thun, M. J.; Calle, E. E.; Krewski, D.; Ito, K.; Thurston, G. D. (2002) Lung cancer, cardiopulmonary mortality, and long-term exposure to fine particulate air pollution. J. Am. Med. Assoc. 287:1132–1141.

[26] Riediker, M.; Cascio, W.E.; Griggs, T.R.; et al. (2004) Particulate matter exposure in cars is associated with cardiovascular effects in healthy young men. Am J Respir Crit Care Med 169: 934–940.

[27] Van Vliet, P.; Knape, M.; de Hartog, J.; Janssen, N.; Harssema, H.; Brunekreef, B. (1997). Motor vehicle exhaust and chronic respiratory symptoms in children living near freeways. Env. Research 74: 122–132.

[28] Brunekreef, B., Janssen, N.A.H.; de Hartog, J.; Harssema, H.; Knape, M.; van Vliet, P. (1997). Air pollution from truck traffic and lung function in children living near roadways. Epidemiology 8:298–303.

[29] Kim, J.J.; Smorodinsky, S.; Lipsett, M.; Singer, B.C.; Hodgson, A.T.; Ostro, B. (2004). Traffic-related air pollution near busy roads: The East Bay children's respiratory health study. Am. J. Respir. Crit. Care Med. 170: 520–526.

[30] State of California Air Resources Board. Roseville Rail Yard Study. Stationary Source Division, October 14, 2004. This document is available in Docket EPA–HQ–OAR–2003–0190. This document is available electronically at: *http://www.arb.ca.gov/diesel/documents/rrstudy.htm.*

[31] State of California Air Resources Board. Diesel Particulate Matter Exposure Assessment Study for the Ports of Los Angeles and Long Beach, April 2006. This document is available in Docket EPA–HQ–OAR–2003–0190. This document is available electronically at: *ftp://ftp.arb.ca.gov/carbis/msprog/offroad/marinevess/documents/portstudy0406.pdf.*

$PM_{2.5}$ concentrations exceeding the level of the $PM_{2.5}$ NAAQS occur in many parts of the country.[32] In 2005 EPA designated 39 nonattainment areas for the 1997 $PM_{2.5}$ NAAQS (70 FR 943, January 5, 2005). These areas are comprised of 208 full or partial counties with a total population exceeding 88 million. The 1997 $PM_{2.5}$ NAAQS was recently revised and the 2006 $PM_{2.5}$ NAAQS became effective on December 18, 2006. Table II–1 presents the number of counties in areas currently designated as nonattainment for the 1997 $PM_{2.5}$ NAAQS as well as the number of additional counties that have monitored data that is violating the 2006 $PM_{2.5}$ NAAQS.

TABLE II–1.—FINE PARTICLE STANDARDS: CURRENT NONATTAINMENT AREAS AND OTHER VIOLATING COUNTIES

Nonattainment areas/other violating counties	Number of counties	Population [a]
1997 $PM_{2.5}$ Standards: 39 areas currently designated	208	88,394,000
2006 $PM_{2.5}$ Standards: counties with violating monitors [b]	49	18,198,676
Total	257	106,595,676

Notes:
(a) Population numbers are from 2000 census data.
(b) This table provides an estimate of the counties violating the 2006 $PM_{2.5}$ NAAQS based on 2003–05 air quality data. The areas designated as nonattainment for the 2006 $PM_{2.5}$ NAAQS will be based on 3 years of air quality data from later years. Also, the county numbers in the summary table includes only the counties with monitors violating the 2006 $PM_{2.5}$ NAAQS. The monitored county violations may be an underestimate of the number of counties and populations that will eventually be included in areas with multiple counties designated nonattainment.

A number of state governments have told EPA that they need the reductions this rule will provide in order to meet and maintain the $PM_{2.5}$ NAAQS. Areas designated as not attaining the 1997 $PM_{2.5}$ NAAQS will need to attain the 1997 standards in the 2010 to 2015 time frame, and then maintain them thereafter. The attainment dates associated with the potential new 2006 $PM_{2.5}$ nonattainment areas are likely to be in the 2015 to 2020 timeframe. The emission standards finalized in this action become effective as early as 2008 making the NO_X, PM, and VOC inventory reductions from this rulemaking useful to states in attaining or maintaining the $PM_{2.5}$ NAAQS.

EPA has already adopted many emission control programs that are expected to reduce ambient $PM_{2.5}$ levels and which will assist in reducing the number of areas that fail to achieve the $PM_{2.5}$ NAAQS. Even so, our air quality modeling for this final rule projects that in 2020, with all current controls but excluding the reductions achieved through this rule, up to 11 counties with a population of 24 million may not attain the current annual $PM_{2.5}$ standard of 15 $\mu g/m^3$. These numbers do not account for additional areas that have air quality measurements within 10 percent of the annual $PM_{2.5}$ standard. These areas, although not violating the standards, will also benefit from the additional reductions from this rule ensuring long-term maintenance of the $PM_{2.5}$ NAAQS.

Air quality modeling performed for this final rule shows that in 2020 and 2030 all 39 current $PM_{2.5}$ nonattainment areas will experience decreases in their $PM_{2.5}$ design values. For areas with current $PM_{2.5}$ design values greater than 15 $\mu g/m^3$ the modeled future-year population weighted $PM_{2.5}$ design values are expected to decrease on average by 0.08 $\mu g/m^3$ in 2020 and by 0.16 $\mu g/m^3$ in 2030. The maximum decrease for future-year $PM_{2.5}$ design values will be 0.38 $\mu g/m^3$ in 2020 and 0.81 $\mu g/m^3$ in 2030. The air quality modeling methodology and the projected reductions are discussed in more detail in Chapter 2 of the RIA.

(2) Ozone

The locomotive and marine engine standards finalized in this action are expected to result in significant reductions of NO_X and VOC emissions. NO_X and VOC contribute to the formation of ground-level ozone pollution or smog. People in many areas across the U.S. continue to be exposed to unhealthy levels of ambient ozone.

(a) Background

Ground-level ozone pollution is typically formed by the reaction of volatile organic compounds (VOC) and nitrogen oxides (NO_X) in the lower atmosphere in the presence of heat and sunlight. These pollutants, often referred to as ozone precursors, are emitted by many types of pollution sources, such as highway and nonroad motor vehicles and engines, power plants, chemical plants, refineries, makers of consumer and commercial products, industrial facilities, and smaller area sources.

The science of ozone formation, transport, and accumulation is complex.[33] Ground-level ozone is produced and destroyed in a cyclical set of chemical reactions, many of which are sensitive to temperature and sunlight. When ambient temperatures and sunlight levels remain high for several days and the air is relatively stagnant, ozone and its precursors can build up and result in more ozone than typically occurs on a single high-temperature day. Ozone can also be transported into an area from pollution sources found hundreds of miles upwind, resulting in elevated ozone levels even in areas with low local VOC or NO_X emissions.

The current ozone NAAQS, established by EPA in 1997, has an 8-hour averaging time. The 8-hour ozone NAAQS is met at an ambient air quality monitoring site when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration over three years is less than or equal to 0.084 ppm. On June 20, 2007, EPA proposed to strengthen the ozone NAAQS, the proposed revisions reflect new scientific evidence about ozone and its effects on people and public welfare.[34] The final

[32] A listing of the $PM_{2.5}$ nonattainment areas is included in the RIA for this rule.

[33] U.S. EPA Air Quality Criteria for Ozone and Related Photochemical Oxidants (Final). U.S. Environmental Protection Agency, Washington, DC, EPA 600/R–05/004aF–cF, 2006. This document is available in Docket EPA–HQ–OAR–2003–0190. This document may be accessed electronically at: *http://www.epa.gov/ttn/naaqs/standards/ozone/s_o3_cr_cd.html*.

[34] EPA proposed to set the 8-hour primary ozone standard to a level within the range of 0.070–0.075 ppm. The agency also requested comments on alternative levels of the 8-hour primary ozone standard, within a range from 0.060 ppm up to and including retention of the current standard (0.084 ppm). EPA also proposed two options for the secondary ozone standard. One option would establish a new form of standard designed specifically to protect sensitive plants from damage caused by repeated ozone exposure throughout the growing season. This cumulative standard would add daily ozone concentrations across a three-month period. EPA proposed to set the level of the cumulative standard within the range of 7 to 21 ppm-hours. The other option would follow the

Continued

ozone NAAQS rule is scheduled for March 2008.

(b) Health Effects of Ozone

The health and welfare effects of ozone are well documented and are assessed in EPA's 2006 ozone Air Quality Criteria Document (ozone AQCD) and EPA Staff Paper.[35, 36] Ozone can irritate the respiratory system, causing coughing, throat irritation, and/or uncomfortable sensation in the chest. Ozone can reduce lung function and make it more difficult to breathe deeply; breathing may also become more rapid and shallow than normal, thereby limiting a person's activity. Ozone can also aggravate asthma, leading to more asthma attacks that require medical attention and/or the use of additional medication. There is evidence of an elevated risk of mortality associated with acute exposure to ozone, especially in the summer or warm season when ozone levels are typically high. Animal toxicological evidence indicates that with repeated exposure, ozone can inflame and damage the lining of the lungs, which may lead to permanent changes in lung tissue and irreversible reductions in lung function. People who are more susceptible to effects associated with exposure to ozone can include children, the elderly, and individuals with respiratory disease such as asthma. Those with greater exposures to ozone, for instance due to time spent outdoors (e.g., children and outdoor workers), are also of particular concern.

The recent ozone AQCD also examined relevant new scientific information that has emerged in the past decade, including the impact of ozone exposure on such health effects as changes in lung structure and biochemistry, inflammation of the lungs, exacerbation and causation of asthma, respiratory illness-related school absence, hospital admissions and premature mortality. Animal toxicological studies have suggested potential interactions between ozone and PM with increased responses observed to mixtures of the two pollutants compared to either ozone or PM alone. The respiratory morbidity observed in animal studies along with the evidence from epidemiologic studies supports a causal relationship between acute ambient ozone exposures and increased respiratory-related emergency room visits and hospitalizations in the warm season. In addition, there is suggestive evidence of a contribution of ozone to cardiovascular-related morbidity and non-accidental and cardiopulmonary mortality.

(c) Current and Projected Ozone Levels

Ozone concentrations exceeding the level of the 8-hour ozone NAAQS occur over wide geographic areas, including most of the nation's major population centers.[37] As of October 10, 2007, there were approximately 144 million people living in 81 areas (which include all or part of 366 counties) designated as not in attainment with the 8-hour ozone NAAQS. These numbers do not include the people living in areas where there is a future risk of failing to maintain or attain the 8-hour ozone NAAQS.

States with 8-hour ozone nonattainment areas are required to take action to bring those areas into compliance in the future. Based on the final rule designating and classifying 8-hour ozone nonattainment areas (69 FR 23951, April 30, 2004), most 8-hour ozone nonattainment areas will be required to attain the ozone NAAQS in the 2007 to 2013 time frame and then maintain the NAAQS thereafter.[38] Many of these nonattainment areas will need to adopt additional emission reduction programs and the NO_X and VOC reductions from this final action are particularly important for these states. In addition, EPA's review of the ozone NAAQS is currently underway with a final rule scheduled for March 2008. If the ozone NAAQS is revised then new nonattainment areas will be designated. While EPA is not relying on it for purposes of justifying this rule, the emission reductions from this rulemaking will also be helpful to states if EPA revises the ozone NAAQS to be more stringent.

EPA has already adopted many emission control programs that are expected to reduce ambient ozone levels. These control programs are described in section I.B.1 of this preamble. As a result of these programs, the number of areas that fail to meet the 8-hour ozone NAAQS in the future is expected to decrease. Based on the air quality modeling performed for this rule, which does not include any additional local controls, we estimate nine counties (where 22 million people are projected to live) will exceed the 8-hour ozone NAAQS in 2020.[39] An additional 39 counties (where 29 million people are projected to live) are expected to be within 10 percent of violating the 8-hour ozone NAAQS in 2020.

This rule results in reductions in nationwide ozone levels. The air quality modeling projects that in 2030, 573 counties (of 579 that have monitored data) experience at least a 0.1 ppb decrease in their ozone design values. There are three nonattainment areas in southern California, the Los Angeles-South Coast Air Basin nonattainment area, the Riverside Co. (Coachella Valley) nonattainment area and the Los Angeles—San Bernardino (W. Mojave) nonattainment area, which will experience 8-hour ozone design value increases due to the NO_X disbenefits which occur in these VOC-limited ozone nonattainment areas. Briefly, NO_X reductions at certain times and in some areas can lead to increased ozone levels. The air quality modeling methodology (Section 2.3), the projected reductions (Section 2.2.4), and the limited NO_X disbenefits (Section 2.2.4.2.1), are discussed in more detail in Chapter 2 of the RIA.

Results from the air quality modeling conducted for this final rule indicate that the locomotive and marine diesel engine emission reductions in 2020 and 2030 will improve both the average and population-weighted average ozone concentrations for the U.S. In addition, the air quality modeling shows that on average this final rule will help bring counties closer to ozone attainment as well as assist counties whose ozone concentrations are within ten percent below the standard. For example, in projected nonattainment counties, on a population-weighted basis, the 8-hour ozone design value will on average decrease by 0.13 ppb in 2020 and 0.62 ppb in 2030.[40]

The impact of the reductions has also been analyzed with respect to those areas that have the highest design

current practice of making the secondary standard equal to the proposed 8-hour primary standard.

[35] U.S. EPA Air Quality Criteria for Ozone and Related Photochemical Oxidants (Final). U.S. Environmental Protection Agency, Washington, DC, EPA 600/R–05/004aF–cF, 2006. This document is available in Docket EPA–HQ–OAR–2003–0190. This document may be accessed electronically at: *http://www.epa.gov/ttn/naaqs/standards/ozone/s_o3_cr_cd.html.*

[36] U.S. EPA (2007) Review of the National Ambient Air Quality Standards for Ozone, Policy Assessment of Scientific and Technical Information. OAQPS Staff Paper.EPA–452/R–07–003. This document is available in Docket EPA–HQ–OAR–2003–0190. This document is available electronically at: *http:www.epa.gov/ttn/naaqs/standards/ozone/s_o3_cr_.html.*

[37] A listing of the 8-hour ozone nonattainment areas is included in the RIA for this rule.

[38] The Los Angeles South Coast Air Basin 8-hour ozone nonattainment area will have to attain before June 15, 2021.

[39] We expect many of the 8-hour ozone nonattainment areas to adopt additional emission reduction programs but we are unable to quantify or rely upon future reductions from additional state and local programs that have not yet been adopted.

[40] Ozone design values are reported in parts per million (ppm) as specified in 40 CFR part 50. Due to the scale of the design value changes in this action, results have been presented in parts per billion (ppb) format.

values, at or above 85 ppb, in 2020. We project there will be nine U.S. counties with design values at or above 85 ppb in 2020. After implementation of this rule, we project that one of these nine counties will drop below 85 ppb. Further, two of the nine counties will be at least 10 percent closer to a design value of less than 85 ppb, and on average all nine counties will be about 18 percent closer to a design value of less than 85 ppb.

(3) Air Toxics

People experience elevated risk of cancer and other noncancer health effects from exposure to the class of pollutants known collectively as ''air toxics''. Mobile sources are responsible for a significant portion of this exposure. According to the National Air Toxic Assessment (NATA) for 1999, mobile sources, including locomotive and marine diesel marine engines, were responsible for 44 percent of outdoor toxic emissions and almost 50 percent of the cancer risk among the 133 pollutants quantitatively assessed in the 1999 NATA. Benzene is the largest contributor to cancer risk of all the assessed pollutants and mobile sources were responsible for about 68 percent of all benzene emissions in 1999. Although the 1999 NATA did not quantify cancer risks associated with exposure to diesel exhaust, EPA has concluded that diesel exhaust ranks with other emissions that the national-scale assessment suggests pose the greatest relative risk.

According to the 1999 NATA, nearly the entire U.S. population was exposed to an average level of air toxics that has the potential for adverse respiratory noncancer health effects. This potential was indicated by a hazard index (HI) greater than 1.[41] Mobile sources were responsible for 74 percent of the potential noncancer hazard from outdoor air toxics in 1999. About 91 percent of this potential noncancer hazard was from acrolein;[42] however, the confidence in the RfC for acrolein is medium[43] and confidence in NATA estimates of population noncancer hazard from ambient exposure to this pollutant is low.[44] It is important to note that NATA estimates of noncancer hazard do not include the adverse health effects associated with particulate matter identified in EPA's Particulate Matter Air Quality Criteria Document. Gasoline and diesel engine emissions contribute significantly to particulate matter concentration.

The NATA modeling framework has a number of limitations which prevent its use as the sole basis for setting regulatory standards. These limitations and uncertainties are discussed on the 1999 NATA website.[45] Even so, this modeling framework is very useful in identifying air toxic pollutants and sources of greatest concern, setting regulatory priorities, and informing the decision making process.

The following section provides a brief overview of air toxics which are associated with nonroad engines, including locomotive and marine diesel engines, and provides a discussion of the health risks associated with each air toxic.

(a) Diesel Exhaust (DE)

Locomotive and marine diesel engines emit diesel exhaust (DE), a complex mixture comprised of carbon dioxide, oxygen, nitrogen, water vapor, carbon monoxide, nitrogen compounds, sulfur compounds and numerous low-molecular-weight hydrocarbons. A number of these gaseous hydrocarbon components are individually known to be toxic, including aldehydes, benzene and 1,3-butadiene. The diesel particulate matter (DPM) present in diesel exhaust consists of fine particles (< 2.5 μm), including a subgroup with a large number of ultrafine particles (< 0.1 μm). These particles have a large surface area which makes them an excellent medium for adsorbing organics and their small size makes them highly respirable and able to reach the deep lung. Many of the organic compounds present on the particles and in the gases are individually known to have mutagenic and carcinogenic properties. Diesel exhaust varies significantly in chemical composition and particle sizes between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), and fuel formulations (high/low sulfur fuel). Also, there are emissions differences between on-road and nonroad engines because the nonroad engines are generally of older technology. This is especially true for locomotive and marine diesel engines.[46]

After being emitted in the engine exhaust, diesel exhaust undergoes dilution as well as chemical and physical changes in the atmosphere. The lifetime for some of the compounds present in diesel exhaust ranges from hours to days.

(i) Diesel Exhaust: Potential Cancer Effects

In EPA's 2002 Diesel Health Assessment Document (Diesel HAD),[47] exposure to diesel exhaust was classified as likely to be carcinogenic to humans by inhalation from environmental exposures, in accordance with the revised draft 1996/1999 EPA cancer guidelines. A number of other agencies (National Institute for Occupational Safety and Health, the International Agency for Research on Cancer, the World Health Organization, California EPA, and the U.S. Department of Health and Human Services) have made similar classifications. However, EPA also concluded in the Diesel HAD that it is not possible currently to calculate a cancer unit risk for diesel exhaust due to a variety of factors that limit the current studies, such as limited quantitative exposure histories in occupational groups investigated for lung cancer.

For the Diesel HAD, EPA reviewed 22 epidemiologic studies on the subject of the carcinogenicity of workers exposed

[41] To express chronic noncancer hazards, we used the RfC as part of a calculation called the hazard quotient (HQ), which is the ratio between the concentration to which a person is exposed and the RfC. (RfC is defined by EPA as, ''an estimate of a continuous inhalation exposure to the human population, including sensitive subgroups, with uncertainty spanning perhaps an order of magnitude, which is likely to be without appreciable risks of deleterious noncancer effects during a lifetime.'') A value of the HQ less than one indicates that the exposure is lower than the RfC and that no adverse health effects would be expected. Combined noncancer hazards were calculated using the hazard index (HI), defined as the sum of hazard quotients for individual air toxic compounds that affect the same target organ or system. As with the hazard quotient, a value of the HI at or below 1.0 will likely not result in adverse effects over a lifetime of exposure. However, a value of the HI greater than 1.0 does not necessarily suggest a likelihood of adverse effects. Furthermore, the HI cannot be translated into a probability that adverse effects will occur and is not likely to be proportional to risk.

[42] U.S. EPA (2006) National-Scale Air Toxics Assessment for 1999. This material is available electronically at *http://www.epa.gov/ttn/atw/nata1999/risksum.html*.

[43] U.S. EPA (2003) Integrated Risk Information System File of Acrolein. National Center for Environmental Assessment, Office of Research and Development, Washington, D.C. 2003. This material is available electronically at *http://www.epa.gov/iris/subst/0364.htm*.

[44] U.S. EPA (2006) National-Scale Air Toxics Assessment for 1999. This material is available electronically at *http://www.epa.gov/ttn/atw/nata1999/risksum.html*.

[45] U.S. EPA (2006) National-Scale Air Toxics Assessment for 1999. *http://www.epa.gov/ttn/atw/nata1999*.

[46] U.S. EPA (2002) Health Assessment Document for Diesel Engine Exhaust. EPA/600/8–90/057F Office of Research and Development, Washington DC. Pp1–1 1–2. This document is available electronically at *http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060*. This document can be found in Docket EPA–HQ–OAR–2003–0190.

[47] U.S. EPA (2002) Health Assessment Document for Diesel Engine Exhaust. EPA/600/8–90/057F Office of Research and Development, Washington, DC. This document is available electronically at *http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060*. This document can be found in Docket EPA–HQ–OAR–2003–0190.

to diesel exhaust in various occupations, finding increased lung cancer risk, although not always statistically significant, in 8 out of 10 cohort studies and 10 out of 12 case-control studies within several industries, including railroad workers. Relative risk for lung cancer associated with exposure ranged from 1.2 to 1.5, although a few studies show relative risks as high as 2.6. Additionally, the Diesel HAD also relied on two independent meta-analyses, which examined 23 and 30 occupational studies respectively, which found statistically significant increases in smoking-adjusted relative lung cancer risk associated with exposure to diesel exhaust, of 1.33 to 1.47. These meta-analyses demonstrate the effect of pooling many studies and in this case show the positive relationship between diesel exhaust exposure and lung cancer across a variety of diesel exhaust-exposed occupations.[48, 49]

In the absence of a cancer unit risk, the Diesel HAD sought to provide additional insight into the significance of the diesel exhaust-cancer hazard by estimating possible ranges of risk that might be present in the population. An exploratory analysis was used to characterize a possible risk range by comparing a typical environmental exposure level for highway diesel sources to a selected range of occupational exposure levels. The occupationally observed risks were then proportionally scaled according to the exposure ratios to obtain an estimate of the possible environmental risk. A number of calculations are needed to accomplish this, and these can be seen in the EPA Diesel HAD. The outcome was that environmental risks from diesel exhaust exposure could range from a low of 10^{-4} to 10^{-5} to as high as 10^{-3}, reflecting the range of occupational exposures that could be associated with the relative and absolute risk levels observed in the occupational studies. Because of uncertainties, the analysis acknowledged that the risks could be lower than 10^{-4} or 10^{-5}, and a zero risk from diesel exhaust exposure was not ruled out.

Retrospective health studies of railroad workers have played an important part in determining that exposure to diesel exhaust is likely to be carcinogenic to humans by inhalation from environmental exposures. Key evidence of the diesel exhaust exposure linkage to lung cancer comes from two retrospective case-control studies of railroad workers which are discussed at length in the Diesel HAD and summarized in Chapter 2 of the RIA.

(ii) Diesel Exhaust: Other Health Effects

Noncancer health effects of acute and chronic exposure to diesel exhaust emissions are also of concern to the EPA. EPA derived a diesel exhaust reference concentration (RfC) from consideration of four well-conducted chronic rat inhalation studies showing adverse pulmonary effects.[50, 51, 52, 53] The RfC is 5 μg/m^3 for diesel exhaust as measured by diesel PM. This RfC does not consider allergenic effects such as those associated with asthma or immunologic effects. There is growing evidence, discussed in the Diesel HAD, that exposure to diesel exhaust can exacerbate these effects, but the exposure-response data are presently lacking to derive an RfC. The EPA Diesel HAD states, ''With DPM [diesel particulate matter] being a ubiquitous component of ambient PM, there is an uncertainty about the adequacy of the existing DE [diesel exhaust] noncancer database to identify all of the pertinent DE-caused noncancer health hazards.'' (p. 9–19). The Diesel HAD concludes ''that acute exposure to DE [diesel exhaust] has been associated with irritation of the eye, nose, and throat, respiratory symptoms (cough and phlegm), and neurophysiological symptoms such as headache, lightheadedness, nausea, vomiting, and numbness or tingling of the extremities.'' [54]

Exposure to diesel exhaust has also been shown to cause serious noncancer effects in occupational exposure studies. One study of railroad workers and electricians, cited in the Diesel HAD,[55] found that exposure to diesel exhaust resulted in neurobehavioral impairments in one or more areas including reaction time, balance, blink reflex latency, verbal recall, and color vision confusion indices. Pulmonary function tests also showed that 10 of the 16 workers had airway obstruction and another group of 10 of 16 workers had chronic bronchitis, chest pain, tightness, and hyperactive airways. Finally, a variety of studies have been published subsequent to the completion of the Diesel HAD. One such study, published in 2006,[56] found that railroad engineers and conductors with diesel exhaust exposure from operating trains had an increased incidence of chronic obstructive pulmonary disease (COPD) mortality. The odds of COPD mortality increased with years on the job so that those who had worked more than 16 years as an engineer or conductor after 1959 had an increased risk of 1.61 (95% confidence interval, 1.12–2.30). EPA is assessing the significance of this study within the context of the broader literature.

(iii) Ambient $PM_{2.5}$ Levels and Exposure to Diesel Exhaust PM

The Diesel HAD also briefly summarizes health effects associated with ambient PM and discusses the EPA's annual $PM_{2.5}$ NAAQS of 15 μg/m^3. There is a much more extensive body of human data showing a wide spectrum of adverse health effects associated with exposure to ambient PM, of which diesel exhaust is an important component. The $PM_{2.5}$ NAAQS is designed to provide protection from the noncancer and premature mortality effects of $PM_{2.5}$ as a whole.

(iv) Diesel Exhaust PM Exposures

Exposure of people to diesel exhaust depends on their various activities, the time spent in those activities, the locations where these activities occur, and the levels of diesel exhaust pollutants in those locations. The major difference between ambient levels of diesel particulate and exposure levels for diesel particulate is that exposure accounts for a person moving from location to location, proximity to the emission source, and whether the exposure occurs in an enclosed environment.

Occupational Exposures

Occupational exposures to diesel exhaust from mobile sources, including

[48] Bhatia, R., Lopipero, P., Smith, A. (1998) Diesel exposure and lung cancer. Epidemiology 9(1):84–91.

[49] Lipsett, M; Campleman, S; (1999) Occupational exposure to diesel exhaust and lung cancer: a meta-analysis. Am J Public Health 80(7): 1009–1017.

[50] Ishinishi, N; Kuwabara, N; Takaki, Y; et al. (1988) Long-term inhalation experiments on diesel exhaust. In: Diesel exhaust and health risks. Results of the HERP studies. Ibaraki, Japan: Research Committee for HERP Studies; pp. 11–84.

[51] Heinrich, U; Fuhst, R; Rittinghausen, S; et al. (1995) Chronic inhalation exposure of Wistar rats and two different strains of mice to diesel engine exhaust, carbon black, and titanium dioxide. Inhal. Toxicol. 7:553–556.

[52] Mauderly, JL; Jones, RK; Griffith, WC; et al. (1987) Diesel exhaust is a pulmonary carcinogen in rats exposed chronically by inhalation. Fundam. Appl. Toxicol. 9:208–221.

[53] Nikula, KJ; Snipes, MB; Barr, EB; et al. (1995) Comparative pulmonary toxicities and carcinogenicities of chronically inhaled diesel exhaust and carbon black in F344 rats. Fundam. Appl. Toxicol. 25:80–94.

[54] ''Health Assessment Document for Diesel Engine Exhaust,'' U.S. Environmental Protection Agency, 600/8–90/057F, *http://www.epa.gov/ttn/atw/dieselfinal.pdf*, May 2002, p. 9–9.

[55] Kilburn (2000) See HAD Chapter 5–7.

[56] Hart, JE; Laden F; Schenker, M.B.; and Garshick, E. Chronic Obstructive Pulmonary Disease Mortality in Diesel-Exposed Railroad Workers; Environmental Health Perspective July 2006: 1013–1016.

locomotive engines and marine diesel engines, can be several orders of magnitude greater than typical exposures in the non-occupationally exposed population.

Over the years, diesel particulate exposures have been measured for a number of occupational groups. A wide range of exposures have been reported, from 2 μg/m^3 to 1,280 μg/m^3, for a variety of occupations. Studies have shown that miners and railroad workers typically have higher diesel exposure levels than other occupational groups studied, including firefighters, truck dock workers, and truck drivers (both short and long haul).[57] As discussed in the Diesel HAD, the National Institute of Occupational Safety and Health (NIOSH) has estimated a total of 1,400,000 workers are occupationally exposed to diesel exhaust from on-road and nonroad vehicles including locomotive and marine diesel engines.

Elevated Concentrations and Ambient Exposures in Mobile Source-Impacted Areas

Regions immediately downwind of rail yards and marine ports may experience elevated ambient concentrations of directly-emitted $PM_{2.5}$ from diesel engines. Due to the unique nature of rail yards and marine ports, emissions from a large number of diesel engines are concentrated in a small area. Furthermore, emissions occur at or near ground level, allowing emissions of diesel engines to reach nearby receptors without fully mixing with background air.

A 2004 study conducted by the California Air Resources Board (CARB) examined the air quality impacts of railroad operations at the J.R. Davis Rail Yard, the largest service and maintenance rail facility in the western United States.[58] The yard occupies 950 acres along a one-quarter mile wide and four-mile long section of land in Roseville, CA. The study developed an emissions inventory for the facility for the year 2000 and modeled ambient concentrations of diesel PM using a well-accepted dispersion model (ISCST3). The study estimated substantially elevated diesel PM concentrations in an area 5,000 meters from the facility, with higher concentrations closer to the rail yard. Using local meteorological data, annual average contributions from the rail yard to ambient diesel PM concentrations under prevailing wind conditions were 1.74, 1.18, 0.80, and 0.25 μg/m^3 at receptors located 200, 500, 1000, and 5000 meters from the yard, respectively. Several tens of thousands of people live within the area estimated to experience substantial increases in annual average ambient $PM_{2.5}$ as a result of these rail yard emissions.

Another study from CARB evaluated air quality impacts of diesel engine emissions within the Ports of Long Beach and Los Angeles in California, one of the largest ports in the U.S.[59] Like the earlier rail yard study, the port study employed the ISCST3 dispersion model. Using local meteorological data, annual average concentrations were substantially elevated over an area exceeding 200,000 acres. Because the ports are located near heavily-populated areas, the modeling indicated that over 700,000 people lived in areas with at least 0.3 μg/m^3 of port-related diesel PM in ambient air, about 360,000 people lived in areas with at least 0.6 μg/m^3 of diesel PM, and about 50,000 people lived in areas with at least 1.5 ug/m^3 of ambient diesel PM directly from the port. Most recently, CARB released several additional Railyard Health Risk Assessments which all show that diesel PM emissions result in significantly higher pollution risks in nearby communities.[60] Together these studies highlight the substantial contribution these facilities make to elevated ambient concentrations in populated areas.

As mentioned in section II.A of this preamble, EPA recently conducted an initial screening-level analysis of a representative selection of national marine port areas and rail yards to begin to better understand the populations that are exposed to DPM emissions from these facilities.[61, 62] As part of this study, a computer geographic information system (GIS) was used to identify the locations and property boundaries of 47 marine ports and 37 rail yard facilities.[63] Census information was used to estimate the size and demographic characteristics of the population living in the vicinity of the ports and rail yards. The results indicate that at least 13 million people, including a disproportionate number of low-income, African-Americans, and Hispanics, live in the vicinity of these facilities and are being exposed to ambient DPM levels that are 2.0 μg/m^3 and 0.2 μg/m^3 above levels found in areas further from these facilities. These populations will benefit from the controls being finalized in this action. This study is discussed in greater detail in chapter 2 of the RIA and detailed findings of this study are available in the public docket for this rulemaking.

(b) Other Air Toxics—benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, POM, naphthalene

Locomotive and marine diesel engine exhaust emissions also contribute to ambient levels of other air toxics known or suspected as human or animal carcinogens, or that have noncancer health effects. These other air toxics include benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, polycyclic organic matter (POM), and naphthalene. All of these compounds, except acetaldehyde, were identified as national or regional cancer risk or noncancer hazard drivers in the 1999 National-Scale Air Toxics Assessment (NATA) and have significant inventory contributions from mobile sources. That is, for a significant portion of the population, these compounds pose a significant portion of the total cancer and noncancer risk from breathing outdoor air toxics. The reductions in locomotive and marine diesel engine emissions finalized in this rulemaking will help reduce exposure to these harmful substances.

Benzene: EPA has characterized benzene as a known human carcinogen (causing leukemia) by all routes of exposure, and concludes that exposure is associated with additional health effects, including genetic changes in both humans and animals and increased proliferation of bone marrow cells in

[57] Diesel HAD Page 2–110, 8–12; Woskie, SR; Smith, TJ; Hammond, SK: et al. (1988a) Estimation of the DE exposures of railroad workers: II. National and historical exposures. Am J Ind Med 12:381–394.

[58] Hand, R.; Pingkuan, D.; Servin, A.; Hunsaker, L.; Suer, C. (2004) Roseville rail yard study. California Air Resources Board. [Online at *http://www.arb.ca.gov/diesel/documents/rrstudy.htm*] This document can be found in Docket EPA–HQ–OAR–2003–0190.

[59] State of California Air Resources Board. Diesel Particulate Matter Exposure Assessment Study for the Ports of Los Angeles and Long Beach, April 2006. This document is available in Docket EPA–HQ–OAR–2003–0190. This document is available electronically at: *ftp://ftp.arb.ca.gov/carbis/msprog/offroad/marinevess/documents/portstudy0406.pdf*.

[60] These studies are available in Docket EPA–HQ–OAR–2003–0190. Studies are also available at *http://www.arb.ca.gov/railyard/hra/hra.htm*.

[61] ICF International. September 28, 2007. Estimation of diesel particulate matter concentration isopleths for marine harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[62] ICF International. September 28, 2007. Estimation of diesel particulate matter population exposure near selected harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[63] The Agency selected a representative sample of the top 150 U.S. ports including coastal, inland, and Great Lake ports. In selecting a sample of rail yards the Agency identified a subset from the hundreds of rail yards operated by Class I Railroads.

mice.[64, 65, 66] EPA states in its IRIS database that data indicate a causal relationship between benzene exposure and acute lymphocytic leukemia and suggests a relationship between benzene exposure and chronic non-lymphocytic leukemia and chronic lymphocytic leukemia. The IARC has determined that benzene is a human carcinogen and the U.S. DHHS has characterized benzene as a known human carcinogen.[67, 68]

A number of adverse noncancer health effects including blood disorders, such as preleukemia and aplastic anemia, have also been associated with long-term exposure to benzene.[69, 70] The most sensitive noncancer effect observed in humans, based on current data, is the depression of the absolute lymphocyte count in blood.[71, 72] In addition, recent work, including studies sponsored by the Health Effects Institute (HEI), provides evidence that biochemical responses are occurring at lower levels of benzene exposure than previously known.[73, 74, 75, 76] EPA's IRIS program has not yet evaluated these new data.

1,3-Butadiene: EPA has characterized 1,3–butadiene as carcinogenic to humans by inhalation.[77, 78] The IARC has determined that 1, 3-butadiene is a human carcinogen and the U.S. DHHS has characterized 1,3-butadiene as a known human carcinogen.[79, 80] There are numerous studies consistently demonstrating that 1,3-butadiene is metabolized into genotoxic metabolites by experimental animals and humans. The specific mechanisms of 1,3-butadiene-induced carcinogenesis are unknown; however, the scientific evidence strongly suggests that the carcinogenic effects are mediated by genotoxic metabolites. Animal data suggest that females may be more sensitive than males for cancer effects associated with 1,3-butadiene exposure; while there are insufficient data in humans from which to draw conclusions about sensitive subpopulations.

1,3-Butadiene also causes a variety of reproductive and developmental effects in mice; no human data on these effects are available. The most sensitive effect was ovarian atrophy observed in a lifetime bioassay of female mice.[81]

Formaldehyde: Since 1987, EPA has classified formaldehyde as a probable human carcinogen based on evidence in humans and in rats, mice, hamsters, and monkeys.[82] EPA is currently reviewing recently published epidemiological data. For instance, research conducted by the National Cancer Institute (NCI) found an increased risk of nasopharyngeal cancer and lymphohematopoietic malignancies such as leukemia among workers exposed to formaldehyde.[83, 84] NCI is currently updating these studies. A recent National Institute of Occupational Safety and Health (NIOSH) study of garment workers also found increased risk of death due to leukemia among workers exposed to formaldehyde.[85] Extended follow-up of a cohort of British chemical workers did not find evidence of an increase in nasopharyngeal or lymphohematopoietic cancers, but a continuing statistically significant excess in lung cancers was reported.[86] Recently, the IARC re-classified formaldehyde as a human carcinogen (Group 1).[87]

Formaldehyde exposure also causes a range of noncancer health effects, including irritation of the eyes (burning and watering of the eyes), nose and throat. Decreased pulmonary function has been observed in humans. Effects from repeated exposure in humans include respiratory tract irritation, chronic bronchitis and nasal epithelial lesions.[88]

Acetaldehyde: EPA has characterized acetaldehyde as a probable human carcinogen, based on nasal tumors in rats.[89] Acetaldehyde is reasonably

[64] U.S. EPA. 2000. Integrated Risk Information System File for Benzene. This material is available electronically at *http://www.epa.gov/iris/subst/0276.htm.*

[65] International Agency for Research on Cancer (IARC). 1982. Monographs on the evaluation of carcinogenic risk of chemicals to humans, Volume 29, Some industrial chemicals and dyestuffs, World Health Organization, Lyon, France, p. 345–389.

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[67] International Agency for Research on Cancer (IARC). 1987. Monographs on the evaluation of carcinogenic risk of chemicals to humans, Volume 29, Supplement 7, Some industrial chemicals and dyestuffs, World Health Organization, Lyon, France.

[68] U.S. Department of Health and Human Services National Toxicology Program 11th Report on Carcinogens available at: *http://ntp.niehs.nih.gov/go/16183.*

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[77] U.S. EPA (2002) Health Assessment of 1,3-Butadiene. Office of Research and Development, National Center for Environmental Assessment, Washington Office, Washington, DC. Report No. EPA600–P–98–001F. This document is available electronically at *http://www.epa.gov/iris/supdocs/buta-sup.pdf.*

[78] U.S. EPA (2002) Full IRIS Summary for 1,3-butadiene (CASRN 106–99–0). Environmental Protection Agency, Integrated Risk Information System (IRIS), Research and Development, National Center for Environmental Assessment, Washington, DC *http://www.epa.gov/iris/subst/0139.htm.*

[79] International Agency for Research on Cancer (IARC) (1999) Monographs on the evaluation of carcinogenic risk of chemicals to humans, Volume 71, Re-evaluation of some organic chemicals, hydrazine and hydrogen peroxide and Volume 97 (in preparation), World Health Organization, Lyon, France.

[80] U.S. Department of Health and Human Services (2005) National Toxicology Program 11th Report on Carcinogens available at: *ntp.niehs.nih.gov/index.cfm?objectid=32BA9724-F1F6-975E-7FCE50709CB4C932.*

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[88] U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry. 1999. Toxicological Profile for formaldehyde. Available at *http://www.atsdr.cdc.gov/toxprofiles/tp111.html.*

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anticipated to be a human carcinogen by the U.S. Department of Health and Human Services (DHHS) in the 11th Report on Carcinogens and is classified as possibly carcinogenic to humans (Group 2B) by the International Agency for Research on Carcinogens (IARC).[90, 91] EPA is currently conducting a reassessment of cancer and noncancer risk from inhalation exposure to acetaldehyde.

The primary noncancer effects of exposure to acetaldehyde vapors include irritation of the eyes, skin, and respiratory tract.[92] In short-term (4 week) rat studies, compound-related histopathological changes were observed only in the respiratory system at various concentration levels of exposure.[93, 94] Data from these studies were used by EPA to develop an inhalation reference concentration. Some asthmatics have been shown to be a sensitive subpopulation to decrements in functional expiratory volume (FEV1 test) and bronchoconstriction upon acetaldehyde inhalation.[95]

Acrolein: Acrolein is extremely acrid and irritating to humans when inhaled, with acute exposure resulting in upper respiratory tract irritation, mucus hypersecretion and congestion. Levels considerably lower than 1 ppm (2.3 mg/m^3) elicit subjective complaints of eye and nasal irritation and a decrease in the respiratory rate.[96, 97] Lesions to the lungs and upper respiratory tract of rats, rabbits, and hamsters have been observed after subchronic exposure to acrolein. Based on animal data, individuals with compromised respiratory function (e.g., emphysema, asthma) are expected to be at increased risk of developing adverse responses to strong respiratory irritants such as acrolein. This was demonstrated in mice with allergic airway-disease by comparison to non-diseased mice in a study of the acute respiratory irritant effects of acrolein.[98] EPA is currently in the process of conducting an assessment of acute exposure effects for acrolein. The intense irritancy of this carbonyl has been demonstrated during controlled tests in human subjects who suffer intolerable eye and nasal mucosal sensory reactions within minutes of exposure.[99]

EPA determined in 2003 that the human carcinogenic potential of acrolein could not be determined because the available data were inadequate. No information was available on the carcinogenic effects of acrolein in humans and the animal data provided inadequate evidence of carcinogenicity.[100] The IARC determined in 1995 that acrolein was not classifiable as to its carcinogenicity in humans.[101]

Polycyclic Organic Matter (POM): POM is generally defined as a large class of organic compounds which have multiple benzene rings and a boiling point greater than 100 degrees Celsius. Many of the compounds included in the class of compounds known as POM are classified by EPA as probable human carcinogens based on animal data. One of these compounds, naphthalene, is discussed separately below. Polycyclic aromatic hydrocarbons (PAHs) are a subset of POM that contain only hydrogen and carbon atoms. A number of PAHs are known or suspected carcinogens. Recent studies have found that maternal exposures to PAHs (a subclass of POM) in a population of pregnant women were associated with several adverse birth outcomes, including low birth weight and reduced length at birth, as well as impaired cognitive development at age three.[102, 103] EPA has not yet evaluated these recent studies.

Naphthalene: Naphthalene is found in small quantities in gasoline and diesel fuels but is primarily a product of combustion. EPA recently released an external review draft of a reassessment of the inhalation carcinogenicity of naphthalene.[104] The draft reassessment recently completed external peer review.[105] Based on external peer review comments received to date, additional analyses are being undertaken. This external review draft does not represent official agency opinion and was released solely for the purposes of external peer review and public comment. Once EPA evaluates public and peer reviewer comments, the document will be revised. The National Toxicology Program listed naphthalene as ''reasonably anticipated to be a human carcinogen'' in 2004 on the basis of bioassays reporting clear evidence of carcinogenicity in rats and some evidence of carcinogenicity in mice.[106] California EPA has released a new risk assessment for naphthalene, and the IARC has reevaluated naphthalene and re-classified it as Group 2B: Possibly carcinogenic to humans.[107] Naphthalene also causes a number of chronic non-cancer effects in animals, including

Assessment, Washington, DC. This material is available electronically at *http://www.epa.gov/iris/subst/0290.htm.*

[90] U.S. Department of Health and Human Services National Toxicology Program 11th Report on Carcinogens available at: *ntp.niehs.nih.gov/index.cfm?objectid=32BA9724-F1F6-975E-7FCE50709CB4C932.*

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[100] U.S. EPA. (2003). Integrated Risk Information System File of Acrolein. Research and Development, National Center for Environmental Assessment, Washington, DC. This material is available at *http://www.epa.gov/iris/subst/0364.htm.*

[101] International Agency for Research on Cancer (IARC). 1995. Monographs on the evaluation of carcinogenic risk of chemicals to humans, Volume 63, Dry cleaning, some chlorinated solvents and other industrial chemicals, World Health Organization, Lyon, France.

[102] Perera, F.P.; Rauh, V.; Tsai, W–Y.; et al. (2002) Effect of transplacental exposure to environmental pollutants on birth outcomes in a multiethnic population. Environ Health Perspect. 111: 201–205.

[103] Perera, F.P.; Rauh, V.; Whyatt, R.M.; Tsai, W.Y.; Tang, D.; Diaz, D.; Hoepner, L.; Barr, D.; Tu, Y.H.; Camann, D.; Kinney, P. (2006) Effect of prenatal exposure to airborne polycyclic aromatic hydrocarbons on neurodevelopment in the first 3 years of life among inner-city children. Environ Health Perspect. 114: 1287–1292.

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[105] Oak Ridge Institute for Science and Education (2004) External Peer Review for the IRIS Reassessment of the Inhalation Carcinogenicity of Naphthalene. August 2004. *http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=84403.*

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abnormal cell changes and growth in respiratory and nasal tissues.[108]

C. Environmental Impacts

There are a number of public welfare effects associated with the presence of ozone, NO_X and $PM_{2.5}$ in the ambient air. In this section we discuss visibility, the impact of deposition on ecosystems and materials, and the impact of ozone on plants, including trees, agronomic crops and urban ornamentals.

(1) Visibility

Visibility can be defined as the degree to which the atmosphere is transparent to visible light. Airborne particles degrade visibility by scattering and absorbing light. Visibility is important because it has direct significance to people's enjoyment of daily activities in all parts of the country. Individuals value good visibility for the well-being it provides them directly, where they live and work and in places where they enjoy recreational opportunities. Visibility is also highly valued in significant natural areas such as national parks and wilderness areas and special emphasis is given to protecting visibility in these areas. For more information on visibility, see the final 2004 PM AQCD as well as the 2005 PM Staff Paper.[109, 110]

EPA is pursuing a two-part strategy to address visibility. First, to address the welfare effects of PM on visibility, EPA has set secondary $PM_{2.5}$ standards which act in conjunction with the establishment of a regional haze program. In setting this secondary standard, EPA has concluded that $PM_{2.5}$ causes adverse effects on visibility in various locations, depending on PM concentrations and factors such as chemical composition and average relative humidity. Second, section 169 of the Clean Air Act provides additional authority to address existing visibility impairment and prevent future visibility impairment in the 156 national parks, forests and wilderness areas categorized as mandatory class I federal areas (62 FR 38680–81, July 18, 1997).[111] In July 1999, the regional haze rule (64 FR 35714) was put in place to protect the visibility in mandatory class I federal areas. Visibility can be said to be impaired in both $PM_{2.5}$ nonattainment areas and mandatory class I federal areas.

Locomotives and marine engines contribute to visibility concerns in these areas through their primary $PM_{2.5}$ emissions and their NO_X emissions which contribute to the formation of secondary $PM_{2.5}$.

Current Visibility Impairment

As of October 10, 2007, almost 90 million people live in nonattainment areas for the 1997 $PM_{2.5}$ NAAQS. These populations, as well as large numbers of individuals who travel to these areas, are likely to experience visibility impairment. In addition, while visibility trends have improved in mandatory class I federal areas the most recent data show that these areas continue to suffer from visibility impairment.[112] In summary, visibility impairment is experienced throughout the U.S., in multi-state regions, urban areas, and remote mandatory class I federal areas.[113, 114]

Future Visibility Impairment

Air quality modeling conducted for this final rule was used to project visibility conditions in 133 mandatory class I federal areas across the U.S. in 2020 and 2030. The results indicate that improvement in visibility will occur in all mandatory class I federal areas although all areas will continue to have annual average deciview levels above background in 2020 and 2030. Chapter 2 of the RIA contains more detail on the visibility portion of the air quality modeling.

(2) Plant and Ecosystem Effects of Ozone

Elevated ozone levels contribute to environmental effects, with impacts to plants and ecosystems being of most concern. Ozone can produce both acute and chronic injury in sensitive species depending on the concentration level and the duration of the exposure. Ozone effects also tend to accumulate over the growing season of the plant, so that even low concentrations experienced for a longer duration have the potential to create chronic stress on vegetation. Ozone damage to plants includes visible injury to leaves and a reduction in food production through impaired photosynthesis, both of which can lead to reduced crop yields, forestry production, and use of sensitive ornamentals in landscaping. In addition, the reduced food production in plants and subsequent reduced root growth and storage below ground, can result in other, more subtle plant and ecosystems impacts. These include increased susceptibility of plants to insect attack, disease, harsh weather, interspecies competition and overall decreased plant vigor. The adverse effects of ozone on forest and other natural vegetation can potentially lead to species shifts and loss from the affected ecosystems, resulting in a loss or reduction in associated ecosystem goods and services. Lastly, visible ozone injury to leaves can result in a loss of aesthetic value in areas of special scenic significance like national parks and wilderness areas. The final 2006 Criteria Document presents more detailed information on ozone effects on vegetation and ecosystems.

As discussed above, locomotive and marine diesel engine emissions of NO_X contribute to ozone and therefore the NO_X standards will help reduce crop damage and stress on vegetation from ozone.

(3) Atmospheric Deposition

Wet and dry deposition of ambient particulate matter delivers a complex mixture of metals (e.g., mercury, zinc, lead, nickel, aluminum, cadmium), organic compounds (e.g., POM, dioxins, furans) and inorganic compounds (e.g., nitrate, sulfate) to terrestrial and aquatic ecosystems. The chemical form of the compounds deposited is impacted by a variety of factors including ambient conditions (e.g., temperature, humidity, oxidant levels) and the sources of the material. Chemical and physical transformations of the particulate compounds occur in the atmosphere as well as the media onto which they deposit. These transformations in turn influence the fate, bioavailability and potential toxicity of these compounds. Atmospheric deposition has been identified as a key component of the environmental and human health

[108] U.S. EPA (1998) Toxicological Review of Naphthalene, Environmental Protection Agency, Integrated Risk Information System, Research and Development, National Center for Environmental Assessment, Washington, DC. This material is available electronically at *http://www.epa.gov/iris/subst/0436.htm.*

[109] U.S. EPA (2004) Air Quality Criteria for Particulate Matter (Oct 2004), Volume I Document No. EPA600/P–99/002aF and Volume II Document No. EPA600/P–99/002bF. This document is available in Docket EPA–HQ–OAR–2003–0190.

[110] U.S. EPA (2005) Review of the National Ambient Air Quality Standard for Particulate Matter: Policy Assessment of Scientific and Technical Information, OAQPS Staff Paper. EPA–452/R–05–005. This document is available in Docket EPA–HQ–OAR–2003–0190.

[111] These areas are defined in section 162 of the Act as those national parks exceeding 6,000 acres, wilderness areas and memorial parks exceeding 5,000 acres, and all international parks which were in existence on August 7, 1977.

[112] U.S. EPA (2002). Latest Findings on National Air Quality—2002 Status and Trends. EPA 454/K–03–001.

[113] U.S. EPA. Air Quality Designations and Classifications for the Fine Particles ($PM_{2.5}$) National Ambient Air Quality Standards, December 17, 2004. (70 FR 943, Jan 5, 2005) This document is also available on the Web at: *http://www.epa.gov/pmdesignations/.*

[114] U.S. EPA. Regional Haze Regulations, July 1, 1999. (64 FR 35714, July 1, 1999).

hazard posed by several pollutants including mercury, dioxin and PCBs.[115]

Adverse impacts on water quality can occur when atmospheric contaminants deposit to the water surface or when material deposited on the land enters a water body through runoff. Potential impacts of atmospheric deposition to water bodies include those related to both nutrient and toxic inputs. Adverse effects to human health and welfare can occur from the addition of excess particulate nitrate nutrient enrichment, which contributes to toxic algae blooms and zones of depleted oxygen, which can lead to fish kills, frequently in coastal waters. Particles contaminated with heavy metals or other toxins may lead to the ingestion of contaminated fish, ingestion of contaminated water, damage to the marine ecology, and limited recreational uses. Several studies have been conducted in U.S. coastal waters and in the Great Lakes Region in which the role of ambient PM deposition and runoff is investigated.[116, 117, 118, 119, 120]

Adverse impacts on soil chemistry and plant life have been observed for areas heavily impacted by atmospheric deposition of nutrients, metals and acid species, resulting in species shifts, loss of biodiversity, forest decline and damage to forest productivity. Potential impacts also include adverse effects to human health through ingestion of contaminated vegetation or livestock (as in the case for dioxin deposition), reduction in crop yield, and limited use of land due to contamination.

The NO_X, VOC and PM standards finalized in this action will help reduce the environmental impacts of atmospheric deposition.

(4) Materials Damage and Soiling

The deposition of airborne particles can reduce the aesthetic appeal of buildings and culturally important articles through soiling, and can contribute directly (or in conjunction with other pollutants) to structural damage by means of corrosion or erosion.[121] Particles affect materials principally by promoting and accelerating the corrosion of metals, by degrading paints, and by deteriorating building materials such as concrete and limestone. Particles contribute to these effects because of their electrolytic, hygroscopic, and acidic properties, and their ability to adsorb corrosive gases (principally sulfur dioxide). The rate of metal corrosion depends on a number of factors, including the deposition rate and nature of the pollutant; the influence of the metal protective corrosion film; the amount of moisture present; variability in the electrochemical reactions; the presence and concentration of other surface electrolytes; and the orientation of the metal surface.

The $PM_{2.5}$ standards finalized in this action will help reduce the airborne particles that contribute to materials damage and soiling.

D. Other Criteria Pollutants Affected by This Final Rule

Locomotive and marine diesel engines account for about 1 percent of the mobile source carbon monoxide (CO) inventory. Carbon monoxide (CO) is a colorless, odorless gas produced through the incomplete combustion of carbon-based fuels. The current primary NAAQS for CO are 35 ppm for the 1-hour average and 9 ppm for the 8-hour average. These values are not to be exceeded more than once per year. As of October 10, 2007, there are 854 thousand people living in 4 areas (made up of 5 counties) that are designated as nonattainment for CO.

Carbon monoxide enters the bloodstream through the lungs, forming carboxyhemoglobin and reducing the delivery of oxygen to the body's organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease. Healthy individuals also are affected, but only at higher CO levels. Exposure to elevated CO levels is associated with impairment of visual perception, work capacity, manual dexterity, learning ability and performance of complex tasks. Carbon monoxide also contributes to ozone nonattainment since carbon monoxide reacts photochemically in the atmosphere to form ozone. Additional information on CO related health effects can be found in the Air Quality Criteria for Carbon Monoxide.[122]

E. Emissions from Locomotive and Marine Diesel Engines

(1) Overview

The engine standards in this final rule will affect emissions of $PM_{2.5}$, NO_X, VOCs, CO, and air toxics for locomotive and marine diesel engines. Based on our analysis for this rulemaking, we estimate that in 2001 locomotive and marine diesel engines contributed almost 60,000 tons (18 percent) to the national mobile source diesel $PM_{2.5}$ inventory and about 2.0 million tons (16 percent) to the mobile source NO_X inventory. In 2030, absent the standards finalized today, these engines will contribute about 50,000 tons (65 percent) to the mobile source diesel $PM_{2.5}$ inventory and almost 1.6 million tons (35 percent) to the mobile source NO_X inventory. Under today's final standards, by 2030, annual NO_X emissions from these engines will be reduced by 800,000 tons, $PM_{2.5}$ emissions by 27,000 tons, and VOC emissions by 43,000 tons.

Locomotive and marine diesel engine emissions are expected to continue to be a significant part of the mobile source emissions inventory, both nationally and in ozone and $PM_{2.5}$ nonattainment areas, in the coming years. Absent the standards finalized today, we expect overall emissions from these engines to decrease modestly over the next ten to fifteen years then remain relatively flat through 2025 due to existing regulations such as lower fuel sulfur requirements, the phase-in of locomotive and marine diesel Tier 1 and Tier 2 engine standards, and the current Tier 0 locomotive remanufacturing requirements. Starting after 2025, emission inventories from these engines once again begin increasing due to growth in the locomotive and marine sectors, see Table II–2.

Each sub-section below discusses one of the affected pollutants, including expected emissions reductions associated with the final standards. Table II–2 summarizes the impacts of this rule for 2012, 2015, 2020, 2030 and

[115] U.S. EPA (2000). Deposition of Air Pollutants to the Great Waters: Third Report to Congress. Office of Air Quality Planning and Standards. EPA–453/R–00–0005. This document is available in Docket EPA–HQ–OAR–2003–0190.

[116] U.S. EPA (2004). National Coastal Condition Report II. Office of Research and Development/ Office of Water. EPA–620/R–03/002. This document is available in Docket EPA–HQ–OAR–2003–0190.

[117] Gao, Y., E.D. Nelson, M.P. Field, et al. 2002. Characterization of atmospheric trace elements on $PM_{2.5}$ particulate matter over the New York-New Jersey harbor estuary. Atmos. Environ. 36: 1077–1086.

[118] Kim, G., N. Hussain, J.R. Scudlark, and T.M. Church. 2000. Factors influencing the atmospheric depositional fluxes of stable Pb, 210Pb, and 7Be into Chesapeake Bay. J. Atmos. Chem. 36: 65–79.

[119] Lu, R., R.P. Turco, K. Stolzenbach, et al. 2003. Dry deposition of airborne trace metals on the Los Angeles Basin and adjacent coastal waters. J. Geophys. Res. 108(D2, 4074): AAC 11–1 to 11–24.

[120] Marvin, C.H., M.N. Charlton, E.J. Reiner, et al. 2002. Surficial sediment contamination in Lakes Erie and Ontario: A comparative analysis. J. Great Lakes Res. 28(3): 437–450.

[121] U.S. EPA (2005). Review of the National Ambient Air Quality Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information, OAQPS Staff Paper. This document is available in Docket EPA–HQ–OAR–2003–0190.

[122] U.S. EPA (2000). Air Quality Criteria for Carbon Monoxide, EPA/600/P–99/001F. This document is available in Docket EPA–HQ–OAR–2003–0190.

2040. Further details on our inventory estimates are available in chapter 3 of the RIA.

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Table II- 2 Estimated National (50 State) Reductions in Emissions from Locomotive and Marine Diesel Engines

Pollutant [short tons]	2012	2015	2020	2030	2040
Direct $PM_{2.5}$					
$PM_{2.5}$ Emissions Without Rule	53,000	48,000	46,000	46,000	49,000
$PM_{2.5}$ Emissions with Rule	49,000	41,000	32,000	20,000	13,000
$PM_{2.5}$ Reductions Resulting from Rule	4,000	7,000	14,000	27,000	37,000
NO_x					
NO_x Emissions Without Rule	1,678,000	1,635,000	1,584,000	1,584,000	1,708,000
NO_x Emissions with Rule	1,591,000	1,474,000	1,213,000	790,000	564,000
NO_x Reductions Resulting from Rule	87,000	161,000	371,000	795,000	1,144,000
VOC					
VOC Emissions Without Rule	71,000	70,000	70,000	71,000	76,000
VOC Emissions with Rule	63,000	55,000	42,000	28,000	21,000
VOC Reductions Resulting from Rule	8,000	15,000	28,000	43,000	55,000

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(2) $PM_{2.5}$ Emission Reductions

As described earlier, EPA believes that reductions of diesel $PM_{2.5}$ emissions are an important part of the nation's progress toward clean air. $PM_{2.5}$ reductions resulting from this final rule will reduce hazardous air pollutants or air toxics from these engines, reduce diesel exhaust exposure in communities near these emissions sources, and help areas address visibility and other environmental impacts associated with $PM_{2.5}$ emissions.

In 2001, annual emissions from locomotive and marine diesel engines totaled about 60,000 tons (18 percent) of the national mobile source diesel $PM_{2.5}$ inventory and by 2030 these engines, absent this final rule, contribute about 50,000 tons (65 percent) of the mobile source diesel $PM_{2.5}$ inventory. Both Table II–2 and Figure II–2 show that $PM_{2.5}$ emissions are relatively flat through 2030 before beginning to rise again due to growth in these sectors.

Table II–2 and Figure II–2 present $PM_{2.5}$ emission reductions from locomotive and marine diesel engines with the final standards required in this rule. Emissions of $PM_{2.5}$ drop in 2012 and 2015 by 4,200 and 7,300 tons respectively. By 2020, annual $PM_{2.5}$ reductions total 14,500 tons and by 2030 emissions are reduced further by 27,000 tons annually. Significant reductions from these engines continue through 2040 when approximately 37,000 tons of $PM_{2.5}$ are annually eliminated as a result of this rule.

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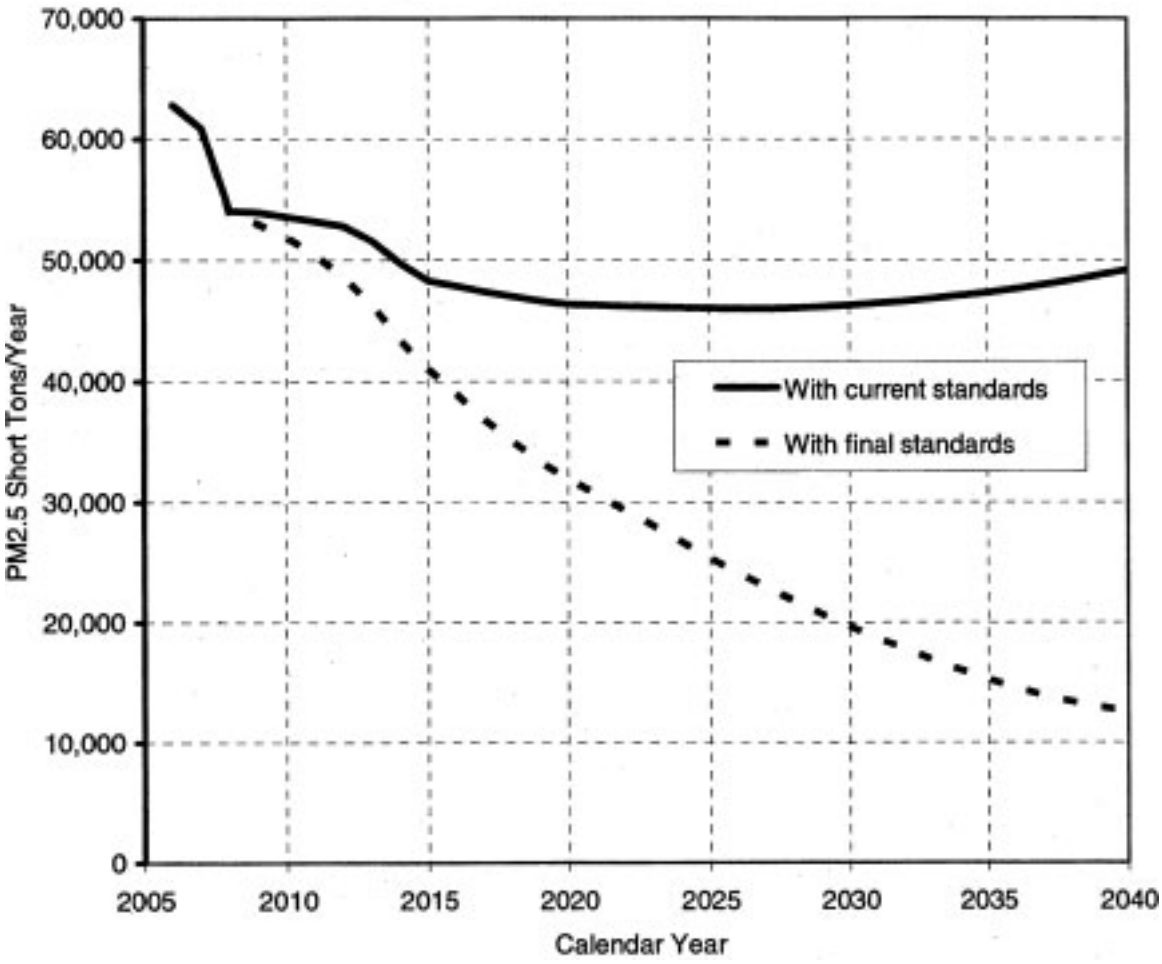
Figure II-2 $PM_{2.5}$ Reductions from Final Rule



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(3) NO_X Emissions Reductions

In 2001 annual emissions from locomotive and marine diesel engines totaled about 2.0 million tons. Due to earlier engine standards for these engines, annual NO_X emissions drop to approximately 1.6 million tons in 2030. Both Table II–2 and Figure II–3 show NO_X emissions remaining fairly flat through 2030 before beginning to rise again due to growth in these sectors.

As shown in Table II–2 and Figure II–3, in the near term this rule reduces annual NO_X emissions from the current national inventory baseline by 87,000 tons in 2012 and 161,000 tons in 2015. By 2020, annual NO_X emissions are cut by 371,000 tons and by 2030—795,000 tons are eliminated. As with $PM_{2.5}$ emissions, a yearly decline in NO_X emissions continues through 2040 when more than 1.1 million tons of NO_X are annually reduced from locomotive and marine diesel engines.

These numbers are comparable to emission reductions projected in 2030 for our already established Clean Air Nonroad Diesel (CAND) program. Table II–3 provides the 2030 NO_X emission reductions (and PM reductions) for this rule compared to the Heavy-Duty Highway rule and CAND rule. The 2030 NO_X reductions of about 738,000 tons for the CAND rule are slightly less than those from this rule.

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Figure II-3 NO_x Reductions from Rule

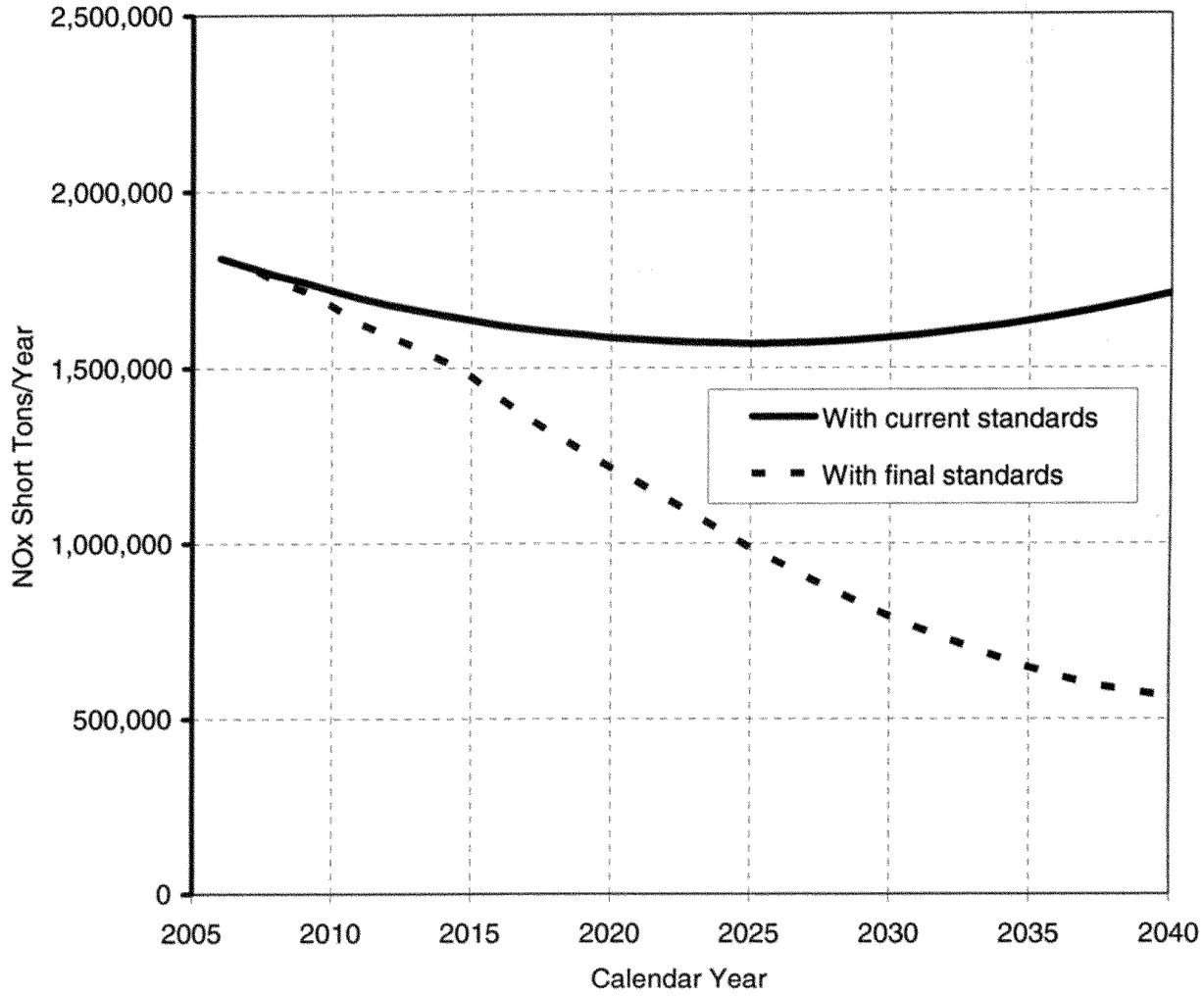

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TABLE II–3.—PROJECTED 2030 EMISSIONS REDUCTIONS FROM RECENT MOBILE SOURCE RULES

[Short tons]

Rule	NO_X	$PM_{2.5}$
Locomotive and Marine	795,000	27,000
Clean Air Nonroad Diesel	738,000	129,000
Heavy-Duty Highway	2,600,000	109,000

(4) Volatile Organic Compounds Emissions Reductions

Emissions of volatile organic compounds (VOCs) from locomotive and marine diesel engines are shown in Table II–2, along with the estimates of the reductions we expect from the HC standard in our rule in 2012, 2015, 2020, 2030 and 2040. In 2012, 8,000 tons of VOCs are reduced and in 2015 15,000 tons are annually eliminated from the inventory. By 2020, reductions will expand to 28,000 tons annually from these engines. Over the next ten years, annual reductions from controlled locomotive and marine diesel engines will produce annual VOC reductions of 43,000 tons in 2030 and 55,000 tons in 2040. Figure II–4 shows our estimate of VOC emissions between 2006 and 2040 both with and without this rule.

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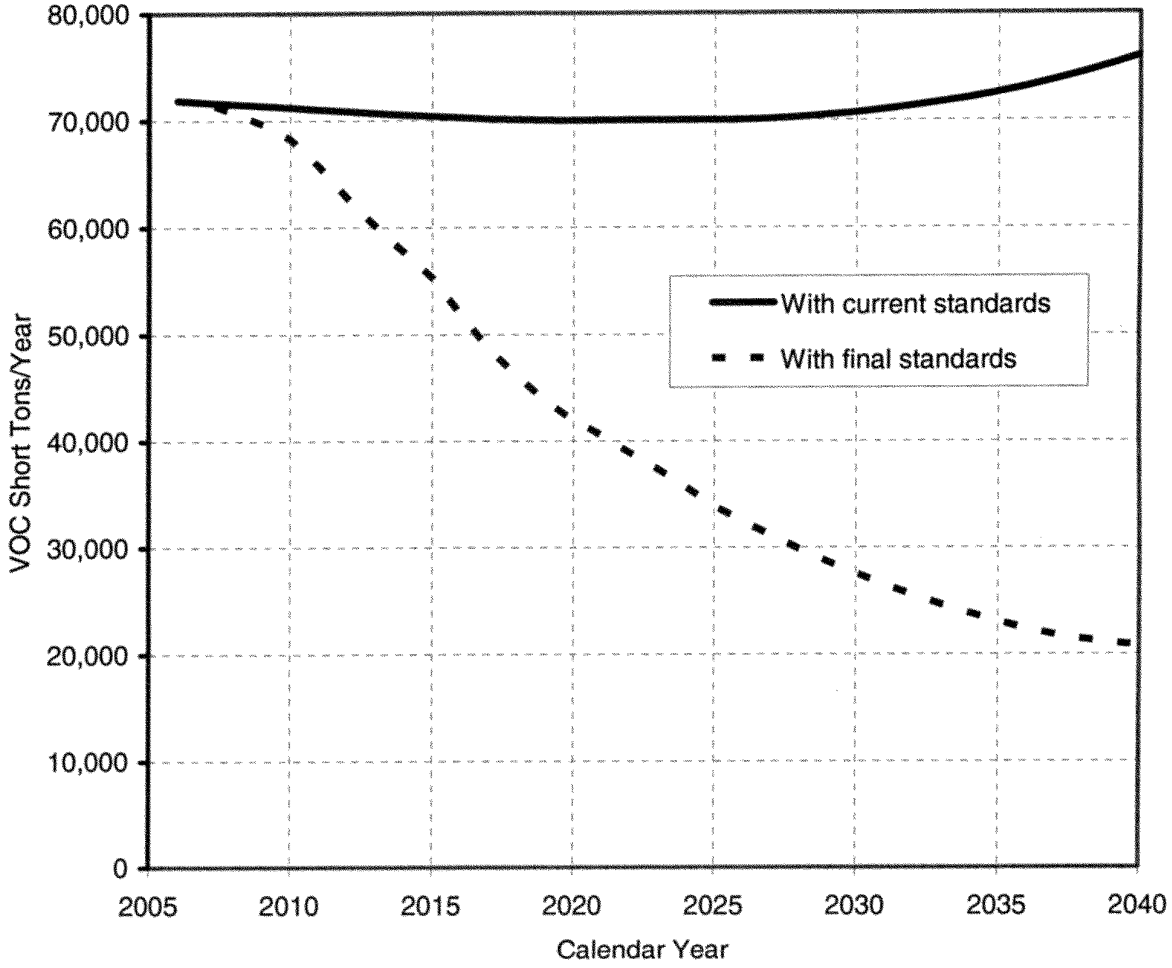
Figure II-4 VOC Reductions from Rule



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III. Emission Standards

This section details the emission standards, implementation dates, and other major requirements of the new program. Following brief summaries of the types of locomotives and marine engines covered, we describe the provisions for:

- Standards for remanufactured Tier 0, 1, and 2 locomotives,
- Tier 3 and Tier 4 standards for newly-built line-haul locomotives,
- Standards and other provisions for switch locomotives,
- Requirements to reduce idling locomotive emissions,
- Tier 3 and Tier 4 standards for newly-built marine diesel engines, and
- Standards for remanufactured marine diesel engines.

An assessment of the technological feasibility of the standards follows the program description. To ensure that the benefits of the standards are realized throughout the useful life of these engines, and to incorporate lessons learned over the last few years from the existing test and compliance programs, we are also revising test procedures and related certification requirements, and adding comparable provisions for remanufactured marine diesel engines. These are described in section IV.

A. What Locomotives and Marine Engines Are Covered?

The regulations being adopted affect locomotives currently regulated under part 92 and marine diesel engines and vessels currently regulated under parts 89, 1039, and 94, as described below.[123] In addition, they apply to existing marine diesel engines above 600 kW (800 hp).

With some exceptions, the locomotive regulations apply for all locomotives originally built in or after 1973 that operate extensively within the United States. See section IV.B for a discussion of the exemption for locomotives that are used only incidentally within the U.S. The exceptions include historic steam-powered locomotives and locomotives powered solely by an external source of electricity. In addition, the regulations generally do not apply to some existing locomotives owned by small businesses. Furthermore, engines used in

[123] All of the regulatory parts referenced in this preamble are parts in Title 40 of the Code of Federal Regulations, unless otherwise noted.

locomotive-type vehicles with less than 750 kW (1006 hp) total power (used primarily for railway maintenance), engines used only for hotel power (for passenger railcar equipment), and engines that are used in self-propelled passenger-carrying railcars, are excluded from these regulations. The engines used in these smaller locomotive-type vehicles are generally subject to the nonroad engine requirements of Parts 89 and 1039.

The marine diesel engine program applies to all propulsion and auxiliary engines with per cylinder displacement up to 30 liters.[124] For purposes of these standards, these marine diesel engines are categorized both by per cylinder displacement and by maximum engine power.

According to our existing definitions, a marine engine is defined as an engine that is installed or intended to be installed on a marine vessel. Engines that are on a vessel but that are not ''installed'' are generally considered to be land-based nonroad engines and are regulated under 40 CFR part 89 or part 1039. Consistent with our current marine diesel engine program, the standards adopted in this rule apply to engines manufactured for sale in the United States or imported into the United States beginning with the effective date of the standards. The standards also apply to any engine installed for the first time in a marine vessel after it has been used in another application subject to different emission standards. In other words, an existing nonroad diesel engine would become a new marine diesel engine, and subject to the marine diesel engine standards, when it is marinized for use in a marine application.

Consistent with our current program, the marine engine standards we are finalizing will not apply to marine diesel engines installed on foreign vessels. While we received many comments requesting that we extend the new standards to engines on foreign vessels operating in the United States, we have determined that it is appropriate to postpone this decision to our rulemaking for Category 3 marine diesel engines. This will allow us to consider all engines on an ocean-going vessel as a system; this may facilitate the application of advanced emission control technologies because these engines often share a common fuel and/or exhaust system. This approach is also consistent with the United States Government's proposal to amend Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL) currently under consideration at the International Maritime Organization (IMO), which calls for significant emission reductions from all engines on ocean-going vessels.[125] EPA expects to finalize new Category 3 engine emission standards in late 2009.[126]

B. What Standards Are We Adopting?

(1) Locomotive Standards

(a) Line-Haul Locomotives

We are setting new emission standards for newly-built and remanufactured line-haul locomotives. Our standards for newly-built line-haul locomotives will be implemented in two tiers: Tier 3, based on engine design improvements, and Tier 4, based on the application of the high-efficiency catalytic aftertreatment technologies now being developed and introduced in the highway diesel sector. Our standards for remanufactured line-haul locomotives apply to all Tier 0, 1, and 2 locomotives and are based on engine design improvements. Table III–1 summarizes the line-haul locomotive standards and implementation dates. The feasibility of the new standards and the technologies involved are discussed in detail in section III.C.

TABLE III.—1 LINE-HAUL LOCOMOTIVE STANDARDS

[g/bhp-hr]

Standards apply to	Take effect in year	PM	NO_X	HC
Remanufactured Tier 0 without separate loop intake air cooling.	2008 as Available, 2010 Required	0.22	8.0	1.00
Remanufactured Tier 0 with separate loop intake air cooling.	2008 as Available, 2010 Required	0.22	7.4	0.55
Remanufactured Tier 1	2008 as Available, 2010 Required	0.22	7.4	0.55
Remanufactured Tier 2	2008 as Available, 2013 Required	0.10	5.5	0.30
New Tier 3	2012	0.10	5.5	0.30
New Tier 4	2015	0.03	1.3	0.14

(i) Remanufactured Locomotives

As proposed, we are setting new standards for the existing fleet of Tier 0, Tier 1, and Tier 2 locomotives, to apply at the time of remanufacture. These standards will also apply at the first remanufacture of Tier 2 locomotives added to the fleet between now and the start of Tier 3.

Commenters have suggested that EPA adopt a naming convention for the standards tiers to avoid confusion over whether, for example, the terms ''Tier 0 standards'' and ''Tier 0 locomotives'' are referring to the ''old'' Tier 0 standards adopted in 1998 or the ''new'' Tier 0 standards promulgated in this rule. A similar confusion may exist for old and new Tier 1 and Tier 2 standards, including for marine engines. The confusion is compounded by the fact that many of the locomotives previously subject to the old Tier 0 standards will now be subject to the new Tier 1 standards, and so a Tier 0 locomotive that is upgraded to meet them could fairly be called a Tier 1 locomotive, and likewise for Tier 2/Tier 3 standards.

[124] Marine diesel engines at or above 30 liters per cylinder, called Category 3 engines, are typically used for propulsion power on ocean-going ships. EPA is addressing Category 3 engines through separate actions, including a planned rulemaking for a new tier of federal standards (see Advance Notice of Proposed Rulemaking published December 7, 2007 at 72 FR 69522) and participation on the U.S. delegation to the International Maritime Organization for negotiations of new international standards (see *http://www.epa.gov/otaq/oceanvessels.com* for information on both of those actions), as well as EPA's Clean Ports USA Initiative (see *http://www.epa.gov/cleandiesel/ports/index.htm*).

[125] See ''Revision of the MARPOL Annex VI, the NO_X Technical Code and Related Guidelines; Development of Standards for NO_X, PM, and SO_X,'' submitted by the United States, BLG 11/15, Sub-Committee on Bulk Liquids and Gases, 11th Session, Agenda Item 5, February 9, 2007, Docket ID EPA–HQ–OAR–2007–0121–0034. This document, along with the U.S. Statement concerning the same, is also available on our Web site: *www.epa.gov/otaq/oceanvessels.com*.

[126] See 72 FR 68518, December 5, 2007 for the new regulatory deadline for the final rule for an additional tier of standards for Category 3 rulemaking (final rule by December 17, 2009).

In response, we are adopting a simple approach whereby a Tier 0 locomotive remanufactured under the more stringent Tier 0 standards we are adopting in this rule will be designated a Tier 0+ locomotive. A Tier 0 locomotive originally manufactured with a separate loop intake air cooling system that is remanufactured to the Tier 1+ standards will be designated as a Tier 1+ locomotive. We are adopting the same approach for Tier 1 and Tier 2 locomotives. That is, those remanufactured under the new standards would be called Tier 1+ and Tier 2+ locomotives, respectively. We are also suggesting that in many contexts, including a number of places in this final rule, there is really no need to make distinctions of this sort, as no ambiguity arises. In these contexts it would be perfectly acceptable to drop the ''+'' designation and simply refer to Tier 0, 1, and 2 locomotives and standards.

As described in section IV.B(3), the new Tier 0+, 1+, and 2+ standards (and corresponding switch-cycle standards) may apply when a Tier 0, 1, or 2 locomotive is remanufactured anytime after this final rule takes effect, if a certified remanufacture system is available. However, this early certification is voluntary on the part of the manufacturers, and so if no emissions control system is certified early for a locomotive, these standards will instead apply beginning January 1, 2010 for Tier 0 and 1, and no later than January 1, 2013 for Tier 2. We are also adopting the proposed reasonable cost provision, described in section IV.B(3), to protect against the unlikely event that the only certified systems made in the early program phase are exorbitantly priced.

Although under this approach, certification of new remanufacture systems in the early phase of the program is voluntary, we believe that developers will strive to certify systems to the new standards as early as possible, even in 2008, to establish these products in the market, especially for the locomotive models anticipated to have significant numbers coming due for remanufacture in the next few years. This focus on higher volume products also maximizes the potential for large emission reductions very early in this program, greatly offsetting the effect of slow turnover to new Tier 3 and Tier 4 locomotives inherent in this sector.

These remanufactured locomotive standards represent PM reductions of about 50 percent for Tier 0 and Tier 1 locomotives, and NO_X reductions of about 20 percent for Tier 0+ locomotives with separate loop aftercooling. Significantly, these reductions will be substantial in the early years. This will be important to State Implementation Plans (SIPs) being developed to achieve attainment with the NAAQS, owing to the 2008 start date and relatively rapid remanufacture schedule (roughly every 7 years, though it varies by locomotive model and age).

Some commenters argued for delaying the remanufactured locomotive standards and some argued for accelerating them. However, little technical justification was provided on either side and, after reconsideration, we believe the proposed standards and dates are appropriate. However, based on the comments, we have identified two current Tier 0 locomotive models that are not likely to meet the new standards under the full range of required test conditions, owing to limitations in the original locomotive design. These are the General Electric (GE) Dash-8 locomotives not equipped with separate loop aftercooling, and the Electro-Motive Diesel (EMD) SD70MAC locomotives that are equipped with separate loop aftercooling. As a result, we are allowing an exception in ambient temperature and altitude conditions under which these models, when remanufactured, must meet the new standards, as detailed in the Part 1033 regulations. These exceptions are limited to the extent that it is technically feasible to meet the relevant standards under most in-use conditions.

(ii) Newly-Built Locomotives

We are adopting the proposed Tier 3 and Tier 4 line-haul locomotive standards but with an earlier start date for Tier 4 NO_X, along with an additional compliance flexibility option. We requested comment in the NPRM on whether additional NO_X emission reductions would be feasible and appropriate for Tier 3 locomotives in the 2012 timeframe, based on reoptimization of existing Tier 2 NO_X control technologies, or the addition of new engine-based technologies such as exhaust gas recirculation (EGR). Manufacturers submitted detailed technical comments indicating that achieving such reductions would result in a large fuel economy penalty, a major engine redesign that would hamper Tier 4 technology development, or both. Our own review of the technical options leads us to the same conclusion and we are therefore finalizing the Tier 3 emissions standards as proposed.

We proposed to allow manufacturers to defer meeting the Tier 4 NO_X standard on newly-built locomotives until the 2017 model year, in order to work through any implementation and technological issues that might arise with advanced NO_X control technology. Even so, we expected that manufacturers would undertake a single comprehensive redesign program for Tier 4, relying on the same basic locomotive platform and overall emission control space allocations for all Tier 4 product years. With this in mind, we proposed that locomotives certified under Tier 4 in 2015 and 2016 without Tier 4 NO_X control systems should have these systems added when they undergo their first remanufacture and be subject to the Tier 4 NO_X standard thereafter.

We received many comments from state and local air quality agencies, and from environmental organizations, arguing that earlier implementation of these advanced technologies is technologically feasible and emphatically stating that they were needed to address the nation's air quality problems. Further review of the test data available for the proposed rule and of new test data available since the proposal supports the argument for earlier implementation of Tier 4 NO_X controls. This information is discussed in detail in section III.C. Consequently, after considering this data and industry comments regarding feasibility, we have concluded that the progress made in the development of NO_X aftertreatment technology has been such that this proposed allowance to defer NO_X control is not consistent with our obligation under section 213(a)(3) of the Clean Air Act to set standards that ''achieve the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the engines or vehicles, giving appropriate consideration to cost, lead time, noise, energy, and safety factors associated with the application of such technology.''

We are therefore not adopting this allowance for deferred NO_X control in 2015–2016 Tier 4 locomotives, effectively advancing the Tier 4 NO_X standard for locomotives by two years. Besides meeting our obligation under the Clean Air Act, this change will simplify the certification and compliance program for all stakeholders by providing a single step for Tier 4 implementation. It will also provide substantial additional NO_X reductions during years that are important to some states for NAAQS attainment, thus helping to address what was arguably the most critical comment we received from state and local air agencies and environmental organizations.

We recognize that designing locomotives to meet the stringent Tier 4

standards in 2015 with the high levels of performance and reliability demanded by the railroad industry will be challenging. As in other recent EPA mobile source programs, we proposed and are finalizing several compliance flexibility measures to aid the transition to these very clean technologies. Specifically, we are adopting two distinct compliance flexibility options for NO_X that, while ensuring the earliest possible introduction of advanced emission control, will provide locomotive manufacturers some level of risk mitigation should the technology solutions prove to be less robust than we project. The first compliance flexibility is consistent with the flexibility program described in our NPRM providing an in-use compliance margin for NO_X of 1.3 g/bhp-hr at full useful life (*i.e.*, a 2.6 g/bhp-hr emissions cap for in-use testing) for the first three Tier 4 model years. See section IV.A(8) for details on this program.

The second flexibility provision is an alternative NO_X compliance option that reduces the in-use NO_X add-on to 0.6 g/bhp-hr (*i.e.*, a 1.9 g/bhp-hr emissions cap for any in-use testing) for model years 2015–2022. While significantly tightening the in-use emissions cap, the provision provides manufacturers with significantly more time to develop advanced NO_X emission control systems using real in-use experiences from the locomotive fleet. Complementing this focus on improving technology through experience with the in-use fleet, this provision also allows manufacturers to substitute additional in-use tests on locomotives in lieu of the typical production line testing requirements of our locomotive regulations. This optional in-use testing would be in addition to the current in-use testing requirements of our locomotive certification program. See section IV.A(8) for details on this program.

For reasons explained in the NPRM, Tier 4 line-haul locomotives will not be required to meet standards on the switch cycle, but we are requiring that newly-built Tier 3 locomotives and Tier 0 through Tier 2 locomotives remanufactured under this program be subject to switch cycle standards, set at levels above the line-haul cycle standards. Section III.B(1)(b) provides details.

(b) Switch Locomotives

The NPRM discussed at some length the importance and challenges of turning over today's large switch locomotive fleet to clean diesel. In response, we proposed standards and other provisions aimed at overcoming these challenges by encouraging the replacement of old high-emitting units with newly-built or refurbished locomotives powered by very clean engines developed for the nonroad equipment market.

We are adopting the new standards for switch locomotives that we proposed. As proposed, we are also continuing the existing Part 92 policy of requiring Tier 0 switch locomotives to only meet standards on the switch cycle, while requiring Tier 1 and Tier 2 locomotives to meet the applicable standards on both the line-haul and switch cycles. This policy was adopted to ensure that manufacturers design emission controls to function broadly over all notches. The switch cycle standards shown in Table III–2 will require emission reductions equivalent to those required by our new standards that apply over the line-haul cycle. Note that these switch cycle standards also apply to the Tier 3 and earlier line-haul locomotives that are subject to compliance requirements on the switch cycle, as mentioned above and in Section III.B(1)(b).

We are also adopting the proposed Tier 3 and 4 emission standards for newly-built switch locomotives, as shown in Table III–2. These standards are slightly more stringent than the Tier 3 and Tier 4 line-haul standards. Given these more stringent switch cycle standards, it is not necessary to require to Tier 3 and 4 switchers to meet the line-haul standards over the line-haul cycle.

TABLE III.—2 EMISSION STANDARDS FOR SWITCH LOCOMOTIVES

[g/bhp-hr]

Switch locomotive standards apply to	Take effect in year	PM	NO_X	HC
Remanufactured Tier 0	2008 as available, 2010 required	0.26	11.8	2.10
Remanufactured Tier 1	2008 as available, 2010 required	0.26	11.0	1.20
Remanufactured Tier 2	2008 as available, 2013 required	0.13	8.1	0.60
Tier 3	2011	0.10	5.0	0.60
Tier 4	2015	0.03	1.3	0.14

We are also finalizing the proposed streamlined certification option to help in the early implementation of the switch locomotive program. As described in section IV.B(9), during a 10-year program start-up period aimed at encouraging the turnover of the existing switcher fleet to the new cleaner engines, switch locomotives may use nonroad-certified engines (Table III–3) without need for an additional certification under the locomotive program. In the years before the nonroad Tier 4 start dates, we are making this provision available using pre-Tier 4 nonroad engines meeting today's standards of 0.15 g/bhp-hr PM and 3.0/4.8 g/bhp-hr NO_X+NMHC (below/above 750 hp), because switchers built with these nonroad engines will still be much cleaner than those meeting the current switch locomotive Tier 2 standards of 0.24 and 8.1 g/bhp-hr PM and NO_X, respectively.

Commenters suggested that we allow the use of even earlier-tier nonroad engines under this option, as these would still be substantially cleaner than the engines being replaced. However, we feel this would defeat the purpose of the program, and would not be justifiable on a feasibility basis, as current-tier nonroad engines will be available for incorporation into new switchers in any year of the program. We are adopting other compliance and ABT provisions relevant to switch locomotives as discussed in section IV.B(1), (2), (3), and (9).

TABLE III.—3 RELEVANT LARGE NONROAD ENGINE TIER 4 STANDARDS

[g/bhp-hr]

Engine power	Model year	PM	NO_X
At or Below 750 hp	2011	0.01	3.0 (NO_X+NMHC) [a]
	2014	0.01	0.30
750–1200 hp	2011	0.075	2.6
	2015	0.02	0.50
Over 1200 hp	2011	0.075	0.50 genset; 2.6 non-genset
	2015	0.02	0.50

Note: (a) 0.30 NO_X for 50% of sales in 2011–2013, or alternatively 1.5 g NO_X for 100% of sales.

Finally, we are revising the definition of a switch locomotive to make clear that it is the total switch locomotive power rating (including power from any auxiliary engines that can operate when a main engine is operating), and not the individual engine power rating, that must be below 2300 hp to qualify, and to drop the unnecessary requirement that it be designed or used primarily for short distance operation. This clears up the ambiguity in the Part 92 definition over multi-engine switchers.

(c) Reduction of Locomotive Idling Emissions

We are adopting the proposed requirement that an Automatic Engine Stop/Start System (AESS) be used on all new Tier 3 and Tier 4 locomotives and installed on all existing locomotives that are subject to the new remanufactured engine standards, at the point of first remanufacture under the new standards. Locomotives equipped with an AESS device under this program must shut down the locomotive engine after no more than 30 continuous minutes of idling, and be able to stop and start the engine at least six times per day without causing engine damage or other serious problems. Continued idling is allowed under the following conditions: to prevent engine damage such as damage caused by coolant freezing, to maintain air pressure for brakes or starter systems, to recharge the locomotive battery, to perform necessary maintenance, or to otherwise comply with applicable government regulations.

Commenters also pointed out that it can sometimes be appropriate to allow a locomotive to idle to heat or cool the cab, and we are adopting regulations to allow it where necessary. Our implementation of this provision will rely on the strong incentive railroads have to limit idling to realize fuel cost savings after they have invested capital by installing an AESS system on a locomotive. We expect the railroads to appropriately develop policies instructing operators when it is acceptable to idle the locomotive to provide heating or cooling to the locomotive cab. We do not believe that those individuals responsible for developing railroad policies have any incentive to encourage or allow unnecessary idling. It is our intention to stay abreast of how well this combination of idle control systems and railroad policies does in fact accomplish the intended goal of reducing unnecessary idling. In general, we may consider it to be circumvention of this provision for an individual operator to use the AESS system in a manner other than that for which the system was designed and implemented per a railroad's policy directive.

A further reduction in idling emissions can be achieved through the use of onboard auxiliary power units (APUs), either as standalone systems or in conjunction with an AESS. In contrast to AESS, which works to reduce unnecessary idling, the APU goes further by also reducing the amount of time when locomotive engine idling is necessary, especially in cold weather climates. APUs are small (less than 50 hp) diesel engines that stop and start themselves as needed to provide: heat to both the engine coolant and engine oil, power to charge the batteries, and power to run accessories such as those required for cab comfort. This allows the much larger locomotive engine to be shut down while the locomotive remains in a state of readiness, thereby reducing fuel consumption without the risk of the engine being damaged in cold weather. APUs are powered by nonroad engines compliant with EPA or State of California nonroad engine standards, and emit at much lower levels than an idling locomotive under current standards.

Some commenters suggested we require both an AESS and an APU. However, the amount of idle reduction an APU can provide is dependent on a number of variables, such as the function of the locomotive (e.g., a switcher or a line-haul), where it operates (i.e., geographical area), and its operating characteristics (e.g., number of hours per day that it operates). As we stated in the NPRM, at this time we are not requiring that APUs be installed on every locomotive because it is not clear how much additional benefit they would provide outside of regions and times of the year where low temperatures or other factors that warrant the use of an APU exist and because they do involve some inherent design and operational complexities that could not be justified without such commensurate benefits. We are, however, adopting the proposed provision to encourage the additional use of APUs by providing in our test regulations, a process by which the manufacturer can appropriately account for the proven emission benefits of a more comprehensive idle reduction system.

In response to comment, we are adopting a more flexible approach that will allow the idle reduction requirement for remanufactured Tier 0+, 1+, and 2+ locomotives to be addressed in a separate certification apart from the certification of the full remanufacture system. Under this approach, remanufacturers will be allowed to obtain a certificate for a system that meets all of the requirements of part 1033 except for those of § 1033.115(g). However, since the idle controls would still need to be installed in a certified configuration before the remanufactured locomotive is returned to service, some other entity would need to obtain a certificate to cover the requirements of § 1033.115(g). (This separate certification approach is somewhat analogous to allowing a motor vehicle engine manufacturer to hold the certificate for exhaust emission standards and a motor vehicle manufacturer to hold the certificate for evaporative emission standards for a single motor vehicle.) Note that manufacturers of freshly manufactured locomotives and their customers will also have the choice as to whether the AESS is installed as part of the certified engine configuration at the factory or by an aftermarket company pursuant to a separate certification before the freshly manufactured locomotive is put into

service. These provisions will allow more companies to remain in the AESS manufacturing market and thus provide more choices to the railroads.

As described in Chapter 5 of the RIA, manufacturers of AESS, and demonstrations done in partnership between government and industry have shown that for most locomotives the fuel savings that result in the first few years after installation of an AESS system will offset the cost of adding the system to the locomotive. Given these short payback times for adding idle reduction technologies to a typical locomotive, normal market forces have led many railroads to retrofit a number of their locomotives with such controls. However, as is common with pollution, market prices generally do not account for the external social costs of the idling emissions, leading to an underinvestment in idling reduction systems. This rulemaking addresses those locomotives for which the railroads judge the fuel savings insufficient to justify the cost of the retrofit. We believe that applying AESS to these locomotives is appropriate when one also considers the significant emissions reductions that will result.

(2) Marine Diesel Engine Standards

(a) Newly-Built Marine Engines

We are adopting Tier 3 and Tier 4 emission standards for newly-built marine diesel engines with displacements under 30 liters per cylinder. Our analysis of the feasibility of these standards is summarized in section III.C and detailed in the RIA.

We are retaining our existing per-cylinder displacement approach to establishing cutpoints for standards, but are revising and refining it in several places to ensure that the appropriate standards apply to every group of engines in this very diverse sector and to provide for an orderly phase-in of the program to spread out the redesign workload burden:

We are moving the C1/C2 cutpoint from 5 liters/cylinder to 7 liters/cylinder, because the latter is a more accurate cutpoint between today's high- and medium-speed diesels.

We are revising the per-cylinder displacement cutpoints within Category 1 to better define the application of standards.

An additional differentiation is made between high power density engines typically used in planing vessels and standard power density engines, with a cutpoint between them set at 35 kW/liter (47 hp/liter).

We are removing the distinction for marine diesels under 37 kW (50 hp) in Category 1, originally made because these were regulated under our nonroad engine program.

Finally, we will further group engines by maximum engine power, especially in regards to setting appropriate long-term aftertreatment-based standards.

Note that we are retaining the differentiation between recreational and non-recreational marine engines within Category 1 because there are differences in their certification programs. Also, as discussed below, we are not finalizing Tier 4 standards for recreational marine engines at this time. Section IV.C(10) clarifies the definition of recreational marine diesel engine.

The new standards and implementation schedules are shown on Tables III–4 through 7. Briefly summarized, the marine diesel standards include stringent engine-based Tier 3 standards, phasing in over 2009–2014. They also include aftertreatment-based Tier 4 standards for commercial marine engines at or above 600 kW (800 hp), phasing in over 2014–2017. For engines of power levels not included in the Tier 3 and Tier 4 tables, the previous tier of standards (Tier 2 or Tier 3, respectively) continues to apply. These standards and implementation dates are the same as those proposed except: (1) Recreational marine engines are not subject to Tier 4 standards; (2) The Tier 4 NO_X standard for 2000–3700 kW engines has been pulled forward by two years; (3) The proposed optional Tier 4 approach coordinated with locomotive Tier 4 has been modified; and (4) based on comments we received, the Tier 3 standards for high power density engines in the 3.5 to 7 liter/cylinder category (Table III–5) have been adjusted slightly to better align them with standards in other categories. The first three of these changes are discussed in more detail below. See section 3.2.1.1 of the Summary and Analysis of Comments document for discussion of the fourth.

TABLE III–4.—TIER 3 STANDARDS FOR MARINE DIESEL C1 COMMERCIAL STANDARD POWER DENSITY

Maximum engine power	L/cylinder	PM g/bhp-hr (g/kW-hr)	NO_X+HC [d] g/bhp-hr (g/kW-hr)	Model year
<19 kW	<0.9	0.30 (0.40)	5.6 (7.5)	2009
19 to <75 kW	<0.9 [a]	0.22 (0.30)	5.6 (7.5)	2009
		0.22 (0.30) [b]	3.5 (4.7) [b]	2014
75 to <3700 kW	<0.9	0.10 (0.14)	4.0 (5.4)	2012
	0.9–<1.2	0.09 (0.12)	4.0 (5.4)	2013
	1.2–<2.5	0.08 (0.11) [c]	4.2 (5.6)	2014
	2.5–<3.5	0.08 (0.11) [c]	4.2 (5.6)	2013
	3.5–<7.0	0.08 (0.11) [c]	4.3 (5.8)	2012

Notes:
(a) <75 kW engines at or above 0.9 L/cylinder are subject to the corresponding 75–3700 kW standards.
(b) Option: 0.15 g/bhp-hr (0.20 g/kW-hr) PM/4.3 g/bhp-hr (5.8 g/kW-hr) NO_X+HC in 2014.
(c) This standard level drops to 0.07 g/bhp-hr (0.10 g/kW-hr) in 2018 for <600 kW engines.
(d) Tier 3 NO_X+HC standards do not apply to 2000–3700 kW engines.

TABLE III–5.—TIER 3 STANDARDS FOR MARINE DIESEL C1 RECREATIONAL AND COMMERCIAL HIGH POWER DENSITY

Maximum engine power	L/cylinder	PM g/bhp-hr (g/kW-hr)	NO_X+HC g/bhp-hr (g/kW-hr)	Model year
<19 kW	<0.9	0.30 (0.40)	5.6 (7.5)	2009
19 to <75 kW	<0.9 [a]	0.22 (0.30)	5.6 (7.5)	2009

TABLE III–5.—TIER 3 STANDARDS FOR MARINE DIESEL C1 RECREATIONAL AND COMMERCIAL HIGH POWER DENSITY—Continued

Maximum engine power	L/cylinder	PM g/bhp-hr (g/kW-hr)	NO_X+HC g/bhp-hr (g/kW-hr)	Model year
		0.22 (0.30) [b]	3.5 (4.7) [b]	2014
75 to <3700 kW	<0.9	0.11 (0.15)	4.3 (5.8)	2012
	0.9–<1.2	0.10 (0.14)	4.3 (5.8)	2013
	1.2–<2.5	0.09 (0.12)	4.3 (5.8)	2014
	2.5–<3.5	0.09 (0.12)	4.3 (5.8)	2013
	3.5–<7.0	0.08 (0.11)	4.3 (5.8)	2012

Notes:
(a) <75 kW engines at or above 0.9 L/cylinder are subject to the corresponding 75–3700 kW standards.
(b) Option: 0.15 g/bhp-hr (0.20 g/kW-hr) PM/4.3 g/bhp-hr (5.8 g/kW-hr) NO_X+HC in 2014.

TABLE III–6.—TIER 3 STANDARDS FOR MARINE DIESEL C2 [a]

Maximum engine power	L/cylinder	PM g/bhp-hr (g/kW-hr)	NO_X+HC [b] g/bhp-hr (g/kW-hr)	Model year
<3700 kW	7–<15	0.10 (0.14)	4.6 (6.2)	2013
	15–<20	0.20 (0.27) [c]	5.2 (7.0)	2014
	20–<25	0.20 (0.27)	7.3 (9.8)	2014
	25–<30	0.20 (0.27)	8.2 (11.0)	2014

Notes:
(a) See note (c) of Table III–7 for optional Tier 3/Tier 4 standards.
(b) Tier 3 NO_X+HC standards do not apply to 2000–3700 kW engines.
(c) For engines below 3300 kW in this group, the PM Tier 3 standard is 0.25g/bhp-hr (0.34 g/kW-hr).

TABLE III–7.—TIER 4 STANDARDS FOR MARINE DIESEL C1 AND C2

Maximum engine power	PM g/bhp-hr (g/kW-hr)	NO_X g/bhp-hr (g/kW-hr)	HC g/bhp-hr (g/kW-hr)	Model year
At or above 3700 kW	0.09 (0.12) [a]	1.3 (1.8)	0.14 (0.19)	[c] 2014
	0.04 (0.06)	1.3 (1.8)	0.14 (0.19)	[b, c] 2016
2000 to <3700 kW	0.03 (0.04)	1.3 (1.8)	0.14 (0.19)	[c, d] 2014
1400 to <2000 kW	0.03 (0.04)	1.3 (1.8)	0.14 (0.19)	[c] 2016
600 to <1400 kW	0.03 (0.04)	1.3 (1.8)	0.14 (0.19)	[b] 2017

Notes:
(a) This standard is 0.19 g/bhp-hr (0.25 g/kW-hr) for engines with 15–30 liter/cylinder displacement.
(b) Optional compliance start dates can be used within these model years; see discussion below.
(c) Option for C2: Tier 3 PM/NO_X+HC at 0.10 / 5.8 g/bhp-hr (0.14/7.8 g/kW-hr) in 2012, and Tier 4 in 2015.
(d) The Tier 3 PM standards continue to apply for these engines in model years 2014 and 2015 only.

Engine manufacturers argued that modifying standard power density engines between 2000 and 3700 kW for Tier 3 NO_X, and again for Tier 4 NO_X shortly after would be too difficult. They argued that these engines could meet Tier 4 NO_X in 2014, two years earlier, if the Tier 3 NO_X+HC standard, proposed to apply in 2012, 2013, or 2014, depending on displacement, did not have to be met. We have analyzed this group of engines and agree that the suggested approach would be feasible and would have very little detrimental effect on NO_X reductions in 2012–2013, while providing significant additional NO_X reductions thereafter. We are therefore leaving the Tier 3/Tier 4 PM standards as proposed but revising the NO_X implementation schedule as suggested by the industry.

The Tier 3 standards for engines with maximum engine power less than 75 kW (100 hp) are based on the nonroad diesel Tier 2 and Tier 3 standards, because these smaller marine engines are largely derived from (and often nearly identical to) the nonroad engine designs. The relatively straightforward carry-over nature of this approach also allows for an early implementation schedule, in model year 2009, providing substantial early benefits to the program. However, some of the nonroad engines less than 75 kW are also subject to aftertreatment-based Tier 4 nonroad standards, and our new program does not carry these over into the marine sector, due to vessel design and operational constraints discussed in section III.C. Because of the widespread use of both direct- and indirect-injection diesel engines in the 19 to 75 kW (25–100 hp) engine market today, we are making two options available to manufacturers for meeting Tier 3 standards on any engine in this range, as indicated in Table III–4. One option focuses on lower PM and the other on lower NO_X, though both require substantial reductions in both PM and NO_X and will take effect in 2014.

With important exceptions, we are subjecting marine diesel engines at or above 75 kW (100 hp) to new emissions standards in two steps, Tier 3 and Tier 4. The Tier 3 standards are based on the engine-out emission reduction potential (apart from the addition of exhaust aftertreatment) of the nonroad Tier 4 diesel engines that will be introduced beginning in 2011. The Tier 3 standards for C1 engines will phase in over 2012–2014. We believe it is appropriate to coordinate the marine Tier 3 standards

with the nonroad Tier 4 (rather than Tier 3) engine developments in this way because marine diesel engines are largely derived from land-based nonroad counterparts, and because the advanced fuel and combustion systems that we expect the Tier 4 nonroad engines to employ will allow approximately a 50 percent reduction in PM when compared to the reduction potential of the nonroad Tier 3 engines. Inserting an additional marine engine tier based on nonroad Tier 3 engines would result in overly short lead time and stability periods and/or a delay in stringent standards.

We are applying high-efficiency aftertreatment-based Tier 4 standards to all commercial and auxiliary C1 and C2 engines over 600 kW (800 hp). These standards will phase in over 2014–2017. Marine diesels over 600 kW, though fewer in number, are the workhorses of the inland waterway and intercoastal marine industry, running at high load factors, for many hours a day, over decades of heavy use. As a result they also account for the bulk of marine diesel engine emissions.

After considering the substantial number of comments received on the feasibility of extending Tier 4 standards to engines below 600 kW, we are not at this time setting Tier 4 standards for these engines. We may do so at some point in the future if further technology developments show a path to address the issues we identify in RIA chapter 4 with the application of aftertreatment technologies to smaller vessels.

We are also not extending the Tier 4 program to recreational marine diesel engines. In our proposal we indicated that at least some recreational vessels, those with engines above 2000 kW (2760 hp), have the space and design layout conducive to aftertreatment-based controls and professional crews who oversee engine operation and maintenance. This suggested that aftertreatment-based standards would be feasible for these larger recreational engines. While commenters on the proposal did not disagree with these views, they pointed out these very large recreational vessels often travel outside the United States, and, for tax reasons, flag outside the U.S. as well. Commenters argued that applying Tier 4 standards to large recreational marine diesel engines would further discourage U.S.-flagging because vessels with those engines would be limited to using only those foreign ports that make ULSD and reductant for NO_X aftertreatment available at recreational docking facilities, limiting their use and hurting the vessel's resale value. The aftertreatment devices used to meet Tier 4 are expected to be sensitive to sulfur in the exhaust and so ULSD must be used in these engines.

In general, we expect ULSD to become widely available worldwide, which would help reduce these concerns. However, there are areas such as Latin America and parts of the Caribbean that currently do not plan to require use of this fuel. Even in countries where ULSD is available for highway vehicles but not mandated for other mobile sources, recreational marinas may choose to not make ULSD and reductant available if demand is limited to a small number of vessels, especially if the storage and dispensing costs are high. To the extent the fuel requirements for Tier 4 engines encourage vessel owners to flag outside the United States, the results would be increased emissions since the international standards for these engines are equivalent to EPA's Tier 1 standards.

After considering the above, we conclude that it is preferable at this time to hold recreational engines marine diesel engines to the Tier 3 standards. We plan to revisit this decision when we consider the broader questions of the application of our national marine diesel engine standards to engines on foreign vessels that enter U.S. ports in the context of our Category 3 marine diesel engine rulemaking.

There is a group of commercial vessels that share some of the characteristics of recreational vessels in that they also operate outside the United States. However, the concerns that lead us to exclude recreational vessels from the Tier 4 standards (flagging or registering in a foreign country and thus avoiding all U.S. emission standards; resale value) do not generally apply to commercial vessels. Unlike recreational vessels, the majority of commercial vessels with C1 or C2 main propulsion engines that operate in the United States do not have the option of flagging offshore. This is because they are engaged full-time in harbor activities in U.S. ports or in transporting freight or otherwise operating only between two U.S. ports, and cabotage laws require such vessels be flagged in the United States. In addition, most of these vessels operate at or between U.S. ports, so ULSD availability is not expected to be a problem. Finally, the resale of U.S. commercial vessels on the world market is already affected by other U.S.-specific vessel design and operation requirements, and these standards are not expected to affect that situation.

Nevertheless, some commercial vessels are used in ways that could make the use of ULSD and even urea an intractable problem. These are commercial vessels that are routinely operated outside of the United States for extended periods of time, including tug/barge cargo vessels operated on circle routes between the United States and Latin America that routinely refuel in places where ULSD is not available, and lift boats, utility boats, supply boats and crewboats that are used in the offshore drilling industry and are contracted to work in waters off Latin America or Western Africa for up to several years at a time without returning to the United States. Owners of these vessels informed us that requiring them to use Tier 4 engines will adversely impact their business in significant ways since they would have to arrange for ULSD and urea outside the United States, potentially at great additional cost, and that this is turn would affect their ability to compete with foreign transportation providers who do not face the same costs. These owners flag their vessels in the U.S. to maximize the flexibility of their business operations, but they informed us that they would consider segregating their fleets and flagging some elsewhere if they are required to use Tier 4 engines. Similar to the recreational marine case, the engines on reflagged vessels would not be subject to any U.S. emission controls or compliance requirements. In addition, there could be adverse impacts on associated industries that use these services, if there are fewer vessels available for use in the Untied States. For all of these reasons, these vessel owner/operators encouraged EPA to consider a provision that would not require these vessels to use Tier 4 engines.

We do not expect ULSD availability at foreign commercial ports to be a widespread problem. Many industrial nations already have or are expected to shift to ULSD in the near future, including Japan (by 2008), Singapore (in 2007), Mexico (in 2007 for ''Northern border areas''), the EU member states (by 2009), and Australia (by 2009). Other countries may also make ULSD available by 2016, as refineries in other countries modify their production to supply ULSD to the U.S. markets even if they do not require it domestically. However, ULSD may be difficult to obtain in some areas of the world, notably Latin America and Africa. Therefore, it is reasonable to include a limited compliance exemption from the Tier 4 standards for the narrow set of vessels that are described above.

Because the decision of whether a Tier 4 engine is required must be made at the design phase of a vessel, and not after it goes into service, it is preferable to define such an exemption based on vessel design characteristics instead of

the owner's intentions for how the vessel may ultimately be used. After consulting with industry representatives, we concluded that the most obvious design feature that indicates the vessel is intended for extensive international use is compliance with international safety standards. We have concluded that the costs of obtaining and maintaining certification for the International Convention for the Safety of Life at Sea (SOLAS) are high enough to discourage owners of vessels that will not be used outside the United States to obtain certification to evade the Tier 4 standards. These costs can range from about $250,000 to $1 million in capital costs and from about $50,000 to $100,000 in annual operating costs. The Port State Information Exchange database maintained by the U.S. Coast Guard indicates that about 30 percent of offshore supply vessels built annually are SOLAS certified and that 3 percent or fewer passenger vessels and tugs built annually are SOLAS certified (based on new vessel construction, 1995–2006).[127] Therefore, to be eligible for the exemption, the owner will be required to obtain and maintain relevant international safety certification pursuant to the requirements of the United States Coast Guard and SOLAS for the vessel on which an exempted engine is installed.

Vessel owners will be required to petition EPA for an exemption for a particular vessel in order for an engine manufacturer to sell them an exempted engine; granting of the exemption will not be automatic. In evaluating a request for a Tier 4 exemption, we will consider the owner's projections of how and where the vessel will be used and the availability of ULSD in those areas, as well as the mix of SOLAS and non-SOLAS vessels in the owner's current fleet and the extent to which those vessels are being or have been operated outside the United States. In general, it is our expectation that fleets should first use existing pre-Tier 4 vessels for operations where ULSD may not be available. Therefore, we would not expect to grant an exemption for a vessel that will be part of a fleet that does not already have a significant percentage of Tier 4 vessels, since a fleet with a smaller percentage of Tier 4 vessels would likely have more pre-Tier 4 vessels that could be employed in the overseas application instead. For example, if 30 percent of an owner's current fleet has SOLAS certification, we would expect that up to 70 percent of the vessels in that fleet could be Tier 4 compliant without changes in the operation of the fleet. We may also ask the petitioner to demonstrate that other vessels in the petitioner's fleet remain in service outside the United States and have not been placed into service domestically. EPA does not expect to approve applications for the Tier 4 exemption described in this paragraph prior to 2021; we expect that the existing fleet of Tier 3 vessels can be used for overseas operations during that time. If an owner petitions EPA for an exemption prior to that year, we may request additional information on the owner's expected operation plans for that vessel and a more complete explanation as to why another vessel in the existing fleet could not be redirected to the offshore application with the Tier 4 vessel under construction taking that vessel's place. Finally, a failure to maintain SOLAS certification for the vessel on which an exempted engine is installed would result in a finding of noncompliance and the owner would be liable for applicable fines and other penalties.

To address the situation in which an owner of a vessel with Tier 4 engines wants to use that vessel in a country that does not have ULSD available, we are also including a provision that will allow the owner to petition EPA to temporarily remove or disable the Tier 4 controls on vessels that are operated solely outside the United States for a given period of time. The petitioner will need to specify where the vessel will operate, how long the vessel will operate there, and why the owner will be unable to provide ULSD for the vessel. The petitioner will also be required to describe what actions will be taken to disable or disconnect the Tier 4 controls. Permission to disable or remove the Tier 4 controls will be allowed only for the period specified by the owner and agreed to by EPA; however, the owner may re-petition EPA at the end of that period for an extension. As part of the approval of such a petition, the petitioner will be required to agree to re-install or reconnect the Tier 4 emission control devices prior to re-entry into the United States, whether this occurs only at the end of the specified period or earlier.

These provisions for migratory vessels are intended to facilitate the use of vessels certified to the U.S. federal marine diesel emission standards while they are operated for extended periods in areas that may not have ULSD available. It should be noted that vessels that receive either limited exemptions or that petition EPA to remove or disable Tier 4 controls will still be subject to the MARPOL emission limits when they are operated outside the United States. We may review these migratory vessel provisions in the context of our upcoming Category 3 marine diesel engine rulemaking. We may also revisit this program in the future if the number of exemption requests appears to be unreasonably high or if we find that significant numbers of vessels that have obtained exemptions from Tier 4 are, in fact, in use domestically.

Note that the implementation schedule in the above marine standards tables is expressed in terms of model years, consistent with past practice and the format of our regulations. However, in two cases we believe it is appropriate to provide a manufacturer the option to delay compliance somewhat, as long as the standards are implemented within the indicated model year. Specifically, we are allowing a manufacturer to delay Tier 4 compliance within the 2017 model year for 600–1000 kW (800–1300 hp) engines by up to 9 months (but no later than October 1, 2017) and, for Tier 4 PM, within the 2016 model year for engines at or above 3700 kW (4900 hp) by up to 12 months (but no later than December 31, 2016). We consider this option to delay implementation appropriate in order to give some flexibility in spreading the implementation workload and ensure a smooth transition to the long-term Tier 4 program.

The Tier 4 standards for locomotives and for C2 diesel marine engines of comparable size are at the same numerical levels but differ somewhat in implementation schedule: Locomotive Tier 4 standards start in 2015, while diesel marine Tier 4 standards start in 2016 for engines in the 1400–2000 kW (1900–2700 hp) range, and in 2014 for engines over 2000 kW (with final PM standards starting in 2016 for these engines). We consider these locomotive and marine diesel Tier 4 implementation schedules to be close enough to warrant our adopting a marine engine option based on the Tier 4 locomotive schedule, aimed at facilitating continuance of today's frequent practice of developing a common engine platform for both markets. Commenters on the proposal supported this marine engine option, but expressed concerns about competitiveness issues and argued that we should remove the proposed restriction to engines of 7–15 liter/cylinder displacement and under 3700 kW maximum engine power.

We are adopting this locomotive-based marine engine option, but with

[127] Memorandum to Docket EPA–HQ–OAR–2003–0190, Marine Vessels—SOLAS Certification, from Jean MarieRevelt, dated January 11, 2007.

some changes from the proposed approach to address potential competitiveness issues, as well as our own concern that this option be used only for the intended purpose of avoiding unnecessary dual design efforts. First, we are retaining some limits on its scope, specifically to engines above both a 7 liters per cylinder limit (Category 2 in the marine sector) and a 1400 kW (1900 hp) maximum engine power. Second, if the option is used, its standards must be met for all of a manufacturer's marine engines at or above 1400 kW (1900 hp) in the same displacement category (that is, 7–15, 15–20, 20–25, or 25–30 liters per cylinder) in all of the model years 2012 through 2016. This will help ensure the option is not gamed by artificially subdividing engine platforms. Because the switch locomotive program we are establishing already includes a similar streamlined option allowing the use of land-based nonroad engines, we are not extending this option to switchers.

We are adopting another provision to help ensure that this locomotive-based marine engine option is environmentally beneficial and is not used to gain a competitive advantage. We are requiring that marine engines under this option meet Tier 3 standards in 2012, the year Tier 3 starts for locomotives, with standards numerically corresponding to locomotive Tier 3 standards levels: 0.14 g/kW-hr (0.10 g/bhp-hr) PM and 7.8 g/kW-hr NO_X+HC (5.8 g/bhp-hr: that is, 5.5 + 0.30 g/bhp-hr combined NO_X and HC). Otherwise a manufacturer could take advantage of the later-starting marine Tier 3 schedule to generate credits or allow increased emissions from these engines until 2015 when the option requires Tier 4 compliance. This approach also deals fairly with the problem identified in the proposal regarding redesigning locomotive-based engine platforms to meet the numerically lower marine Tier 3 NO_X level.

Finally, we considered but are not adopting a provision that would set a total vessel power limit for the Tier 4 standards. The comments we received on this issue lead us to conclude that multiple-engine configurations are used in vessel designs for specific purposes and are not likely to be employed to evade the Tier 4 standards. We may consider this type of restriction in a future action, however, if multiple-engine vessels are built in applications that have typically used a different number of engines in the past.

(b) Remanufactured Marine Engines

In addition to the standards for newly-built engines, we are adopting for the first time emission standards for marine diesel engines on existing vessels. Many of these existing engines will remain in the fleet for 40 years or more, making them what would otherwise be a substantial source of air pollution. The marine remanufacture program will provide early PM reductions by reducing emissions from this legacy fleet sooner than would be the case from the retirement of old vessels in favor of new vessels with cleaner engines. Additional early NO_X reductions are expected to be achieved from the use of locomotive remanufacture systems recertified under this program for Category 2 engines.

The program we are finalizing is modified from what we described in the NPRM. In the NPRM we described a two-part program that would have applied to all commercial marine diesel engines above 600 kW when they are remanufactured. In the first part, which we considered beginning as early as 2008, vessel owners/operators and engine rebuilders who remanufacture engines would be required to use a certified remanufacture system when an engine is remanufactured (defined as replacement of all cylinder liners, either in one event or over a five-year period) if such a certified system is available. In the second part, which we considered beginning in 2013, a marine diesel engine identified by EPA as a high-sales volume engine model would have been required to meet specified emission requirements when it is remanufactured. Specifically, the remanufacturers or owners of such engines would have been required to use systems certified to meet the standard; if no certified system is available, they would have needed to either retrofit the engines with emission reduction technology that demonstrates at least a 25 percent reduction or replace the engines with new ones. For engines not identified as high-sales volume engines, Part 1 would have continued to apply.

Several commenters requested that EPA not finalize this program at this time but instead consider it in a separate rulemaking. They noted that this would allow additional time to consider the program and its requirements. Postponing the program, however, would also result in the loss of important emission reductions early in the program. Delay is also not necessary because the program we are adopting consists only of the first part of the program described in our proposal, requiring the owner of a marine diesel engine to use a certified marine remanufacture system when the engine is remanufactured if such a system is available. We are not adopting a requirement for the mandatory availability of remanufacture systems. (Under the option discussed in the proposal, in certain circumstances, if a remanufacture system was not made available the owner would have been required to retrofit an emission control technology, repower the vessel (replace its engines) or scrap the vessel.)

The marine remanufacture program we are adopting applies to all commercial marine diesel engines with maximum engine power greater than 600 kW and manufactured in 1973 or later, through Tier 2. The beginning date of 1973 is based on our existing locomotive program; many of the techniques used to achieve those standards are expected to be applicable to marine diesel engines over 600 kW.

As described in more detail below, the program draws on aspects of our locomotive remanufacture and diesel retrofit programs with regard to the basic requirements that apply and how remanufacture systems are certified. The remainder of this section describes the main features of the program. The technological feasibility of this program is described in section III.C, and the certification requirements are set out in section IV. Small manufacturer, engine dresser, vessel builder, and operator flexibilities are set out in section IV.A(13)(b).

Similar to the locomotive program, the marine program we are finalizing applies when a marine diesel engine is remanufactured. Covered engines are those that are remanufactured to as-new condition. Based on discussions with engine manufacturers, we have determined that replacing all cylinder liners is a simple and clear indicator that the servicing being done is extensive enough for the engine to be considered functionally equivalent to a freshly manufactured engine, both mechanically and in terms of how it is used. Therefore, we are defining remanufacture as the removal and replacement of all cylinder liners, either during a single maintenance event or over a five-year period. It should be noted that marine diesel engines are not considered to be remanufactured if the rebuilding process falls short of this definition (i.e., the cylinder liners are removed and replaced over more than a five-year period). As with locomotives, remanufactured marine diesel engines are new until they are sold or placed into service.

For the purpose of this program, ''replace'' includes removing, inspecting, and requalifying a liner. This addresses the situation in which an engine experiences a cylinder failure prior to a scheduled rebuild: The owner might replace the failed cylinder right away and replace the others at rebuild; then, at the time of rebuild, the installer would likely inspect the cylinder that was a few months old to make sure it qualified for continued use according to the certificate holder's instructions. We do not think that owners will fail to requalify cylinders to avoid the remanufacture requirements because requalification is done both to ensure the continued reliability and durability of the engine and as part of surveys necessary to retain vessel certification for safety and other purposes. The five-year provision was first adopted in the locomotive program to help ensure that the standards are not avoided through phased remanufacturing (i.e., not replacing the power assemblies all at once). It is reasonable to use this approach in the marine sector as most commercial engines are rebuilt all at once, although some owners may choose a rolling rebuild approach in which a certain number of cylinders are rebuilt every year. We may revisit the five-year limit after a few years of the program to evaluate whether this is the appropriate period and whether owners are adjusting their rebuild practices, particularly with respect to rolling rebuilds, to circumvent the regulations (see discussion of rolling rebuilds, below).

When an engine is remanufactured, it must be certified as meeting the emission standards for remanufactured engines (by using a certified remanufacture system) unless there is no certified remanufacturing system available for that engine. In other words, the owner/operator or installer of a covered engine would be required to use a certified marine remanufacture system when remanufacturing that engine if one is available. If there is no certified system available at that time, there is no requirement. Availability means not only that EPA has certified a system, but also that it can be obtained and installed in a timely manner consistent with normal business practices. For example, a system would generally not be considered to be available if it required that the engine be removed from the vessel and shipped to a factory to be remanufactured unless that is the normal rebuild process for that engine. Similarly, a system would not be considered to be available if the component parts are not available for purchase in the period normally associated with a scheduled rebuild. If a certified system is not available there is no requirement to comply with this program until the next remanufacture, at which time the remanufacturer would need to check again to see if a system is available. Nonavailability due to inability to obtain parts may be demonstrated by a written record that shows a good faith effort to obtain parts.

Several states and localities have voluntary retrofit programs to reduce emissions from marine diesel engines. These programs encourage vessel owners to apply emission reduction strategies in return for a financial or operational incentive. Retrofit systems range from engine adjustments to installing different cylinders, fuel injectors, turbochargers, or other engine components. To receive the incentive, the owner must demonstrate the reduction, often through emission measurements. We received state agency comments expressing concern about the potential inconsistency between state and local retrofit programs and a potential marine remanufacture program. Specifically, a situation could be created in which a vessel owner who has already applied a retrofit device pursuant to a state or local retrofit program would be required to remove the voluntary retrofit device and install a certified marine remanufacture system. We do not want to negatively impact the positive benefits that arise from state and local retrofit programs, especially in those cases in which the retrofit achieves a greater reduction (e.g., retrofit of a SCR system) than a certified marine remanufacture system. We also do not want to discourage these programs especially in early years where states and local programs may achieve reductions before certified remanufacture systems become available.

Therefore, we are adopting a provision that will allow an owner/operator of an engine that is fit with a retrofit device prior to 2017 pursuant to a state or local retrofit program to request a qualified exemption from the marine remanufacture requirements for that engine. This qualified exemption will be available only to engines equipped with retrofit device under a state or local program before 2017. The owner/operator must request the exemption prior to a remanufacturing event that would otherwise trigger the requirement to use a certified remanufacture system. The request must include documentation that the vessel has been retrofit pursuant to a state or local retrofit program and a signed statement declaring that to be true. Except for the initial request for a specific vessel and a specific retrofit, a request would be considered to be approved unless we notify the requestor otherwise within 30 days of the date that we receive the request. Note that the exemption does not apply where the sponsoring government specifies that inclusion in the retrofit program is not intended to provide an exemption from the requirements of this subpart. EPA's granting of the exemption is conditioned upon the owner/operator's continued use and maintenance of the retrofit kit that provides the basis for the exemption.

Beginning in 2017, this exemption will no longer be available for new retrofits. Engines included in state or local retrofit programs will be required to use a certified remanufacture system if one is available when the engine is remanufactured. In this case either the certified remanufacture system would be part of the retrofit or the vessel owner would use a certified remanufacture system the next time at the next remanufacture event.

At this time, we are adopting standards for remanufacture systems only for marine diesel engines over 600 kW. This 600 kW threshold is reasonable because of the long hours of use, often at high load, of engines above 600 kW, and their long services lives. These engines are also more likely to undergo regular full overhauls, returning them to as-new condition. Commercial marine diesel engines larger than 600 kW typically undergo periodic full, like-new rebuilds. These large engines are often installed on tugs, towboats, ferries, offshore supply vessels, lakers, and coasters, which require reliable power at all times. These vessels are often used for ten or more hours a day, every day of the year. As a result, these engines are typically subject to regular maintenance to ensure their dependability. In addition, many manufacturers provide guidance for a full rebuild to as-new condition. This might include replacing piston rings, heads, bearings, and gear train/camshaft as well as piston liners.[128] Rebuilding to as-new condition helps ensure smooth operation over the full maintenance interval. Owners of these vessels are also motivated to maintain their engines because it is very complicated and expensive to repower their vessels; replacing an engine may require major hull modifications. Because these vessels operate for decades, often 40 or

[128] See Note from Amy Kopin, Mechanical Engineer, to Jean Marie Revelt, EPS, Re: Marine Remanufacture Program. A copy of this Note is available in Docket OAR–2003–0190.

more years, their engines may be remanufactured to as-new condition anywhere from three to six or even more times before the vessel is scrapped.

We are not setting standards for marine remanufacture systems for engines below 600 kW because we currently do not have sufficient data to determine the extent that rebuilding of engines below 600kW qualifies as remanufacturing to an as new condition. Smaller commercial engines under 600 kW or recreational engines typically have shorter useful lives than the larger engines and do not see as much wear on an annual basis. This means it takes longer to acquire the hours between maintenance intervals. Engines on some smaller commercial or recreational marine vessels may not be rebuilt at all but, instead, are replaced or the vessel is scrapped. There may also be other technological and cost issues with applying remanufacture requirements to smaller commercial or recreational engines.

For these reasons, we are finalizing only standards for remanufactured commercial marine diesel engines above 600 kW. We may revisit this approach after implementing the program to evaluate whether other remanufactured marine diesel engines should be included in the program as well.

A certified marine remanufacture system must achieve a 25 percent reduction in PM emissions compared to the engine's measured baseline emissions level (the emission level of the engine as rebuilt according to the manufacturer's specification but before the installation of the remanufacture system) without increasing NO_X emissions (within 5 percent). We are not finalizing a 0.22 g/kW-hr PM cap, as proposed. The percent reduction is being adopted because the large range of engine platforms on existing marine diesel engines makes the selection of an effective numeric emission limit impractical. A more stringent emission limit may prevent the development of remanufacture systems for many engines, while a less stringent limit could allow manufacturers to certify remanufacture systems for engines that already meet the limit without any additional emission benefits. A percentage reduction has the advantage of allowing more engines to participate in the program while ensuring valid emission reductions.

We are not adopting the multi-step approach discussed in the proposal. This approach, based on the Urban Bus program, would have entailed setting standards based on reductions of 60 percent, 40 percent, and 20 percent, and requiring that a rebuild use the certified kit meeting the most stringent of these three standards if available. Manufacturers expressed concern that such a requirement would discourage the development of remanufacture systems since they could rapidly become obsolete. Owners were concerned that they would be subject to a moving requirement that would complicate their engine maintenance and overhaul schedules and could result in identical engine models being required to use different remanufacture systems. They also were concerned that such an approach would mean they would have to use a different system every time they remanufacture, and the impacts on engines that are remanufactured over several maintenance events. For these reasons, instead of adopting the multi-step approach, we are adopting a single emission reduction requirement. If several certified systems are available, we will allow any of them to be used. However, states may develop incentive programs to encourage the use of the certified remanufacture system with the greatest reduction. Also, we may revisit the emission level in the future to determine if it should be modified to reflect advances in applying new PM reduction technologies to existing marine diesel engines.

We expect that this PM reduction will be met by using incrementally-improved components that are replaced when an engine is remanufactured, based on reduction technologies manufacturers are already using or will be using to achieve the Tier 3 PM standards. For example, a remanufacture system could reduce PM emissions by using different fuel injectors or different piston rings to reduce oil consumption. Remanufacturing systems may not adversely affect engine reliability, durability, or power.

Some engine manufacturers expressed concern about the potential for unintended adverse effects on engine performance, reliability, or durability that could occur if another entity develops a remanufacture system for their engines. They were particularly concerned about being held responsible for an emission failure if the remanufacture system does not perform as intended, or for an engine failure if the system causes other engine components to fail. To address this concern, the program we are finalizing requires any person who wishes to certify a remanufacture system for an engine not produced by that person to notify the original engine manufacturer and request their comments on the remanufacture system. Any comments received by the certifier are required to be included in the certification application, as well as a description of how those comments were addressed.

As we described at proposal, this final rule includes a cost cap on marine diesel remanufacture systems of $45,000 per ton of PM reduced, based on the incremental cost of the remanufacture system (the cost in excess of what a rebuild would otherwise cost). This cost cap is analogous to the reasonable cost limit in the current locomotive remanufacturing program and is intended to ensure that marine remanufacture systems do not impose excessively burdensome cost requirements on vessel owners that are not justified by the benefits of the reductions. The $45,000 per ton of PM reduced is similar to the cost of a number of mobile source retrofit programs. This cap includes all costs to the vessel owner associated with the remanufacture system beyond those associated with an engine remanufactured without a certified system, such as labor for any special installation procedures and any modifications to the vessel or its operation (e.g., fuel consumption impacts).

It may not be possible for the certifier to predict the characteristics of all vessels that can use the remanufacture system and therefore provide a comprehensive estimate of the total incremental costs of installing the remanufacture system. Therefore, in addition to an estimate of the vessel-related installation costs that would apply to most vessels, the certifier must also provide an estimate of the amount of residual incremental costs that would be available for installation of the remanufacture system on a particular vessel without triggering the $45,000 per ton PM threshold (i.e., the maximum amount installation may cost for a particular vessel after the cost of the remanufacture system is deducted from the $45,000 maximum cost). This will guide vessel owners in determining if the cost of a certified remanufacture system will exceed the $45,000 threshold for a particular vessel.

We are including a provision that will allow a vessel owner to request an exemption from EPA if the vessel owner can demonstrate to EPA's satisfaction that actual installation cost for his or her vessel will exceed the $45,000 per ton PM threshold. This may be necessary, for example, if a vessel with external keel cooling cannot be modified to achieve required cooling levels required by the remanufacture system without extensive modifications to the vessel hull. We are also including a small business exemption as well as a

financial hardship provision (see Section IV.A.13(b)(vi and vii)) that would allow postponing the requirements for owners who can show financial hardship.

Marine remanufacture systems can be certified as soon as this rule goes into effect. A remanufacture system will be considered to be available 120 days after we issue a certificate of conformity for it or 90 days after we include it on our list of certified remanufacture systems, whichever is later. Prior to the end of that period, a kit will not be considered to be ''available.'' This period allows time for owners to arrange for remanufacturing with a certified system once one that applies to the relevant engine has been certified. Once a marine remanufacture system is certified, as evidenced by an EPA-issued certificate of conformity, it will be considered to be available until it is withdrawn or the certificate holder fails to obtain a certificate of conformity for a subsequent year. We will maintain a list of available remanufacture systems and provide access to this list by posting it on our website. Owners should consult the list prior to any particular remanufacturing event to determine whether a certified system is available and therefore whether they are affected by the program. Uncertified systems purchased before that date can be used as long as they are consistent with the normal parts inventory practices of the owner or rebuild facility. Stockpiling of uncertified remanufacture systems to evade the requirements of the program is not allowed.

For engines on a rolling rebuild schedule (i.e., cylinder liners are not replaced all at once but are replaced in sets on a schedule of 5 or fewer years, for example 5 sets of 4 liners for a 20-cylinder engine on a 5-year schedule), the requirement is triggered at the time the remanufacture system becomes available, with the engine required to be in a certified configuration when the last set of cylinder liners is replaced. The remanufacturing requirements do not apply for cylinder-liner replacements that occurred before the remanufacture system becomes available. Any remanufacturing that occurs after the system is available needs to use the certified system, including remanufacturing that occurs on a rolling schedule over less than five years following the availability of the remanufacturing system. If the components of a certified remanufacture system are not compatible with the engine's current configuration, the program allows the owner to postpone the installation of the remanufacture system until the replacement of the last set of cylinder-liners, which would occur no later than five years after the availability of the system. At that time, all engine components must be replaced according to the certified remanufacture system requirements.

Initially, we expect marine remanufacture systems to be certified for C2 engines that are derived from certified locomotive remanufacture systems. Some of these certified locomotive systems are already used on C2 marine diesel engines, or can be used with modification. The new Tier 0+, Tier 1+ and Tier 2+ certified locomotive remanufacture systems are likely to be capable of being used on marine diesel engines without much additional development when those certified locomotive systems become available, for additional reductions. To encourage this practice, we are providing a streamlined certification process for locomotive systems certified to the new Tier 0+, Tier 1+, or Tier 2+ standards for use on C2 engines. The streamlined certification will also be allowed for existing Tier 0 locomotive remanufacture systems (certified under part 92), but those systems can be used only on pre-Tier 1 (uncertified) C2 marine engines, and the use of these existing Tier 0 systems will not be permitted after systems certified to the new Tier 0+ (or Tier 1+ if applicable) locomotive standards are made available. The streamlined certification process will require only an engineering analysis demonstrating that the system would achieve emission reductions from marine engines similar to those from locomotives. The streamlined certification process will allow modifications to the previously certified locomotive system as necessary to install the system on a C2 marine engine. If the manufacturer of a locomotive remanufacture system chooses to modify that system in a substantive way, for example to remove NO_X emission controls (because the marine remanufacture program only requires PM reductions), then the system will have to be recertified as a marine remanufacture system based on measured values and subject to all of the other certification requirements of the marine remanufacture program (see section IV). We are not providing a similar streamlined certification process for C1 marine systems because there are currently no certified remanufacture systems for C1-equivalent engines through our other mobile source programs.

The program described above is engine-based in that it assumes that remanufacture systems will consist of changes to engine components or operational settings. At least one user asked EPA to consider also allowing remanufacture systems consisting of the use of specified fuels or fuel additives. The program we are adopting will allow this type of remanufacture system, subject to the following constraints.

First, the use of a remanufacture system based on a fuel or fuel additive will not be mandatory if such a system is certified. Instead, the use of a fuel or fuel additive system will be allowed as an alternative compliance mechanism in place of an engine-based remanufacture system. In other words, if an engine-based remanufacture system is certified, owners of the affected engine models can either use that engine-based system or use a fuel or fuel additive system if one has also been certified; if there is no certified engine-based system, then there is no requirement to use the fuel or fuel additive remanufacture system. This requirement is necessary because, in contrast to an engine-based system, a fuel or fuel additive-based system requires positive action on the part of the owner to achieve the emission reductions. In the case of an engine-based system, the owner installs the replacement parts at the time of rebuild; installation of the parts will achieve the required reductions and there is little impact on the owner or the vessel's operations. In the case of a fuel or fuel additive system, however, the owner will be required to use the specified fuel or fuel additive at all times; if the owner does not take the required action, the ''system'' will not be in use. Because a fuel or fuel additive-based system will require the owner to do something on a continuous basis and require additional recording and recordkeeping, the success of the system requires a positive commitment on behalf of the owner/operator.

Second, the certifier of a remanufacture system based on a fuel or fuel additive will be required to show that use of the fuel or fuel additive meets the 25 percent PM reduction based on measured values, without increasing NO_X emissions, for all engines to which the system will apply. This will require testing an engine with and without the use of the specified fuel or fuel additive. Different engines may be combined into one engine family for the purpose of certification, based on EPA approval.

Third, any fuel or fuel additive for which certification is sought under the marine remanufacture program must first be registered under 40 CFR Part 79, Registration of Fuels and Fuel Additives. This is to ensure that the fuel or fuel additive does not contain

substances that are otherwise controlled by EPA.

Fourth, as part of the certification, the certifier will be required to provide a sampling procedure that can be used by EPA or other enforcement authorities to verify owner compliance onboard and for enforcement purposes. That procedure should explain how to detect if the appropriate level of fuel additive or if the appropriate fuel type is actually being used onboard on the basis of a fuel sample taken from a fuel tank on the vessel. In addition to being provided to EPA as part of the certification process, the certifier will be required to provide a copy of this procedure to the purchaser as part of the remanufacture system package and will be required to maintain a copy of the procedure on the internet to facilitate in-field compliance verification.

Fifth, the remanufacture system will require a notification to be placed at the appropriate fill location (either on the fuel tank inlet in the case of fuels or pre-blended fuel additives, or as specified on the engine in the case of fuel additives not blended in the fuel) that indicates the engine is outfitted with a fuel or fuel additive remanufacture system and that compliant fuel or additives must be used at all times.

Finally, when an owner agrees to use a fuel or fuel additive-based remanufacture system in lieu of an engine-based system, that owner must also agree to any recordkeeping requirements specified in the certification of that system. These may include keeping a record of the purchase of the specified fuel or fuel additive and, in the case of additives, the amounts and dates of the additive use. These requirements must be set out by the certifier as part of the kit, and the owner will be deemed to have agreed to them by affixing a label to the engine or appropriate fuel or fuel additive inlet indicating that it is certified with a fuel or fuel-additive remanufacture system.

If an owner or operator chooses a certified remanufacture system based on a particular fuel or fuel additive to meet these remanufacture requirements, the failure to use the fuel or fuel additive would be a violation of 1068.101(b)(1).

Allowing the use of fuel or fuel additive-based remanufacture systems is not intended to be a mechanism to require fuel switching for marine diesel engines, either to 15 ppm fuel earlier than required or to distillate from residual fuel for auxiliary engines on vessels with Category 3 marine diesel engines or for those smaller vessels than may currently use residual fuel in their C2 main propulsion engines. It is also not intended to prevent the use of off-spec fuel in marine diesel engines. If there is no certified engine-based remanufacture system available for an engine, a fuel or fuel additive-based kit will not be required to be used even if one is certified.

EPA is committed to the development and successful operation of a marine remanufacture program. We intend to assess the effectiveness of this program as early as 2012 to ascertain the extent to which engine manufacturers are providing certified remanufacture systems. If remanufacture systems are not available or are not in the process of being developed and certified at that time for a significant number of engines, we may consider changes to the program. As part of that assessment, we may evaluate whether to include Part 2 of the program described in our proposal. Part 2 would require the owner/operator or installers of a marine diesel engine identified by EPA as a high-sales volume engine to either use a certified remanufacture system when the engine is remanufactured or, if no system is available, retrofit an emission reduction technology for the engine that meets the 25 percent PM reduction, or repower (replace the engine with a freshly manufactured engine). Part 2 was intended to create a market for marine remanufacture systems, to help ensure their development over the initial five years of the program. However, vessel owners were very concerned that a mandatory repower program would have the opposite impact, and would discourage certification of remanufacture systems in favor of mandatory repowers due to the higher value of a replacement engine compared to a remanufacture system. In evaluating the effectiveness of the remanufacture program in the future, EPA may revisit the need for Part 2, or something similar, to ensure emission reductions from the large marine legacy fleet are occurring in a timely and effective manner. We may also evaluate other aspects of the program, including the criteria that trigger a remanufacturing event (including the 5-year period for incremental remanufactures), and whether we should set remanufacture standards for engines less than 600 kW.

(3) Carbon Monoxide, Hydrocarbon, and Smoke Standards

We did not propose and are not setting new standards for CO. Emissions of CO are typically relatively low in diesel engines today compared to non-diesel pollution sources. Furthermore, among diesel application sectors, locomotives and marine diesel engines are already subject to relatively stringent CO standards in Tier 2—essentially 1.5 and 3.7 g/bhp-hr, respectively, compared to the current heavy-duty highway diesel engine CO standard of 15.5 g/bhp-hr. Therefore, the Tier 3 and Tier 4 CO standards for all locomotives and marine diesel engines will remain at current Tier 2 levels and remanufactured Tier 0, 1 and 2 locomotives will likewise continue to be subject to the existing CO standards for each of these tiers. Although we are not setting more stringent standards for CO in Tier 4, we note that aftertreatment devices using precious metal catalysts that we project will be employed to meet Tier 4 PM, NO_X and HC standards will provide meaningful reductions in CO emissions as well.

As discussed in section II, HC emissions, often characterized as VOCs, are precursors to ozone formation, and include compounds that EPA considers to be air toxics. As with CO, emissions of HC are typically relatively low in diesel engines compared to non-diesel sources. However, in contrast to CO standards, the HC standard for Tier 2 line-haul locomotives (0.30 g/bhp-hr), though comparable to HC standards from other diesel applications in Tier 2 and Tier 3, is more than twice that of the long-term 0.14 g/bhp-hr standard set for both the heavy-duty highway 2007 and nonroad Tier 4 programs. For marine diesel engines, the Tier 2 HC standard is expressed as part of a combined NO_X+HC standard varying (by engine size) between 5.4 and 8.2 g/bhp-hr, which clearly allows for high HC levels. Our more stringent Tier 3 NO_X+HC standards for marine diesel engines will likely provide some reduction in HC emissions, but we expect that the catalyzed exhaust aftertreatment devices used to meet the Tier 4 locomotive and marine NO_X and PM standards will concurrently provide very sizeable reductions in HC emissions. Therefore, in accordance with the Clean Air Act section 213 provisions outlined in section I.B(3) of this preamble, we are applying a 0.14 g/hp-hr HC standard to locomotives and marine diesel engines in Tier 4. This level is the same as that adopted for highway and nonroad diesel engines equipped with high-efficiency aftertreatment.

We are retaining the existing form of the HC standards through Tier 3. That is, locomotive and marine HC standards will remain in the form of total hydrocarbons (THC), except for gaseous- and alcohol-fueled engines (See 40CFR § 92.8 and § 94.8). Likewise, the Tier 3 marine NO_X+HC standards are based on THC, except that Tier 3 standards for less than 75 kW (100 hp) engines are

based on NMHC, consistent with their basis in the nonroad engine program. Tier 4 HC standards are expressed as NMHC standards, consistent with aftertreatment-based standards adopted for highway and nonroad diesel engines.

As for other diesel mobile sources, we believe that locomotive smoke standards currently in place are of diminishing usefulness as PM emissions are reduced to very low levels, as these low-PM engines emit very little or no visible smoke. We are therefore not setting smoke standards for locomotives covered under the new 40 CFR Part 1033 created by this final rule, if the locomotives are certified to a PM family emission limit (FEL) or standard of 0.05 g/bhp-hr (0.07 g/kW-hr) or lower. Locomotives certified with PM at higher levels are subject to smoke standards equal to those established previously in Part 92. This allows manufacturers of locomotives certified to Tier 4 PM (or to an FEL slightly above Tier 4) to avoid the unnecessary expense of testing for smoke. Marine diesel engines currently have no smoke standards and we are not setting any in this rule.

Commenters suggested that smoke testing is superfluous for pre-Tier 4 engines as well, because a properly maintained engine meeting any tier of EPA emissions standards will also meet the smoke standards. Based on the available information, we remain unconvinced that this argument is valid in all cases and we are therefore retaining the smoke standards for locomotives with PM FELs above 0.05 g/bhp-hr. However, we do agree that this relationship generally holds true for engines designed to emission standards being set in this rule, and are therefore waiving the smoke test requirement from certification, production line, and in-use testing, unless there is visible evidence of excessive smoke emissions. This provides the test cost savings sought by the manufacturers but retains the EPA enforcement opportunity if smoke should become a problem in engines subject to this program.

C. Are the Standards Feasible?

In this section, we describe the feasibility of the various emission control technologies we project will be used to meet the standards we are finalizing today. Because of the range of engines and applications we cover in this rulemaking and because of the diversity in technologies that will be available for them, our standards span a range of emission levels. We have identified a number of different emission control technologies we expect will be used to meet these standards. The technologies range from incremental improvement of existing engine components to highly advanced catalytic exhaust aftertreatment systems similar to those expected to be used to control emissions from heavy-duty diesel trucks and nonroad equipment.

We first describe the feasibility of emission control technologies we project will be used to meet the standards we are finalizing for existing locomotive and marine engines that are remanufactured as new (i.e., Tier 0, 1, 2 locomotives and marine diesel engines >600 kW). We next describe how these same technologies will be applied to meet the interim standards for freshly manufactured engines (i.e., Tier 3). We conclude this section with a discussion of catalytic exhaust aftertreatment technologies projected to be used to meet our Tier 4 standards. Throughout this section, we also address many of the comments submitted by stakeholders concerning the feasibility, applicability, performance, and durability of the emission control technologies we presented in the Notice of Proposed Rulemaking (NPRM). For a more detailed analysis of these technologies, issues related to their application to locomotive and marine diesel engines, and our response to public comments, we refer you to the Regulatory Impact Analysis (RIA) and Summary & Analysis of Comments documents associated with this rulemaking.

(1) Emission Control Technologies for Remanufacture of Existing Locomotives and Marine Diesel Engines >600 kW

In the locomotive sector, emissions standards already exist for engines that are remanufactured as new. Some of these engines were originally unregulated (i.e. Tier 0), and others were originally built to earlier emissions standards (Tier 1 and Tier 2). This rulemaking now requires more stringent standards for these engines whenever the locomotives are remanufactured as new. Our remanufactured engine standards apply to locomotive engines and marine engines >600 kW that were originally built as early as 1973.

We project that incremental improvements to existing engine components will make it feasible to meet both our locomotive and marine remanufactured engine standards for PM. In many cases, these improvements have already been implemented on newly built locomotives to meet our current locomotive standards. To meet the more stringent NO_X standard for the locomotive Tier 0+ and Tier 1+ remanufacturing program, we expect that improvements in fuel system design, engine calibration and optimization of existing after-cooling systems will be used to reduce NO_X from the current 9.5 g/bhp-hr Tier 0 standard to the tightened Tier 1+ standard for NO_X of 7.4 g/bhp-hr. These are the same technologies used to meet the current Tier 1 emission standard of 7.4 g/bhp-hr. In essence, locomotive manufacturers will duplicate current Tier 1 locomotive NO_X and HC emission solutions and incorporate them into the portion of the existing Tier 0 fleet able to accommodate them (i.e. locomotives manufactured with separate-circuit cooling systems for intake air and engine coolant). For older Tier 0 locomotives without separate-circuit cooling systems, reaching the Tier 1 NO_X level will not be possible, and 8.0 g/hp-hr represents the lowest achievable NO_X emission level through the application of improved fuel system design.

To meet the more stringent PM standards for the Tier 0+, 1+, and 2+ locomotive and marine remanufacturing programs (as well as the new locomotive Tier 3 interim standards), we expect that lubricating oil consumption control technologies will be implemented. A significant fraction of the PM in today's medium-speed locomotive and locomotive-based marine engines is comprised of lubricating oil.[129] Engine design changes which reduce oil consumption also reduce the volatile organic fraction of the engine-out PM. Whether oil consumption is reduced through improvements in piston ring-pack design, improved closed crankcase ventilation systems, or a combination of both, lower PM emissions will result. We believe that use of existing low-oil-consumption piston ring-pack designs—in conjunction with improvements to closed crankcase ventilation systems—can provide the significant, near-term PM reductions required for these remanufacturing programs. These PM-reducing technologies can be applied to all medium-speed locomotive and locomotive-based marine engines—including those built as far back as 1973.

For the remanufacture of locomotive- and nonroad-based marine engines >600 kW, we believe that similar improvements to piston ring-pack designs, as well as turbocharger, fuel system, and closed crankcase ventilation system improvements can achieve the 25 percent PM reduction required in this program without the use of exhaust aftertreatment devices.

[129] Smith, B., Osborne, D., Fritz, S., ''AAR Locomotive Emissions Testing 2006 Final Report,'' Association of American Railroads, Document #LA–023.

Turbocharger designs which increase engine airflow or charge air cooling system enhancements which reduce intake air temperatures can reduce PM levels. Fuel system changes such as increased injection pressure or improved injector tip design can enhance fuel atomization, improving combustion efficiency and reducing soot PM. Any combination of these improvements—or other technologies which achieve the 25 percent PM reduction—can become part of a certified marine remanufacture kit.

We believe that some fraction of the remanufacturing systems for locomotives can be developed and certified as early as this year, so we are requiring the usage of the new Tier 0+, Tier 1+ and Tier 2+ emission control systems as soon as they are available. However, we estimate that it will take approximately 2 years to complete the development and certification process for all of the Tier 0+ and Tier 1+ emission control systems, so full implementation of the Tier 0+ and Tier 1+ remanufactured engine standards is not anticipated until it is required in 2010. We base this lead time on the types of technology that we expect to be implemented and on the amount of lead time locomotive manufacturers needed to certify similar systems for our current remanufacturing program. The lead time required to implement the design changes necessary to meet the Tier 3 and remanufactured Tier 2 locomotive PM emission standards led to an implementation date of 2012 for new Tier 3 engines and 2013 for remanufactured Tier 2 engines. These engine changes include further improvements to ring pack designs (especially for two-stroke engines) and the implementation of high efficiency crankcase ventilation systems, which are described and illustrated in detail in Chapter 4 of the RIA.

(2) Emission Control Technologies for New Tier 3 Locomotive and Marine Diesel Engines

The new Tier 3 locomotive and marine diesel engine standards require PM reductions relative to current Tier 2 levels. Based upon our on-highway and nonroad clean diesel experience, we expect that the introduction of ULSD fuel into the locomotive and marine sectors will reduce sulfate PM formation and assist in meeting the PM standards for locomotives (both remanufactured Tier 2 and new Tier 3) and new marine diesel engines. We believe that the combination of reduced sulfate PM and incremental design changes that bring oil and crankcase emission control to near Tier 3 nonroad or 2007 heavy-duty on-highway levels can provide at least a 50 percent reduction in PM emissions.

For Tier 3 marine diesel engines (which are, in almost all instances, a derivative of land-based nonroad and locomotive engines), the technologies and design changes needed to meet the more stringent NO_X and PM standards are already being developed for nonroad Tier 4 applications. In order to meet our nonroad Tier 4 emission levels, these engines, in the years before 2012, will see significant base engine improvements designed to reduce engine-out emissions. For details on the design, calibration, and hardware changes we expect will be used to meet the Tier 3 standards for lower horsepower marine engines, we refer you to our nonroad Tier 4 rulemaking.[130] For example, we expect that marine engines will utilize high-pressure, common-rail fuel injection systems or improvements in unit injector design. When such fuel system improvements are used in conjunction with engine mapping and calibration optimization, the marine Tier 3 diesel engine standards can be met. In the case of locomotive-based marine engines, we expect that manufacturers will transfer the technologies used to meet locomotive standards to the marine engine designs.

The 2009 Tier 3 start date for marine engines <75 kW constitutes a special case. We proposed this very early start date, matched with standard levels equal to the nonroad engine Tier 4 standard levels that take effect in 2008, based on our assessment that these engines are close derivatives of the nonroad engines on which they are based—in some cases, with no substantive modifications. The 2009 start date accounts for time needed to make the necessary modifications, prepare for and conduct the certification process, and deal with the large overall workload burden for diesel engine manufacturers. Although the manufacturers commented that this is a very aggressive schedule, at the limits of feasibility, they did not refute our assessment. Their objections to implementation of the not-to-exceed (NTE) standard on the same schedule, and our response, are discussed in section IV.A(3).

Because all of the aforementioned technologies to reduce NO_X and PM emissions can be developed for production, certified, and introduced into the marine engine sector without extended lead-time, we believe these technologies can be implemented for some engines as early as 2009, and for all engines by 2014, on a schedule that very closely follows the nonroad Tier 4 engine changes.

(3) Catalytic Exhaust Aftertreatment Technologies for Tier 4 Locomotive and Marine Engines

For marine diesel engines in commercial service that are greater than 600 kW and for all locomotives, we are setting stringent Tier 4 standards based on the use of advanced catalytic exhaust aftertreatment systems to control both PM and NO_X emissions. There are four main issues to address when analyzing the application of this technology to these new sources: The efficacy of the fundamental catalyst technology in terms of the percent reduction in emissions given certain engine conditions such as exhaust temperature; its appropriateness in terms of packaging; its long-term durability; and whether the technology significantly impacts an industry's supply chain infrastructure—especially with respect to supplying urea reductant for NO_X aftertreatment on locomotives and marine vessels. We have carefully examined these points, and based upon our analysis (detailed in Chapter 4 of the RIA), we have identified robust PM and NO_X catalytic exhaust aftertreatment systems that are suitable for locomotives and marine engines that also pose a manageable impact on the rail and marine industries' infrastructure.

(a) Catalytic PM Emission Control Technology

The most effective exhaust aftertreatment used for diesel PM emission control is the diesel particulate filter (DPF). In Europe, more than one million light-duty diesel passenger cars are OEM-equipped with DPF systems, and worldwide, over 200,000 DPF retrofits to diesel engines have been completed.[131] Broad application of catalyzed diesel particulate filter (CDPF) systems with greater than 90 percent PM control began with the successful introduction of 2007 model year heavy-duty diesel trucks in the United States. These systems use a combination of passive and active soot regeneration strategies. CDPF systems utilizing metal substrates are a further development that balances a degree of elemental carbon soot control with reduced

[130] ''Final Regulatory Impact Analysis: Control of Emissions from Nonroad Diesel Engines,'' EPA420–R–04–007, May 2004, Docket EPA–HQ–OAR–2003–0012. The RIA is also available online at *http://epa.gov/nonroad-diesel/2004fr/420r04007.pdf.*

[131] ''Diesel Particulate Filter Maintenance: Current Practices and Experience'', Manufacturers of Emission Controls Association, June 2005, online at *http://meca.org/galleries/default-file/Filter_Maintenance_White_Paper_605_final.pdf.*

backpressure, improved ability of the trap to clear oil ash, greater design freedom regarding filter size/shape, and greater system robustness. Metal-CDPFs were initially introduced as passive-regeneration retrofit technologies for diesel engines designed to achieve approximately 60 percent control of PM emissions. Recent data from development of these systems for Euro-4 truck applications has shown that metal-CDPF trapping efficiency for elemental carbon PM can exceed 70 percent for engines with inherently low elemental carbon emissions.[132]

Data from locomotive testing confirms a relatively low elemental carbon fraction and relatively high organic fraction for PM emissions from medium-speed Tier 2 locomotive engines.[133] The use of an oxidizing catalyst with platinum group metals (PGM) coated directly to the CPDF combined with a diesel oxidation catalyst (DOC) mounted upstream of the CDPF will provide 95 percent or greater removal of HC, including the semi-volatile organic compounds that contribute to PM. Such systems will reduce overall PM emissions from a locomotive or marine diesel engine by approximately 90 percent from today's levels.

We believe that locomotive and marine diesel engine manufacturers will benefit from the extensive development taking place to implement DPF technologies in advance of the heavy-duty truck and nonroad PM standards in Europe and the United States. Given the steady-state operating characteristics of locomotive and marine engines, DPF regeneration strategies will certainly be capable of precisely controlling PM under all conditions and passively regenerating whenever the exhaust gas temperature is >250 °C. Therefore, we believe that the Tier 4 PM standards we are adopting for locomotive and marine diesel engines are technologically feasible. And given the level of activity in the on-highway and nonroad sectors to implement DPF technology, we have concluded that our implementation dates for locomotive and marine diesel engines are appropriate and achievable.

(b) Catalytic NO_X Emission Control Technology

We have analyzed a variety of technologies available for NO_X reduction to determine their applicability to diesel engines in the locomotive and marine sectors. As described in more detail in Chapter 4 of the RIA, we expect locomotive and marine diesel engine manufacturers will choose to use Selective Catalytic Reduction (SCR) to comply with our new standards. SCR is a commonly-used aftertreatment device for meeting stricter NO_X emissions standards in diesel applications worldwide. Stationary power plants fueled with coal, diesel, and natural gas have used SCR for three decades as a means of controlling NO_X emissions, and currently European heavy-duty truck manufacturers are using this technology to meet Euro 5 emissions limits. To a lesser extent, SCR has been introduced on diesel engines in the U.S. market, but the applications have been largely limited to ferry boats and stationary electrical power generation demonstration projects in California and several of the Northeast states. However, several heavy-duty truck engine manufacturers have indicated that they will use SCR technology by 2010, when 100 percent of the heavy-duty diesel trucks are required to meet the NO_X limits of the 2007 heavy-duty highway rule.[134, 135] Providing comment on our NPRM, locomotive and marine diesel engine manufacturers confirm that they expect to use urea-SCR catalyst systems to comply with our Tier 4 standards. While other promising NO_X-reducing technologies such as lean NO_X catalysts, NO_X adsorbers, and advanced combustion control continue to be developed (and may be viable approaches to the standards we are setting today), our analysis assumes that SCR will be the Tier 4 NO_X technology of choice in the locomotive and marine diesel engine sectors.

An SCR catalyst supports the chemical reactions which reduce nitrogen oxides in the exhaust stream to elemental nitrogen (N_2) and water by using ammonia (NH_3) as the reducing agent. The most-common method for supplying ammonia to the SCR catalyst is to inject an aqueous urea-water solution into the exhaust stream. In the presence of high-temperature exhaust gasses (>250 °C), the urea hydrolyzes to form NH_3 and CO_2. The NH_3 is stored on the surface of the SCR catalyst where it is used to complete the NO_X-reduction reaction. In theory, it is possible to achieve 100 percent NO_X conversion if the NH_3-to-NO_X ratio (α) is 1:1 and the space velocity within the catalyst is not excessive. However, given the space limitations in packaging exhaust aftertreatment devices in mobile applications, an α of 0.85–1.0 is often used to balance the need for high NO_X conversion rates against the potential for NH_3 slip (where NH_3 passes through the catalyst unreacted). The urea dosing strategy and the desired α are dependent on the conditions present in the exhaust gas; namely temperature and the quantity of NO_X present (which can be determined by engine mapping, temperature sensors, and NO_X sensors). Overall NO_X conversion efficiency, especially under low-temperature exhaust gas conditions, can be improved by controlling the ratio of two NO_X species within the exhaust gas; NO_2 and NO. This can be accomplished through use of an oxidation catalyst upstream of the SCR catalyst to promote the conversion of NO to NO_2. The physical size and catalyst formulation of the oxidation catalyst are the principal factors that control the NO_2-to-NO ratio, and by extension, improve the low-temperature performance of the SCR catalyst.

Recent studies have shown that SCR systems are capable of providing well in excess of 80 percent NO_X reduction efficiency in high-power, diesel applications.[136, 137, 138] SCR catalysts can achieve significant NO_X reduction throughout much of the exhaust gas temperature operating range observed in locomotive and marine applications. Collaborative research and development activities between diesel engine manufacturers, truck manufacturers, and SCR catalyst suppliers have also shown that SCR is a mature, cost-effective solution for NO_X reduction on diesel engines in other mobile sources. While many of the published studies have focused on highway truck applications, similar trends, operational characteristics, and NO_X reduction efficiencies have been reported for marine and stationary applications as well.[139] Given the preponderance of studies and data—and our analysis summarized here and detailed in Chapter 4 of the RIA—we have

[132] Jacob, E., Laëmmerman, R., Pappenheimer, A., Rothe, D. ''Exhaust Gas Aftertreatment System for Euro 4 Heavy-duty Engines'', MTZ, June, 2006.

[133] Smith, B., Osborne, D., Fritz, S. ''AAR Locomotive Emissions Testing 2006 Final Report'' Association of American Railroads, Document #LA–023.

[134] ''Review of SCR Technologies for Diesel Emission Control: European Experience and Worldwide Perspectives,'' presented by Dr. Emmanuel Joubert, 10th DEER Conference, July 2004.

[135] Lambert, C., ''Technical Advantages of Urea SCR for Light-Duty and Heavy-Duty Diesel Vehicle Applications,'' SEA Technical Paper 2004–01–1292, 2004.

[136] Walker, A.P. et al., ''The Development and In-Field Demonstration of Highly Durable SCR Catalyst Systems,'' SAE 2004–01–1289.

[137] Conway, R. et al., ''Combined SCR and DPF Technology for Heavy Duty Diesel Retrofit,'' SAE Technical Paper 2005–01–1862, 2005.

[138] ''The Development and On-Road Performance and Durability of the Four-Way Emission Control SCRTTM System,'' presented by Andy Walker, 9th DEER Conference, August 28, 2003.

[139] Telephone conversation with Gary Keefe, Argillon, June 6, 2006.

concluded that this technology is appropriate for locomotive and marine diesel applications. Furthermore, locomotive and marine diesel engine manufacturers will benefit from the extensive development taking place to implement SCR technologies in advance of the heavy-duty truck NO_X standards in Europe and the U.S. The urea dosing systems for SCR, already in widespread use across many different diesel applications, are expected to become more refined, robust, and reliable in advance of our Tier 4 locomotive and marine standards. Given the predominately steady-state operating characteristics of locomotive and marine engines, SCR NO_X control strategies will certainly be capable of precisely controlling NO_X under all conditions whenever the exhaust gas temperature is greater than 250 °C.

To ensure that we have the most up-to-date information on urea-SCR NO_X technologies and their application to locomotive and marine engines, we have met with a number of locomotive and marine engine manufacturers, as well as manufacturers of catalytic NO_X emission control systems. Through our discussions we have learned that some engine manufacturers perceive some risk regarding urea injection accuracy and long-term catalyst durability, both of which could result in either less efficient NO_X reduction or ammonia emissions. Comments on our NPRM, submitted by the Manufacturers of Emission Controls Association (MECA), provided additional information on the issues of urea dosing accuracy, catalyst durability, and system performance and their comments are consistent with our own analysis that urea-SCR technology can provide durable control of NO_X emissions. We have carefully investigated these issues for other diesel applications and conclude that precise urea injection systems and durable catalysts already exist and have been applied to urea-SCR NO_X emission control systems which are similar to those that we expect to be implemented in locomotive and marine applications.

Urea injection systems applied to on-highway diesel trucks and diesel electric power generators already ensure the precise injection of urea, and these applications have similar—if not more dynamic—engine operation as compared to locomotive and marine engine operation. To ensure precise urea injection across all engine operating conditions, these systems utilize NO_X sensors to maintain closed-loop feedback control of urea injection. These NO_X-sensor-based feedback control systems are similar to oxygen sensor-based systems that are used with catalytic converters on virtually every gasoline vehicle on the road today. These systems, already developed for many diesel engines, are directly applicable to locomotive and marine engines as well.

(c) Durability of Catalytic PM and NO_X Emission Control Technology

Published studies indicate that SCR systems will experience very little deterioration in NO_X conversion throughout the life-cycle of a diesel engine.[140, 141] The principal mechanism of deterioration in an SCR catalyst is thermal sintering—the loss of catalyst surface area due to the melting and growth of active catalyst sites under high-temperature conditions (as the active sites melt and combine, the total number of active sites at which catalysis can occur is reduced). This effect can be minimized by design of the SCR catalyst washcoat and substrate for the exhaust gas temperature window in which it will operate. Several commenters noted that locomotives are subject to consist operation in tunnels, which results in elevated exhaust gas temperatures. Further, they speculated that these elevated exhaust temperatures could reach 700 °C—a temperature that could lead to deterioration of catalyst performance over the useful life of a locomotive. To investigate this scenario, EPA conducted a study (in cooperation with locomotive manufacturers and the railroads) in August, 2007 on Union Pacific's Norden tunnel system (between Sparks, NV and Roseville, CA).[142] We determined that the peak, post-turbine exhaust gas temperature observed in the 2 trailing units of a 4-unit lead consist was only 560 °C. In light of this new information, we are more confident that catalytic aftertreatment devices will be both effective and durable when used in locomotive service.

Another mechanism for catalyst deterioration is chemical poisoning—the plugging and/or chemical de-activation of active catalytic sites. Phosphorus from the engine oil and sulfur from diesel fuel are the primary components in the exhaust stream which can de-activate a catalytic site. The risk of catalyst deterioration due to sulfur poisoning will be all but eliminated with the 2012 implementation of ULSD fuel (<15 ppm S) for locomotive and marine applications. Locomotive and marine operators will already have several years of experience running ULSD fuel by the time NO_X aftertreatment technology is required. Catalyst deterioration due to chemical poisoning can also be reduced through the use of an engine oil with lower levels of sulfated ash, phosphorous, and sulfur (commonly referred to as ''low-SAPS'' oil). Such an oil formulation, designed for use in 2007 DPF- and DOC-equipped on-highway, heavy-duty engines was introduced in October 2006 and is specified by the American Petroleum Institute (API) as ''CJ–4.'' [143] This specification has new and/or lower limits on the amount of sulfated ash, phosphorous, and sulfur an oil may contain and was developed specifically for 2007 on-highway engines equipped with exhaust aftertreatment technologies running on ULSD fuel. Previous oil formulations for heavy-duty, on-highway engines, such as API CI–4, did not specify a limit for sulfur content, and allowed higher levels of phosphorous (0.14% vs. 0.12%) and ash (1.2~1.5% vs. 1.0%) content.[144]

The migration of low-SAPS engine oil properties to future locomotive and marine oil formulations—while beneficial and directionally helpful in regards to the durability, performance, and maintenance of the exhaust aftertreatment components we reference—does not affect our feasibility analysis. European truck and marine applications have shown that SCR is a durable technology even without using a low-SAPs oil formulation. One commenter suggested that these newer, low-SAPS oil formulations, developed for use in on-highway and nonroad diesel engines, may not be appropriate for locomotive or marine applications. While we acknowledge that the exact oil formulation for locomotive and marine applications using ULSD fuel is not known today, we do believe that there is adequate time to develop an appropriate oil formulation. For example, in the State of California, all

[140] Conway, R. et al., ''NO_X and PM Reduction Using Combined SCR and DPF Technology in Heavy Duty Diesel Applications,'' SAE Technical Paper 2005–01–3548, 2005.

[141] Searles, R.A., et al., ''Investigation of the Feasibility of Achieving EURO V Heavy-Duty Emission Limits with Advanced Emission Control Systems,'' 2007 AECC Conference—Belgium, Paper Code: F02E310.

[142] ''Locomotive Exhaust Temperatures During High Altitude Tunnel Operation In Donner Pass,'' U.S. EPA, August 29, 2007. This document is available in Docket EPA–HQ–OAR–2003–0190–0736.

[143] ''API CJ–4 Performance Specifications,'' American Petroleum Institute, online at *http://apicj-4.org/performance_spec.html.* This document is available in Docket EPA–HQ–OAR–2003–0190–0738.

[144] ''CJ–4 Performance Specification: Frequently Asked Questions,'' Lubrizol, online at *http://www.lubrizol.com/cj-4/faq.asp.* This document is available in Docket EPA–HQ–OAR–2003–0190–0741.

intra-state locomotives, marine vessels (in the SCAQMD), and nonroad engines have been operating with ULSD fuel since June, 2006—so there should already be field data/experience available today to begin developing an oil formulation for ULSD in advance of the implementation date for aftertreatment-forcing standards. In addition, the nonroad sector will have transitioned to ULSD fuel nationwide by June, 2010, followed by the locomotive sector in June, 2012—again, leaving ample time to develop an oil formulation which does not contain any more sulphated-ash than necessary to neutralize crankcase acids.

Thermal cycling, mechanical vibration, and shock loads are all factors which can affect the mechanical durability of exhaust system components. The stresses applied to the aftertreatment devices by these factors can be managed through the selection of proper materials and the design of support and mounting structures which are capable of withstanding the shock and vibration levels present in locomotive and marine applications. One commenter to our NPRM stated that shock loading for a locomotive catalyst is estimated to be 10–12 g. This level of shock loading is consistent with the levels that catalyst substrate manufacturers, catalyst canners, and exhaust system manufacturers are currently designing to (for OEM aftertreatment systems and components subject to the durability requirements of on-highway, marine, and nonroad applications). Nonroad applications such as logging equipment are subject to shock loads in excess of 10 g and on-highway applications can exceed 30 g (with some OEM applications specifying a 75 g shock load requirement).[145] In addition, the American Bureau of Shipping (ABS) specification for exhaust manifolds on diesel engines states that these parts may need to withstand vibration levels as high as ±10 g at 600 °C for 90 minutes.[146] Given these examples of shock and vibration requirements for today's nonroad, on-highway, and marine environments, we believe that appropriate support structures can be designed and developed for the aftertreatment devices we expect to be used on Tier 4 locomotives.

(d) Packaging of Catalytic PM and NO_X Emission Control Technologies

Locomotive manufacturers will need to design the exhaust system components to accommodate the aftertreatment system. Our analysis, detailed in the RIA, shows that the packaging requirements for the aftertreatment system are such that they can be accommodated within the envelope defined by the Association of American Railroads (AAR) Plate ''L'' clearance diagram for freight locomotives.[147] The typical volume required for the SCR catalyst and post-SCR ammonia slip catalyst for Euro V and U.S. 2010 heavy-duty truck applications is approximately 2 times the engine displacement, and the upstream DOC/CDPF volume is approximately 1–1.5 times the engine displacement. Due to the longer useful life and maintenance intervals required for locomotive applications, we estimate that the SCR catalyst volume will be sized at approximately 2.5 times the engine displacement, and the combined DOC/CDPF volume will be approximately 1.7 times the engine displacement. For a typical locomotive engine with 6 ft^3 of total cylinder displacement, the volume requirement for the aftertreatment components alone would be approximately 25 ft^3 (of the 80 ft^3 estimated to be available for packaging these components and their associated ducts/hardware above the engine).

EPA engineers have examined Tier 2 EMD and GE line-haul locomotives and acknowledge that packaging the necessary aftertreatment components will be a difficult task. However, this task should not be more difficult (and will quite likely less so) than the packaging challenges faced by nonroad and on-highway applications. Given the space available on today's locomotives, we feel that packaging catalytic PM and NO_X emission control technologies onboard locomotives may be less challenging than packaging similar technologies onboard other mobile sources (such as light-duty vehicles, heavy-duty trucks, and nonroad equipment). Given that similar exhaust systems are either already implemented onboard these vehicles or will be implemented on these vehicles years before similar systems would be required onboard locomotives and marine vessels, we have concluded that any packaging issues will be successfully addressed early in the locomotive and marine vessel design process. Our analysis concludes that there is adequate space to package these components, as well as their associated ducts, transitions, and urea/exhaust mixing devices. This conclusion also applies to new switcher locomotives as well, which while being shorter in length than line-haul locomotives, are also equipped with smaller, less-powerful engines—resulting in smaller volume requirements for the aftertreatment components.

For commercial vessels which use marine diesel engines greater than 600 kW, we expect these vessels will be designed to accommodate the exhaust system components engine manufacturers specify as necessary to meet the new standards. Our discussions with marine architects and engineers, along with our review of vessel characteristics, leads us to conclude that for commercial marine vessels, adequate engine room space can be made available to package aftertreatment components. Packaging of these components, and analyzing their mass/placement effect on vessel characteristics, will become part of design process undertaken by marine architecture firms.[148]

We did determine, however, that for recreational vessels and for vessels equipped with engines less than 600 kW, catalytic PM and NO_X exhaust aftertreatment systems were less practical from a packaging standpoint than for the larger, commercially operated vessels. We have identified catalytic emission control systems that would significantly reduce emissions from these smaller vessels. However, after taking into consideration costs, energy, safety, and other relevant factors, we found a number of reasons, detailed in the RIA, to not adopt any new exhaust aftertreatment-forcing standards at this time on these smaller vessels. One reason is that most of these vessels use seawater-cooled exhaust systems—and even seawater injection into their exhaust systems—to cool engine exhaust gases and prevent the overheating materials such as a fiberglass hull. This current practice of cooling and seawater injection could reduce the effectiveness of catalytic exhaust aftertreatment systems. This is significantly more challenging than for gasoline catalyst systems due to much larger relative catalyst sizes and cooler exhaust temperatures typical of diesel engines. In addition, because of these vessels' small size and their typical operation by planing high on the surface

[145] Correspondence from Adam Kotrba of Tenneco. This document is available in Docket EPA–HQ–OAR–2003–0190–0742.

[146] ''ABS Rules for Building and Classing—Steel Vessels Under 90 Meters (295 Feet) In Length,'' Part 4—Vessel Systems and Machinery, American Bureau of Shipping, 2006.

[147] ''AAR Manual of Standards and Recommended Practices,'' Standard S–5510, Association of American Railroads.

[148] Telephone conversation between Brian King, Elliot Bay Design Group, and Brian Nelson, EPA, July 24, 2006.

of the water, catalytic exhaust aftertreatment systems pose several significant packaging and weight challenges. These challenges could be addressed by the use of lightweight hull and superstructure materials. But any solution which employs new, lightweight hull and superstructure materials would have to be developed, tested and approved by classifying organizations prior to their application on vessels using catalytic exhaust aftertreatment systems. Taken together, these factors led us to conclude that it is not prudent to set aftertreatment-forcing emission standards for marine diesel engines below 600 kW at this time.

(e) Infrastructure Impacts of Catalytic PM and NO_X Emission Control Technologies

For PM trap technology the rail and marine industries will experience minimal impacts on their infrastructures. Since PM trap technology relies on no separate reductant, any infrastructure impacts will be limited to some minor changes in maintenance practices and equipment at maintenance facilities. Such maintenance will be limited to the infrequent removal of ash buildup from within a PM trap. This type of maintenance may require that maintenance facilities periodically remove PM traps for ash cleaning and may involve the use of a crane or other lifting device. We understand that much of this kind of infrastructure already exists for other locomotive and marine engine maintenance practices. We have toured shipyards and locomotive maintenance facilities at rail switchyards, and we observed that such facilities are generally already adequate for any required PM trap removal and maintenance.

We do expect some impact on the railroad and marine sectors to accommodate the use of a separate reductant for use in a NO_X SCR system. For light-duty, heavy-duty, and nonroad applications, the commonly preferred reductant in an SCR system has been a 32.5 percent urea-water solution. The 32.5 percent solution, also known as the ''eutectic'' concentration, provides the lowest freezing point (-11 °C or 12 °F) and ensures that the ratio of urea-to-water will not change when the solution begins to freeze.[149] Heated urea storage tanks and insulation of the urea dosing hardware onboard the locomotive (urea storage tank, pump, and lines) may be necessary to prevent freeze-up in northern climates. Locomotives and marine vessels are commonly refueled from large, centralized fuel storage tanks, tanker trucks, or tenders with long-term purchase agreements. Urea suppliers will be able to distribute urea to the locomotive and marine markets in a similar manner, or they may choose to employ multi-compartment diesel fuel/urea tanker trucks for delivery of both products simultaneously. The frequency that urea will need to be replenished is dependent on many factors; urea storage capacity, engine duty-cycle, and expected urea dosing rate for each application. We expect that locomotive manufacturers and marine vessel designers will size the urea storage tanks appropriate to the usage factors for each application plus some margin-of-safety (to reduce the probability that an engine will be operated without urea). Discussions concerning the urea infrastructure in North America and specifications for an emissions-grade urea solution are now under way amongst light- and heavy-duty on-highway diesel stakeholders.

Although an infrastructure for widespread transportation, storage, and dispensing of SCR-grade urea does not currently exist in the U.S., the affected stakeholders in the light- and heavy-duty on-highway and nonroad diesel sectors are expected to follow the European model, where diesel engine/truck manufacturers and fuel refiners/distributors have formed a collaborative working group known as ''AdBlue.'' The goal of the AdBlue organization is to resolve potential problems with the supply, handling, and distribution of urea and to establish standards for product purity.[150] With regard to urea production capacity, the U.S. has more-than-sufficient capacity to meet the additional needs of the rail and marine industries. For example, in 2003, the total diesel fuel consumption for Class I railroads was approximately 3.8 billion gallons.[151] If 100 percent of the Class I locomotive fleet were equipped with SCR catalysts, approximately 190 million gallons-per-year of 32.5 percent urea-water solution would be required.[152] It is estimated that 190 million gallons of urea solution would require 0.28 million tons of dry urea (1 ton dry urea is needed to produce 667 gallons of 32.5 percent urea-water solution). Currently, the U.S. consumes 14.7 million tons of ammonia resources per year, and relies on imports for 41 percent of that total (of which, urea is the principal derivative). In 2005 domestic ammonia producers operated their plants at 66 percent of rated capacity, resulting in 4.5 million tons of reserve production capacity.[153] In the very long-term situation above, where 100 percent of the locomotive fleet required urea, only 6.2 percent of the reserve domestic capacity would be needed to satisfy the additional demand. A similar analysis for the marine industry, with a yearly diesel fuel consumption of 2.2 billion gallons per year, would not significantly impact the urea demand-to-reserve capacity equation. Since the rate at which urea-SCR technology is introduced to the railroad and marine markets will be gradual—and the reserve urea production capacity is more-than-adequate to meet the expected demand from all diesel markets in the 2017 timeframe—EPA does not project any urea cost or supply issues, beyond the costs estimated in the RIA, will result from implementing the Tier 4 standards.

(f) Unregulated Pollutants

There is potential for the formation of unregulated pollutants of significant concern to EPA any time engine technologies change, including when new emission control technologies are added. Some examples of these unregulated pollutants include N_2O and ammonia (NH_3). In addition, failure to dose urea in an SCR system while operating under load may cause elevated NO_2 emissions. Similarly, use of a CDPF that produces NO_2 in excess of what is needed for passive regeneration—and operated without a downstream SCR system—may lead to elevated NO_2 emissions. Such increased NO_2 emissions could be a concern for operation in enclosed environments such as locomotive operation in minimally ventilated or unventilated tunnels. Similarly, use of NO_X reduction catalysts with poor selectivity could result in elevated N_2O emissions. An aggressive urea dosing strategy within an SCR system (for high levels of NO_X control) without a properly designed/calibrated feedback control system, ammonia slip catalyst, or adequate exhaust/urea mixing could also result in elevated ammonia (NH_3) emissions.

[149] Miller, W. et al., ''The Development of Urea-SCR Technology for US Heavy Duty Trucks,'' SAE Technical Paper 2000–01–0190, 2000.

[150] ''Ensuring the Availability and Reliability of Urea Dosing for On-Road and Non-Road,'' presented by Glenn Barton, Terra Corp., 9th DEER Conference, August 28, 2003.

[151] ''National Transportation Statistics—2004,'' Table 4–5, U.S. Bureau of Transportation Statistics.

[152] Assuming the dosing rate of 32.5 percent urea-water solution is 5 percent of the total fuel consumed; 3.8 billion gallons of diesel fuel * 0.05 = 190 million gallons of urea-water solution.

[153] ''Mineral Commodity Summaries 2006,'' page 118, U.S. Geological Survey, online at *www.minerals.usgs.gov/minerals/pubs/mcs/mcs2006.pdf.*

These NH_3 emissions, which can be minimized through the use of closed-loop feedback and control of urea injection, can be all-but-eliminated through use of an oxidation catalyst downstream of the SCR catalyst. Such catalysts, commonly referred to as ''slip catalysts,'' are in use today and have been shown to be highly effective at eliminating ammonia emissions.[154]

The issue of NH_3 emissions (or ammonia slip) was raised by several commenters, with claims that excessive NH_3 emissions are ''inevitable'', and may reach 25 ppm during steady-state operation and 100 ppm during transient operation. We have assessed this issue and concluded that a properly-designed slip catalyst, with good selectivity to nitrogen (N_2), can convert most of the excess NH_3 released from the SCR catalyst into N_2 and water. Recent studies by Johnson Matthey and the Association for Emissions Control by Catalyst (AECC) have shown that an aged SCR system equipped with a slip catalyst can achieve tailpipe NH_3 levels of less of than 10 ppm when tested on the European Stationary Cycle (ESC) and European Transient Cycle (ETC).[154, 155] The SCR system in the Johnson Matthey study was aged on a cycle which included 400 hours of high-temperature operation at 650 °C (to simulate active DPF regeneration events). Our analysis of the locomotive engine operating conditions presumes a maximum, post-turbine exhaust temperature of 560 °C. This presumption is based on implementation of a ''passive'' DPF regeneration approach (in which NO_2 created by the oxidation catalyst is sufficient to oxidize trapped soot) and our own testing of locomotives during operation in non-ventilated tunnels.[142] Under these conditions, we expect slip catalysts to be durable and effective in reducing NH_3 slip.

We expect manufacturers to be conscious of these possibilities and to take appropriate action to minimize or prevent the formation of unregulated pollutants when designing emission control systems. Manufacturers must comply with the ''Prohibited Controls'' section of 40 CFR 1033.115(c), which states:

''You may not design or produce your locomotives with emission control devices, systems, or elements of design that cause or contribute to an unreasonable risk to public health, welfare, or safety while operating. For example, this would apply if the locomotive emits a noxious or toxic substance it would otherwise not emit that contributes to such an unreasonable risk.''

Emission control systems designed to meet the 2007 and 2010 heavy-duty truck and Tier 2 light-duty vehicle emission standards already take these unregulated pollutants into account through compliance with section 202(A)(4) of the Clean Air Act. CDPF systems that minimize formation of excess NO_2 while still relying primarily on passive regeneration have entered production for OEM and retrofit applications. Compact urea-SCR systems that have been developed to meet the U.S. 2010 heavy-duty truck standards use closed-loop controls that continuously monitor NO_X reduction performance. Such systems have the capability to control stack emissions of NH_3 to below 5 ppm during transient operation even without the use of an ammonia slip catalyst. We understand that such systems may still emit some very small level of uncontrolled pollutants and we would not generally consider a system that releases de minimis amounts of NH_3 or N_2O while employing technology consistent with limiting these emissions to be in violation of § 1033.115(c)—which is the same way we currently treat passenger cars and heavy-duty trucks with regard to N_2O and H_2S emissions.

(4) The New Standards Are Technologically Feasible

Our rulemaking involves a range of engines, and we have identified a range of technologically feasible emission control technologies that we project will be used to meet our new standards. Some of these technologies are incremental improvements to existing engine components, and many of these improved components have already been applied to similar engines. The other technologies we identified involve catalytic exhaust aftertreatment systems. For these technologies we carefully examined the catalyst technology, its applicability to locomotive and marine engine packaging constraints, its durability with respect to the lifetime of today's locomotive and marine engines, and its impact on the infrastructure of the rail and marine industries. From our analysis, which is presented in detail in our RIA, we conclude that incremental improvements to engine components and the implementation of catalytic PM and NO_X exhaust aftertreatment technology will be feasible to meet our new emissions standards.

IV. Certification and Compliance Program

This section describes the regulatory changes being finalized for the locomotive and marine compliance programs, beyond the standards discussed in section III. The most obvious change is that the regulations have been written in plain language. They are structured to contain the provisions that are specific to locomotives in a new part 1033 and the provisions that are specific to marine engines and vessels in a new part 1042. We also proposed to apply the general provisions of existing parts 1065 and 1068.[156] The plain language regulations, however, are not intended to significantly change the compliance program, except as specifically noted in today's notice. These plain language regulations will supersede the regulations in part 92 and 94 (for Categories 1 and 2) as early as the 2008 model year. See section III for the starting dates for different engines. The changes from the existing programs are described below briefly along with other notable aspects of the compliance program. See the regulatory text for the detailed requirements and see the Summary and Analysis of Comments document for a more complete rationale for the changes being adopted. **Note:** The term manufacturer is used in this section to include locomotive and marine manufacturers and remanufacturers.

A. Issues Common to Locomotives and Marine

For many aspects of compliance, we are adopting similar provisions for marine engines and locomotives, which are discussed in this section. Several other issues are also included in this section, where we are specifying different provisions, but where the issues are similar in nature. The remaining compliance issues are discussed in sections IV.B. (for locomotives) and IV.C. (for marine).

(1) Test Procedures

(a) Incorporation of Part 1065 Test Procedures for Locomotive and Marine Diesel Engines

As part of our initiative to update the content, organization and writing style

[154] Smedler, Gudmund, ''NO_X Emission Control Options'', 2007 HDD Emission Control Symposium—Gothenberg, Sweden, September 11, 2007.

[155] Searles, R.A., et al., ''Investigation of Feasibility of Achieving EURO V Heavy-Duty Emission Limits with Advanced Emission Control Systems,'' 2007 AECC Conference—Belgium, Paper Code: F02E310.

[156] We proposed modifications to the existing provisions of 40 CFR part 1068 on May 18, 2007 (72 FR 28097). Readers interested in the compliance provisions that will apply to locomotives and marine diesel engines should also read the actual regulatory changes in that will be finalized in that rulemaking.

of our regulations, we are revising our test procedures. We have grouped all of our engine dynamometer and field testing test procedures into one part entitled, ''Part 1065: Test Procedures.'' For each engine or vehicle sector for which we have recently promulgated standards (such as land-based nonroad diesel engines or recreational vehicles), we identified an individual part as the standard-setting part for that sector. These standard-setting parts then refer to one common set of test procedures in part 1065. These programs regulate land-based on-highway heavy-duty engines, land-based nonroad diesel engines, recreational vehicles, and nonroad spark-ignition engines over 19 kW. In this rule, we are applying part 1065 to all locomotive and marine diesel engines, as part of a plan to eventually have all our engine programs refer to a common set of procedures.

In the past, each engine or vehicle sector had its own set of testing procedures. There are many similarities in test procedures across the various sectors. However, as we introduced new regulations for individual sectors, the more recent regulations featured test procedure updates and improvements that the other sectors did not have. As this process continued, we recognized that a single set of test procedures allows for improvements to occur simultaneously across engine and vehicle sectors. A single set of test procedures is easier to understand than trying to understand many different sets of procedures, and it is easier to move toward international test procedure harmonization if we only have one set of test procedures. We note that procedures that are particular for different types of engines or vehicles, for example, test schedules designed to reflect the conditions expected in use for particular types of vehicles or engines, remain separate and are reflected in the standard-setting parts of the regulations.

The part 1065 test procedures are organized and written to be clearer than locomotive- and marine-specific test procedures found in parts 92 and 94. In addition, part 1065 improves the content of the respective testing specifications, including the following:

- Specifications and calculations written in the international system of units (SI)
- Procedures by which manufacturers can demonstrate that alternate test procedures are equivalent to specified procedures
- Specifications for new measurement technology that has been shown to be equivalent or more accurate than existing technology
- Procedures that improve test repeatability
- Calculations that simplify emissions determination
- New procedures for field testing engines
- More comprehensive sets of definitions, references, and symbols
- Calibration and accuracy specifications that are scaled to the applicable standard, which allows us to adopt a single specification that applies to a wide range of engine sizes and applications.

We are adopting the lab-testing and field-testing specifications in part 1065 for all locomotive and marine diesel engines. These procedures replace those currently published in parts 92 and 94. We are making a gradual transition from the part 92 and 94 procedures. In general, we specify that manufacturers use the test procedures in 1065 when certifying under part 1033 or 1042. However, we will allow manufacturers to use a combination of the old and new test procedures through 2014, provided such use is done using good engineering judgment. Moreover, manufacturers may continue to rely on carryover test data based on part 92 or 94 procedures to recertify engine families that are not changing.

In the future, we may apply the test procedures specified in part 1065 to other types of engines, so we encourage companies involved in producing or testing other engines to stay informed of developments related to these test procedures.

(b) Revisions to Part 1065

Part 1065 was originally adopted on November 8, 2002 (67 FR 68242) and was initially applicable to standards regulating large nonroad spark-ignition engines and recreational vehicles under 40 CFR parts 1048 and 1051. The test procedures initially adopted in part 1065 were sufficient to conduct testing, but on July 13, 2005 (70 FR 11534) we promulgated a final rule that reorganized these procedures and added content to make various improvements. Today, we are finalizing additional modifications, largely as proposed. The reader is referred to the NPRM, the regulatory text, and the docket for more information about the changes being made to Part 1065 in this final rule. Note that since part 1065 applies for diesel engines subject to parts 86 and 1039, we are also making some minor revisions to those parts to reflect the changes being made to part 1065. (We are also making a technical correction to an equation in § 86.117–96.)

These changes will become effective July 7, 2008. Section 1065.10(c)(6) of the existing regulations includes a provision that automatically allows manufacturers an additional 12 months beyond the effective date to revise their test procedures to comply with the new regulations. Since these changes will not affect the stringency of the standards, we also plan to use our authority under § 1065.10(c)(4) to allow the use of carryover data collected using the earlier procedures.

(2) Certification Fuel

It is well-established that measured emissions may be affected by the properties of the fuel used during the test. For this reason, we have historically specified allowable ranges for test fuel properties such as cetane and sulfur content. These specifications are intended to represent most typical fuels that are commercially available in use. This helps to ensure that the emissions reductions expected from the standards occur in use as well as during emissions testing.

In our previous regulation of in-use locomotive and marine diesel fuel, we established a 15 ppm sulfur standard at the refinery gate for locomotive and marine (LM) diesel fuel beginning June 1, 2012. However, since we intended to allow the sale, distribution, and use of higher sulfur LM diesel fuel (such as contaminated ULSD) to continue indefinitely, we did not set a ''hard and fast'' downstream requirement that only 15 ppm LM diesel may be sold and distributed in all areas of the country . Because refiners cannot intentionally produce off-specification fuel for locomotives, most in-use locomotive and marine diesel fuel will be ULSD (with a sulfur content of 15 ppm or less). Nevertheless, we expect that some fuel will be available with sulfur levels between 15 and 500 ppm, and our existing regulations require that such fuel be designated as 500 ppm sulfur diesel fuel. Note that fuel designated as 500 ppm sulfur is also known as low sulfur diesel fuel (LSD).

Because we have reduced the upper limit for locomotive and marine diesel fuel sulfur content for refiners to 15 ppm in 2012, we are establishing new ranges of allowable sulfur content for diesel test fuels. See section IV.C.(8) for information about testing marine engines designed to use residual fuel. For marine diesel engines, we are specifying the use of ULSD fuel as the test fuel for Tier 3 and later standards. We believe this will correspond to the fuels that these engines will see in use over the long term. We recognize that this approach will mean that some marine engines will use a test fuel that is lower in sulfur than in-use fuel

during the first few years and that other Tier 2 marine engines allowed to be produced after 2012 will use a test fuel that is higher in sulfur than fuel already available in use when they are produced. However, we believe that it is more important to align changes in marine test fuels with changes in the PM standards than strictly with changes in the in-use fuel. Nevertheless, we are allowing Tier 2 certification with fuel meeting the 7 to 15 ppm sulfur specification to simplify testing but will require that PM emissions be corrected to be equivalent to testing conducted with the specified fuel. This will ensure that the effective stringency of the Tier 2 standards will not be affected.

For locomotives, we will require that Tier 4 engines be certified based on ULSD test fuels. We are also requiring that these locomotives use ULSD in the field. We will continue to allow the use of 500 ppm LM diesel fuel, in older locomotives in the field.[157] Thus, we are requiring that remanufacture systems for Tier 0 and Tier 1 locomotives be certified on LSD test fuel. We are allowing the use of test fuels other than those specified here. Specifically, we will allow the use of ULSD during emission testing for locomotives otherwise required to use LSD, provided they do not use sulfur-sensitive technology (such as oxidation catalysts). However, as a condition of this allowance, the manufacturer will be required to add an additional amount to the measured PM emissions to make them equivalent to what would have been measured using LSD. For example, we will allow a manufacturer to test with ULSD if they adjusted the measured PM emissions upward by 0.01 g/bhp-hr (which would be a relatively conservative adjustment and would ensure that manufacturers would not gain an inappropriate advantage by testing on ULSD).

We are adopting special fuel provisions for Tier 3 locomotives and Tier 2 locomotive remanufacture systems. The final regulations specify that the test fuel for these be ULSD without sulfur correction since these locomotives will use ULSD in use for most of their service lives. However, unlike Tier 4 locomotives, we will not require them to be labeled to require the use of ULSD, unless they included sulfur sensitive technology.

We are adopting a new flexibility for locomotives and Category 2 marine engines to reduce fuel costs for testing. Because these engines can consume 200 gallons of diesel fuel per hour at full load, fuel can represent a significant fraction of the testing cost, especially if the manufacturer must use specially blended fuel rather than commercially available fuel. To reduce this cost, we will allow manufacturers to immediately begin testing of locomotives and Category 2 marine engines with commercially available diesel fuel. We do not believe that this will change the effective stringency of the standards.

For both locomotive and marine engines, all of the specifications described above will apply to emission testing conducted for certification, production-line testing, and in-use, as well as any other testing for compliance purposes for engines in the designated model years. Any compliance testing of previous model year engines will be done with the fuels designated in our regulations for those model years.

(3) Supplemental Emission Standards

We are continuing the supplemental emission standards for locomotives and marine engines. For locomotives, this means we will continue to apply notch emission caps, based on the emission rates in each notch, as measured during certification testing. We recognize that for our Tier 4 standards it will not be practical to measure very low levels of PM emissions separately for each notch during testing, and thus we are changing the calculation of the PM notch cap for Tier 4 locomotives. All other notch caps will be determined and applied as they currently are under 40 CFR 92.8(c). See § 1033.101(e) of the regulations for the detailed calculation.

Marine engines will continue to be subject to not-to-exceed (NTE) standards; however, we are making certain changes to these standards based upon our understanding of in-use marine engine operation and based upon the underlying Tier 3 and Tier 4 duty cycle emissions standards. As background, we determine NTE compliance by first applying a multiplier to the duty-cycle emission standard, and then we compare to that value an emissions result that is recorded when an engine runs within a certain range of engine operation. This range of operation is called an NTE zone (see 40 CFR 94.106). The first regulation of ours that included NTE standards was the commercial marine diesel regulation, finalized in 1999. After we finalized that regulation, we promulgated other NTE regulations for both heavy-duty on-highway and nonroad diesel engines. We also finalized a regulation that requires heavy-duty on-highway engine manufacturers to conduct field testing to demonstrate in-use compliance with the on-highway NTE standards. Throughout our development of these other regulations, we have learned many details about how best to specify NTE zones and multipliers that will ensure the greatest degree of in-use emissions control, while at the same time will avoid disproportionately stringent requirements for engine operation that has only a minor contribution to an engine's overall impact on the environment. Based upon the Tier 3 and Tier 4 standards—and our best information of in-use marine engine operation—we are making certain improvements to our marine NTE standards.

For marine engines we are broadening the NTE zones in order to better control emissions in regions of engine operation where an engine's emissions rates (i.e. grams/hour, tons/day) are greatest; namely at high engine speed and high engine load. This is especially important for commercial marine engines because they typically operate at steady-state at high-speed and high-load operation. This change also will make our marine NTE zones much more similar to our on-highway and nonroad NTE zones. Additionally, we analyzed different ways to define the marine NTE zones, and we determined a number of ways to improve and simplify the way we define and calculate the borders of these zones. We feel that these improvements will help clarify when an engine is operating within a marine NTE zone.

Note that we specify different duty cycles to which a marine engine may be certified, based upon the engine's specific application (e.g., fixed-pitch propeller, controllable-pitch propeller, constant speed, auxiliary, etc.). These duty cycles are described below in section IV.C.(9). Correspondingly, we also have a unique NTE zone for each of these duty cycles. These different NTE zones are intended to best reflect an engine's real-world range of operation for that particular application. One primary change in the NTE zones, compared to the NPRM, is for controllable-pitch propeller applications. Rather than using the nonroad NTE zone, as proposed, the final NTE zone for these engines has been revised to better reflect marine engine operation. Please refer to section 1042.101(c) of the new regulations for a description of our new NTE standards. In the cases where marine auxiliary engines use the same duty cycle as their land-based nonroad counterparts, we

[157] Under our existing fuel regulations (40 CFR 80.510(g)), 500 ppm LM diesel fuel may not be sold and/or distributed in the Northeast/Mid-Atlantic (NE/MA) area beginning October 1, 2012. Such fuel may no longer be used in the NE/MA area beginning December 1, 2012.

are adopting the same NTE standards as we have already finalized for nonroad engines in 40 CFR § 1039.101. As the standards for marine diesel engines under 75 kW are based on the corresponding nonroad engine standards, we are aligning the NTE standard start dates for these engines with the nonroad engine NTE start dates in 2012 and 2013.

We are also implementing new NTE multipliers. We have analyzed how the Tier 3 and Tier 4 emissions standards affect the stringency of the marine NTE standards, especially in comparison to the stringency of the underlying duty cycle standards. We recognized that in certain sub-regions of our new NTE zones, slightly higher multipliers are necessary because of the way that our more stringent Tier 3 and Tier 4 emissions standards will affect the stringency of the NTE standards. For comparison, Tier 2 marine NTE standards contain multipliers that range in magnitude from 1.2 to 1.5 times the corresponding duty cycle standard. The new multipliers range from 1.2 to 1.9 times the standard. Even with these slightly higher NTE multipliers, we are confident that our changes to the marine NTE standards will ensure the greatest degree of in-use emissions control. We are also confident that our changes to the marine NTE standards will continue to ensure proportional emissions reductions, across the full range of marine engine operation.

We are also adopting other NTE provisions for marine engines that are similar to our existing heavy-duty on-highway and nonroad diesel NTE standards. We are making these particular changes to account for the implementation of catalytic exhaust treatment devices on marine engines. One such provision is to account for when a marine engine rarely operates within a limited region of the NTE zone (i.e. less than 5 percent of in-use operation). Another provision allows small deficiencies in NTE compliance for a limited period of time. We feel that these provisions have been effective in our on-highway and nonroad NTE programs; therefore, we are adopting them for our marine NTE standards as well.

(4) Emission Control Diagnostics

We requested comment on a requirement that all Tier 4 engines include a simple engine diagnostic system to alert operators to general emission-related malfunctions. As is described in the S&A document, we are not adopting such general requirements today. (See section IV.A.(7) of this Final Rule for related requirements involving SCR systems.) We are, however, adopting special provisions for locomotives that include emission related diagnostics. First, we will require locomotive operators to respond to malfunction indicators by performing the required maintenance or inspection. Second, locomotive manufacturers will be allowed to repair such malfunctioning locomotives during in-use compliance testing (they would still be required to include a description of the malfunction in the in-use testing report.). This approach takes advantage of the unique market structure with two major manufacturers and only a few railroads buying nearly all of the freshly manufactured locomotives. These provisions create incentives for both the manufacturers and railroads to work together to develop a diagnostic system that would effectively reveal real emission malfunctions. Our current regulations already require that locomotive operators complete all manufacturer-specified emission-related maintenance, and this new requirement treats repairs indicated by diagnostic systems as such emission-related maintenance. Thus, the railroads will have a strong incentive to make sure that they only have to perform this additional maintenance when real malfunctions are occurring. On the other hand, manufacturers will want to have all emission malfunctions revealed so that when they test an in-use locomotive they can repair identified malfunctions before testing if the railroad has not yet done it.

(5) Monitoring and Reporting of Emissions Related Defects

We are applying the defect reporting requirements of § 1068.501 to replace the provisions of subparts E in parts 92 and 94. This will result in two significant changes for manufacturers. First, § 1068.501 obligates manufacturers to tell us when they learn that emission control systems are defective and to conduct investigations under certain circumstances to determine if an emission-related defect is present. Second, it changes the thresholds after which they must submit defect reports. See the text 40 CFR 1068.501 for details about this requirement.

(6) Rated Power

We are specifying in parts 1033 and 1042 how to determine maximum engine power in the regulations for both locomotives and marine engines. The term ''maximum engine power'' will be used for marine engines instead of previously undefined terms such as ''rated power'' or ''power rating'' to specify the applicability of the standards. The addition of this definition is intended to allow for more objective applicability of the standards. More specifically, for marine engines, we define maximum engine power to mean the maximum brake power output on the nominal power curve for an engine.

For locomotives, the term ''rated power'' will continue to be used, but is explicitly defined to be the brakepower of the engine at notch 8. We will continue to use the term ''rated power'' because this definition is consistent with the commercial meaning of the term.

(7) In-Use Compliance for SCR Operation

As discussed in section III.C, we are projecting that manufacturers will use urea-based SCR systems to comply with the Tier 4 emission standards.[158] These systems are very effective at controlling NO_X emissions as long as the operator continues to supply urea of acceptable quality. Thus we considered concepts put forward by manufacturers in other mobile source sectors in dealing with this issue. These include design features to prevent an engine from being operated without urea if an operator ignores repeated warnings and allows the urea level to run too low. EPA has issued a guidance document for urea SCR systems discussing the use of such features on highway diesel vehicles.

We believe that the nature of the locomotive and large commercial marine sectors supports a different in-use compliance approach. This approach focuses on requirements for operators of locomotives and marine diesel engines that depend on urea SCR to meet EPA standards, aided by onboard alarm and logging mechanisms that engine manufacturers will be required to include in their engine designs. Except in the rare instance that operation without urea may be necessary, the regulatory provisions put no burden on the end-user beyond simply filling the urea tank with appropriate quality urea. Specifically, we are specifying:

- That it is illegal to operate without acceptable quality urea when the urea is needed to keep the SCR system functioning properly;
- That manufacturers must include clear and prominent instructions to the operator on the need for, and proper steps for, maintaining urea, including a

[158] The provisions described in this section will apply equally to SCR systems using reductants other than urea, except for systems using normal diesel fuel as the reductant.

statement that it is illegal to operate the engine without urea;

- That manufacturers must include visible and audible alarms at the operator's console to warn of low urea levels or inadequate urea quality;
- That engines and locomotives must be designed to track and log, in nonvolatile computer memory, all incidents of engine operation with inadequate urea injection or urea quality; and
- That operators must report to EPA in writing any incidence of operation with inadequate urea injection or urea quality within 30 days of each incident, and
- That, when requested, locomotive and vessel operators must provide EPA with access to, and assistance in obtaining information from, the electronic onboard incident logs.

We understand that in extremely rare circumstances, such as during a temporary emergency involving risk of personal injury, it may be necessary to operate a vessel or locomotive without adequate urea. We would intend such extenuating circumstances to be taken into account when considering what penalties or other actions are appropriate as a result of such operation. The information from SCR compliance monitoring systems described above may also be useful for state and local air quality agencies and ports to assist them in any marine engine compliance programs they implement.

Our new regulations specify that what constitutes acceptable urea solution quality be specified by the manufacturers in their maintenance instructions and require that the certified emission control system must meet the emissions standards with any urea solution within stated specifications. This could be facilitated by an industry standard for urea quality, which we expect will be generated in the future as these systems move closer to market. We recognize that this will likely require automated sensing of some characteristic indicator such as urea concentration or exhaust NO_X concentration.

We believe these provisions can be an effective tool in ensuring urea use for locomotives and large commercial marine vessels because of the relatively small number of railroads and operators of large commercial vessels in the U.S., especially considering that the number of SCR-equipped locomotives and vessels will ramp up quite gradually over time. In-use compliance provisions of the sort we are adopting for locomotives and large commercial marine engines would be much less effective in other mobile source sectors such as highway vehicles because successful enforcement involving millions of vehicle owners would be extremely difficult. In addition, the highway and nonroad diesel sectors are characterized by a wide variety of applications and duty cycles, which further differentiate in-use compliance approaches that may make sense in the relatively uniform rail and marine sectors from those that would be effective in the highway and nonroad sectors.

(8) Temporary In-Use Compliance Margins

Consistent with the approach we took in the highway heavy-duty rule (66 FR 5113) and nonroad diesel rule (69 FR 38957), we are adopting a provision for in-use compliance flexibility in the initial years of the Tier 4 program. We proposed to allow adjusted in-use compliance standards for the first three model years of the Tier 4 locomotive standards to help assure the manufacturers that they will not face recall if they exceed standards by a small amount during this transition to advanced clean diesel technologies.

Commenters suggested that the reasons we gave for applying this provision to locomotives were valid for marine engines too. We agree and are extending this provision to Tier 4 marine diesel engines. Commenters also argued that we over-emphasized the flexibility needed for NO_X technology compared to PM technology. In response, we have concluded that it is appropriate to provide an alternative set of margins available to manufacturers willing to accept more stringent in-use compliance levels for NO_X in exchange for somewhat less stringent levels for PM.

Table IV–1 shows the in-use adjustments that we will apply. These adjustments would be added to the appropriate standards or FELs in determining the in-use compliance level for a given in-use hours accumulation. Our intent is that these add-on levels be available only for highly-effective advanced technologies such as particulate traps and SCR, and so we will apply them only to engines certified at or below the Tier 4 standards without the use of credits, through the first three model years of the new standards. As part of the certification process, manufacturers will still be required to demonstrate compliance with the unadjusted Tier 4 certification standards using deteriorated emission rates. Therefore manufacturers will not be able to use these in-use adjustments in setting design targets for the engine. They need to project that engines will meet the standards in use without adjustment. The in-use adjustments merely provide some assurance that they will not be forced to recall engines because of some small miscalculation of the expected deterioration rates.

Also, to avoid what would essentially be a doubling up of the benefits of the two alternatives, contrary to their purpose, we are requiring that a manufacturer may only use the alternative set of add-ons for an engine family if this choice is indicated in the certification application and may not reverse this choice in carry-over certifications or certifications by design.

TABLE IV–1.—IN-USE ADD-ONS (g/bhp-hr)

For useful life fractions	Primary set		Alternative set	
	NO_X	PM	NO_X	PM
<50% UL	0.7	.....	0.2	
50%–75% UL	1.0	0.01	0.3	0.03
>75% UL	1.3	.....	0.4	

As discussed in section III.B(1)(a)(ii), in response to industry comments, we are providing another Tier 4 NO_X compliance option for line-haul locomotives with a reduced in-use NO_X add-on of 0.6 g/bhp-hr. Under this option, for the first 8 model years of Tier 4 (2015–2022), a line-haul locomotive manufacturer may certify a locomotive to the 1.3 g/bhp-hr NO_X standard without needing to calculate or apply a deterioration factor. These locomotives, when tested in-use, must comply with an in-use standard of 1.9 g/bhp-hr but

do not get the additional NO_X compliance margins discussed above.

Because this option is meant to address manufacturer concerns about manufacturing variability as well as catalyst durability, we are allowing manufacturers using this option to substitute an in-use locomotive test for each required production line test. These tests must be conducted on locomotives with more than 50 hours of accumulated operation, but at less than one-half of their useful life, and are in addition to normally-required manufacturer in-use testing. Furthermore, locomotives certified under this option may not generate credits under the ABT program because of their potentially higher in-use emissions. Also, of course, they may not be purposely designed to emit regulated pollutants at higher levels in use than at certification. This option will be available through the 2022 model year. It will not be available for the 2015–2022 model year locomotives when they are remanufactured in 2023 or later.

(9) Fuel Labels and Misfueling

The advanced emission controls that will be used to comply with many of the new standards will require the use of ULSD. Therefore, we are requiring that manufacturers notify each purchaser of a Tier 4 locomotive or marine engine that it must be fueled only with the ultra low-sulfur diesel fuel meeting our regulations. We are also applying this requirement for locomotives and engines having sulfur-sensitive technology and certified using ULSD. All of these locomotives and vessels must be labeled near the refueling inlet to say: ''Ultra-Low Sulfur Diesel Fuel Only''. These labels are required to be affixed or updated any time any engine on a vessel is replaced after the new program goes into effect.

We are requiring the use of ULSD in locomotives and vessels labeled as requiring such use, including all Tier 4 locomotives and marine engines. More specifically, use of the wrong fuel for locomotives or marine engines would be a violation of 40 CFR 1068.101(b)(1) because use of the wrong fuel would have the effect of disabling the emission controls.

We addressed the supply of ultra-low sulfur fuel in our previous regulation of in-use locomotive and marine diesel fuel. Specifically, we established a 15 ppm sulfur standard at the refinery gate for locomotive and marine (LM) diesel fuel beginning June 1, 2012. However, since we allow the sale, distribution, and use of 500 ppm LM diesel fuel to continue indefinitely, we did not set a ''hard and fast'' downstream requirement that only 15 ppm LM diesel may be sold and distributed in all areas of the country.[159] This was to allow the LM diesel fuel pool to remain an outlet for off-specification distillate product and interface/transmix material. Because refiners cannot intentionally produce off-specification fuel for locomotives—refiners will no longer be able to produce nonroad, locomotive, or marine diesel fuel above 15 ppm beginning June 1, 2012—most in-use locomotive and marine diesel fuel will be ULSD (with a sulfur content of 15 ppm or less). Nevertheless, we expect that some fuel will be available with sulfur levels between 15 and 500 ppm, and our regulations require such fuel to be designated as 500 ppm sulfur diesel fuel.

We received comments regarding the fact that we did not set a strict downstream requirement on the use of 15 ppm LM for the entire country. The commenters feared that while a port might receive deliveries of 15 ppm LM fuel, the port might keep its pump labeled as ''500 ppm LM'' to allow it to receive and dispense either 15 ppm or 500 ppm LM. (As part of the diesel fuel regulations, all pumps dispensing diesel fuel must be labeled with the type and maximum sulfur level of the diesel fuel being dispensed.) The commenters were concerned that if such practice were widespread, marine vessels that require ULSD could potentially have problems finding it.

We understand the commenters' concerns and have discussed a few potential solutions to this problem. One possible option is to require large ports (i.e., ports over some certain size) to make 15 ppm LM diesel fuel available. This size requirement could be by volume of single sale or above some other specified volume. Under this requirement, those ports with multiple tanks could continue to offer 500 ppm LM diesel fuel in addition to the 15 ppm LM diesel fuel. Or, if a port (regardless of size) continues to sell 500 ppm LM diesel fuel, it must also sell 15 ppm LM diesel fuel. Another potential option would be to limit the sale of 500 ppm LM diesel fuel to small ports and locomotives only. However, these potential solutions would need to be discussed thoroughly with all stakeholders (including those in the fuel distribution and marketing industry) and put out for notice and comment. Therefore, we are merely noting potential solutions in this final rule but we are committing to investigate this issue further and, if the facts warrant doing so, addressing it in a separate action.

[159] However, in the Northeast/Mid-Atlantic (NE/MA) area, as defined at 40 CFR 80.510(g), 500 ppm LM diesel fuel may no longer be sold and/or distributed beginning October 1, 2012. Such fuel may no longer be used in the NE/MA area beginning December 1, 2012.

(10) Deterioration Factor Plan Requirements

In this rulemaking, we are amending our deterioration factor (DF) provisions to include an explicit requirement that DF plans be submitted by manufacturers for our approval in advance of conducting engine durability testing, or in the case where no new durability testing is being conducted, in advance of submitting the engine certification application. We are not fundamentally changing either the locomotive or marine engine DF requirements with this provision, other than to require advance approval.

An advance submittal and approval format will allow us sufficient time to ensure consistency in DF procedures, without the need for manufacturers to repeat any durability testing or for us to deny an application for certification should we find the procedures to be inconsistent with the regulatory provisions. We expect that the DF plan would outline the amount of service accumulation to be conducted for each engine family, the design of the representative in-use duty cycle on which service will be accumulated, and the quantity of emission tests to be conducted over the service accumulation period.

(11) Production Line Testing

We proposed to continue the existing production line testing provisions that apply to manufacturers. Some manufacturers suggested that we should eliminate this requirement on the basis that very low noncompliance rates are being detected at a high expense. While we agree that compliance rates have been very good, we do not agree that they mean that the program has little or no value. As we move toward more stringent emission standards with this rulemaking, we anticipate that the margin of compliance with the standards for these engines is likely to decrease. Consequently, this places an even greater significance on the need to ensure little variation in production engines from the certification engine, which is often a prototype engine. For this reason, it is important to maintain our production line testing program.

However, the existing regulations allow manufacturers to develop alternate programs that provide equivalent assurance of compliance on the production line and to use such programs instead of the specified

production line testing program. For example, given the small sales volumes associated with marine engines it may be appropriate to include a production verification program for marine engines as part of a manufacturer's broader production verification programs for its non-marine engines. We believe these existing provisions already address the concerns raised to us by the manufacturers.

We are adding provisions to allow manufacturers to use special procedures for production line testing of catalyst-equipped engines. Under the existing Part 92 and Part 94 programs, a manufacturer of a catalyst-equipped locomotive or Category 2 marine engine would be required to assemble and test the engine with a complete catalyst system. At the manufacturer's choice, the engine could be broken in by operating it for up to 300 hours or it could be tested in a ''green'' state and its measured emissions adjusted by applying ''green engine factors''. The new regulations in Parts 1033 and 1042 will continue to allow these options, but will also include additional options.

For locomotives, the new regulations will allow a locomotive to be used in service for up to 1,000 hours before it is tested. This will be sufficient time to degreen a catalyst. We believe that this approach should work well for locomotives given the very close working relationships between the manufacturers and the major railroads. (See section IV.A.(8) for additional interim provisions related to production-line testing of locomotives.)

We do not believe this locomotive approach would work for marine engines because the marine market is much more diverse and the very close working relationships cannot be assumed. Therefore, we will rely on our general authority to approve alternate PLT programs. Should a consensus develop in the future about how to appropriately verify that engines and catalysts are produced to conform to the regulations, we may adopt specific regulatory provisions to address these marine engines.

(12) Evaporative Emission Requirements

While nearly all locomotives currently subject to part 92 are fueled with diesel fuel, § 92.7 includes evaporative emission provisions that would apply for locomotives fueled by a volatile liquid fuel such as gasoline or ethanol. These regulations do not specify test procedures or specific numerical limits, but rather set ''good engineering'' requirements. We are adopting these same requirements in part 1033.

We are also adopting similar requirements for marine engines and vessels that run on volatile fuels. We are not aware of any compression-ignition marine engines currently being produced that would be subject to these requirements but believe that it is appropriate to adopt these requirements now rather than waiting until such engines are produced. In this final rule, we are adopting requirements for controlling evaporative emissions that are identical to those for locomotives. As described in the proposal, we intend to apply to compression-ignition marine engines and vessels the same requirements we will be adopting for spark-ignition engines and vessels before the end of 2008 (as proposed at 72 FR 28098). We therefore intend to modify part 1042 in the final rule corresponding to that proposal related to spark-ignition marine engines and vessels. Specifically, if someone were to build a marine vessel with a compression-ignition engine that runs on a volatile liquid fuel, the engine would be subject to the exhaust emission standards of part 1042, but the fuel system would be subject to the evaporative emission requirements of the recently proposed part 1045.[160]

(13) Small Business Provisions

There are a number of small businesses that will be subject to this rule because they are locomotive manufacturers/remanufacturers, railroads, marine engine manufacturers, post-manufacture marinizers, vessel builders, or vessel operators. We largely continue the existing provisions that were adopted previously for these small businesses in the 1998 Locomotive and Locomotive Engines Rule (April 16, 1998; 63 FR 18977); our 1999 Commercial Marine Diesel Engines Rule (December 29, 1999; 64 FR 73299) and our 2002 Recreational Diesel Marine program (November 8, 2002; 67 FR 68304). These provisions, which are discussed below, are designed to minimize regulatory burdens on small businesses needing added flexibility to comply with emission standards while still ensuring the greatest emissions reductions achievable. (See section IX.C of this rule for discussion of our outreach efforts with small entities.)

(a) Locomotive Sector

(i) Production-Line and In-Use Testing Does not Apply

Production-line and in-use testing requirements do not apply to small locomotive manufacturers until January 1, 2013, which is up to five calendar years after this program becomes effective.

In the 1998 Locomotive Rule (April 16, 1998; 63 FR 18977), the in-use testing exemption was provided to small remanufacturers with locomotives or locomotive engines that became new during the 5-year delay, and this exemption was applicable to these locomotives or locomotive engines for their entire useful life (the exemption was based on model years within the delay period, but not calendar years as we are promulgating today). As an amendment to the existing in-use testing exemption, small remanufacturers with these new locomotives or locomotive engines must now begin complying with the in-use testing requirements after the five-year delay on January 1, 2013 (exemption based on calendar years). Thus, they are no longer exempt from in-use testing for the entire useful life of a locomotive or a locomotive engine. We are finalizing this provision to ensure that small remanufacturers comply with our standards in-use, and subsequently, the public is assured they are receiving the air quality benefits of today's standards. In addition, this amendment provides a date certain for small remanufacturers when in-use testing requirements begin to apply.

We received a number of comments asking us to clarify whether or not we were still planning to require production-line audits or verification for small locomotive remanufacturers during this 5-year delay (until January 1, 2013). In response, we are clarifying that we did not intend to exempt small locomotive remanufacturers from production-line audits during the 5-year delay (our intent was to exempt these entities from production-line and in-use testing requirements). We believe this requirement is of minimal regulatory burden to small locomotive remanufacturers. Moreover, we have clarified the general auditing regulations to explicitly allow audits to be conducted by the owner/operator, which further minimizes the burden.

(ii) Class III Railroads Exempt From New Standards for Existing Fleets

EPA is limiting the category of small railroads which are exempt from the Tier 0, 1 and 2 remanufacturing requirements for existing fleets to those railroads that qualify as Class III railroads and that are not owned by a large parent company. Under the current Surface Transportation Board classification system, this exemption is limited to railroads having total revenue less than $25.5 million per year. This change requires that all Class II

[160] Part 1045 was proposed on May 18, 2007 (72 FR 28097).

railroads, when remanufacturing their locomotives, meet the new standards finalized for existing fleets.

EPA had requested comment on whether the small railroads exemption from emissions standards for existing fleets had been effective and appropriate and whether they should continue under the new program finalized today. Under part 92, only railroads qualifying as ''large'' businesses, as defined by the Small Business Administration (SBA) were subject to the standards for their pre-existing fleet. The SBA definition of a large railroad is based on employment. For line-haul railroads the threshold is 1,500 or more employees, and for short-haul railroads it is 500 or more employees. Additionally, any railroad owned by a parent company that is large by SBA definition is also subject to the current existing fleet requirements. Although this excludes a majority of the more than 500 U.S. freight railroads, it addresses the vast majority of the emissions because it includes all Class I railroads.

The majority of comments supported revising the criterion for exempting railroads from emissions standards for existing fleets. While some of these commenter's felt that a revenue based approach exempting Class III railroads was appropriate, others disagreed, and argued that all railroads, regardless of classification or revenues should be subject to the new emission standards for existing fleets. These commenters felt no exemption would be legitimate because of both the extremely long operational life of these locomotive engines and the predominance of Class II and III railroads in various nonattainment areas of the country which contribute to air quality problems. Those commenters opposing any change to the existing exemption scheme argued that the current approach of exempting all small railroads should be retained because the costs involved in meeting new standards for existing fleets would impose a heavy financial burden on small railroads currently exempt from the program. Additionally, these commenters argued that small railroads' emissions are trivial and do not impact air quality.

In finalizing this new approach, EPA believes that continuing to exempt Class III railroads with annual revenues under $25.5 million while including all Class II railroads in the existing fleet program is a reasonable approach that addresses both industry concerns regarding costs while also recognizing that small railroads do contribute to air pollution in areas they service including nonattainment areas throughout the U.S.

We are clarifying our definition that intercity passenger or commuter railroads are not included as railroads that are small businesses because they are typically governmental or are large businesses. Due to the nature of their business, these entities are largely funded through tax transfers and other subsidies. Thus, the only passenger railroads that could qualify for the small railroad provisions will be small passenger railroads related to tourism.

(iii) Small Railroads Excluded From In-Use Testing Program

The railroad in-use testing program continues to apply to Class I freight railroads only, and thus no small railroads are subject to this testing requirement. It is important to note many Class II and III freight railroads qualify as small businesses. This provision provides flexibility to all Class II and III railroads, which includes small railroads. All Class I freight railroads are large businesses.[161]

(iv) Hardship Provisions

Section 1068.245 of the existing regulations in title 40 contains hardship provisions for engine and equipment manufacturers, including those that are small businesses. We will apply this section for locomotives as described below.

Under the unusual circumstances hardship provision, locomotive manufacturers may apply for hardship relief if circumstances outside their control cause their failure to comply and if the failure to sell the subject locomotives will have a major impact on the company's solvency. An example of an unusual circumstance outside a manufacturer's control may be an ''Act of God,'' a fire at the manufacturing plant, or the unforeseen shut down of a supplier with no alternative available. The terms and time frame of the relief depend on the specific circumstances of the company and the situation involved. As part of its application for hardship, a company is required to provide a compliance plan detailing when and how it will achieve compliance with the standards.

(b) Marine Sector

(i) Revised Definitions of Small-Volume Manufacturer and Small-Volume Boat Builder

As proposed, we are revising the definitions of small-volume manufacturer (SVM) and small-volume boat builder to include worldwide production. Currently, an SVM is defined as a manufacturer with annual U.S.-directed production of fewer than 1,000 engines (marine and nonmarine engines), and a small-volume boat builder is defined as a boat manufacturer with fewer than 500 employees and with annual U.S.-directed production of fewer than 100 boats. By including worldwide production in these definitions, we prevent a manufacturer or boat builder with a large worldwide production of engines or boats, or a large worldwide presence, from receiving relief from the requirements of this program. The provisions that apply to small-volume manufacturers and small-volume boat builders as described below are intended to minimize the impact of this rule for those entities that do not have the financial resources to quickly respond to requirements in the rule.

(ii) Broader Engine Families and Testing Relief

Broader engine families: We are finalizing as proposed the provision that post-manufacture marinizers (PMMs) and SVMs be allowed to continue to group all commercial Category 1 engines into one engine family for certification purposes, all recreational engines into one engine family, and all Category 2 engines into one family. As with existing regulations, these entities are responsible for certifying based on the ''worst-case'' emitting engine. This approach minimizes certification testing because the marinizer and SVMs can use a single engine in the first year to certify their whole product line. In addition, marinizers and SVMs may then carry over data from year to year until changing engine designs in a way that might significantly affect emissions.

As described in the proposal, this broad engine family provision still requires a certification test and the associated burden for small-volume manufactures. We realize that the test costs are spread over low sales volumes, and we recognize that it may be difficult to determine the worst-case emitter without additional testing but we need a reliable, test-based, technical basis to issue a certificate for these engines. However, manufacturers will be able to use carryover test data to spread costs over multiple years of production.

Production-line and deterioration testing: In addition, as proposed, SVMs producing engines less than or equal to 600 kW (800 hp) are exempted from production-line and deterioration testing for the Tier 3 standards. We will assign a deterioration factor for use in

[161] U.S. EPA, Assessment and Standards Division, Memorandum from Chester J. France to Alexander Cristofaro of U.S. EPA's Office of Policy, Economics, and Innovation, Locomotive and Marine Diesel RFA/SBREFA Screening Analysis, September 25, 2006.

calculating end-of-useful life emission factors for certification. This approach minimizes compliance testing since production-line and deterioration testing is more extensive than a single certification test. As described in the proposal, Tier 3 standards for these engines are not expected to require the use of aftertreatment—similar to the existing Tier 1 and Tier 2 standards. The Tier 4 standards for engines greater than 600 kW are expected to require aftertreatment emission-control devices. Currently, we are not aware of any SVMs that produce engines greater than 600 kW, except for one marinizer that plans to discontinue their production in the near future.[162]

We are finalizing provisions that require SVMs to undertake production-line and deterioration testing in the future if they begin producing these larger engines due to the sophistication of manufacturers that produce engines with aftertreatment technology. We believe these manufacturers will have the resources to conduct both the design and development work for the aftertreatment emission-control technology, along with production-line and deterioration testing.

(iii) Delayed Standards

One-year delay: As described in the proposal, post-manufacture marinizers (PMMs) generally depend on engine manufacturers producing base engines for marinizing. This can delay the certification of the marinized engines. There may be situations in which, despite its best efforts, a marinizer cannot meet the implementation dates, even with the provisions described in this section. Such a situation may occur if an engine supplier without a major business interest in a marinizer were to change or drop an engine model very late in the implementation process or was not able to supply the marinizer with an engine in sufficient time for the marinizer to recertify the engine. Based on this concern, we are finalizing as proposed to allow a one-year delay in the implementation dates of the Tier 3 standards for post-manufacture marinizers qualifying as small businesses (the definition of small business, not SVM, used by EPA for these provisions for manufacturers of new marine diesel engines—or other engine equipment manufacturing—is 1,000 or fewer employees; as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201) and producing engines less than or equal to 600 kW (800 hp).

As described above and in the proposal, the Tier 4 standards for engines greater than 600 kW (800hp) are expected to require aftertreatment emission-control devices. We will not apply this one-year delay to small PMMs that begin marinizing these larger engines in the future due to the sophistication of entities that produce engines with aftertreatment technology. We expect that the large base engine manufacturer (with the needed resources), not the small PMM, will conduct both the design and development work for the aftertreatment emission-control technology and that they will also take on the certification responsibility in the future. Thus, the small PMM marinizing large engines will not need a one-year delay.

Three-year delay for not-to-exceed (NTE) requirements: As described in the proposal, additional lead time is also appropriate for PMMs to demonstrate compliance with NTE requirements. Their reliance on another company's base engines affects the time needed for the development and testing work needed to comply. Thus, as proposed, PMMs qualifying as small businesses and producing engines less than or equal to 600 kW (800hp) may also delay compliance with the NTE requirements by up to three years, for the Tier 3 standards. Three years of extra lead time (compared to one year for the primary certification standards) is appropriate considering their more limited resources. As described above and in the proposal, the Tier 4 standards for engines greater than 600 kW are expected to require aftertreatment emission-control devices. We do not apply this three-year delay to small PMMs that begin marinizing these larger engines in the future due to the sophistication of entities that produce engines with aftertreatment technology. We expect that the large base engine manufacturer (with the needed resources), not the small PMM, will conduct both the design and development work for the aftertreatment emission-control technology and that they will also take on the certification responsibility in the future. Thus, the small PMM marinizing large engines does not need a three-year delay for compliance with the NTE requirements.

Five-year delay for recreational engines: For recreational marine diesel engines, the existing regulations (2002 Recreational Diesel Marine program; November 8, 2002, 67 FR 68304) allow small-volume manufacturers up to a five-year delay for complying with the standards. However, as proposed, we will not continue this provision. As discussed above and in the proposal, the Tier 3 standards for these engines are expected to be engine-out standards which do not require the use of aftertreatment—similar to the existing Tier 1 and Tier 2 standards. The Tier 4 standards will not apply to recreational engines. Also, Tier 3 engines are expected to require far less in terms of new hardware, and in fact, are expected to only require upgrades to existing hardware (i.e., new fuel systems). In addition, manufacturers have experience with engine-out standards from the existing Tier 1 and Tier 2 standards, and thus, they have learned how to comply with such standards. Thus, small-volume manufacturers of recreational marine diesel engines do not need more time to meet the new standards. For small PMMs of recreational marine diesel engines, the one-year delay described earlier will provide enough time for these entities to meet today's standards.

(iv) Engine Dressing Exemption

We are finalizing as proposed that marine engine dresser will continue to be exempt from certification and compliance requirements. As described in the proposal, many marine diesel engine manufacturers take a new, land-based engine and modify it for installation on a marine vessel. Some of these companies modifying an engine make no changes that might affect emissions. Instead, the modifications may consist of adding mounting hardware and a generator or reduction gears for propulsion. It can also involve installing a new marine cooling system that meets original manufacturer specifications and duplicates the cooling characteristics of the land-based engine but with a different cooling medium (such as sea water). In many ways, these manufacturers are similar to nonroad equipment manufacturers that purchase certified land-based nonroad engines to make auxiliary engines. This simplified approach of producing an engine can more accurately be described as dressing an engine for a particular application. As indicated above, engine dressers make changes to an engine without affecting the emission characteristics of the engine, which would include modifications that do not affect aftertreatment emission-control devices or systems (as stated earlier, Tier 4 standards for engines greater than 600 kW (800 hp) are expected to require aftertreatment).

Because the modified land-based engines are subsequently used on a marine vessel, however, these modified engines are considered marine diesel

[162] U.S. EPA, Assessment and Standards Division, Memorandum from Chester J France to Alexander Cristofaro of U.S. EPA's Office of Policy, Economics, and Innovation, Locomotive and Marine Diesel RFA/SBREFA Screening Analysis, September 25, 2006.

engines, which then fall under these requirements. As described in the proposal, while we continue to consider them to be manufacturers of a marine diesel engine, they are not be required to obtain a certificate of conformity (as long as they ensure that the original label remains on the engine and report annually to EPA that the engine models that are exempt pursuant to this provision). This extends section 94.907 of the existing regulations. For further details of engine dressers responsibilities see section 1042.605 of the regulations.

(v) Vessel Builder Provisions

Current recreational marine engines regulations (2002 Recreational Diesel Marine program; November 8, 2002, 67 FR 68304) allow manufacturers with a written request from a small-volume boat builder to produce a limited number of uncertified engines (over a five year period)—an amount equal to 80 percent of the boat builders sales for one year. For builders with very small production volumes, this 80 percent allowance could be exceeded, as long as sales did not exceed 10 engines in any one year nor 20 total engines over five years and applied only to engines less than or equal to 2.5 liters per cylinder. We are not continuing this provision because recreational marine engines are subject only to the Tier 3 standards that are not expected to change the physical characteristics of engines (Tier 3 standards will not result in a larger engine or otherwise require any more space within a vessel). Because of the similarity to Tier 2 engine standards there will be no need for boat builders to redesign engine compartments thus eliminating the need for this 5 year delay provision.

(vi) Small Vessel Operators Exempt From New Standards for Existing Fleet

In the proposed rule, we requested comment on an alternative program option (Alternative 5: Existing Engines) that would for the first time set emission standards for marine diesel engines on existing vessels—the marine existing fleet or remanufacture program. As described earlier in section III.B.2.b, Remanufactured Marine Standards, we plan to finalize only the first part of this option requiring the owner of a marine diesel engine (vessel operator) to use a certified marine remanufacture system when the engine is remanufactured if such a system is available.

The marine existing fleet program will apply only to those commercial marine diesel engines (C1 and C2 engines) which meet the following criteria:

- Greater than 600 kW (800 hp);
- Tier 0 or Tier 1 engines for C1 engines;
- Tier 0, Tier 1 or Tier 2 engines for C2 engines;
- Built in model year 1973 or later; and
- Have a certified kit available at time of remanufacture.

We estimate that about 4 percent (or about 3,885 of 105,406 engines) of all C1 and C2 engines are subject to the existing fleet program and are likely to have certified kits available at the time of remanufacture. Thus, the percentage of vessels impacted by the remanufacture program is estimated to be similar.

Industry commented that a small portion of the vessel operators with engines greater than 600 kW (800 hp) are small businesses that would be significantly burdened by the existing fleet program. To address these comments, the requirements of the marine existing fleet program do not apply to owners of marine diesel engines or vessel operators with less than $5 million in gross annual sales revenue. This threshold includes annual sales revenue from parent companies or affiliates of the owners/operators. (Small Business Administration's (SBA's) regulations at 13 CFR 121.103 describe how SBA determines affiliation.) If at some future date gross annual sales revenues are $5 million or more, they become subject to the existing fleet program at that point. The $5 million limit was chosen because a substantial sample of data for vessel operators—with vessels that have C1 and C2 engines greater than 600 kW—indicates that a significant portion of the total revenue for this sample set, about 80 percent, is generated by operators with $5 million or more in annual sales revenue.[163]

We expect that the amount of emissions from this sector correlates reasonably well with the amount of revenue generated (anticipate that revenue corresponds to activity which correlates well to emissions), and thus, most of the emissions from vessel operators (with engines greater than 600 kW (800 hp)) is obtained from those operators with $5 million or greater in revenue. The $5 million threshold for annual sales revenue is estimated to include about 8 percent less of the total vessel operator revenue compared to a $10 million limit, while reflecting 15 percent more revenue than a $1 million threshold. About 90 percent of all vessel operators with C1 and C2 engines have less than $5 million in revenue. The cost to remanufacture engines is a greater burden to the vessel operators with less than $5 million in revenue (larger fraction of revenue, etc.) than those above this limit. Therefore, the $5 million revenue threshold eliminates the regulatory burden for a substantial number of small vessel operators, while capturing a significant portion of the emissions from operators in the marine remanufacture program.

[163] The Waterways Journal, Inc., 2006 Inland River Record.

(vii) Hardship Provisions

Sections 1068.245, 1068.250 and 1068.255 of the existing title 40 regulations contain hardship provisions for engine and equipment manufacturers, including those that are small businesses. As proposed, we will apply these sections for marine applications such as PMMs, SVMs, and small-volume boat builders, which will effectively continue existing hardship provisions for these entities as described below.

In addition, for the marine existing fleet or remanufacture program, we are now providing these same hardship provisions to vessel operators or marine remanufacturers that qualify as small businesses. These provisions are described below.

Post-Manufacture Marinizers (PMMs), Small-Volume Manufacturers (SVMs), and Vessel Operators (or Marine Remanufacturers): As proposed, we are continuing two existing hardship provisions for PMMs and SVMs. In addition, we now extend these two provisions to small vessel operators or small marine remanufacturers for the marine existing fleet program. All of these entities may apply for this relief on an annual basis. First, under an economic hardship provision, PMMs, SVMs, and vessel operators (or marine remanufacturers) may petition us for additional lead time to comply with the standards. They must show that they have taken all possible business, technical, and economic steps to comply, but the burden of compliance costs will have a major impact on their company's solvency. As part of its application of hardship, a company is required to provide a compliance plan detailing when and how it plans to achieve compliance with the standards. Hardship relief could include requirements for interim emission reductions and/or purchase and use of emission credits. The length of the hardship relief decided during initial review is up to one year, with the potential to extend the relief as needed. We anticipate that one to two years is normally sufficient. Also, for PMMs and SVMs, if a certified base engine is available, they must generally use this

engine. We believe this provision will protect PMMs and SVMs from undue hardship due to certification burden. Also, some emission reduction can be gained if a certified base engine becomes available. See the regulatory text in 40 CFR 1068.250 for additional information.

Second, under the unusual circumstances hardship provision, PMMs, SVMs, and vessel operators (or marine remanufacturers) may also apply for hardship relief if circumstances outside their control cause the failure to comply and if the failure to sell the subject engines will have a major impact on their company's solvency. An example of an unusual circumstance outside a manufacturer's control may be an ''Act of God,'' a fire at the manufacturing plant, or the unforeseen shut down of a supplier with no alternative available (the second example is mainly for PMMs and SVMs). The terms and time frame of the relief depend on the specific circumstances of the company and the situation involved. As part of its application for hardship, a company is required to provide a compliance plan detailing when and how it will achieve compliance with the standards. We consider this relief mechanism to be an option of last resort. We believe this provision will protect PMMs, SVMs, and vessel operators (or marine remanufacturers) from circumstances outside their control. We, however, do not envision granting hardship relief if contract problems with a specific company prevent compliance for a second time. See the regulatory text in 40 CFR 1068.245 for additional information.

Small-volume boat builders: As proposed, we are continuing the unusual circumstances hardship provision for small-volume boat builders (those with less than 500 employees and worldwide production of fewer than 100 boats). Small-volume boat builders may apply for hardship relief if circumstances outside their control cause the failure to comply and if the failure to sell the subject vessels will have a major impact on the company's solvency. An example of an unusual circumstance outside a boat builder's control may be an ''Act of God,'' a fire at the boat building facility, or the unforeseen breakdown of a supply contract with an engine supplier. This relief allows the boat builder to use an uncertified engine and is considered a mechanism of last resort. The terms and time frame of the relief depend on the specific circumstances of the company and the situation involved. As part of its application for hardship, a company is required to provide a compliance plan detailing when and how it plans to achieve compliance with the standards. See the regulatory text in 40 CFR 1068.250 for additional information.

In addition, as described in the proposal, small-volume boat builders generally depend on engine manufacturers to supply certified engines in time to produce complying vessels by the date emission standards begin to apply. We are aware of other applications where certified engines have been available too late for equipment manufacturers to adequately accommodate changing engine size (for engines meeting Tier 4 standards, which are described in section III.B.2 of today's rule) [164] or performance characteristics. To address this concern, we are allowing small-volume boat builders to request up to one extra year before using certified engines if they are not at fault and will face serious economic hardship without an extension. See the regulatory text in 40 CFR 1068.255 for additional information.

(14) Alternate Tier 4 NO_X+HC Standards

We proposed to continue our existing emission averaging programs for the new Tier 4 NO_X and HC standards for locomotives and marine engines. However, the existing averaging programs do not allow manufacturers to show compliance with HC standards using averaging. Because we are concerned that this could potentially limit the benefits of our averaging program as a phase-in tool for manufacturers, we are establishing an alternate NO_X+HC standard of 1.4 g/bhp-hr that could be used as part of the averaging program. Manufacturers that were unable to comply with the Tier 4 HC standard would be allowed to certify to a NO_X+HC FEL, and use emission credits to show compliance with the alternate standard instead of the otherwise applicable NO_X and HC standards. For example, a manufacturer may choose to use banked emission credits to gradually phase in its Tier 4 1200 kW marine engines by producing a mix of Tier 3 and Tier 4 engines during the early part of 2014. NO_X+HC credits and NO_X credits could be averaged together without discount.

The value of this alternate standard (1.4 g/bhp-hr) is the rounded sum of the Tier 4 NO_X and HC standards. We proposed to set this value at the level of the NO_X standard (1.3 g/bhp-hr). However, based on the comments received, we no longer believe this to be appropriate. See the Summary and Analysis of Comments for more discussion of this issue.

(15) Other Issues

We are finalizing other minor changes to the compliance program. For example, engine manufacturers will be required to provide installation instructions to vessel manufacturers and kit installers to ensure that engine cooling systems, aftertreatment exhaust emission controls, and other emission controls are properly installed. Proper installation of these systems is critical to the emission performance of the equipment. Vessel manufacturers and kit installers will be required to follow the instructions to avoid improper installation that could render emission controls inoperative. Improper installation would subject them to penalties equivalent to those for tampering with the emission controls.

We are also clarifying the general requirement that no emission controls for engines subject to this final rule may cause or contribute to an unreasonable risk to public health, welfare, or safety, especially with respect to noxious or toxic emissions that may increase as a result of emission-control technologies. The regulatory language, which addresses the same general concept as the existing §§ 92.205 and 94.205, implements sections 202(a)(4) and 206(a)(3) of the Act and clarifies that the purpose of this requirement is to prevent control technologies that would cause unreasonable risks, rather than to prevent trace emissions of any noxious compounds. This requirement prevents the use of emission-control technologies that produce pollutants for which we have not set emission standards but nevertheless pose a risk to the public. As is described in Section III and the Summary and Analysis of Comments document, this provision does not preclude the use of urea-based SCR emission controls.

Some marine engine manufacturers have expressed concern over the current provisions in our regulation for selection of an emission data engine. Part 94 specifies that a marine manufacturer must select for testing from each engine family the engine configuration which is expected to be worst-case for exhaust emission compliance on in-use engines. Some manufacturers have interpreted this to

[164] Tier 3 engine-out standards are not expected to change the physical characteristics of marine engines. Tier 3 standards will not result in a larger engine or otherwise require any more space within a vessel. For Tier 4 standards, we expect that vessels will be designed to accommodate emission components that engine manufacturers specify as necessary to meet these new standards (e.g., ensure adequate space is available to package aftertreatment components).

mean that they must test all the ratings within an engine family to determine which is the worst-case. Understandably, this interpretation could cause production problems for many manufacturers due to the lead time needed to test a large volume of engines. Our view is that the current provisions do not necessitate testing of all ratings within an engine family. Rather, manufacturers are allowed to base their selection on good engineering judgment, taking into consideration engine features and characteristics which, from experience, are known to produce the highest emissions. This methodology is consistent with the provisions for our on-highway and nonroad engine programs. Therefore, we are keeping essentially the same language in part 1042 as is in part 94. We are adopting similar language for locomotives and will apply it in the same manner as we do for marine engines.

B. Compliance Issues Specific to Locomotives

(1) Refurbished Locomotives

Section 213(a)(5) of the Clean Air Act directs EPA to establish emission standards for ''new locomotives and new engines used in locomotives.'' In the previous rulemaking, we defined ''new locomotive'' to mean a freshly manufactured or remanufactured locomotive.[165] We defined ''remanufacture'' of a locomotive as a process in which all of the power assemblies of a locomotive engine are replaced with freshly manufactured (containing no previously used parts) or reconditioned power assemblies. In cases where all of the power assemblies are not replaced at a single time, a locomotive is considered to be ''remanufactured'' (and therefore ''new'') if all of the power assemblies from the previously new engine had been replaced within a five year period.

Our new regulations clarify the definition of ''freshly manufactured locomotive'' when an existing locomotive is substantially refurbished including the replacement of the old engine with a freshly manufactured engine. The existing definition in § 92.12 states that freshly manufactured locomotives are locomotives that do not contain more than 25 percent (by value) previously used parts. We allowed freshly manufactured locomotives to contain up to 25 percent used parts because of the current industry practice of using various combinations of used and unused parts. This 25 percent value applies to the dollar value of the parts being used rather than the number because it more properly weights the significance of the various used and unused components. We chose 25 percent as the cutoff because setting a very low cutoff point would have allowed manufacturers to circumvent the more stringent standards for freshly manufactured locomotives by including a few used parts during the final assembly. On the other hand, setting a very high cutoff point could have required remanufacturers to meet standards applicable to freshly manufactured locomotives, but such standards may not have been feasible given the technical limitations of the existing chassis.

We are adding to § 1033.901 a definition of ''refurbish'' which will mean the act of modifying an existing locomotive such that the resulting locomotive contains less than 50 percent (by value) previously used parts (but more than 25 percent). We believe that where an existing locomotive is improved to this degree, it is appropriate to consider it separately from locomotives that are simply remanufactured in a conventional sense. As described below, we are specifying provisions for refurbished locomotives that vary by application (switch or line-haul) and model year (before or after 2015). See also section IV.B(2), which describes minimum credit proration factors for refurbished locomotives.

We are also clarifying that any locomotives built before 1973 become ''new'' and thus subject to our emission standards when refurbished. In the 1998 rulemaking, we determined that pre-1973 locomotives should not be considered ''new'' when remanufactured.[166] An important policy consideration in making that determination was our analysis of the feasibility of such locomotives to meet the Tier 0 emission standards. However, that analysis is not valid for refurbished locomotives. Given the degree to which such locomotives are redesigned and reconfigured, there is no reason that they should be considered differently from 1973 locomotives simply because their frames (or some other parts) were originally manufactured earlier.

We requested comment on setting more stringent standards for refurbished locomotives, considering that these locomotives are restored to a condition likely to allow for many years of continued service. Industry commenters expressed concern that our subjecting refurbished locomotives to more stringent standards could prove counterproductive, because state and local programs that currently help fund voluntary refurbishments to very clean emission levels could lose their incentive to continue doing so, given that these refurbishments would now just be meeting EPA standards. It was further argued that these refurbishments would also lose any opportunity to generate valuable ABT credits, given the challenge just in meeting the standards.

We believe that the need for financial incentives will be just as clear and just as strong under the new program as before. Refurbishing a locomotive effectively removes an old, high-emitting locomotive from the fleet and replaces it with a clean one. The substantial cost of doing so and the potential that, absent incentives, old locomotives (especially switchers) would continue in operation almost indefinitely are the true drivers for creating incentives, regardless of the standards involved. We expect that state and local government officials involved in this process are well aware of this and will act accordingly. The ABT credits that can be gained from these refurbishments have not been a major factor to date and, considering that the credits can subsequently be used to produce other, less clean locomotives, we do not believe that state and local governments would or should be satisfied to help finance clean locomotives that result in dirtier locomotives elsewhere. As detailed below, we are therefore adopting more stringent standards for refurbished locomotives and phasing in these standards in a way that we believe best facilitates continued refurbishment of existing locomotives, while recognizing differences between the switch and line-haul locomotive fleets and the emission reduction trends resulting from our tiered approach to standards-setting.

Currently, small numbers of old low-horsepower locomotives are being refurbished as significantly lower-emitting switch locomotives. The regulations in part 92 subject these locomotives to the Tier 0 standards (unless they contain less than 25 percent previously used parts) and allow them to generate emission credits if they are cleaner than required. The regulations in part 1033 will continue this approach through model year 2014. It is important to note that since most of these locomotives were originally manufactured before 1973, simply by

[165] As is described in this section, freshly manufactured locomotives, repowered locomotives, refurbished locomotives, and all other remanufactured locomotives are all ''new locomotives'' in both the previous and new regulations.

[166] ''Locomotive Emission Standards: Regulatory Support Document'', APPENDIX L, ''Exclusion of Pre-1973 Locomotives'', April 1998.

meeting the Tier 0 standards they will achieve significant emission reductions.

For similar reasons, we are adopting an interim program for slightly larger locomotives with power between 2300 and 3000 horsepower refurbished through model year 2014. These locomotives, which are frequently used as road switchers, would also be subject to the Tier 0 standards for this period.

We do not believe, however, that it would be appropriate to allow switch locomotives to be refurbished to the Tier 0+ standards in the long term. Once the Tier 4 standards begin to apply, we will allow these locomotives to be certified to the Tier 3 switch locomotive standards, which will still provide the opportunity to generate some emission credits as an incentive.

The story is slightly different for higher power line-haul locomotives, which are currently not being refurbished. Nearly all of these remaining in the Class I railroad fleets were originally manufactured in or after 1973 and are already subject to the Tier 0 or later standards. Therefore there will be less of an air quality incentive to fund their refurbishment, and so we are specifying that refurbished line-haul locomotives be subject to the same standards as freshly manufactured locomotives. The regulations would treat them the same except for emission credit proration factors, which are described in section IV.B.(2)

Another important consideration is the potential for refurbishment to be used as a loophole to circumvent the freshly manufactured standards for line-haul locomotives. Railroads currently turn over their line-haul fleets much faster than their switch fleets. However, it is not hard to envision a scenario in which railroads began refurbishing their locomotives rather than buying freshly manufactured locomotives, especially as the Tier 4 standards went into effect. A long-term program requiring that refurbished line-haul locomotives meet the same standards as freshly manufactured locomotives prevents refurbishment from being used as such a loophole.

TABLE IV–2.—PROVISIONS FOR REFURBISHED SWITCH LOCOMOTIVES

	Applicable tier of standards	Minimum pro-ration factor
Locomotives refurbished before 2015	Tier 0+	0.60
Locomotives refurbished in 2015 or later	Tier 3	0.60

TABLE IV–3.—PROVISIONS FOR REFURBISHED LINE-HAUL LOCOMOTIVES

	Applicable tier of standards	Minimum pro-ration factor
Locomotives refurbished before 2015	Tier 2+/3	0.60
Locomotives refurbished in 2015 or later	Tier 4	0.60

(2) Averaging, Banking and Trading

For the most part, our new regulations will continue the existing averaging banking and trading provisions for locomotives. This section only highlights the provisions that are most significant in the context of this Final Rule. The reader is encouraged to read subpart H of part 1033 for details of this program.

In order to ensure that the ABT program is not used to delay the implementation of the Tier 4 technology, we are applying a restriction similar to the averaging restriction that was adopted for Tier 2 locomotives in the previous locomotive rulemaking. We are restricting the number of Tier 4 locomotives that could be certified using credits to no more than 50 percent of a manufacturer's annual production. As was true for the earlier restriction, this is intended to ensure that progress is made toward compliance with the advanced technology expected to be needed to meet the Tier 4 standards. This will encourage manufacturers to make every effort toward meeting the Tier 4 standards, while allowing some use of banked credits to provide needed lead time in implementing the Tier 4 standards by 2015, allowing them to appropriately focus research and development funds.

We proposed to allow the carryover of all Part 92 credits except for PM credits generated from Tier 0 or Tier 1 locomotives. The Tier 0 and Tier 1 PM standards under part 92 were set above the average baseline level to act as caps on PM emissions rather than technology-forcing standards. While Part 92 allows credits generated only relative the estimated average baseline rather than the standards, we were still concerned that such credits might have been windfall credits. However, as is described in the Summary and Analysis of Comments document, after further analysis we now believe that allowing the carryover of all part 92 PM credits is appropriate and will allow such credits to be used under part 1033.

We are also updating the proration factors for credits generated or used by remanufactured locomotives. The updated proration factors better reflect the difference in service time for line-haul and switch locomotives. The ABT program is based on credit calculations that assume as a default that a locomotive would remain at a single FEL for its full service life (from the point it is originally manufactured until it is scrapped). However, when we established the existing standards, we recognized that technology would continue to evolve and that locomotive owners may wish to upgrade their locomotives to cleaner technology and certify the locomotive to a lower FEL at a subsequent remanufacture. We established proration factors based on the age of the locomotive to make calculated credits for remanufactured locomotives consistent with credits for freshly manufactured locomotives in terms of lifetime emissions. These proration factors are shown in § 1033.705 of the new regulations. These replace the existing proration factors of § 92.305. For example, using the new proration factors, a 15-year-old line-haul locomotive certified to a new FEL that was 1.00 g/bhp-hr below the applicable standard would generate the same amount of credit as a freshly manufactured locomotive that was certified to an FEL that was 0.43 g/bhp-hr below the applicable standard because the proration factor would be 0.43. For comparison, under the old regulations, the proration factor would have been 0.50.

We are correcting how the proration factors apply for refurbished locomotives to more appropriately give credits to railroads for upgrading old locomotives to use clean engines, rather than to continue using the old high emission engines indefinitely. As with the rest of the program, credits will be calculated from the difference between the applicable standard and the emissions of the new refurbished locomotive, adjusted to account for the projected time the locomotive would remain in service. The correction creates a floor for the credit proration factor for refurbished locomotives of 0.60. This is equal to the proration factor for 20-year-old switchers and would also be equivalent to a proration factor for a locomotive that was just over 10 years old. For example, refurbishing a 35-year-old switch locomotive to an FEL 1.0 g/bhp-hr below the Tier 0 standard would generate the same amount of credit as a conventional remanufacture of a 20-year-old switch locomotive to an FEL 1.0 g/bhp-hr below the Tier 0 standard. This is because we believe that such refurbished switch locomotives will almost certainly operate as long as a 20-year-old locomotive that was remanufactured at the same time. Similarly, we believe that refurbished line-haul locomotives would likely operate as long as a 10-year-old locomotive that was remanufactured at the same time.

Finally, we are finalizing special provisions for credits generated and used by Tier 3 and later locomotives. Under the current part 92 ABT program, credits are segregated based on the cycle over which they are generated but not by how the locomotive is intended to be used (switch, line-haul, passenger, etc.). Line-haul locomotives can generate credits for use by switch locomotives, and vice versa, because both types of locomotives are subject to the same standards. However, for the Tier 3 and Tier 4 programs, switch and line-haul locomotives are subject to different standards with emissions generally measured only for one test cycle. We will allow credits generated by Tier 3 or later switch locomotives over the switch cycle to be used by line-haul locomotives to show compliance with line-haul cycle standards. As proposed, we are not allowing such cross-cycle use of line-haul credits (or switch credits generated by line-haul locomotives) by Tier 3 or later switch locomotives.

To make this approach work without double-counting of credits, we are also adopting a special calculation method where the credit using locomotive is subject to standards over only one duty cycle while the credit generating locomotive is subject to standards over both duty cycles (and can thus generate credits over both cycles). In such cases, we would require the use of credits under both cycles. For example, for a Tier 4 line-haul engine family needing 1.0 megagram of NO_X credits to comply with the line-haul emission standard, the manufacturer would have to use 1.0 megagram of line-haul NO_X credits and 1.0 megagram of switch NO_X credits if the line-haul credits were generated by a locomotive subject to standards over both cycles.

(3) Phase-In and Reasonable Cost Limit

The new Tier 0 and 1 emission standards become applicable on January 1, 2010. We also proposed a requirement for 2008 and 2009 when a remanufacturing system is certified to these new standards. If such a system is available before 2010 for a given locomotive model at a reasonable cost, remanufacturers of those locomotives may no longer remanufacture them to the previously applicable standards. They must instead comply with the new Tier 0 or 1 emission standards when they are remanufactured. Similarly, we are requiring them to use certified Tier 2 systems for 2008 through 2012 when a remanufacturing system is certified to the new Tier 2 standards. For the purposes of this provision, ''reasonable cost'' means that the total incremental cost to the operators of the locomotive (including initial hardware, increased fuel consumption, and increased maintenance costs) during the useful life of the locomotive must be less than $250,000. This cost limit is based on the upper cost we think likely to be required to meet these standards and reflects comments on our NPRM from remanufacturers.

As part of this phase-in requirement, we are requiring certifiers to notify customers that they are applying for certificate such that their locomotives will become subject to the new standards. We would then allow owners/operators a minimum 90-day grace period (after we issue the certificate) in which they could remanufacture their locomotives to the previously applicable standards once they are notified by the certificate holder that such systems are available. This allows them to use up inventory of older parts. However, where the certifiers do not immediately notify them, railroads would be allowed a grace period of at least 120 days after they are notified. This combined approach allows sufficient time to find out about the availability of kits and to make appropriate plans for compliance. We are also adding a new provision for owners/operators that limits the total number of locomotives that would need to meet the new standards during 2008 and 2009 to a fraction of the total number of remanufactures they do between October 3, 2008 and December 31, 2009 that are subject to either the old or new standards.

We are adding provisions that would allow Tier 0/1 remanufacturers to use during the phase-in period an assigned deterioration factor of 0.03 g/bhp-hr for PM and assume that all other deterioration factors are zero. We will also apply an in-use PM add-on of 0.03 g/bhp-hr. These two provisions are intended to address lead time concerns raised by commenters. The commenters correctly point out that the available lead time is not sufficient to allow remanufacturers to verify durability of the emission controls in a more conventional way. By addressing this lead time issue, we will make it more likely that the low emission kits will be brought to market early.

(4) Recertification Without Testing

Once manufacturers have certified an engine family, we have historically allowed them to obtain certificates for subsequent model years using the same test data if the engines remain unchanged from the previous model year. We refer to this type of certification as ''carryover.'' We are also extending this allowance to owner/operators. Specifically, we are adding the following paragraph to the end of § 1033.240:

> (c) An owner/operator remanufacturing its locomotive to be identical to the previously certified configuration may certify by design without new emission test data. To do this, submit the application for certification described in § 1033.205, but instead of including test data, include a description of how you will ensure that your locomotives will be identical in all material respects to their previously certified condition. You have all of the liabilities and responsibilities of the certificate holder for locomotives you certify under this paragraph.

(5) Railroad Testing

Section 92.1003 requires Class I freight railroads to annually test a small sample of their locomotives. We proposed to adopt the same requirements in § 1033.810, but asked for comments on whether this program should be changed. In particular, we requested suggestions to better specify how a railroad selects which locomotives to test, which has been a source of some confusion in recent years. In this final rule, we are adopting a revised approach that should reduce this confusion. The regulations provide four options for railroads to select

locomotives for testing and require EPA to notify the railroad by January 1st for any year in which we choose to specify which locomotives should be tested.

In addition, the maximum annual testing rate is being lowered to 0.075 percent, from the previously applicable rates of 0.15 to 0.10 percent. This new rate will require Class I railroads to test approximately 20 locomotives per year. We believe that this number of tests (in addition to the testing required for certificate holders) will be enough to allow us to appropriately monitor the emission performance of in-use locomotives.

(6) Test Conditions and Corrections

In our previous rule, we established test conditions that are representative of in-use conditions. Specifically, we required that locomotives comply with emission standards when tested at temperatures from 45°F to 105°F and at both sea level and altitude conditions up to about 4,000 feet above sea level. One of the reasons we established such a broad range was to allow outdoor testing of locomotives. While we only required that locomotives comply with emission standards when tested at altitudes up to 4,000 feet for purposes of certification and in-use liability, we also required manufacturers to submit evidence with their certification applications, in the form of an engineering analysis, that shows that their locomotives were designed to comply with emission standards at altitudes up to 7,000 feet. We included correction factors that are used to account for the effects of ambient temperature and humidity on NO_X emission rates.

We are now changing how the regulations deal with the test temperatures. We are specifying that testing without correction may be performed down to a lower limit of 60°F. In implementing the prior regulations, we found that the broad temperature range with correction, which was established to make testing more practical, was problematic. Given the uncertainty with the existing correction, manufacturers have generally tried to test in the narrower range being adopted today. However, we will still allow manufacturers to test at lower temperatures but will require them to develop correction factors specific to their locomotive designs.

We are also changing the altitude requirements for switch locomotives in response to a comment noting that switch locomotives will rarely operate above 5,500 feet. For switch locomotives, we will only require manufacturers to show that their locomotives comply with emission standards at altitudes up to 5,500 feet.

(7) Duty Cycles and Calculations

(a) Idle Weighting Adjustments

While we did not propose any changes to the weighting factors for the locomotive duty cycles, we did request comment on whether such changes would be appropriate in light of the proposed idle reduction requirements. The regulations specify an alternate calculation for locomotive equipped with idle shutdown features. This provision allows a manufacturer to appropriately account for the inclusion of idle reduction features as part of its emission control system. There are three primary reasons why we are not changing the calculation procedures with respect to the idle requirements. First, different shutdown systems will achieve different levels of idle reduction in use. Thus, no single adjustment to the cycle would appropriately reflect the range of reductions that will be achieved. Second, the existing calculation provides an incentive for manufacturers to design shutdown systems that achieve in the greatest degree of idle reduction that is practical. Finally, our feasibility analysis is based in part on the emission reductions achievable relative to the existing standards. Since some manufacturers already rely on the calculated emission reductions from shutdown features incorporated into many of their locomotive designs, our feasibility is based in part on allowing such calculations.

We are adopting a slight change to the way this adjustment works as compared to the previous regulations. We are specifying that idle emission rates for locomotives meeting our minimum shutdown requirements in § 1033.115 be reduced by 25 percent, unless the manufacturer demonstrates that greater idle reduction will be achieved.

(b) Representative Cycles

We also recognize that the potential exists for locomotives to include additional power notches, or even continuously variable throttles, and that the standard FTP sequence for such locomotives would result in an emissions measurement that does not accurately reflect their in-use emissions performance. Moreover, some locomotives may not have all of the specified notches, making it impossible to test them over the full test. Under the previous regulations, we handled such locomotives under our discretion to allow alternate calculations (40 CFR 92.132(e)). We are now adopting more specific provisions in § 1033.520. In general, for locomotives missing notches, we believe the existing duty cycle weighting factors should be reweighted without the missing notches. For locomotives without notches or more than 8 power notches, the regulations reference following information provided to us by manufacturers for the previous rulemaking that shows typical notch power levels expressed as a percentage of the rated power of the engine.

In response to comments we are also adding provisions to address locomotives that include new design features that will result in changes to the in-use duty cycle. Specifically, the regulations state that manufacturers must notify us if they are adding design features that will make the expected average in-use duty cycle of their engine family significantly different from the otherwise applicable test cycle. They must also recommend an alternate test cycle that represents the expected average in-use duty cycle. We will specify whether to use the default duty cycle, the recommended cycle, or a different cycle, depending on which cycle we believe best represents expected in-use operation. For locomotives subject to both line-haul and switch cycle standards, the regulations specify that a single set of standards would apply for the representative cycle.

(c) Energy Saving Design Features

We are adopting special provisions for locomotives equipped with energy-saving design features, such as sophisticated electronic optimization of throttle and brake settings based on route data or locomotive operation in a consist, electronically controlled pneumatic (ECP) brakes, and hybrid technology. The provisions we are adopting recognize that to whatever degree the total work done by a locomotive is reduced, the mass emissions would likely also be reduced. For example, if certain design features reduced by three percent the amount of work needed to pull a typical train, then the mass emission rate (g/hr) would generally also be reduced by three percent. Under the new provisions, manufacturers will be allowed to adjust their locomotives' emissions to reflect this, based on data gathered prior to certification.

Manufacturers choosing to adjust emissions under these provisions must present a test plan to EPA for approval prior generating the in-use data necessary to estimate their emissions reductions. The degree to which manufacturers would be allowed to take

a credit at certification would be determined from a statistical analysis of their supporting data to address the uncertainty in their estimate. This would minimize the possibility that manufacturers would be given credit for emission reductions that did not actually occur. Later, additional data on the in-use fleet using the feature could be gathered to improve the statistical certainty and this could then be factored into subsequent certifications. In concept, however, if we had perfect data, we would grant the manufacturers full credit for the savings.

Since our standards are specified as brake-specific emission limits, no credit or adjustment will be allowed for features that only improve the engine's brake-specific fuel consumption. The nature of the test procedure itself already properly credits such features. Thus, allowing additional credits to be calculated would be double-counting of credits.

(8) Non-OEM Remanufacturing Parts

We are adopting measures in § 1033.645 to help provide for the continued participation in remanufacturing by parts manufacturers willing to take responsibility for the long-term emissions performance of their parts but who lack the wherewithal to design and certify entire locomotive remanufacture systems that may include complex emissions control systems far beyond their expertise. Under this program, we would determine, based on an upfront engineering analysis, that the part supplier has a reasonable basis for concluding that use of their part would be equivalent to the OEM part in use. We would later verify its emission performance through in-use emission testing.

The exact nature of the engineering analysis necessary to demonstrate that the part supplier has a reasonable basis for concluding that use of their part (or parts) will not cause emissions to increase beyond the level expected from the OEM part in use, is expected to vary. We see four possible paths to accomplish this.

- The part is shown to be identical to the original part in all material respects.
- The part differs physically from the original in a small number of ways and each of these is evaluated to show that the aftermarket part will be as good as or better than the original with respect to emissions performance.
- Measurable emission-critical parameters such as fuel injection profile or engine oil consumption rate are established and an engine (or relevant engine subsystem) using the aftermarket part is shown through testing to perform as good or better than one with the original part with respect to these parameters.
- Emissions testing and durability demonstration is performed in essentially the same manner as for remanufactured system certification.

For example, cylinder liners differing only in color and part number from the OEM liners would be identical in all material respects. Those having different bore groove patterns would not be considered identical, but an analysis of the difference this makes in the oil's interaction with the cylinder wall and rings (which could have an impact on PM emissions) could suffice to make the demonstration. Chrome-plated cylinder liners in combination with a specified piston ring set used in place of original rings and non-plated liners could be expected to affect the emission-critical parameter of oil consumption, especially later in the locomotive useful life due to differences in wear rates. Bench or field testing over time demonstrating lower oil consumption trends than original equipment could provide a sufficient demonstration, provided no other emission-critical parameters are involved. We do not believe it is necessary or even possible to specify in the regulations the appropriate emission-critical parameters for all of the locomotive aftermarket components identified in this provision or to specify the test procedures and criteria by which these parameters are evaluated. Instead, we are establishing broad criteria and requiring the part suppliers to propose the appropriate emission-critical parameters and corresponding test or analytical methods appropriate to the part they produce.

We would allow railroads to use the non-OEM part during remanufacturing once we have approved the supplier's engineering analysis. Once the part has been installed in at least 250 locomotives, we would require one of them to be tested. One additional locomotive would need to be tested from the next additional 500 locomotives that use the part. If any locomotives fail to meet all standards, we generally require one additional locomotive to be tested for each locomotive that fails. We would generally allow the supplier to include testing performed by others. For example, if a railroad tests a locomotive with the part under § 1033.810, the supplier could submit those test data as fulfillment of its test obligations.

We are adopting these provisions to address the specific issue of parts that are typically replaced during remanufacturing and for which there is an active aftermarket. Therefore, we are only specifying cylinder liners, cylinder heads, pistons, rings, and fuel injectors as being covered by this program. We reserve the authority to expand the program to cover other parts.

(9) Use of Nonroad Engines Certified Under 40 CFR Parts 89 and 1039

Section 92.907 currently allows the use of a limited number of nonroad engines in locomotive applications without certification under the locomotive program. We believe a similar allowance should also be included in the new regulations. However, we are making some changes to these procedures. In general, manufacturers have not taken advantage of these previously existing provisions. In some cases, this was because the manufacturer wanted to produce more locomotives than allowed under the exemption. However, in most cases, it was because the customer wanted a full locomotive certification with the longer useful life and additional compliance assurances. We are adopting new separate approaches for the long term (§ 1033.625) and the short term (§ 1033.150), each of which addresses at least one of these issues.

For the long term, we are replacing the existing allowance that relies on part 89 certificates with a design-certification program that makes the locomotives subject to the locomotive standards in use but does not require new testing to demonstrate compliance at certification. Specifically, this program allows switch locomotive manufacturers using nonroad engines to introduce up to 30 locomotives of a new model prior to completing the traditional certification requirements. While the manufacturer would be able to certify without new testing, the locomotives would have locomotive certificates. Thus, purchasers would have the compliance assurances they desire.

As is described in section III B (1)(b), the short-term program is more flexible and does not require that the locomotives comply with the switch cycle standards; instead the engines would be subject to the part 1039 standards. The manufacturers would be required to use good engineering judgment to ensure that the engines' emission controls would function properly when installed in the locomotives. For example, the locomotive manufacturer would need to ensure that sufficient cooling capacity was available to cool the engine intake air. Given the relative levels of the part 1039 standards and those being

proposed in 1033, we do believe there is little environmental risk with this short-term allowance and thus are not including any limits of the sales of such locomotives. Nevertheless, we are limiting this allowance to model years through 2017. This provides sufficient time to develop these new switchers. These locomotives would not be exempt from the part 1033 locomotive standards when remanufactured, unless the remanufacturing of the locomotive took place prior to 2018 and involved replacement of the engines with certified new nonroad engines. Otherwise, the remanufactured locomotive will be required to be covered by a part 1033 remanufacturing certificate.

(10) Mexican and Canadian Locomotives

Under the prior regulations, Mexican and Canadian locomotives are subject to the same requirements as U.S. locomotives if they operate extensively within the U.S. The regulation 40 CFR 92.804(e) states:

Locomotives that are operated primarily outside of the United States, and that enter the United States temporarily from Canada or Mexico are exempt from the requirements and prohibitions of this part without application, provided that the operation within the United States is not extensive and is incidental to their primary operation.

We are changing this exemption to make it subject to our prior approval, since we have found that the current language has caused some confusion. When we created this exemption, it was our understanding that Mexican and Canadian locomotives rarely operated in the U.S. and the operation that did occur was limited to within a short distance of the border. We are now aware that there are many Canadian locomotives that do operate extensively within the U.S. and relatively few that meet the conditions of the exemption. We have also learned that some Mexican locomotives may be operating more extensively in the United States. Thus, it is appropriate to make this exemption subject to our prior approval. To obtain this exemption, a railroad will be required to submit a detailed plan for our review prior to using uncertified locomotives in the U.S. We will grant an exemption for locomotives that we determine will not be used extensively in the U.S. and that such operation will be incidental to their primary operation. Mexican and Canadian locomotives that do not have such an exemption and do not otherwise meet EPA regulations may not enter the United States.

(11) Other Locomotive Issues

The regulations in part 92 allow locomotive owners to voluntarily subject their pre-1973 locomotives to the Tier 0 standards or to include in the locomotive program low-horsepower locomotives that would otherwise be excluded based on their rated power. We are also including these options in the new part 1033. We will also provide two additional options. First, we will allow Tier 0 switch locomotives, which are normally not subject to line-haul cycle standards, to be voluntarily certified to the line-haul cycle standards. Second, we will allow any locomotives to be voluntarily certified to a more stringent tier of standards. An example of where these options may be desirable would be a case in which a customer wants to purchase a refurbished switch locomotive that meets the Tier 2 standards. While it may seem obvious that it would be allowed, the old regulations are unclear. The part 1033 regulations eliminate this confusion.

The existing and proposed regulations both specified that railroads are required to perform emission-related maintenance. In response to comments, we have added to the regulations a clarification that unscheduled maintenance has to be performed in a timely manner, no later than at the next ''92-day'' inspection required by the Federal Railroad Administration. Railroads expressed concern that the regulations, as previously written, would have required them to immediately remove a locomotive from service to make emission-related repairs. This was not our intent. Rather, the maintenance provision was intended to merely require that the maintenance be performed in a timely manner. For many repairs, it may be appropriate to wait until the next 92-day inspection. However, for many others it would be appropriate to make the repair sooner to the extent practical.

In response to comments, we are adding an interim allowance to simplify certification testing of locomotive engines. Specifically, for model years before 2014, we will allow manufacturers to test locomotive engines for certification without replicating the transient behavior in the locomotive. This will make it easier for manufacturers to certify new cleaner remanufacturing systems for the full range of locomotive models.

C. Compliance Issues Specific to Marine Engines

(1) Remanufacturing

As discussed in Section III, above, we are adopting a marine remanufacture program for marine diesel engines over 600 kW built from 1973 through Tier 2 that requires the use of a certified remanufacture system when such an engine is remanufactured, if one is available. Certified remanufacture systems must achieve at least a 25 percent reduction in PM emissions. This section briefly describes several certification and compliance provisions for the marine remanufacture program; the full program is contained in the regulations for this rule.

In general, the normal certification requirements for new marine diesel engines would apply, with minor variations as needed to accommodate the characteristics of remanufactured engines. For example, engine families are based on the same criteria as for freshly manufactured engines, and testing, reporting, the application for certification, and warranty requirements closely follow the provisions that apply for freshly manufactured engines.

In general, remanufactured engines are considered to be ''new'' engines, and they remain new until sold or placed back into service after the replacement of the last cylinder liner. The standards do not apply for engines that are rebuilt without removing cylinder liners. For a new engine to be placed into service, it must be covered by a certificate of conformity.

As is the case with our other emission control programs, certification testing for conformity demonstration will be performed on the most common configuration within an engine family. An engine family is a group of engines that have the same characteristics with respect to combustion cycle and fuel, cooling system, method of air aspiration, method of exhaust aftertreatment, combustion chamber design, bore and stroke, and mechanical or electronic controls. Other configurations may be included if it can be shown based on good engineering judgment that they are likely to provide a PM reduction similar to the configuration tested. Compliance for these other configurations is based on an engineering demonstration that the remanufacturing system reduces PM emissions by 25 percent without increasing NO_X emissions. Engine families may also include remanufacturing systems corresponding to engines that were originally produced over multiple model years, as long as the configuration does not change in a

way that affects the validity of certification for the remanufacturing system.

To certify a remanufacture system, a manufacturer must measure baseline emissions and emissions from an engine remanufactured using its system. A baseline emission rate would be established by remanufacturing an engine following normal procedures. That engine or a second engine of the same configuration is then tested for emissions after remanufacturing with the expected emission controls. The remanufacturing system meets the emission standards of the program by demonstrating a minimum 25 percent reduction in PM emissions and no increase in NO_X emissions (within 5 percent). The remanufacturer must also demonstrate that the remanufacturing system does not adversely affect engine reliability or power.

The remanufacturer must also demonstrate that the total marginal cost of the remanufacturing system is less than $45,000 per ton of PM reduction. For the purpose of this demonstration, marginal cost means the difference in costs between remanufacturing the engine using the remanufacture system and remanufacturing the engine conventionally. Total marginal costs over the period of one useful life are divided by the projected PM emissions over one useful life to obtain the cost of the remanufacture system per ton of PM reduced. Costs to be considered include hardware costs, labor costs, operating costs over one useful life period, and other costs (such as shipping).

The useful life provisions established for freshly manufactured engines would apply equally to remanufactured engines. In general, remanufacturers would be responsible for meeting emission standards for 10 years or 10,000 hours of operation for Category 1 engines, and 10 years or 20,000 hours of operation for Category 2 engines.

Certification will rely on a deterioration factor, similar to freshly manufactured engines. The certifying company may either use an assigned value of 0.015 g/kW-hr for PM or develop a new deterioration factor based on engine testing. For Tier 2 engines, the certifying company needs to add the deterioration factor to measured emission levels for certification. The deteriorated number must be less than the applicable PM standard. For Tier 1 and earlier engines, the deterioration factor is added to the emission level established for the certified configuration and that higher emission level serves as the emission standard for any in-use testing after certification.

The regulations allow for simplified certification requirements for remanufacture systems that are already certified under the locomotive program. This would require only an engineering analysis demonstrating that the system would achieve emission reductions from marine engines similar to those from locomotives. Because the marine remanufacture program requires only a PM reduction, locomotive remanufacture system manufacturers may modify those locomotive systems with respect to NO_X emissions. In that case, the system will have to be recertified as a marine remanufacture system based on measured values and subject to all of the other certification requirements of the marine remanufacture program.

Remanufactured engines are not eligible for generating or using emission credits for averaging, banking, or trading. This is appropriate because the program we are finalizing is only mandatory if a system has been certified for the relevant engine. We will reconsider allowing systems to be based on emission credits when we consider whether to adopt a mandatory marine remanufacture program (Part 2 of the proposed program) at a later date.

Not-to-exceed standards do not apply to remanufacturing. This is appropriate because the base engine in most cases is not subject to NTE requirements. In addition, NTE is most appropriately considered in the initial engine design phase; requiring remanufactured engines to meet the NTE requirements would likely require more intensive engine redesign than is anticipated by the simpler program we are finalizing.

Finally, other provisions such as those governing maintenance intervals, warranties, duty cycles, test fuel, labeling, recordkeeping, etc. are the same as or similar to those for freshly manufactured engines.

(2) Replacement Engines

We are revising certain aspects of our existing provisions with regard to replacement engines, as described below. These requirements apply to all marine diesel engines, propulsion or auxiliary, regardless of marine application. Section 1042.601(c) provisions apply instead of the provision of section 1068.240(b)(3) that applies for other nonroad engines.

(a) Replacement With a Freshly Manufactured Engine

Under the current marine diesel engine program, an engine manufacturer is generally prohibited from selling a marine engine that does not meet the standards that are in effect when that engine is produced. However, we recognize that there may be situations in which a vessel owner may require an engine certified to an earlier tier of standards. The two most likely situations are (1) when a vessel has been designed to use a particular engine such that it cannot physically accommodate a different engine due to size or weight constraints (e.g., a new engine model will not fit into the existing engine compartment); or (2) when the engine is matched to key vessel components such as the propeller, or when a vessel has a pair of engines that must be matched for the vessel to function properly.

To address these extreme situations, we amended existing regulation 40 CFR 94.1103(b)(3) to allow a manufacturer to produce a new engine which meets an earlier tier of standards if the Administrator determined that no new engine certified to the emission limits in effect at that time is produced by any manufacturer with the appropriate physical or performance characteristics needed to repower the vessel. An engine manufactured pursuant to this provision is subject to certain conditions: The replacement engine must meet standards at least as stringent as those of the original engine; the engine manufacturer must take possession of the original engine or confirm it is destroyed; and the replacement engine must be clearly labeled to show that it does not comply with the standards and that sale or installation of the engine for any purpose other than as a replacement engine is a violation of federal law and subject to civil penalty.

We subsequently revised this provision to allow the engine manufacturer to make the determination of whether an engine compliant with the current standards would fit a vessel, but solely in cases of catastrophic failure (see 70 CFR 40419, July 13, 2005). This change was made to reflect industry concerns that obtaining prior EPA approval would take too long. The engine manufacturer may make the determination in catastrophic failure situations provided that the following conditions are met: The manufacturer must determine that no certified engine is available, either from its own product lineup or that of the manufacturer of the original engine (if different); and the engine manufacturer must document the reasons why an engine of a newer tier is not usable, and this report must be made available to us upon request. We also specified in § 94.1103(a)(8) that no other significant modifications to the vessel can be made as part of the process of replacing the engine, or for a period of 6 months thereafter.

In response to comments on the proposal for this rulemaking, we are

finalizing three additional revisions to the replacement engine provisions. First, engine manufacturers may now make the determination with respect to the feasibility of using a current tier engine in both noncatastrophic and catastrophic situations. This is a significant change to the program. Engine manufacturers and user groups were concerned about the amount of time that would be needed to obtain prior EPA approval, even in these noncatastrophic cases. Even though the noncatastrophic engine replacement is more typically planned in advance, it is still the case that the determination must be made in a timely manner to ensure the engine manufacturer has time to produce the engine before the vessel is taken out of service for the replacement. Therefore, we are revising the program to allow the engine manufacturer to make such determinations, provided certain additional conditions are met: The engine manufacturer must examine the suitability of replacement with any current tier engine, either produced by that manufacturer or any other manufacturer; the engine manufacturer must make a record of each determination, which must be kept for eight years and contain specific information; the record must be submitted to EPA within 30 days after shipping each engine along with a statement certifying that the information contained in that record is true. We may reduce the reporting and recordkeeping requirements in this section after a manufacturer has established a consistent level of compliance with the requirements of this section.

These records will be used by EPA to evaluate whether engine manufacturers are properly making the feasibility determination and applying the replacement engine provisions. We may void any exemptions we determine do not conform to the applicable requirements. When assessing penalties under this provision we would consider whether the manufacturer acted in good faith. Thus manufacturers are encouraged to keep additional records to support their good faith attempt to comply with the regulations. For example, manufacturers could keep records of requests for replacement engines that are denied.

In making the determination that a current tier engine is not a feasible replacement engine for a vessel, we expect the engine manufacturer will evaluate not just engine dimensions and weight but may also include other pertinent vessel characteristics. These pertinent characteristics would include downstream vessel components such as drive shafts, reduction gears, cooling systems, exhaust and ventilation systems, and propeller shafts; electrical systems for diesel generators (indirect drive engines); and such other ancillary systems and vessel equipment that would affect the choice of an engine. At the same time, there are differences between the new tier and original tier engines that should not affect this determination, such as the warranty period or life expectancy of a newer tier engine, or its cost or production lead time. These characteristics should not be part of the determination of whether or not a new tier engine can be used as a replacement engine. With regard to the warranty period or life expectancy for the new tier engine, an exception may be if these are significantly shorter for the new tier engine than for an older tier engine or the original engine and the shorter warranty period or life expectancy for the newer model is consistent with industry practices.

In addition, in the case of a vessel with two or more paired engines, if the engine not in need of replacement has accumulated service in excess of 75 percent of its useful life we specify that the determination must consider replacement of both engines in the pair. This requirement is necessary to prevent circumvention of the freshly manufactured engine requirements by replacing one engine at a time and relying on the need to pair the engines as the sole justification for producing an engine to an earlier tier. We are also specifying that no additional modifications may be made to a vessel for six months after installing a new replacement engine made to a previous tier. This is to avoid circumvention of the requirement to use a freshly manufactured engine when a vessel is refurbished such that it becomes a new vessel.

The second change to the replacement engine provision is necessary to accommodate the new tiers of standards we are adopting in this rulemaking. Specifically, in making the feasibility determination the engine manufacturer is now required to consider all previous tiers and use any of their own engine models from the most recent tier that meets the vessel's physical and performance requirements. If an engine manufacturer can produce an engine that meets a previous tier of standards representing better control of emissions than that of the engine being replaced, the manufacturer would need to supply the engine meeting the tier of standards with the lowest emission levels. For example, if a Tier 1 engine is being replaced after the Tier 3 standards go into effect, the engine manufacturer would have to demonstrate why a Tier 2 as well as a Tier 3 engine cannot be used before a Tier 0 engine can be produced and installed. Similarly, for an engine built prior to 2004, the engine manufacturer would have to demonstrate why a Tier 1, Tier 2, or a Tier 3 engine cannot be used. It should be noted, in the case of Tier 0 engines, that MARPOL Annex VI prohibits replacing an existing engine at or above 130 kW with a freshly manufactured engine unless it meets the Tier 1 standards.

The third change to the replacement engine provisions pertains to Tier 4 engines. We are making the advance determination that Tier 4 engines equipped with aftertreatment technology to control either NO_X or PM are not required for use as replacement engines for engines from previous tiers in accordance with this regulatory replacement engine provision. Note, however, that Tier 4 engines will be required to be used as replacement engines if the original engine being replaced is a Tier 4 engine. We are making this determination in advance because we expect that installing such a Tier 4 engine in a vessel that was originally designed and built with a previous tier engine could require extensive vessel modifications (e.g., addition of a urea tank and associated plumbing; extra room for a SCR or PM filter; additional control equipment) that may affect important vessel characteristics (e.g., vessel stability). It should be noted that by making this advance determination, EPA is not implying that Tier 4 engines are never appropriate for use as replacement engines for engines from previous tiers; this determination is intended to simplify the search across engines and is based on the presumption that Tier 4 engines may not fit in most cases. We are also not intending to prevent states or local entities from including Tier 4 engines in incentive programs that encourage vessel owners to replace previous tier existing engines with new Tier 4 engines or to retrofit control technologies on existing engines, since those incentive programs often are designed to offset some of the costs of installing and/or using advanced emission control technology solutions. This advance determination is being made solely for Tier 4 marine diesel replacement engines that comply with the Tier 4 standards through the use of catalytic aftertreatment systems. Should an engine manufacturer develop a Tier 4 compliant engine solution that does not require the use of such technology, then this automatic determination will

not apply. Instead our existing provision will apply and it will be necessary to show that a non-catalytic Tier 4 engine would not meet the required physical or performance needs of the vessel.

(b) Replacement With an Existing Engine

Our current marine diesel engine program does not contain provisions that address the case in which an engine is replaced with an existing used engine. This means that if a vessel owner replaces an existing engine with a used engine, then that replacement engine is not required to be certified to our marine standards. It should be noted, however, that engines greater than 600 kW that are built after 1973 would still be subject to the remanufacture program described in Section III(C)(2)(b). This means if the existing engine that is the replacement engine has all of its cylinder liners replaced, it will be required to be remanufactured using a certified remanufacture system if one is available for that engine. It is our expectation that a vessel owner would not replace an existing engine above 600 kW with a partially-rebuilt engine, and therefore we do not expect to see replacement engines that are not remanufactured if there is a certified remanufacture system available.

These remanufacture requirements would apply whether the owner is obtaining an identical existing (used) replacement engine due to an engine failure or through an engine exchange for a periodic engine rebuild. These requirements would also apply if a vessel owner is obtaining a different model existing (used) replacement engine, for whatever reason.

It should be noted that pursuant to the definition of ''new marine engine,'' used engines brought into the marine market from other segments (e.g., locomotive, land-based nonroad, or highway sectors) are considered to be new marine diesel engines when they are marinized or modified for use on a vessel, and must meet the standards for newly manufactured engines in effect when such an engine is marinized or modified for installation on a vessel.

(c) Swing Engines

A swing engine is an additional engine that is purchased at the time the vessel is constructed as part of a rebuild strategy. When an engine is due for rebuild, that engine is removed from the vessel and replaced with the swing engine. The removed engine is rebuilt and then becomes the swing engine. Note that a swing engine is not meant to be a replacement engine in case of engine failure. Rather, it is a maintenance practice.

It is our expectation that the swing engine would undergo a complete rebuild, including cylinder liner replacement, before it is made available as the swing engine. That would constitute remanufacturing, and the engine would be required to comply with the engine remanufacture requirements. In general, this means that all engines that are part of a swing engine rebuild practice are expected to comply with the remanufacture requirements over time, providing a certified remanufacture system is available.

(d) Vessel Refurbishing

Our current program specifies that in addition to newly manufactured vessels, a vessel is considered to be ''new'' if it is modified such that the value of the modifications exceeds 50 percent of the value of the modified vessel. Such a refurbished vessel would be required to have an engine that is compliant with the standards in place when the vessel is modified. We expect that most vessel modifications will not trigger this threshold, but the requirement is necessary to accommodate those cases where a major structural change is done to a vessel that make it like-new.

We are revising this provision to specify how temporary modifications will be treated under this provision. In general, temporary modifications to a vessel would not be considered to be vessel refurbishing for the purpose of the ''new vessel'' definition. We are defining temporary modifications as modifications to a vessel that are made pursuant to a written contract between the vessel owners and the purchaser of the vessel's services and that are made for the purpose of fulfilling the purchaser's marine service requirements. To be considered to be temporary, the modifications must be removed from the vessel upon expiration of the contract or after a period of one year, whichever is shorter. While we will allow a vessel owner to petition EPA for a longer period of time, we will generally assume that changes that are necessary for longer than one year are quasi-permanent. We do not expect there to be many petitions for longer periods of time because temporary modifications that exceed 50 percent of the vessel's value would be considerable and would likely involve the vessel's power plant.

(3) Personal Use Exemption

The current marine diesel engine emission control program contains certain exemptions from the standards, including the following: test engines; manufacturer-owned engines; display engines; competition engines; export engines; and certain military engines. We also provide an engine dresser exemption that applies to marine diesel engines that are produced by marinizing a certified highway, nonroad, or locomotive engine without changing it in any way that may affect the emissions characteristics of the engine.

In addition to these existing exemptions we are also adding a new provision that exempts an engine installed on a vessel manufactured by a person for his or her own use (see 40 CFR 1042.630). This is intended to address the hobbyists and fishermen who make their own vessel (from a personal design, for example, or to replicate a vintage vessel) and who would otherwise be considered to be a manufacturer subject to the full set of emission standards by introducing a vessel into commerce. The exemption is intended to allow such a person to install a rebuilt engine, an engine that was used in another vessel owned by the person building the new vessel, or a reconditioned vintage engine (to add greater authenticity to a vintage vessel). The exemption is not intended to allow such a person to order a new uncontrolled engine from an engine manufacturer. We expect this exemption to involve a very small number of vessels, so the environmental impact of this exemption will be negligible, while the cost would otherwise be high to install a certified compliant engine.

Because the exemption is intended for hobbyists and fishermen, we are setting additional constraints. First, the vessel may not be used for general commercial purposes. The one exception to this is that the exemption allows a fisherman to use the vessel for his or her own commercial fishing. Second, the exemption is limited to one such vessel over a ten-year period and does not allow exempt engines to be sold for at least five years. We believe these restrictions are not unreasonable for a true hobby builder or comparable fisherman. Moreover, we require that the vessel generally be built from unassembled components, rather than simply completing assembly of a vessel that is otherwise similar to one that must use a freshly manufactured engine certified to meet the applicable emission standards. The person also must be building the vessel him- or herself, and not simply ordering parts for someone else to assemble. Finally, the vessel must be a vessel that is not classed or subject to Coast Guard inspections or surveys.

(4) Lifeboat/Rescue Boat Exemption

Our current marine diesel engine program does not exempt lifeboats or rescue boats, and we did not propose to revise that approach. This approach was developed for the Tier 2 marine diesel engine standards. As we explained in our 1999 FRM, the technologies that would meet Tier 2 standards would not have inherent negative effect on the performance or power density of an engine, and we expected that manufacturers would be able to use the range of technologies available to maintain or even improve the performance capabilities and reliability of their engines. We also note that land-based emergency engines such as standby generators are not exempt from our emission control requirements in either highway or nonroad applications.

We received several comments from manufacturers of lifeboats and rescue boats requesting that we reconsider this approach and exempt engines on lifeboats and rescue boats from the Tier 3 and Tier 4 standards. They noted that engines on lifeboats and rescue boats are not regularly used as they are intended for use only during emergencies, and they are generally only operated for 3 minutes once a week and are water tested for a short period only a few times a year. Boat manufacturers were also concerned about the reliability of electronic controls and advanced technology aftertreatment systems in these situations, especially when the boats are stored on deck and exposed to the elements.

We've also learned that at least some engine manufacturers that have certified engines in the past for use on Coast Guard approved lifeboats and rescue boats pursuant to Coast Guard and international (International Convention for the Safety of Life at Sea—SOLAS) requirements have not yet done so for Tier 2 engines and may elect not to do so at all.[167] The Coast Guard and SOLAS certification requirements are meant to ensure that an engine will perform after it is inverted, will operate when submerged up to the crankshaft, and will readily start at temperatures as low as −15 degrees C. This certification is expensive and time-consuming, and those costs may be difficult to recover over the limited U.S. market for lifeboats and rescue boats (100 to 150 boats per year). Manufacturers of those lifeboats that use those engines must either find an alternative engine for their product, and recertify the boats to the Coast Guard and SOLAS requirements, or exit the market.

After considering these comments, we conclude that it is reasonable to modify our program for engines used on Coast Guard approved lifeboats and rescue boats. First, our final program exempts engines intended to be used on lifeboats and rescue boats from the Tier 4 standards. This exemption is appropriate for technological reasons. We expect the Tier 4 standards to be met through the application of aftertreatment technology. While we believe these technologies will be durable and reliable, it is also the case the additional complexity could possibly affect engine performance in an emergency, which is the sole situation in which these engines would be used. For example, it would be necessary to ensure the engines on the lifeboat or rescue boat have onboard at all times an adequate supply of urea that meets the quality requirements of an SCR system. In addition, if the engine on the lifeboat or rescue boat is only run for very short periods of time for periodic onboard tests, the PM filter may not have time to regenerate. This could result in a small risk of plugging. Therefore, it is reasonable to exempt these engines from the Tier 4 requirements. It is worth noting that most lifeboat engines are less than 600 kW and thus would not be subject to Tier 4 standards.

Second, to avoid a situation in which an engine certified to the Coast Guard and SOLAS requirements is not available for use in a lifeboat or rescue boat application, we are providing an exemption that would have the effect of delaying the date of the emission standards for engines used on those boats until SOLAS certified engines of the respective emissions tier become available. Specifically, we will grant exemptions for engines not complying with the Tier 3 requirements for use in a Coast Guard approved lifeboat or rescue boat until such time as a comparable Tier 3 engine that meets the weight, size, and performance requirements of the boat is certified under the Coast Guard and SOLAS requirements. Once such an engine becomes available, the non Tier 3 compliant engines may not be sold for use in these applications. This provision is necessary because the Coast Guard has observed a precipitous drop in available SOLAS certified engines with the emissions tier change from the Tier 1 emissions standards to the Tier 2 emissions standards. Given the high cost of SOLAS certification and the low sales of SOLAS certified engines, engine manufacturers have delayed SOLAS certification of new emission tier engines. After considering the high cost of SOLAS certification, the need for additional lead time to complete the SOLAS certification process and the importance of lifeboats and rescue boats to safety, we have concluded it is appropriate to provide this exemption. We are not requiring engine manufacturers to certify these engines by a specified date. However, we anticipate that engine manufacturers will over time certify their Tier 3 engines to the Coast Guard and SOLAS requirements, or modify their existing Coast Guard certified engines as necessary to comply with the Tier 3 requirements. Most of the marine diesel engines used on lifeboats and rescue boats are derived from land-based highway or nonroad engines. Once the Tier 3 requirements for those engines go into effect and the Tier 2 or Tier 1 counterparts are retired from the fleet, it will become more expensive to continue to provide parts and service for these older engines, and engine manufacturers will prefer to provide newer tier engines for lifeboats and rescue boats globally. Because it is not possible to determine when that change will take place, the final program specifies that when they do become available, they must be used.

Finally, we are extending this exemption to Tier 2 engines as well. We have learned that some lifeboat and rescue boat manufacturers are having trouble obtaining engines that meet the Tier 2 standards. Note that because Tier 2 engines are not regulated under part 1042, this exemption is included in a new section in part 94 (94.914). As with the Tier 3 exemption, once a Tier 2 engine becomes available that meets the weight, size, and performance requirements of the boat and is certified under the Coast Guard and SOLAS requirements the exemption will no longer be available for freshly manufactured engines.

Engines that are produced to an earlier tier pursuant to these provisions must be labeled to make clear that their use is limited to lifeboats or rescue boats approved by the U.S. Coast Guard under approval series 160.135 or 160.156. Using such a vessel as for a purpose other than a lifeboat or rescue boat is a violation of the regulations.

The above provisions are applicable only to engines in lifeboats and rescue boats used solely for emergency purposes. This is an important distinction because there are cases in which a lifeboat may serve dual use on a vessel, both for general transportation (e.g., tenders) and for emergencies. Engines in lifeboats and rescue boats that are not used solely for emergency purposes are not exempt. These engines

[167] See *http://www.uscg.mil/hq/g-m/mse4/boatlb.htm#LIFEBOAT_FOR_MERCHANT_VESSELS* for Coast Guard requirements for lifeboats and rescue boats.

are not expected to remain idle long enough for urea storage or PM trap regeneration to be a problem. For all these reasons, the Tier 2 and 3 flexibility and Tier 4 exemption will apply only to engines intended for installation on lifeboats approved by the U.S. Coast Guard under approval series 160.135 (except those which are also approved for use as launches or tenders) and rescue boats approved by the U.S Coast Guard under series 160.156.

(5) Stand-By Emergency Auxiliary Engines

We are exempting certain stand-by emergency auxiliary engines from the Tier 4 standards. This exemption is necessary due to the fact that these engines are rarely used, their operation being limited to periodic testing of several minutes duration. While the technologies that will be used to achieve the Tier 4 standards are expected to be durable, it is also the case that operation for such short periods of time may not be enough to engage the aftertreatment regeneration strategy. In addition, these auxiliary engines would need separate urea tanks, rendering them more complicated to maintain and use in an emergency situation.

This exemption is limited to dedicated stand-by emergency auxiliary engines subject to United States Coast Guard requirements set out in 46 CFR part 112. In general, these stand-by emergency auxiliary engines are supplemental to the ships' main auxiliary engines. They are located away from the main engine compartment, have separate fuel tanks, and are connected to the ships' power system in such a way as to provide for emergency power only to emergency equipment and not the ship's power grid generally. These engines must be labeled for use as marine stand-by emergency auxiliary engines only.

Marine stand-by emergency engine means any marine auxiliary engine whose operation is limited to unexpected emergency situations on a vessel; these engines are subject to testing and maintenance required by the United States Coast Guard. They are generally used to produce power for critical networks or equipment (including power supplied to portions of a vessel) when electric power from the main auxiliary engine(s) is interrupted. Marine auxiliary engines used to supply power to the vessel's general electric grid or that are operated on a constant basis are not considered to be emergency marine auxiliary engines.

Exempted engines are required to meet the applicable Tier 3 standards (in part 89 or part 94, as applicable). See 40 CFR 1068.265 for the provisions that apply for such exempt engines. The engines must also be labeled to make clear that they are exempt and their use is limited to emergency stand-by auxiliary power as specified in United States Coast Guard requirements set out in 46 CFR part 112.

(6) Gas Turbine Engines

While gas turbine engines[168] are used extensively in naval ships, they are not used very often in commercial ships. Because of this and because we do not currently have sufficient information, we are not including marine gas turbines in this rulemaking. Nevertheless, we believe that gas turbines could likely meet the new standards (or similar standards) since they generally have lower emissions than diesel engines and may reconsider gas turbines in a future rulemaking.

(7) Natural Gas Engines

The increasing deployment of tankers carrying liquefied natural gas has led to greater numbers of large marine engines running on natural gas instead of diesel fuel. Depending on the technological approach engine manufacturers take, these engines could fall under our definition for spark-ignition engines even though their design and development is more like compression-ignition engines. Without some clarifying provision, these engines would therefore be subject to the standards that we are developing for inboard spark-ignition engines, which are based on automotive technologies. Since this is clearly not appropriate, we are adopting a provision to specify that natural gas engines above 250 kW are subject to standards for marine compression-ignition engines regardless of our regulatory definitions for spark-ignition and compression-ignition engines. Since the analysis of control technology and the estimated costs and emission reductions are very similar to that for diesel-fueled engines, we have made no effort to separately analyze these engines relative to the new emission standards.

(8) Residual Fuel Engines

The vast majority of Category 1 and 2 marine diesel engines subject to EPA's emission standards operate on distillate diesel fuel. There are cases, however, in which the owner of a vessel may prefer to operate a Category 2 engine on another type of diesel fuel. This is mainly the case for auxiliary engines on ocean-going vessels, to allow them to use the same fuel that is used in the propulsion engine (typically residual fuel). There are also a few vessels operated on the Great Lakes that use residual fuel or residual fuel blends.

Our marine diesel engine program requires engine manufacturers to perform certification testing using the same type of fuel that will be used in actual engine operation. This requirement, which was also included in our 1999 Tier 2 rule, is intended to ensure that engines meet the emission limits in operation. In our proposal, we noted that engine manufacturers have not certified Category 1 or 2 engines that can be operated on residual fuel to the Tier 2 standards. Manufacturers explained that it is not profitable to do so due to the small size of the U.S. market for these engines. They also informed us that it would be difficult to meet EPA's PM standards on residual fuel.

Some owners expressed concern to EPA about the unavailability of large auxiliary engines certified to the Tier 2 standards on residual fuel. These owners expressed a preference for auxiliary engines run on the same fuel as propulsion engines to simplify ship operations. To respond to this concern, we asked for comment on a compliance consisting of an alternative PM standard and a tighter NO_X standard. The alternative standards would be available for auxiliary engines to be installed on vessels with Category 3 propulsion engines. Certification testing would still be required on residual fuel but we would allow alternative PM measurement procedures. To ensure that questions of test fuel and PM measurement are resolved before certification testing, manufacturers would have to apply to EPA to exercise this flexibility.

The alternative of exempting residual fuel engines from the test fuel requirement and allowing them to be tested on distillate fuel is not appropriate. All of our mobile source emission control programs are predicated on an engine meeting the emission standards in use. The test fuel requirement is one of several provisions that help ensure in-use compliance, including useful life periods, emission deterioration factors, durability testing, and not-to-exceed zone. Amending the test fuel provisions to allow manufacturers to certify residual fuel engines using distillate fuel would introduce considerable uncertainty into the in-use performance of these engines,

[168] Gas turbine engines are internal combustion engines that can operate using diesel fuel, but do not operate on a compression-ignition or other reciprocating engine cycle. Power is extracted from the combustion gas using a rotating turbine rather than reciprocating pistons.

would weaken the emission standards, and would be contrary to the goals of our program.

We received no comments supporting the compliance flexibility described above, and therefore we are not revising our program with respect to test fuels or the standards that apply to engines with per cylinder displacement below 30 liters that use residual fuel. We expect to revisit this issue in the context of our upcoming rulemaking for Category 3 marine diesel engines.

(9) Duty Cycles for Marine Engines

Manufacturers pointed out two inconsistencies between the proposal and existing requirements for marine engines related to the proposed duty cycles for marine propulsion engines less than 37 kW and the proposed duty cycle for propeller-law auxiliary engines. We agree that the existing 4-mode duty cycle (E3) should be used for these applications and have corrected this in the final rule.

We received comment that the 8-mode (C1) duty cycle was not designed to represent variable-speed propulsion engines intended for use with variable-pitch or electrically-coupled propellers. Caterpillar provided an example of a power curve for a variable-speed engine designed to operate with a controllable pitch propeller where the operation is limited at low and mid-range speeds. In this case, we agree that the constant speed (E2) test duty cycle, combined with the NTE requirements, is more representative of the operation of this engine than the proposed C1 cycle. For this engine, the power and torque at the C1 intermediate speed is relatively low, leading to a heavy weighting of low power operation. In addition, the power limit curve, for overload protection, is at lower power than even the E3 duty cycle.

Controllable pitch propellers are also used with variable speed engines that have power curves that are more similar to those seen for nonroad engines or marine engines used with fixed pitch propellers. We are concerned that the E2 duty cycle would not be representative of the operation of these engines. Therefore, we are finalizing the E3 duty cycle for variable-speed propulsion engines intended for use with variable-pitch or electrically-coupled propellers. In the case where the engine is not capable of operating over the E3 duty cycle in-use, the E2 duty cycle would be used. For the purposes of this requirement, we consider an engine capable of operating over the E3 duty cycle if the engine can safely achieve more than 1.15 times the power specified in the E3 duty cycle at 63, 80, and 91 percent of maximum test speed.

(10) Definition of Recreational Marine Diesel Vessel

We are adopting a revised the definition of recreational marine diesel vessel in part 1042 that will essentially return to the definition we originally adopted in 1999. This revision will effectively rescind that change we made in our 2003 recreational engine rule (68 FR 9745, February 28, 2003). As is described later, in that rulemaking we revised the definition of recreational vessel by adding a reference to the Coast Guard definition in 46 U.S.C. 2101. However, since then, it has become clear that the revision resulted in significant confusion for industry.

As described above, the Tier 3 standards that apply to recreational marine diesel engines are different than those that apply to standard power density commercial engines and recreational engines are not subject to the Tier 4 standards. Recreational engines are also subject to different compliance requirements, notably the duty cycle for certification testing and their useful life. These programmatic differences reflect the different way in which these engines are used, with recreational engines generally having a higher power/density ratio, operating at a higher load, and being used for fewer hours over their life than commercial engines.

Recreational engines are defined based on whether or not they are intended by the engine manufacturer to be installed on a recreational vessel. In our 1999 Tier 2 marine diesel engine rule, we defined recreational vessel as a vessel intended by the vessel operator to be operated primarily for pleasure or leased to another for the latter's pleasure, with the exception of (i) vessels less than 100 gross tons that carry more than six passengers; and (ii) vessels more than 100 gross tons that carry one or more passengers, where passenger means someone who pays to be on the vessel.

The goal of this definition was to exclude so-called recreational vessels that are in fact operated like commercial vessels: Those that are operated many hours a year (for example, charter fishing vessels and smaller tour vessels that are rented on an individual basis, with or without a crew). A personal vessel owned by an individual for his personal use and not for hire was intended to be considered to be a recreational vessel. For smaller vessels, this is achieved by requiring that there be fewer than six paying passengers; this allows an individual to invite friends onboard his or her vessel in return for some pecuniary arrangement (e.g., paying for the gas). For larger vessels, above 100 gross tons, the presence of any paying passenger prevents the vessel from being characterized as recreational; this is intended to cover luxury yachts that recover costs by taking paying passengers onboard. The specified paying passenger thresholds are high enough to make them likely to be known at the time the vessel is purchased.

In the 2003 rule, we revised the definition of recreational vessel, by adding a reference to the Coast Guard definition. However, the Coast Guard definition and EPA's definition have different intents. Coast Guard's requirements are safety related to ensure adequate lifesaving equipment is onboard a recreational vessel. For example, the Coast Guard definitions differentiate between charter and noncharter vessels based on whether vessels are operated with or without a crew. The intent of EPA's approach is to identify those vessels that are intended for pleasure as opposed to commercial applications. Thus our definition needs to rely on features that can be known at the time of manufacture. For example, by setting a six passenger threshold for small vessels our intent was to identify those vessels clearly identified by the manufacturer as being intended for charter use and not used as a charter either incidentally or unintentionally.

Since the Coast Guard definitions do not reflect the intent of EPA's program and are inconsistent with EPA's definitions, we are revising the definitions to remove the references to the Coast Guard definitions and reverting back to the original definitions adopted in 1999. While the new definition is being adopted in part 1042, § 94.12(i) of part 94 will allow manufacturers to use this new definition for certification under part 94. Commercial vessels that were categorized as recreational prior to that time due to confusion about the meaning of the definitions will not be affected by the revised definitions.

(11) Engine Stockpiling by Vessel Builders

Our existing marine diesel engine program specifies in § 94.1103(a)(5) that it is a prohibited act to introduce into commerce a new vessel containing an engine not covered by a certificate of conformity applicable for an engine model year the same as or later than the calendar year in which the manufacture

of the new vessel is initiated.[169] However, as an exception, we allow vessel manufacturers to use up their normal inventory of engines not certified to new, more stringent emission standards if they were built before the date on which the new standards apply (subject to stockpiling prohibitions). With the adoption of the Tier 3 and 4 emission standards, the location of this provision transfers to § 1068.101(a)(1), including the exception noted above, now being located in § 1068.105(a).

The normal inventory approach above was developed in response to traditional business practice in automotive and other industries where vehicles and equipment are serially manufactured. Although this scheme works well for most manufacturers of small, serially-produced marine vessels, its application to manufacturers of large, commercial marine vessels may not be so straightforward. In this latter case there are typically long lead-time build schedules and low production volumes, which translate to vessel manufacturers maintaining lean inventory onsite at the shipyard. Vessel manufacturers usually order engines from dealers upon entering into a vessel construction agreement with an end customer. Due to lengthy build schedules, which for many projects can be counted in years, and the location of some shipyards in low-lying coastal areas subject to seasonal flooding, engines are often delivered and warehoused at the dealers' offsite location until such time as the vessels are ready to receive them for installation. Especially in projects where construction agreements involve multiple vessels, engines for all vessels may be ordered and delivered to the dealer during the same year in which construction of the first vessel is initiated. Due to this type of business practice, we will allow vessel manufacturers to consider as part of their normal inventory those engines that are warehoused at offsite dealerships and for which the vessel manufacturer entered into a purchase agreement prior to a change in applicable emission standards, provided this practice is consistent with the vessel manufacturers past engine ordering practices. We will allow this normal inventory of engines to be used up after new emission standards apply. It should be noted, however, that this clarification does not extend to engines that are not the subject of a prior purchase agreement, and would not allow a vessel manufacturer to search for a previous tier engine among engine dealers to evade the standards. Also, if a dealer has previous tier engines that are not the subject of a prior purchase agreement after a new tier of standards goes into effect, those engines may be used only as replacement engines, subject to § 1042.615; those engines may not be sold for use in new vessels.

(12) Other Issues

Several commenters, including the United States Coast Guard, raised questions regarding the possibility that advanced aftertreatment based emission control systems for marine diesel engines may need to be by-passed or otherwise modified or disabled in order to guarantee safe operation under emergency conditions. In general terms, the commenters speculated that the catalyst systems could fail in such a manner as to restrict exhaust flow reducing engine power and potentially endangering vessel safety.

Marine vessels that lose power to a main propulsion engine or generating engine providing essential power to main propulsion engine auxiliaries could go adrift with almost no control. Unlike trucks and locomotives, marine vessels have no brakes and can literally ''coast'' for miles and due to their enormous tonnage have an incredible amount of momentum and can cause catastrophic damage via collisions, allisions, and groundings. In the past, main propulsion failures on marine vessels have resulted in severe loss of life, property, and damage to the marine environment. Due to this precedent, a loss of main propulsion is defined as a ''marine casualty or accident'' in 46 CFR 4.03–1(b)(2)(ix) and 46 CFR 4.05–1 requires the occurrence to be immediately reported to the Coast Guard. To avoid potential loss of propulsion 46 CFR 58.01–35 effectively requires that main propulsion auxiliary machinery be provided in duplicate to prevent single point of failure.

Our discussions with the engine manufacturers regarding the technologies they expect to use to comply with the rules we are finalizing today, lead us to conclude that such failure mechanisms are extremely unlikely given the robust nature of the technologies.[170] However, reflecting the high priority everyone places on safety and the reality that no one can say today with absolute certainty how emission control systems will be designed in the future, we are continuing several regulatory provisions that further ensure safe vessel operation under all circumstances. Consistent with Coast Guard's requirements for main propulsion auxiliary machinery, we feel these provisions address the single point of failure concern in the design of emission control systems.

First, we are continuing our general regulatory requirement found in § 1042.115(e) stating that a manufacturer may not design engines with emission-control devices, systems, or elements of design that cause or contribute to an unreasonable risk to public health, welfare, or safety while operating. Likewise, our regulations continue to make clear that actions taken by the operators of marine vessels in order to respond to a temporary emergency will not be considered tampering under § 1068.101(b)(1) provided the system is returned to its proper function as soon as possible. Lastly, in evaluating auxiliary emission control devices (AECDs) for marine diesel engines we will continue to recognize that AECDs, such as those that eliminate a single point of failure, are not defeat devices as defined under § 1042.115(f) if the AECDs are necessary to prevent engine (or vessel) damage or accidents. In the case of AECD approval, we will continue our current practice of reviewing manufacturer certification applications to ensure that these provisions are only used when necessary. Further, it is our general expectation that engine manufacturers will provide diagnostic systems to alert vessel operators when such AECDs are active and if the AECD requires the operator to take an action, the diagnostic system should give the vessel operator as much advance warning as reasonably possible.

V. Costs and Economic Impacts

In this section, we present the projected cost impacts and cost effectiveness of the standards, and our analysis of the expected economic impacts on affected markets. The projected benefits and benefit-cost analysis are presented in Section VI. The benefit-cost analysis explores the net yearly economic benefits to society of the reduction in mobile source emissions expected to be achieved by

[169] The manufacture of a vessel is initiated when the keel is laid, or the vessel is at a similar stage of construction. ''A similar stage of construction'' means: (1) the stage at which construction identifiable with a specific vessel begins, and (2) assembly of that vessel has commenced comprising at least 50 tons or one percent of the estimated mass of all structural material, whichever is less.

[170] We should note here that the standards in our rules are performance-based rather than a prescription for the application of a specific technology. Our rules do not prevent a manufacturer from developing and applying new or different technology at some future time as long as it meets the performance basis in the rules (e.g., a 0.04 g/kW-hr standard PM).

this rulemaking. The economic impact analysis explores how the costs of the rule will likely be shared across the manufacturers and users of the engines and equipment that will be affected by the standards. Unless noted otherwise, all costs are in 2005 dollars.

The annual monetized health benefits of this rule in 2030 will range from $9.2 and $11 billion, assuming a 3 percent discount rate, or between $8.4 billion to $10 billion, assuming a 7 percent discount rate. The social costs of the new standards are estimated to be approximately $738 million in 2030.[171] The impact of these costs on society are estimated to be small, with the prices of rail and marine transportation services estimated to increase by about 1 percent.

Further information on these and other aspects of the economic impacts of our final rule are summarized in the following sections and are presented in more detail in the Final RIA for this rulemaking.

A. Engineering Costs

The following sections briefly discuss the various engine and equipment cost elements considered for this cost analysis and present the total engineering costs we have estimated for this rulemaking; the reader is referred to Chapter 5 of the final RIA for a complete discussion of our engineering cost estimates. When referring to ''equipment'' costs throughout this discussion, we mean the locomotive and/or marine vessel related costs as opposed to costs associated with the diesel engine being placed into the locomotive or vessel. Estimated freshly manufactured engine and equipment engineering costs depend largely on both the size of the piece of equipment and its engine, and on the technology package being added to the engine to ensure compliance with the standards. The wide size variation of engines covered by this program (e.g., small marine engines with less than 37 kW (50 horsepower, or hp) through locomotive and marine C2 engines with over 3000 kW (4000 hp) and the broad application variation (e.g., small pleasure crafts through large line haul locomotives and cargo vessels) that exists in these industries makes it difficult to present an estimated cost for every possible engine and/or piece of equipment. Nonetheless, for illustrative purposes, we present some example per engine/equipment engineering cost impacts throughout this discussion. This engineering cost analysis is presented in detail in Chapter 5 of the final RIA.

Note that the engineering costs here do not reflect changes to the fuel used to power locomotive and marine engines. Our Nonroad Tier 4 rule (69 FR 38958) controlled the sulfur level in all nonroad fuel, including that used in locomotives and marine engines. The sulfur level in the fuel is a critical element of the locomotive and marine program. However, since the costs of controlling locomotive and marine fuel sulfur have been considered in our Nonroad Tier 4 rule, they are not considered here. This analysis considers only those costs associated with the locomotive and marine program being finalized today. Also, the engineering costs presented here do not reflect any savings that are expected to occur because of the engine ABT program and the various flexibilities included in the program which are discussed in section IV of this preamble. As discussed there, these program features have the potential to provide savings for both engine and locomotive/vessel manufacturers.

(1) Freshly Manufactured Engine and Equipment Variable Engineering Costs

Engineering costs for exhaust emission control devices (i.e., catalyzed DPFs, SCR systems, and DOCs) were estimated using a methodology consistent with the one used in our 2007 heavy-duty highway rulemaking. In that rule, surveys were provided to nine engine manufacturers seeking information relevant to estimating the engineering costs for and types of emission-control technologies that might be enabled with ultra low-sulfur diesel fuel (15 ppm S). The survey responses were used as the first step in estimating the engineering costs of advanced emission control technologies anticipated for meeting the 2007 heavy-duty highway standards. We then built upon these engineering costs using input from members of the Manufacturers of Emission Controls Association (MECA). We also used this information in our recent nonroad Tier 4 (NRT4) rule. Because the anticipated emission control technologies expected to be used on locomotive and marine engines are the same as or similar to those expected for highway and nonroad engines, and because the expected suppliers of the technologies are the same for these engines, we have used that analysis as the starting point for estimating the engineering costs of these technologies in this rule.[172] Importantly, the analysis summarized here and detailed in the final RIA takes into account specific differences between the locomotive and marine products when compared to on-highway trucks (e.g., engine size).

Engineering costs of control include variable costs (for new hardware, its assembly, and associated markups) and fixed costs (for tooling, research, redesign efforts, and certification). We are projecting that the Tier 3 standards will be met by optimizing the engine and emission controls that will exist on locomotive and marine engines in the Tier 3 timeframe. Therefore, we have estimated no hardware costs associated with the Tier 3 standards. For the Tier 4 standards, we are projecting that SCR systems and DPFs will be the most likely technologies used to comply. Upon installation in a new locomotive or a new marine vessel, these devices would require some new equipment related hardware in the form of brackets, new sheet metal, and a reductant storage and delivery system. The annual variable costs for example years, the PM/NO_X split of those engineering costs, and the net present values that would result are presented in Table V–1.[173] As shown, we estimate the net present value for the years 2006 through 2040 of all variable costs at $1.5 billion using a three percent discount rate, with $1.3 billion of that being engine-related variable costs.[174] Using a seven percent discount rate, these costs are $674 million and $575 million, respectively.

[171] The estimated 2030 social welfare cost of $738 million is based on draft compliance costs for this final rule of $740 million for that year. The final compliance cost estimate for 2030 is somewhat higher, at $759 million; see section VI.C for an explanation. This difference is not expected to have an impact on the results of the market analysis or on the expected distribution of social costs among stakeholders.

[172] ''Economic Analysis of Diesel Aftertreatment System Changes Made Possible by Reduction of Diesel Fuel Sulfur Content,'' Engine, Fuel, and Emissions Engineering, Incorporated, December 15, 1999, Public Docket No. A–2001–28, Docket Item II–A–76.

[173] The PM/NO_X+NMHC cost allocations for variable costs used in this cost analysis are as follows: SCR systems including marinization costs on marine applications are 100% NO_X+NMHC; DPF systems including marinization costs on marine applications are 100% PM; and, equipment hardware costs are split evenly.

[174] Throughout our cost and economic impact analyses, net present value (NPV) calculations are based on the period 2006–2040, reflecting the period when the NPRM analysis was completed. This has the consequence of discounting the current year costs, effectively 2007, and all subsequent years are discounted by an additional year. The result is a slightly smaller NPV of engineering costs than by calculating the NPV over 2007–2040 (3% smaller for 3% NPV and 7% smaller for 7% NPV). The same convention applies for the emission inventories as shown in Table V–7. We have used 2006 because we intended to publish the proposal in 2006. For the final analysis, we have chosen to continue with 2006 to make comparisons between proposal and final analyses more clear.

TABLE V–1.—FRESHLY MANUFACTURED ENGINE AND EQUIPMENT VARIABLE ENGINEERING COSTS

[Millions of 2005 dollars]

Year	Engine variable engineering costs	Equipment variable engineering costs	Total variable engineering costs	Total for PM	Total for NO_X+NMHC
2008	$0	$0	$0	$0	$0
2009	$0	$0	$0	$0	$0
2010	$0	$0	$0	$0	$0
2011	$0	$0	$0	$0	$0
2012	$0	$0	$0	$0	$0
2015	$60	$11	$71	$37	$34
2020	$82	$14	$96	$50	$46
2030	$99	$18	$117	$61	$56
2040	$98	$17	$115	$60	$55
NPV at 3%	$1,255	$220	$1,475	$772	$703
NPV at 7%	$575	$100	$674	$353	$321

We can also look at these variable engineering costs on a ''per engine'' and a ''per piece of equipment'' basis rather than an annual total basis. Doing so results in the costs summarized in Table V–2. The costs shown represent the total engine-related and equipment-related engineering hardware costs associated with all of the new emissions standards to which the given power range and market segment would need to comply. For example, a commercial marine engine below 600 kW (805 hp) would need to comply with the Tier 3 standards as its final tier and would, therefore, incur no new hardware costs. In contrast, a commercial marine engine over 600 kW is expected to comply with both Tier 3 and then Tier 4 and would, therefore, incur hardware costs associated with the Tier 4 standards. The costs also represent long term costs or those costs after expected learning effects have occurred and warranty costs have stabilized.

Table V-2 Long-term Variable Engineering Cost per New Engine & Piece of Equipment to Comply with the Final Tier of Standards (2005 dollars) [a]

Power Range	Locomotive Line haul	Locomotive Switcher [b]	C1 Marine	C2 Marine
Engine Costs ($/engine)				
600≤kW<1500	NA [c]	NA	$11,540	$29,960
≥1500 kW	$54,630	$13,640	$20,050	$55,750
# of engines/piece of equipment				
600≤kW<1500	NA	NA	2	2
≥1500 kW	1	1	2	2
Equipment Costs ($/piece of equipment for Tier 4 engines)				
600≤kW<1500	NA	NA	$23,070	$59,910
≥1500 kW	$54,630	$13,640	$40,110	$111,510
Equipment Costs ($/piece of equipment to accommodate Tier 4 engines)				
600≤kW<1500	NA	NA	$5,500	$5,500
≥1500 kW	$10,400	$7,500	$10,400	$10,400
Total Variable Cost ($/piece of equipment)				
600≤kW<1500	NA	NA	$28,570	$65,420
≥1500 kW	$65,020	$21,140	$50,490	$121,890

Notes:

(a) We have estimated no variable engineering costs associated with the Tier 3 standards and none associated with the Tier 4 standards for power ranges below 600 kW (800 hp) or for the recreational marine and small commercial marine categories.

(b) Locomotive switchers generally use land-based nonroad engines (i.e., NRT4 engines); therefore, we have used NRT4 cost estimates for locomotive switchers in this rulemaking.

(c) NA (not applicable) means there are no engines in that market segment/power range.

(2) Freshly Manufactured Engine and Equipment Fixed Engineering Costs

Because these technologies are being researched for implementation in the highway and nonroad markets well before the locomotive and marine emission standards take effect, and because engine manufacturers will have had several years complying with the highway and nonroad standards, we believe that the technologies used to comply with the locomotive and marine standards will have undergone significant development before reaching locomotive and marine production, and

we have considered this in estimating the costs for research and development. Chapter 5 of the final RIA details our approach which differs from our approach in the draft RIA. We anticipate that engine manufacturers would introduce a combination of primary technology upgrades to meet the new emission standards. Achieving very low NO_X emissions requires basic research on NO_X emission-control technologies and improvements in engine management. There would also have to be some level of tooling expenditures to make possible the fitting of new hardware on locomotive and marine engines. We also expect that locomotives and marine vessels being fitted with Tier 4 engines would have to undergo some level of redesign to accommodate the aftertreatment devices expected to meet the Tier 4 standards.

The total of fixed engineering costs and the net present values of those costs are shown in Table V–3.[175] As shown, we have estimated the net present value for the years 2006 through 2040 of all fixed engineering costs at $549 million using a three percent discount rate, with $471 million of that being engine-related research costs. Using a seven percent discount rate, these costs are $422 million and $371 million, respectively.

TABLE V–3.—FRESHLY MANUFACTURED ENGINE AND EQUIPMENT FIXED ENGINEERING COSTS

[Millions of 2005 dollars]

Year	Engine research	Engine tooling	Engine certification	Equipment redesign	Total fixed engineering costs	Total for PM	Total for NO_X +NMHC
2008	$34	$0	$0	$0	$34	$11	$23
2009	34	0	0	0	34	11	23
2010	68	0	0	0	68	23	46
2011	114	19	5	0	138	50	88
2012	80	0	0	0	80	27	54
2015	46	17	1	13	76	30	46
2020	0	0	0	3	3	1	1
2030	0	0	0	3	3	1	1
2040	0	0	0	0	0	0	0
NPV at 3%	471	33	6	39	549	194	354
NPV at 7%	371	24	5	22	422	148	274

Some of the estimated fixed engineering costs would occur in years prior to the Tier 3 standards taking affect in 2012. Engine manufacturers would need to invest in engine tooling and certification prior to selling engines that meet the standards. Engine research is expected to begin five years in advance of the standards for which the research is done. We have estimated some engine research for both the Tier 3 and Tier 4 standards, although the research associated with the Tier 4 standards is expected to be higher since it involves work on aftertreatment devices which only the Tier 4 standards would require. By 2016, the Tier 4 standards would be fully implemented and engine research toward the Tier 4 standards would be completed. Similarly, engine tooling and certification efforts would be completed. We have estimated that equipment redesign, driven mostly by marine vessel redesigns, would continue for many years given the nature of the marine market. Therefore, by 2017 all engine-related fixed engineering costs would be zero, and by 2033 all equipment-related fixed engineering costs would be zero.

(3) Freshly Manufactured Engine Operating Costs

We anticipate an increase in costs associated with operating locomotives and marine vessels. We anticipate three sources of increased operating costs: Reductant use; DPF maintenance; and a fuel consumption impact. Increased operating costs associated with reductant use would occur only in those locomotives/vessels equipped with a SCR engine using a reductant like urea. Maintenance costs associated with the DPF (for periodic cleaning of accumulated ash resulting from unburned material that accumulates in the DPF) would occur in those locomotives/vessels that are equipped with a DPF engine. The fuel consumption impact is anticipated to occur more broadly—we expect that a one percent fuel consumption increase would occur for all new Tier 4 engines, locomotive and marine, due to higher exhaust backpressure resulting from aftertreatment devices. These costs and how the fleet cost estimates were generated are detailed in Chapter 5 of the final RIA and are summarized in Table V–4.[176]

TABLE V–4.—FRESHLY MANUFACTURED ENGINE ESTIMATED INCREASED OPERATING COSTS

[Millions of 2005 dollars]

Year	Reductant use	DPF maintenance	Fuel consumption impact	Total operating costs	Total for PM	Total for NO_X+NMHC
2008	$0	$0	$0	$0	$0	$0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	0	0	0	0	0	0
2012	0	0	0	0	0	0
2015	23	0	7	30	4	26

[175] The PM/NO_X+NMHC cost allocations for fixed costs used in this cost analysis are as follows: Engine research expenditures are 67% NO_X+NMHC and 33% PM; engine tooling and certification costs are split evenly; and, equipment redesign costs are split evenly.

[176] The PM/NO_X+NMHC cost allocations for operating costs used in this cost analysis are as follows: Reductant costs are 100% NO_X+NMHC; DPF maintenance costs are 100% PM; and, fuel consumption impacts are split evenly.

TABLE V–4.—FRESHLY MANUFACTURED ENGINE ESTIMATED INCREASED OPERATING COSTS—Continued

[Millions of 2005 dollars]

Year	Reductant use	DPF maintenance	Fuel consumption impact	Total operating costs	Total for PM	Total for NO_X+NMHC
2020	143	3	42	187	24	164
2030	409	8	118	535	67	468
2040	619	12	175	806	99	707
NPV at 3%	4,031	75	1,157	5,264	654	4,610
NPV at 7%	1,575	29	453	2,057	256	1,801

As shown, we have estimated the net present value for the years 2006 through 2040 of the annual operating costs at $5.2 billion using a three percent discount rate and $2.1 billion using a seven percent discount rate. The operating costs are zero until Tier 4 engines start being sold since only the Tier 4 engines are expected to incur increased operating costs (note that operating costs associated with the remanufacturing programs are discussed below). Reductant use represents the largest source of increased operating costs. Because reductant use is meant for controlling NO_X emissions, most of the operating costs are associated with NO_X+NMHC control.

(4) Engineering & Operating Costs Associated With the Remanufacturing Programs

We have also estimated engineering costs associated with the locomotive and marine remanufacturing programs. The remanufacturing process is not a low cost endeavor. However, it is much less costly than purchasing a freshly manufactured engine. The engineering costs we have estimated associated with the remanufacturing program are not meant to capture the remanufacturing process but rather the incremental engineering costs to that process. Therefore, the remanufacturing costs estimated here are only those engineering and operating costs resulting from the requirement to meet a more stringent standard than the engine was designed to meet at its original sale. In addition to incremental hardware costs, we expect that some remanufactured engines will see a fuel consumption impact. We expect a one percent fuel consumption increase will occur for remanufactured Tier 0 locomotives because we believe that the tighter NO_X standard will be met using retarded timing. For the same reason, we expect a two percent fuel consumption increase for remanufactured C2 marine engines. The marine engines will have timing retarded to the same degree as locomotives, but the relative degree of timing retard will be greater for marine engines given their initial state of control. These engineering and operating costs and how they were generated are detailed in Chapter 5 of the final RIA and are summarized in Table V–5.[177] As shown, we have estimated the net present value for the years 2006 through 2040 of the annual engineering and operating costs associated with the locomotive and marine remanufacturing programs at $2.1 billion using a 3 percent discount rate and $1.2 billion using a 7 percent discount rate.

TABLE V–5.—ESTIMATED HARDWARE AND OPERATING COSTS ASSOCIATED WITH THE LOCOMOTIVE & MARINE REMANUFACTURING PROGRAMS

[Millions of 2005 dollars]

Year	Locomotive	Marine	Total	Total for PM	Total for NO_X+NMHC
2008	$59	$16	$75	$38	$38
2009	32	21	54	27	27
2010	58	27	85	42	42
2011	111	32	143	71	71
2012	91	44	135	68	68
2015	52	37	89	44	44
2020	37	26	63	31	31
2030	94	12	106	53	53
2040	158	3	161	80	80
NPV at 3%	1,669	450	2,120	1,060	1,060
NPV at 7%	864	289	1,153	577	577

(5) Total Engineering & Operating Costs

The total engineering and operating costs associated with today's final rule are the summation of the new engine and new equipment engineering costs, both fixed and variable, the new engine operating costs for freshly manufactured engines, and the hardware and operating costs associated with the locomotive and marine remanufacturing programs. These costs are summarized in Table V–6.

[177] Costs associated with the remanufaturing program are split evenly between NO_X+NMHC and PM. Note that the costs associated with the marine remanufacturing program are consistent with the inventory reductions discussed in section II. Our estimate of the number of remanufactured engines is presented in a memorandum from Amy Kopin to the docket for this rule (see Docket Item No. EPA–HQ–OAR–2003–0190–0847).

TABLE V–6.—TOTAL ENGINEERING & OPERATING COSTS OF THE FINAL PROGRAM

(Millions of 2005 dollars]

Year	Freshly manufactured engine related engineering costs	Freshly manufactured equipment related engineering costs	Freshly manufactured engine & equipment operating costs	Hardware and operating costs associated with the remanufacturing programs	Total engineering costs	Total PM costs	Total NO_X+NMHC costs
2008	$34	$0	$0	$75	$109	$49	$60
2009	34	0	0	54	87	38	49
2010	68	0	0	85	153	65	88
2011	138	0	0	143	281	121	160
2012	80	0	0	135	215	94	121
2015	123	24	30	89	266	116	150
2020	82	17	187	63	349	106	242
2030	99	20	535	105	759	181	578
2040	98	17	806	161	1,082	240	842
NPV at 3%	1,764	260	5,264	2,120	9,407	2,680	6,727
NPV at 7%	974	122	2,057	1,153	4,307	1,333	2,973

As shown, we have estimated the net present value of the annual engineering costs for the years 2006 through 2040 at $9.4 billion using a three percent discount rate and $4.3 billion using a seven percent discount rate. Roughly half of these costs are operating costs, with the bulk of those being reductant related costs. As explained above in the operating cost discussion, because reductant use is meant for controlling NO_X emissions, most of the operating costs and, therefore, the majority of the total engineering costs are associated with NO_X+NMHC control.

Figure V–1 graphically depicts the annual engineering costs associated with the program being finalized today. The engine costs shown represent the engineering costs associated with engine research and tooling, etc., and the incremental costs for new hardware such as DPFs and reductant SCR systems. The equipment costs shown represent the engineering costs associated with equipment redesign efforts and the incremental costs for new equipment-related hardware such as reductant storage and delivery systems, sheet metal and brackets. The remanufacturing program costs include incremental hardware and operating costs for the locomotive and marine remanufacturing programs. The operating costs include incremental increases in operating costs associated with reductant use, DPF maintenance, and a one percent fuel consumption increase for new Tier 4 engines. The total program engineering costs are shown in Table V–6 as $9.4 billion at a three percent discount rate and $4.3 billion at a seven percent discount rate.

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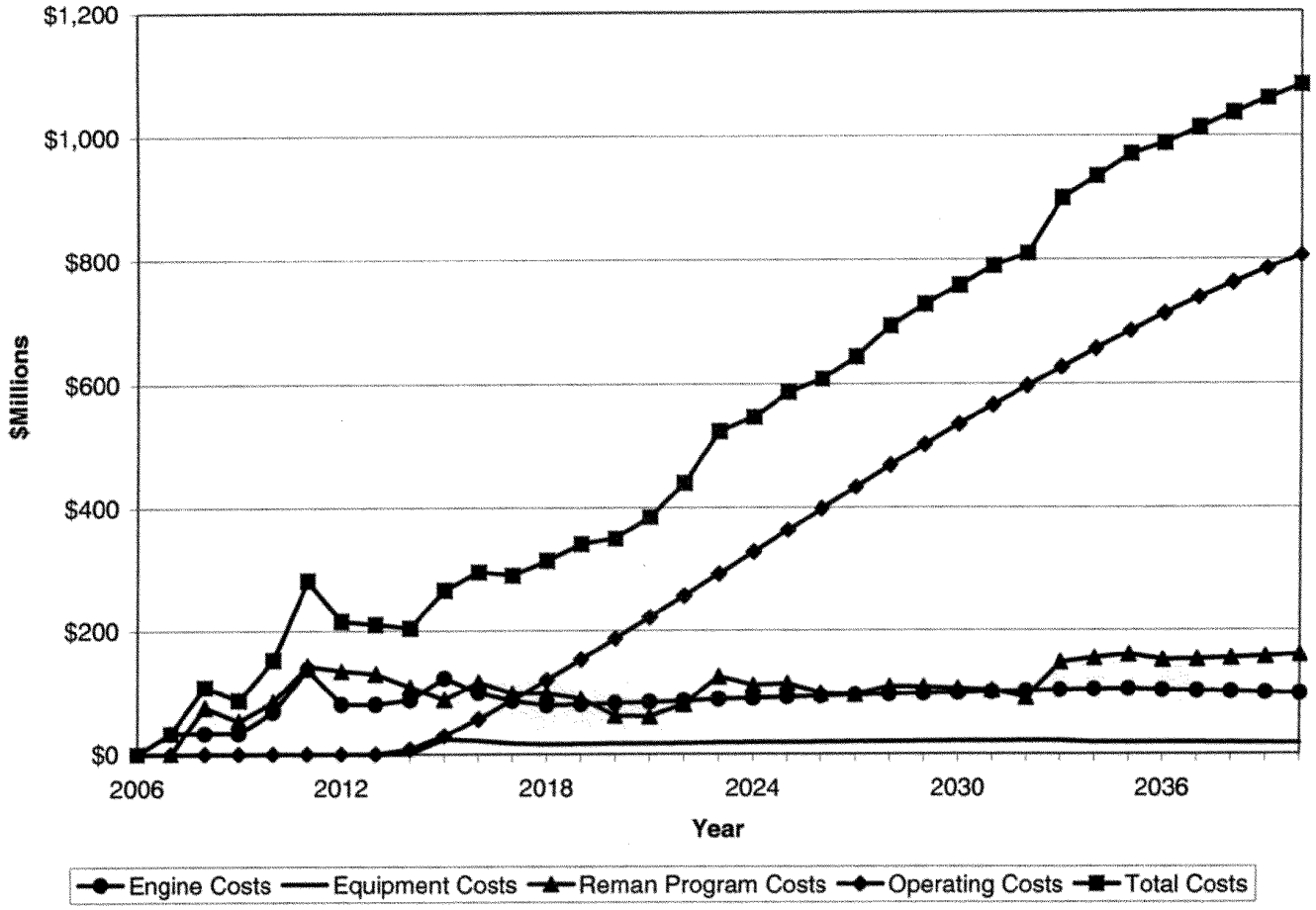
Figure V-1 Annual Engineering Costs of the New Engine Standards and Locomotive & Marine Remanufacturing Programs



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B. Cost Effectiveness

As discussed in section VI, this rule is very cost beneficial, with social benefits far outweighing social costs. However, this does not shed light on how cost effective this control program is compared to other control programs at providing the expected emission reductions. One tool that can be used to assess the value of the final program is the ratio of engineering costs incurred per ton of emissions reduced and comparing that ratio to other control programs. As we show in this section, the PM and NO_X emissions reductions from the new locomotive and marine diesel program compare favorably—in terms of cost effectiveness—to other mobile source control programs that have been or will soon be implemented. We note that today's action builds upon the efforts undertaken by the engine manufacturing industry to comply with our recent 2007/2010 heavy-duty highway and nonroad Tier 4 (NRT4) rulemakings. As such, and as discussed at length in Chapter 5 of the final RIA, much of the research and development associated with diesel emission controls builds upon the work done to comply with those earlier rules. This does not change the conclusion that the cost effectiveness of today's action compares favorably with other actions deemed appropriate for society.

We have calculated the cost per ton of our program based on the net present value of all engineering costs incurred and all emission reductions generated from the current year 2006 through the year 2040. This approach captures all of the costs and emissions reductions from our program including those costs incurred and emissions reductions generated by the locomotive and marine remanufacturing programs. The baseline case for this evaluation is the existing set of engine standards for locomotive and marine diesel engines and the existing remanufacturing requirements. The analysis timeframe is meant to capture both the early period of the program when very few new engines that meet the standards would be in the fleet, and the later period when essentially all engines would meet the new standards.

Table V–7 shows the emissions reductions associated with today's rule. These reductions are discussed in more detail in section II of this preamble and Chapter 3 of the final RIA.

TABLE V–7.—ESTIMATED EMISSIONS REDUCTIONS ASSOCIATED WITH THE NEW LOCOMOTIVE AND MARINE PROGRAM
(Short tons)

Year	$PM_{2.5}$	PM_{10} [a]	NO_X	NMHC
2015	7,000	8,000	161,000	14,000
2020	14,000	15,000	371,000	26,000
2030	27,000	27,000	795,000	40,000
2040	37,000	38,000	1,144,000	52,000
NPV at 3%	308,000	318,000	8,757,000	492,000
NPV at 7%	134,000	139,000	3,708,000	221,000

Note: (a) Note that, $PM_{2.5}$ is estimated to be 97 percent of the more inclusive PM_{10} emission inventory.

In Section II we generate and present $PM_{2.5}$ inventories since recent research has determined that these are of greater health concern. Similarly, NMHC is estimated to be 93 percent of the more inclusive VOC emission inventory. Traditionally, we have used PM_{10} and NMHC in our cost effectiveness calculations. Since cost effectiveness is a means of comparing control measures to one another, we use PM_{10} and NMHC in our cost effectiveness calculations for comparisons to past control measures.

Using the engineering costs shown in Table V–6 and the emission reductions shown in Table V–7, we can calculate the $/ton associated with today's rule. These are shown in Table V–8. The resultant cost per ton numbers depend on how the engineering costs presented above are allocated to each pollutant. Therefore, as described in section V.A, we have allocated costs as closely as possible to the pollutants for which they are incurred. These allocations are also discussed in detail in Chapter 5 of the final RIA.

TABLE V–8.—FINAL PROGRAM AGGREGATE COST PER TON AND LONG-TERM ANNUAL COST PER TON

Pollutant	2006 thru 2040 discounted lifetime cost per ton at 3%	2006 thru 2040 discounted lifetime cost per ton at 7%	Cost per ton in 2030	Cost per ton in 2040
NO_X+NMHC	$730	$760	$690	$700
PM	8,440	9,620	6,620	6,360

The costs per ton shown in Table V–8 for 2006 through 2040 use the net present value of the annualized engineering costs and emissions reductions associated with the program for the years 2006 through 2040. We have also calculated the costs per ton of emissions reduced in the years 2030 and 2040 using the annual engineering costs and emissions reductions in those specific years. These numbers are also shown in Table V–8. All of the costs per ton include costs and emission reductions that will occur from the locomotive and marine remanufacturing programs.

In comparison with other emissions control programs, we believe that the new locomotive and marine program represents a cost effective strategy for generating substantial NO_X+NMHC and PM reductions. This can be seen by comparing the cost effectiveness with the cost effectiveness of a number of standards that EPA has adopted in the past. Table V–9 and Table V–10 summarize the cost per ton of several past EPA actions to reduce emissions of NO_X+NMHC and PM from mobile sources.

TABLE V–9.—NEW LOCOMOTIVE AND MARINE PROGRAM COMPARED TO PREVIOUS MOBILE SOURCE PROGRAMS FOR NO_X+NMHC

Program	$/ton NO_X+NMHC
Today's locomotive & marine standards	$730
Tier 4 Nonroad Diesel (69 FR 39131)	1,140
Tier 2 Nonroad Diesel (EPA420–R–98–016, Chapter 6)	710
Tier 3 Nonroad Diesel (EPA420-R–98–016, Chapter 6)	480
Tier 2 vehicle/gasoline sulfur (65 FR 6774)	1,580—2,650
2007 Highway HD (66 FR 5101)	2,530
2004 Highway HD (65 FR 59936)	250—480

Note: Costs adjusted to 2005 dollars using the Producer Price Index for Total Manufacturing Industries.

TABLE V–10.—NEW LOCOMOTIVE AND MARINE STANDARDS COMPARED TO PREVIOUS MOBILE SOURCE PROGRAMS FOR PM

Program	$/ton PM
Today's locomotive & marine standards	$8,440
Tier 4 Nonroad Diesel (69 FR 39131)	12,630
Tier 1/Tier 2 Nonroad Diesel (EPA420–R–98–016, Chapter 6)	2,700

TABLE V–10.—NEW LOCOMOTIVE AND MARINE STANDARDS COMPARED TO PREVIOUS MOBILE SOURCE PROGRAMS FOR PM—Continued

Program	$/ton PM
2007 Highway HD (66 FR 5101)	15,990

Note: Costs adjusted to 2005 dollars using the Producer Price Index for Total Manufacturing Industries.

C. EIA

We prepared an Economic Impact Analysis (EIA) to estimate the social costs associated with the final control program to estimate the market-level changes in prices and outputs for affected markets, the social costs of the program, and the expected distribution of those costs across stakeholders. As defined in EPA's *Guidelines for Preparing Economic Analyses*, social costs are the value of the goods and services lost by society resulting from (a) the use of resources to comply with and implement a regulation and (b) reductions in output.[178]

A quantitative Economic Impact Model (EIM) was developed to estimate price and quantity changes and total social costs associated with the emission control program.

The EIM is a computer model comprised of a series of spreadsheet modules that simulate the supply and demand characteristics of each of the markets under consideration. The model methodology is firmly rooted in applied microeconomic theory and was developed following the methodology set out in OAQPS's *Economic Analysis Resource Document*.[179] Chapter 7 of the RIA contains a detailed description of the EIM, including the economic theory behind the model and the data used to construct it, the baseline equilibrium market conditions, and the model's behavior parameters. The EIM and the estimated compliance costs presented above are used to estimate the economic impacts of the program. The results of this analysis are summarized below.

The engineering costs we used in the EIA are an earlier version of the estimated compliance costs developed for this final rule. The net present value of the engineering costs used in the EIA is estimated to be approximately $9.17 billion (NPV over the period of analysis at 3 percent discount rate), which is about $240 million less than the net present value of the final estimated engineering costs of about $9.41 billion. This difference is the sum of various cost adjustments, the largest of which are an increase of about $222 million in operating costs for the marine markets and $42 million in the operating costs for the rail markets (NPV over the period of analysis at 3 percent discount rate). These changes are not expected to have a substantial impact on the market level results because the differences are relatively small on an annual basis. For example, operating costs for C2 marine markets increase by about 15 percent in 2030 (from $107 million to $123 million). The previous estimate of $107 million was associated with an increase of approximately 1.1 in the price of marine transportation services and a decrease of approximately 0.5 percent in the quantity of marine transportation services provided. A small increase in operating costs is not likely to change those results by very much. The market-level impacts on the other downstream markets are also likely to be very small and not economically significant. Finally, the difference in compliance costs will not affect the distribution of social costs, which is a function of the price elasticity of supply and demand.

(1) Market Analysis Results

In the market analysis, we estimate how prices and quantities of goods and services affected by the emission control program can be expected to change once the program goes into effect.

The compliance costs associated with the new locomotive and marine diesel engine standards are expected to lead to price and quantity changes in these markets. A summary of the market analysis results is presented in Table V–11 for 2012, which is representative of the first year of the Tier 3 standards; 2016, which is representative of the first year of the Tier 4 standards; and 2030, which represents market impacts of the program in the long-term. Results for all years can be found in Chapter 7 of the RIA.

For all markets, the market impacts for the early years of the program are driven by the transportation markets. In these years, the only direct compliance costs are associated with the remanufacture programs; there are no variable costs associated with the Tier 3 standards and therefore no direct compliance costs. The transportation markets will experience operating costs increases; these will result in small increases in transportation market prices, which will translate to small contractions in demand for locomotives and marine diesel engines and vessels. This is expected exert marginal downward pressure on prices in those markets, of less than 0.1 percent. The production decreases are also expected to be very small, at 0.1 percent or less.

The Tier 4 programs are expected to result in larger market changes due to the direct compliance costs associated with Tier 4 standards and the continuing costs of the remanufacture programs. For the locomotive markets, the price increases in 2016 are expected to be about 4 percent for line haul locomotives and about one percent for switchers in 2016. In the long term (by 2030), prices are expected to increase to about 3.2 percent for line haul locomotives and about 1.5 percent for switchers. These small price increases reflect the relative amount of the compliance costs compared to the total cost of a locomotive or switcher (the engine is only a small part of the total cost of the locomotive). In all cases, the decrease in the quantity of line haul locomotives or switchers produced is expected to be less than 0.5 percent.

In the marine markets, price increases for engines are expected to be larger in 2016, varying from about 9 percent for C1 engines above 600 kW (800 hp) to 17 percent for auxiliary engines and C2 engines above 600 kW.[180] The price increases for vessels that use these engines, however, are smaller (about 2 percent and 7 percent, respectively), reflecting the relative amount of the compliance costs compared to the price of a commercial marine vessel. Production quantities are expected to decrease by less than 4 percent for engines and vessels. The long-term price impacts are similar, with expected price increases of about 12 percent for engines C2 above 600 kW and 7 percent for C1 engines above 600 kW, and vessel price

[178] EPA Guidelines for Preparing Economic Analyses, EPA 240–R–00–003, September 2000, p 113. A copy of this document can be found at *http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/Guidelines.html.*

[179] U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Innovative Strategies and Economics Group, OAQPS Economic Analysis Resource Document, April 1999. A copy of this document can be found at *http://www.epa.gov/ttn/ecas/econdata/Rmanual2/.*

[180] Results presented in this section are by marine engine category in kW; the actual EIA analysis presented in Chapter 7 of the RIA was performed using marine engine categories by hp.

increases of less than 5 percent. Long-term production quantity decreases are expected to be less than 3 percent.

TABLE V–11.—ESTIMATED MARKET IMPACTS FOR 2012, 2016, 2030

(2005$)

Market [c]	Average variable engineering cost per unit	Change in price		Change in quantity	
		Absolute	Percent	Absolute	Percent
2012					
Rail Sector:					
Locomotives	$0	−535	−0.03	−1	−0.1
Switcher/Passenger	0	−348	−0.03	0	−0.1
Transportation Services	NA	[a] NA	0.1	[a] NA	−0.1
Marine Sector					
Engines:					
Auxiliary >600 kW	0	−47	0.00	0	−0.1
C1>600 kW	0	−8	0.00	0	0.0
C2>600 kW	0	−139	−0.03	0	−0.1
Other marine	0	0	0.00	0	0.0
Vessels					
C1>600 kW	0	−174	−0.01	0	0.0
C2>600 kW	0	−2,419	−0.07	0	−0.1
Other marine	0	−3	0.00	1	0.0
Transportation Services	NA	[a] NA	0.2	[a] NA	−0.1
2016					
Rail Sector:					
Locomotives	84,274	83,227	4.2	−1	−0.1
Switcher/Passenger	14,175	13,494	1.0	0	−0.1
Transportation Services	NA	[a] NA	0.3	[a] NA	−0.1
Marine Sector					
Engines:					
Auxiliary >600 kW	37,097	35,569	17.1	−11	−3.4
C1>600 kW	18,483	16,384	8.5	−15	−3.7
C2>600 kW	71,806	71,602	16.3	0	−0.2
Other marine	0	0	0.00	0	0.0
Vessels:					
C1>600 kW	8,277	[b] 34,043	2.1	−14	−3.7
C2>600 kW	12,107	[b] 255,143	7.0	0	−0.2
Other marine	0	−4	0.00	−1	0.0
Transportation Services	NA	[a] NA	0.4	[a] NA	−0.2
2030					
Rail Sector:					
Locomotives	65,343	63,019	3.2	−4	−0.3
Switcher/Passenger	21,139	19,628	1.5	−1	−0.3
Transportation Services	NA	[a] NA	0.6	[a] NA	−0.3
Marine Sector					
Engines:					
Auxiliary >600 kW	28,359	27,021	13.0	−11	−2.8
C1>600 kW	14,131	12,479	6.5	−13	−2.9
C2>600 kW	54,893	54,264	12.3	−1	−0.5
Other marine	0	−1	0.0	0	0.0
Vessels:					
C1>600 kW	6,933	[b] 25,768	1.6	−12	−2.9
C2>600 kW	10,169	[b] 164,774	5.1	0	−0.5
Other marine	0	−12	0.0	−4	0.0
Transportation Services	NA	[a] NA	1.1	[a] NA	−0.5

Notes:

[a] The prices and quantities for transportation services are normalized ($1 for 1 unit of services provided) and therefore it is not possible to estimate the absolute change price or quantity; see 7.3.1.5.

[b] The estimated vessel impacts include the impacts of direct vessel compliance costs and the indirect impacts of engine markets for both propulsion and auxiliary engines. See Chapter 7 of the RIA.

[c] Results presented in this table are by marine engine category in kW; the actual EIA analysis presented in Chapter 7 of the RIA was performed using marine engine categories by hp.

(2) Economic Welfare Analysis

In the economic welfare analysis, we look at the total social costs associated with the program and their distribution across key stakeholders.

The total estimated social costs of the program are about $221 million, $284 million, $332 million and $738 million for 2012, 2016, 2020, and 2030. These estimated social costs are nearly identical to the total compliance costs for those years. The slight reduction in social costs when compared to compliance costs occurs because the total engineering costs do not reflect the decreased sales of locomotives, engines and vessels that are incorporated in the

total social costs. Results for all years are presented in Chapter 7 of the RIA.

Table V–12 shows how total social costs are expected to be shared across stakeholders for selected years.

We estimate the net social costs of the program to be approximately $738 million in 2030.[181] The rail sector is expected to bear about 62.5 percent of the social costs of the program in 2030, and the marine sector is expected to bear about 37.5 percent. In each of these two sectors, these social costs are expected to be born primarily by producers and users of locomotive and marine transportation services (about 98 percent). The remaining 2 percent is expected to be borne by locomotive, marine engine, and marine vessel manufacturers and fishing and recreational users.

TABLE V–12.—SUMMARY OF ESTIMATED SOCIAL COSTS FOR 2012, 2016, 2020, 2030 (2005$, $MILLION)

Stakeholder group [a]	2012		2016	
	Surplus change ($)	Percent	Surplus change ($)	Percent
Locomotives:				
Locomotive producers	−35.1	15.9	−8.3	2.9
Line haul producers	−27.8	12.6	−0.9	0.3
Switcher/Passenger producers	−7.2	3.3	−7.4	2.6
Rail transportation service providers	−21.4	9.7	−43.4	15.3
Rail transportation service consumers	−68.4	31.0	−138.9	48.8
Total locomotive sector	−124.9	56.6	−190.6	67.0
Marine:				
Marine engine producers	−45.8	20.7	−2.1	0.7
Auxiliary > 600 kW	−16.0	7.3	−0.5	0.2
C1 > 600 kW	−19.0	8.6	−1.6	0.5
C2 > 600 kW	−10.7	4.9	0.0	0.0
Other marine	0.0	0.0	0.0	0.0
Marine vessel producers	−0.3	0.1	−15.8	5.6
C1 > 600 kW	−0.1	0.0	−13.5	4.7
C2 > 600 kW	−0.1	0.1	−2.2	0.8
Other marine	−0.1	0.0	−0.1	0.0
Recreational and fishing vessel consumers	0.0	0.0	0.0	0.0
Marine transportation service providers	−11.9	5.4	−18.1	6.4
Marine transportation service consumers	−38.1	17.3	−57.9	20.3
Auxiliary engines < 600 kW	0.0	0.0	0.0	0.0
Total marine sector	−96.1	43.5	−93.8	33.0
Total Program	−221.0	.....	−284.4	.....

Stakeholder group	2020		2030	
	Surplus change ($)	Percent	Surplus change ($)	Percent
Locomotives:				
Locomotive producers	−1.1	0.3	−3.1	0.4
Line haul producers	−1.0	0.3	−2.7	0.4
Switcher/Passenger producers	−0.1	0.0	−0.4	0.1
Rail transportation service providers	−46.4	14.0	−109.0	14.8
Rail transportation service consumers	−148.6	44.8	−348.9	47.3
Total locomotive sector	−196.1	59.1	−461.1	62.5
Marine:				
Marine engine producers	−1.8	0.5	−2.0	0.3
Auxiliary > 600 kW	−0.4	0.1	−0.5	0.1
C1 > 600 kW	−1.3	0.4	−1.4	0.2
C2 > 600 kW	0.0	0.0	−0.1	0.0
Other marine	0.0	0.0	0.0	0.0
Marine vessel producers	−10.3	3.1	−9.2	1.2
C1 > 600 kW	−8.8	2.7	−8.2	1.1
C2 > 600 kW	−1.3	0.4	−0.7	0.1
Other marine	−0.1	0.0	−0.3	0.0
Recreational and fishing vessel consumers	0.0	0.0	0.0	0.0
Marine transportation service providers	−29.5	8.9	−63.3	8.6
Marine transportation service consumers	−94.4	28.4	−202.5	27.4
Auxiliary engines < 600 kW	0.0	0.0	0.0	0.0
Total marine sector	−135.9	40.9	−277.0	37.5
Total Program	−332.0	.....	−738.1	.....

Note: [a] Results presented in this table are by marine engine category in kW; the actual EIA analysis presented in Chapter 7 of the RIA was performed using marine engine categories by hp.

[181] All estimates presented in this section are in 2005$.

Table V–13 shows the distribution of total surplus losses for the program from 2007 through 2040. This table shows that the rail sector is expected to bear about 62 percent of the total program social costs through 2040 (NPV 3%), and that most of the costs are expected to be borne by the rail transportation consumers. The marine sector is expected to bear about 38 percent of the total program social costs through 2040 (NPV 3%), most of which are also expected to be borne by the marine transportation consumers. This is consistent with the structure of the program, which leads to high compliance costs for the rail marine transportation sectors.

TABLE V–13. ESTIMATED NET SOCIAL COSTS 2007 THROUGH 2040 BY STAKEHOLDER ($MILLION, 2005$)

Stakeholder Groups [a]	Surplus change	Percent of total surplus	Surplus change	Percent of total surplus
Locomotives	NPV 3%	.....	NPV 7%	
Locomotive producers	−$221.1	2.4	−$160.4	3.8
Line Haul	−172.2		−124.5	
Switcher/Passenger	−48.9		−35.9	
Rail transportation service providers	−1,302.7	14.2	−568.6	13.6
Rail transportation service consumers	−4,168.7	45.6	−1,819.5	43.5
Total locomotive sector	−5,692.6	62.6	−2,548.5	61.0
Marine				
Marine engine producers	−307.5	3.4	−229.4	5.5
Auxiliary > 600 kW	−87.3		−64.0	
C1 > 600 kW	−106.8		−74.6	
C2 > 600 kW	−56.8		−42.6	
Other marine	−56.7		−48.1	
Marine vessel producers	−150.0	1.6	−72.5	1.7
C1 > 600 kW	−126.8		−60.8	
C2 > 600 kW	−19.7		−10.2	
Other marine	−3.5		−1.5	
Recreational and fishing vessel consumers	0.2		0.1	
Marine transportation service providers	−704.6	7.7	−308.4	7.4
Marine transportation service consumers	−2,254.7	24.6	−986.9	23.6
Auxiliary Engines <600 kW	−40.2	0.4	−34.2	−0.8
Total marine sector	3,456.7	37.8	−1,631.3	39.0
Total Program	−9.149.2		−4,179.8	

Note: [a] Results presented in this table are by marine engine category in kW; the actual EIA analysis presented in Chapter 7 of the RIA was performed using marine engine categories by hp.

(3) What Are the Significant Limitations of the Economic Impact Analysis?

Every economic impact analysis examining the market and social welfare impacts of a regulatory program is limited to some extent by limitations in model capabilities, deficiencies in the economic literatures with respect to estimated values of key variables necessary to configure the model, and data gaps. In this EIA, there three potential sources of uncertainty: (1) Uncertainty resulting from the way the EIM is designed, particularly from the use of a partial equilibrium model; (2) uncertainty resulting from the values for key model parameters, particularly the price elasticity of supply and demand; and (3) uncertainty resulting from the values for key model inputs, particularly baseline equilibrium price and quantities.

Uncertainty associated with the economic impact model structure arises from the use of a partial equilibrium approach, the use of the national level of analysis, and the assumption of perfect competition. These features of the model mean it does not take into account impacts on secondary markets or the general economy, and it does not consider regional impacts. The results may also be biased to the extent that firms have some control over market prices, which would result in the modeling over-estimating the impacts on producers of affected goods and services.

The values used for the price elasticities of supply and demand are critical parameters in the EIM. The values of these parameters have an impact on both the estimated change in price and quantity produced expected as a result of compliance with the new standards and on how the burden of the social costs will be shared among producer and consumer groups. In selecting the values to use in the EIM it is important that they reflect the behavioral responses of the industries under analysis.

Finally, uncertainty in measurement of data inputs can have an impact on the results of the analysis. This includes measurement of the baseline equilibrium prices and quantities and the estimation of future year sales. In addition, there may be uncertainty in how similar engines and equipment were combined into smaller groups to facilitate the analysis. There may also be uncertainty in the compliance cost estimations.

While variations in the above model parameters may affect the distribution of social costs among stakeholders and the estimated market impacts, they will not affect the total social costs of the program. This is because the total social costs are directly related to the total compliance costs. To explore the effects of key sources of uncertainty on the distribution of social costs and on estimated price and quantity impacts, we performed a sensitivity analysis in which we examine the results of using alternative values for several model parameters. The results of these analyses are contained in Appendix 7H of the RIA prepared for this rule.

Despite these uncertainties, we believe this economic impact analysis provides a reasonable estimate of the expected market impacts and social welfare costs of the new standards in future. Acknowledging benefits omissions and uncertainties, we present a best estimate of the social costs based on our interpretation of the best available scientific literature and methods supported by EPA's Guidelines for Preparing Economic Analyses and

the OAQPS Economic Analysis Resource Document.

VI. Benefits

This section presents our analysis of the health and environmental benefits that are estimated to occur as a result of the final locomotive and marine engine standards throughout the period from initial implementation through 2030. Nationwide, the engines that are subject to the emission standards in this rule are a significant source of mobile source air pollution. The standards will reduce exposure to NO_X and direct PM emissions and help avoid a range of adverse health effects associated with ambient $PM_{2.5}$ and ozone levels. In addition, the standards will help reduce exposures to diesel PM exhaust, various gaseous hydrocarbons and air toxics. As described below, the reductions in PM and ozone from the standards are expected to result in significant reductions in premature deaths and other serious human health effects, as well as other important public health and welfare effects.

EPA typically quantifies and monetizes PM- and ozone-related impacts in its regulatory impact analyses (RIAs) when possible. The RIA for the proposal for this rulemaking only quantified benefits from PM; in the current RIA we quantify and monetize the ozone-related health and environmental impacts associated with the final rule. The science underlying the analysis is based on the current ozone criteria document.[182] To estimate the incidence and monetary value of the health outcomes associated with this final rule, we used health impact functions based on published epidemiological studies, and valuation functions derived from the economics literature.[183] Key health endpoints analyzed include premature mortality, hospital and emergency room visits, school absences, and minor restricted activity days. The analytic approach to characterizing uncertainty is consistent with the analysis used in the RIA for the proposed O3 NAAQS.

The benefits modeling is based on peer-reviewed studies of air quality and health and welfare effects associated with improvements in air quality and peer-reviewed studies of the dollar values of those public health and welfare effects. These methods are consistent with benefits analyses performed for the recent analysis of the proposed Ozone NAAQS and the final PM NAAQS analysis.[184, 185] They are described in detail in the RIAs prepared for those rules.

The range of PM benefits associated with the final standards is estimated based on risk reductions estimated using several sources of PM-related mortality effect estimates. In order to provide an indication of the sensitivity of the benefits estimates to alternative assumptions about PM mortality risk reductions, in Chapter 6 of the RIA we present a variety of benefits estimates based on two epidemiological studies (including the ACS study and the Six Cities Study) and the recent PM mortality expert elicitation.[186] EPA intends to ask the Science Advisory Board to provide additional advice as to which scientific studies should be used in future RIAs to estimate the benefits of reductions in PM-related premature mortality.

The range of ozone benefits associated with the final standards is also estimated based on risk reductions estimated using several sources of ozone-related mortality effect estimates. There is considerable uncertainty in the magnitude of the association between ozone and premature mortality. This analysis presents four alternative estimates for the association based upon different functions reported in the scientific literature. We use the National Morbidity, Mortality and Air Pollution Study (NMMAPS),[187] which was used as the primary basis for the risk analysis in the ozone Staff Paper [188] and reviewed by the Clean Air Science Advisory Committee (CASAC).[189] We also use three studies that synthesize ozone mortality data across a large number of individual studies.[190, 191, 192] Note that there are uncertainties within each study that are not fully captured by this range of estimates.

Recognizing that additional research is necessary to clarify the underlying mechanisms causing these effects, we also consider the possibility that the observed associations between ozone and mortality may not be causal in nature. EPA has requested advice from the National Academy of Sciences on how best to quantify uncertainty in the relationship between ozone exposure and premature mortality in the context of quantifying benefits associated with ozone control strategies.

The range of total ozone- and PM-related benefits associated with the final standards is presented in Table VI–1. We present total benefits based on the PM-and ozone-related premature mortality function used. The benefits ranges therefore reflect the addition of each estimate of ozone-related premature mortality (each with its own row in Table VI–1) to estimates of PM-related premature mortality, derived from either the epidemiological literature or the expert elicitation. The estimates in Table VI–1, and all monetized benefits presented in this section, are in year 2006 dollars.

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[182] U.S. Environmental Protection Agency (2006) Air quality criteria for ozone and related photochemical oxidants (second external review draft) Research Triangle Park, NC: National Center for Environmental Assessment; report no. EPA/600R–05/004aB–cB, 3v. Available: *http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=137307* [March 2006]

[183] Health impact functions measure the change in a health endpoint of interest, such as hospital admissions, for a given change in ambient ozone or PM concentration.

[184] U.S. Environmental Protection Agency. August 2007. Proposed Regulatory Impact Analysis (RIA) for the Proposed National Ambient Air Quality Standards for Ozone. Prepared by: Office of Air and Radiation. Available at *http://www.epa.gov/ttn/ecas/ria.html#ria2007*.

[185] U.S. Environmental Protection Agency. October 2006. Final Regulatory Impact Analysis (RIA) for the Proposed National Ambient Air Quality Standards for Particulate Matter. Prepared by: Office of Air and Radiation. Available at *http://www.epa.gov/ttn/ecas/ria.html*.

[186] Industrial Economics, Incorporated (IEc). 2006. Expanded Expert Judgment Assessment of the Concentration-Response Relationship Between $PM_{2.5}$ Exposure and Mortality. Peer Review Draft. Prepared for: Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC. August.

[187] Bell, M.L., et al. 2004. Ozone and short-term mortality in 95 US urban communities, 1987–2000. Jama, 2004. 292(19): p. 2372–8.

[188] U.S. EPA (2007) Review of the National Ambient Air Quality Standards for Ozone, Policy Assessment of Scientific and Technical Information. OAQPS Staff Paper. EPA–452/R–07–003. This document is available in Docket EPA–HQ–OAR–2003–0190. This document is available electronically at: *http:www.epa.gov/ttn/naaqs/standard/ozone/s_o3_cr_sp.html*.

[189] CASAC (2007). Clean Air Scientific Advisory Committee's (CASAC) Review of the Agency's Final Ozone Staff Paper. EPA–CASAC–07–002. March 26.

[190] Bell, M.L., F. Dominici, and J.M. Samet. A meta-analysis of time-series studies of ozone and mortality with comparison to the national morbidity, mortality, and air pollution study. Epidemiology, 2005. 16(4): p. 436–45.

[191] Ito, K., S.F. De Leon, and M. Lippmann. Associations between ozone and daily mortality: analysis and meta-analysis. Epidemiology, 2005. 16(4): p. 446–57.

[192] Levy, J.I., S.M. Chemerynski, and J.A. Sarnat. 2005. Ozone exposure and mortality: an empiric bayes metaregression analysis. Epidemiology, 2005. 16(4): p. 458–68.

TABLE VI–1.—ESTIMATED 2030 MONETIZED PM- AND OZONE-RELATED HEALTH BENEFITS OF THE FINAL LOCOMOTIVE AND MARINE ENGINE STANDARDS [a]

Premature ozone mortality function or assumption	Reference	Mean total benefits (billions, 2006$, 3% discount rate) [c, d]	Mean total benefits (billions, 2006$, 7% discount rate) [c, d]
2030 Total Ozone and PM Benefits—PM Mortality Derived From American Cancer Society Analysis [a]			
NMMAPS	Bell et al., 2004	$9.7	$8.9.
Meta-analysis	Bell et al., 2005	$11	$9.8.
	Ito et al., 2005	$11	$10.
	Levy et al., 2005	$11	$10.
Assumption that association is not causal		$9.2	$8.4.
2030 Total Ozone and PM Benefits—PM Mortality Derived From Expert Elicitation [b]			
NMMAPS	Bell et al., 2004	$5.2 to $37	$4.8 to $34.
Meta-analysis	Bell et al., 2005	$6.2 to $38	$5.8 to $35.
	Ito et al., 2005	$6.7 to $39	$6.3 to $35.
	Levy et al., 2005	$6.7 to $39	$6.4 to $35.
Assumption that association is not causal		$4.7 to $37	$4.4 to $33.

Notes:

[a] Total includes ozone and $PM_{2.5}$ benefits. Range was developed by adding the estimate from the ozone premature mortality function to the estimate of $PM_{2.5}$-related premature mortality derived from the ACS study (Pope et al., 2002).

[b] Total includes ozone and $PM_{2.5}$ benefits. Range was developed by adding the estimate from the ozone premature mortality function to both the lower and upper ends of the range of the $PM_{2.5}$ premature mortality functions characterized in the expert elicitation. The effect estimates of five of the twelve experts included in the elicitation panel fall within the empirically-derived range provided by the ACS and Six-Cities studies. One of the experts fall below this range and six of the experts are above this range. Although the overall range across experts is summarized in this table, the full uncertainty in the estimates is reflected by the results for the full set of 12 experts. The twelve experts' judgments as to the likely mean effect estimate are not evenly distributed across the range illustrated by arraying the highest and lowest expert means.

[c] Note that total benefits presented here do not include a number of unquantified benefits categories. A detailed listing of unquantified health and welfare effects is provided in Table VI–6.

[d] Results reflect the use of both a 3 and 7 percent discount rate, as recommended by EPA's Guidelines for Preparing Economic Analyses and OMB Circular A–4. Results are rounded to two significant digits for ease of presentation and computation.

(1) Quantified Human Health and Environmental Effects of the Final Standards

In this section we discuss the ozone and $PM_{2.5}$ health and environmental impacts of the final standards. We discuss how these impacts are monetized in the next section. It should be noted that the emission control scenarios used in the air quality and benefits modeling are slightly different than the final emission control program. The differences reflect further refinements of the regulatory program since we performed the air quality modeling for this rule. Emissions and air quality modeling decisions are made early in the analytical process. Chapter 3 of the RIA describes the changes in the inputs and resulting emission inventories between the preliminary assumptions used for the air quality modeling and the final emission control scenario.

Estimated Ozone and PM Impacts

To model the ozone and PM air quality benefits of this rule we used the Community Multiscale Air Quality (CMAQ) model. CMAQ simulates the numerous physical and chemical processes involved in the formation, transport, and deposition of particulate matter. This model is commonly used in regional applications to estimate the ozone and PM reductions expected to occur from a given set of emissions controls. The meteorological data input into CMAQ are developed by a separate model, the Penn State University / National Center for Atmospheric Research Mesoscale Model, known as MM5. The modeling domain covers the entire 48-State U.S., as modeled in proposed ozone NAAQS analysis.[193] The grid resolution for the modeling domain was 12 x 12 km.

While this rule will reduce ozone levels generally and provide national ozone-related health benefits, this is not always the case at the local level. Due to the complex photochemistry of ozone production, reductions in NO_X emissions lead to both the formation and destruction of ozone, depending on the relative quantities of NO_X, VOC, and ozone catalysts such as the OH and HO_2 radicals. In areas dominated by fresh emissions of NO_X, ozone catalysts are removed via the production of nitric acid which slows the ozone formation rate. Because NO_X is generally depleted more rapidly than VOC, this effect is usually short-lived and the emitted NO_X can lead to ozone formation later and further downwind. The terms ''NO_X disbenefits'' or ''ozone disbenefits'' refer to the ozone increases that can result from NO_X emissions reductions in these localized areas. According to the North American Research Strategy for Tropospheric Ozone (NARSTO) Ozone Assessment, these disbenefits are generally limited to small regions within specific urban cores and are surrounded by larger regions in which NO_X control is beneficial.[194] For this analysis, we observed two urban areas that, to some degree, experience ozone disbenefits: Southern California and Chicago.

Marginal changes in ozone in these areas are much more dependent upon baseline air quality conditions than PM due to nonlinearities present in the chemistry of ozone formation. A marginal decrease in NO_X emissions modeled on its own in these areas, as

[193] See the Regulatory Impact Analysis for the Proposed Ozone NAAQS (EPA–452/R–07–008, July 2007). This document is available at *http://www.epa.gov/ttn/ecas/ria.html#ria2007*.

[194] The NARSTO Assessment Document synthesizes the scientific understanding of ozone pollution, giving special consideration to behavior on expanded scales over the North American continent, encompassing Canada, the United States, and Mexico. Successive drafts of this Assessment Document experienced progressive stages of review by its authors and by outside peers, and transcripts were recorded containing the review comments and the corresponding actions. This included an external review by the NRC, the comments of which were addressed and incorporated in the final draft. NARSTO, 2000. An Assessment of Tropospheric Ozone Pollution—A North American Perspective. NARSTO Management Office (Envair), Pasco, Washington. *http://narsto.org/*

was done for this analysis, may yield a very different ambient ozone concentration than if it were modeled in combination with other planned or future controls. For example, recent California SIP modeling indicates that with a combined program of national and local controls, California can reach ozone attainment by 2024 through a mixture of substantial NO_X (and VOC) reductions.[195] In areas prone to ozone disbenefits, our ability to draw conclusions based on air quality modeling conducted for the final rule is limited because the yet-to-occur emission reductions in these areas are not accounted for in our analytical approach. Within these regions, it is expected that the additional NO_X reductions from SIP-based controls would lead to fewer ozone disbenefits from the marginal changes modeled here. More detailed information about the air quality modeling conducted for this analysis is included in the air quality modeling technical support document (TSD), which is located in the docket for this rule.

The modeled ambient air quality data serves as an input to the Environmental Benefits Mapping and Analysis Program (BenMAP).[196] BenMAP is a computer program developed by EPA that integrates a number of the modeling elements used in previous Regulatory Impact Analyses (e.g., interpolation functions, population projections, health impact functions, valuation functions, analysis and pooling methods) to translate modeled air concentration estimates into health effects incidence estimates and monetized benefits estimates.

The addition of ozone mortality to our health impacts analysis has led to an increased focus on the issue of ozone disbenefits for two related reasons: (1) The monetized value of ozone-related benefits, in terms of ozone's contribution to total rule-related benefits, has increased due to the inclusion of ozone mortality; and (2) The overall ozone impacts of NO_X reductions in certain geographic regions of the U.S., when modeled on the margin, may be negative.

Figure 1 shows the diurnal pattern of ozone concentrations in the 2030 baseline and post-control scenarios for a grid cell in Orange County, CA during July. From this figure it is clear that the disbenefits (points when the control case ozone levels are higher than the baseline) are occurring primarily during nighttime hours when ozone is generally low.

This diurnal pattern means that the extent of the disbenefits is not as large as one might have thought. Our conversion from using a 24-hour metric to using the maximum 8-hour average metric in the ozone mortality studies (see page 6–4 and the health impacts section) excludes the nighttime hours when NO_X-related disbenefits are most likely to occur.

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[195] SCAQMD (2007). Final 2007 Air Quality Management Plan. Available at: *http://www.aqmd.gov/aqmp/07aqmp/index.html*. Accessed November 8, 2007.

[196] Information on BenMAP, including downloads of the software, can be found at *http://www.epa.gov/air/benmap*.

Figure 2: July 2030 time-series of CMAQ base and control modeling for Orange County, CA

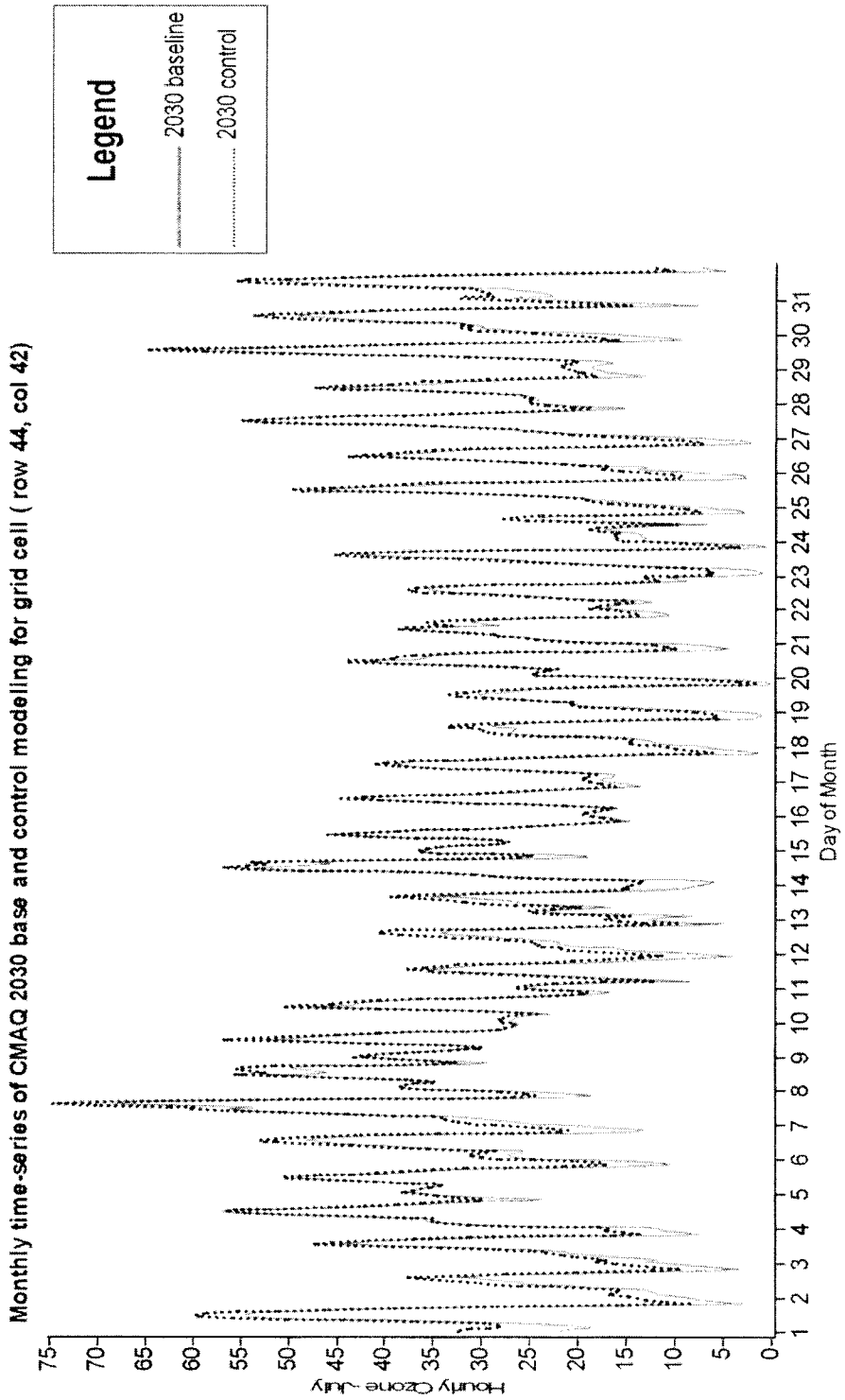

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Table VI–2 presents the estimates of ozone- and PM-related health impacts for the years 2020 and 2030, which are based on the modeled air quality changes between a baseline, pre-control scenario and a post-control scenario reflecting the final emission control strategy.

The use of two sources of PM mortality reflects two different sources of information about the impact of reductions in PM on reduction in the risk of premature death, including both the published epidemiology literature and an expert elicitation study conducted by EPA in 2006. In 2030, based on the estimate provided by the ACS study, we estimate that PM-related emission reductions related to the final rule will result in 1,100 fewer premature fatalities annually. The number of premature mortalities avoided increases to 2,600 when based on the Six Cities study. When the range of expert opinion is used, we estimate between 500 and 4,900 fewer premature mortalities in 2030. We also estimate 680 fewer cases of chronic bronchitis, 2,500 fewer non-fatal heart attacks, 870 fewer hospitalizations (for respiratory and cardiovascular disease combined), 720,000 fewer days of restricted activity due to respiratory illness and approximately 120,000 fewer work-loss days. This analysis projects substantial health improvements for children from reduced upper and lower respiratory illness, acute bronchitis, and asthma attacks. These results are based on an assumed cutpoint in the long-term mortality concentration-response functions at 10 $\mu g/m^3$, and an assumed cutpoint in the short-term morbidity concentration-response functions at 10 $\mu g/m^3$. The impact using four alternative cutpoints (3 $\mu g/m^3$, 7.5 $\mu g/m^3$, 12 $\mu g/m^3$, and 14 $\mu g/m^3$) has on $PM_{2.5}$-related mortality incidence estimation is presented in Chapter 6 of the RIA.

For ozone, we estimate a range of between 54–250 fewer premature mortalities as a result of the final rule in 2030, assuming that there is a causal relationship between ozone exposure and mortality. We also estimate that by 2030, the final rule will result in over 500 avoided respiratory hospital admissions and emergency room visits, 290,000 fewer days of restricted activity due to respiratory illness, and 110,000 school loss days avoided.

TABLE VI–2.—ESTIMATED REDUCTION IN INCIDENCE OF ADVERSE HEALTH EFFECTS RELATED TO THE FINAL LOCOMOTIVE AND MARINE ENGINE STANDARDS [a]

		2020	2030
Health Effect		Mean Incidence Reduction (5th–95th percentile)	
PM-Related Endpoints			
Premature Mortality—Derived from Epidemiology Literature.	Adult, age 30+—ACS cohort study (Pope et al., 2002).	490 (190–790)	1,100 (440–1,800)
	Adult, age 25+—Six-Cities study (Laden et al., 2006).	1,100 (610–1,600)	2,600 (1,400–3,700)
	Infant, age <1 year—Woodruff et al. 1997.	1 (1–2)	2 (1–3)
Premature Mortality—Derived from Expert Elicitation [b].	Adult, age 25+—Lower Bound (Expert K).	220 (0–1,100)	500 (0–2,400)
	Adult, age 25+—Upper Bound (Expert E).	2,200 (1,100–3,300)	4,900 (2,500–7,500)
Chronic bronchitis (adult, age 26 and over)		310 (56–560)	680 (130–1,200)
Acute myocardial infarction (adults, age 18 and older)		1,000 (550–1,500)	2,500 (1,300–3,600)
Hospital admissions—respiratory (all ages) [c]		120 (58–170)	270 (130–400)
Hospital admissions—cardiovascular (adults, age >18) [d]		240 (150–330)	600 (380–820)
Emergency room visits for asthma (age 18 years and younger)		410 (240–580)	890 (520–1,300)
Acute bronchitis (children, age 8–12)		1,000 (−35–2,100)	2,300 (−77–4,600)
Lower respiratory symptoms (children, age 7–14)		9,200 (4,400–14,000)	20,000 (9,700–31,000)
Upper respiratory symptoms (asthmatic children, age 9–18)		6,700 (2,100–11,000)	15,000 (4,600–25,000)
Asthma exacerbation (asthmatic children, age 6–18)		8,400 (920–24,000)	19,000 (2,000–53,000)
Work loss days (adults, age 18–65)		59,000 (51,000–67,000)	120,000 (110,000–140,000)
Minor restricted-activity days (adults, age 18–65)		350,000 (290,000–400,000)	720,000 (610,000–830,000)
Ozone-Related Endpoints			
Premature Mortality, All ages—Derived from NMMAPS.	Bell et al., 2004	13 (−22–49)	54 (−43–150)
Premature Mortality, All ages—Derived from Meta-analyses.	Bell et al., 2005	44 (−47–140)	180 (−69–420)
	Ito et al., 2005	60 (−34–150)	240 (−14–500)
	Levy et al., 2005	62 (−14–140)	250 (44–450)
Premature Mortality—Assumption that association between ozone and mortality is not causal.		0	0
Hospital admissions—respiratory causes (children, under 2; adult, 65 and older) [e].		14 (−150–170)	260 (−350–890)
Emergency room visit for asthma (all ages)		69 (−89–270)	250 (−190–830)
Minor restricted activity days (adults, age 18–65)		84,000 (43,000–120,000)	290,000 (150,000–430,000)
School absence days		33,000 (−17,000–77,000)	110,000 (−15,000–240,000)

Notes:
([a]) Incidence is rounded to two significant digits. PM and ozone estimates represent impacts from the final standards nationwide.
([b]) Based on effect estimates derived from the full-scale expert elicitation assessing the uncertainty in the concentration-response function for PM-related premature mortality (IEc, 2006).[197]
The effect estimates of five of the twelve experts included in the elicitation panel fall within the empirically-derived range provided by the ACS and Six-Cities studies. One of the experts fall below this range and six of the experts are above this range. Although the overall range across experts is summarized in this table, the full uncertainty in the estimates is reflected by the results for the full set of 12 experts. The twelve experts' judgments as to the likely mean effect estimate are not evenly distributed across the range illustrated by arraying the highest and lowest expert means.
([c]) Respiratory hospital admissions for PM include admissions for chronic obstructive pulmonary disease (COPD), pneumonia, and asthma.
([d]) Cardiovascular hospital admissions for PM include total cardiovascular and subcategories for ischemic heart disease, dysrhythmias, and heart failure.
([e]) Respiratory hospital admissions for ozone include admissions for all respiratory causes and subcategories for COPD and pneumonia.

(2) Monetized Benefits

Table VI–3 presents the estimated monetary value of reductions in the incidence of health and welfare effects. Tables VI–4 and VI–5 present the total annual PM- and ozone-related health benefits, which are estimated to be between $9.2 and $11 billion in 2030, assuming a 3 percent discount rate, or between $8.4 and $10 billion, assuming a 7 percent discount rate, using the ACS-derived estimate of PM-related premature mortality (Pope et al., 2002) and the range of ozone-related premature mortality studies derived from the epidemiological literature. The range of benefits expands to between $4.7 and $39 billion, assuming a 3 percent discount rate, when the estimate includes the opinions of outside experts on PM and the risk of premature death, or between $4.4 and $35 billion, assuming a 7 percent discount rate. All monetized estimates are stated in 2006$. These estimates account for growth in real gross domestic product (GDP) per capita between the present and the years 2020 and 2030. As the tables indicate, total benefits are driven primarily by the reduction in premature fatalities each year.

The above estimates of monetized benefits include only one example of non-health related benefits. Changes in the ambient level of $PM_{2.5}$ are known to affect the level of visibility in much of the U.S. Individuals value visibility both in the places they live and work, in the places they travel to for recreational purposes, and at sites of unique public value, such as at National Parks. For the final standards, we present the recreational visibility benefits of improvements in visibility at 86 Class I areas located throughout California, the Southwest, and the Southeast. These estimated benefits are approximately $170 million in 2020 and $400 million in 2030, as shown in Table VI–3.

Table VI–3, VI–4 and VI–5 do not include those additional health and environmental benefits of the rule that we were unable to quantify or monetize. These effects are additive to the estimate of total benefits, and are related to two primary sources. First, there are many human health and welfare effects associated with PM, ozone, and toxic air pollutant reductions that remain unquantified because of current limitations in the methods or available data. A full appreciation of the overall economic consequences of the final standards requires consideration of all benefits and costs projected to result from the new standards, not just those benefits and costs which could be expressed here in dollar terms. A list of the benefit categories that could not be quantified or monetized in our benefit estimates are provided in Table VI–6.

TABLE VI–3.—ESTIMATED MONETARY VALUE IN REDUCTIONS IN INCIDENCE OF HEALTH AND WELFARE EFFECTS

[In millions of 2006$] [a, b]

		2020	2030
$PM_{2.5}$-Related Health Effect		Estimated Mean Value of Reductions (5th and 95th percentile)	
Premature Mortality—Derived from Epidemiology Studies [c, d].	Adult, age 30+—ACS study (Pope et al., 2002)		
	3% discount rate	$3,400 ($810–$7,000)	$8,100 ($1,900–$16,000)
	7% discount rate	$3,100 ($730–$6,300)	$7,300 ($1,700–$15,000)
	Adult, age 25+—Six-cities study (Laden et al., 2006)		
	3% discount rate	$7,800 ($2,200–$15,000)	$18,000 ($5,100–$35,000)
	7% discount rate	$7,000 ($1,900–$13,000)	$17,000 ($4,600–$32,000)
	Infant Mortality, <1 year—(Woodruff et al. 1997)		
	3% discount rate	$7 ($2–$14)	$13 ($3.5–$26)
	7% discount rate	$7 ($2–$13)	$12 ($3.1–$23)
Premature mortality—Derived from Expert Elicitation [c, d, e].	Adult, age 25+—Lower bound (Expert K)		
	3% discount rate	$1,500 ($0–$7,700)	$3,600 ($0–$18,000)
	7% discount rate	$1,400 ($0–$7,000)	$3,200 ($0–$16,000)
	Adult, age 25+—Upper bound (Expert E)		
	3% discount rate	$15,000 ($4,100–$30,000)	$36,000 ($9,500–$70,000)
	7% discount rate	$14,000 ($3,700–$27,000)	$32,000 ($8,600–$63,000)

[197] Industrial Economics, Incorporated (IEc). 2006. Expanded Expert Judgment Assessment of the Concentration-Response Relationship Between $PM_{2.5}$ Exposure and Mortality. Peer Review Draft. Prepared for: Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC. August.

TABLE VI–3.—ESTIMATED MONETARY VALUE IN REDUCTIONS IN INCIDENCE OF HEALTH AND WELFARE EFFECTS—Continued

[In millions of 2006$] [a, b]

		2020	2030
Chronic bronchitis (adults, 26 and over)		$150 ($12–$500)	$340 ($28–$1,100)
Non-fatal acute myocardial infarctions:			
3% discount rate		$110 ($34–$230)	$260 ($74–$550)
7% discount rate		$110 ($31–$230)	$250 ($69–$540)
Hospital admissions for respiratory causes		$2.1 ($1.0–$3.2)	$4.9 ($2.4–$7.3)
Hospital admissions for cardiovascular causes		$6.7 ($4.2–$9.2)	$17 ($11–$23)
Emergency room visits for asthma		$0.15 ($0.08–$0.23)	$0.33 ($0.18–$0.49)
Acute bronchitis (children, age 8–12)		$0.08 ($0–$0.2)	$0.17 ($0–$0.42)
Lower respiratory symptoms (children, 7–14)		$0.18 ($0.07–$0.33)	$0.40 ($0.15–$0.73)
Upper respiratory symptoms (asthma, 9–11)		$0.21 ($0.06–$0.46)	$0.46 ($0.13–$1.0)
Asthma exacerbations		$0.45 ($0.05–$1.3)	$1.0 ($0.11–$2.9)
Work loss days		$8.9 ($7.7–$10)	$18 ($16–$21)
Minor restricted-activity days (MRADs)		$22 ($13–$32)	$46 ($27–$66)
Recreational Visibility, 86 Class I areas		$170 (na)[f]	$400 (na)
Ozone-related Health Effect			
Premature Mortality, All ages—Derived from NMMAPS.	Bell et al., 2004	$100 (−$170–$420)	$440 (−$340–$1,400)
Premature Mortality, All ages—Derived from Meta-analyses.	Bell et al., 2005	$340 (−$360–$1,200)	$1,400 (−$550–$3,900)
	Ito et al., 2005	$460 (−$260–$1,400)	$1,900 (−$120–$4,700)
	Levy et al., 2005	$480 (−$110–$1,300)	$2,000 ($280–$4,400)
Premature Mortality—Assumption that association between ozone and mortality is not causal.		$0	$0
Hospital admissions—Respiratory causes (children, under 2; adult, 65 and older).		−$0.54 (−$4.6–$3.3)	$2.7 (−$11–$17)
Emergency room visit for asthma (all ages)		$0.03 (−$0.03–$0.1)	$0.09 (−$0.07–$0.30)
Minor restricted activity days (adults, age 18–65)		$2.5 (−$4.0–$9.9)	$8.8 (−$7.8–$28)
School absence days		$2.9 (−$1.5–$6.8)	$11 (−$1.3–$21)
Worker Productivity		$0.53 (na)[f]	$2.9 (na)[f]

Notes:

([a]) Monetary benefits are rounded to two significant digits for ease of presentation and computation. PM and ozone benefits are nationwide.

([b]) Monetary benefits adjusted to account for growth in real GDP per capita between 1990 and the analysis year (2020 or 2030)

([c]) Valuation assumes discounting over the SAB recommended 20 year segmented lag structure. Results reflect the use of 3 percent and 7 percent discount rates consistent with EPA and OMB guidelines for preparing economic analyses (EPA, 2000; OMB, 2003).

([d]) The valuation of adult premature mortality, derived either from the epidemiology literature or the expert elicitation, is not additive. Rather, the valuations represent a range of possible mortality benefits.

([e]) Based on effect estimates derived from the full-scale expert elicitation assessing the uncertainty in the concentration-response function for PM-related premature mortality (IEc, 2006).[198] The effect estimates of five of the twelve experts included in the elicitation panel fall within the empirically-derived range provided by the ACS and Six-Cities studies. One of the experts fall below this range and six of the experts are above this range. Although the overall range across experts is summarized in this table, the full uncertainty in the estimates is reflected by the results for the full set of 12 experts. The twelve experts' judgments as to the likely mean effect estimate are not evenly distributed across the range illustrated by arraying the highest and lowest expert means.

([f]) We are unable at this time to characterize the uncertainty in the estimate of benefits of worker productivity and improvements in visibility at Class I areas. As such, we treat these benefits as fixed and add them to all percentiles of the health benefits distribution.

TABLE VI–4.—TOTAL MONETIZED BENEFITS OF THE FINAL LOCOMOTIVE AND MARINE ENGINE RULE—3% DISCOUNT RATE

2020			2030		
Ozone mortality function	Reference	Mean total benefits	Ozone mortality function	Reference	Mean total benefits
Total Ozone and PM Benefits (Billions, 2006$)—PM Mortality Derived From the ACS Study					
NMMAPS	Bell et al., 2004	$4.0	NMMAPS	Bell et al., 2004	$9.7
Meta-analysis	Bell et al., 2005	$4.2	Meta-analysis	Bell et al., 2005	$11
	Ito et al., 2005	$4.4		Ito et al., 2005	$11
	Levy et al., 2005	$4.4		Levy et al., 2005	$11

[198] Industrial Economics, Incorporated (IEc). 2006. Expanded Expert Judgment Assessment of the Concentration-Response Relationship between $PM_{2.5}$ Exposure and Mortality. Peer Review Draft. Prepared for: Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC. August.

TABLE VI–4.—TOTAL MONETIZED BENEFITS OF THE FINAL LOCOMOTIVE AND MARINE ENGINE RULE—3% DISCOUNT RATE—Continued

2020			2030		
Ozone mortality function	Reference	Mean total benefits	Ozone mortality function	Reference	Mean total benefits
Assumption that association is not causal		$3.9	Assumption that association is not causal		$9.2
Total Ozone and PM Benefits (Billions, 2006$)—PM Mortality Derived From Expert Elicitation (Lowest and Highest Estimate)					
NMMAPS	Bell et al., 2004	$2.1 to $16	NMMAPS	Bell et al., 2004	$5.2 to $37
Meta-analysis	Bell et al., 2005	$2.4 to $16	Meta-analysis	Bell et al., 2005	$6.2 to $38
	Ito et al., 2005	$2.5 to $16		Ito et al., 2005	$6.7 to $39
	Levy et al., 2005	$2.5 to $16		Levy et al., 2005	$6.7 to $39
Assumption that association is not causal		$2.0 to $16	Assumption that association is not causal		$4.7 to $37

TABLE VI–5.—TOTAL MONETIZED BENEFITS OF THE FINAL LOCOMOTIVE AND MARINE ENGINE RULE—7% DISCOUNT RATE

Total Ozone and PM Benefits (Billions, 2006$)—PM Mortality Derived From Epidemiology Studies (ACS and Six Cities)

2020			2030		
Ozone mortality function	Reference	Mean total benefits	Ozone mortality function	Reference	Mean total benefits
NMMAPS	Bell et al., 2004	$3.7	NMMAPS	Bell et al., 2004	$8.9
Meta-analysis	Bell et al., 2005	$3.9	Meta-analysis	Bell et al., 2005	$9.8
	Ito et al., 2005	$4.0		Ito et al., 2005	$10
	Levy et al., 2005	$4.0		Levy et al., 2005	$10
Assumption that association is not causal		$3.6	Assumption that association is not causal		$8.4

Total Ozone and PM Benefits (Billions, 2006$)—PM Mortality Derived From Expert Elicitation (Lowest and Highest Estimate)

2020			2030		
Ozone mortality function	Reference	Mean total benefits	Ozone mortality function	Reference	Mean total benefits
NMMAPS	Bell et al., 2004	$2.0 to $14	NMMAPS	Bell et al., 2004	$4.8 to $34
Meta-analysis	Bell et al., 2005	$2.2 to $15	Meta-analysis	Bell et al., 2005	$5.8 to $35
	Ito et al., 2005	$2.3 to $15		Ito et al., 2005	$6.3 to $35
	Levy et al., 2005	$2.3 to $15		Levy et al., 2005	$6.4 to $35
Assumption that association is not causal		$1.9 to $14	Assumption that association is not causal		$4.4 to $33

TABLE VI–6.—UNQUANTIFIED AND NON-MONETIZED POTENTIAL EFFECTS OF THE FINAL LOCOMOTIVE AND MARINE ENGINE STANDARDS

Pollutant/Effects	Effects Not Included in Analysis—Changes in:
Ozone Health [a]	Chronic respiratory damage [b]
	Premature aging of the lungs [b]
	Non-asthma respiratory emergency room visits
	Exposure to UVb (+/−) [e]
Ozone Welfare	Yields for
	—commercial forests
	—some fruits and vegetables
	—non-commercial crops
	Damage to urban ornamental plants
	Impacts on recreational demand from damaged forest aesthetics
	Ecosystem functions
	Exposure to UVb (+/−) [e]
PM Health [c]	Premature mortality—short term exposures [d]
	Low birth weight
	Pulmonary function
	Chronic respiratory diseases other than chronic bronchitis
	Non-asthma respiratory emergency room visits
	Exposure to UVb (+/−) [e]
PM Welfare	Residential and recreational visibility in non-Class I areas
	Soiling and materials damage
	Damage to ecosystem functions

TABLE VI–6.—UNQUANTIFIED AND NON-MONETIZED POTENTIAL EFFECTS OF THE FINAL LOCOMOTIVE AND MARINE ENGINE STANDARDS—Continued

Pollutant/Effects	Effects Not Included in Analysis—Changes in:
	Exposure to UVb (+/−)[e]
Nitrogen and Sulfate Deposition Welfare	Commercial forests due to acidic sulfate and nitrate deposition
	Commercial freshwater fishing due to acidic deposition
	Recreation in terrestrial ecosystems due to acidic deposition
	Existence values for currently healthy ecosystems
	Commercial fishing, agriculture, and forests due to nitrogen deposition
	Recreation in estuarine ecosystems due to nitrogen deposition
	Ecosystem functions
	Passive fertilization
CO Health	Behavioral effects
HC/Toxics Health[f]	Cancer (benzene, 1,3-butadiene, formaldehyde, acetaldehyde)
	Anemia (benzene)
	Disruption of production of blood components (benzene)
	Reduction in the number of blood platelets (benzene)
	Excessive bone marrow formation (benzene)
	Depression of lymphocyte counts (benzene)
	Reproductive and developmental effects (1,3-butadiene)
	Irritation of eyes and mucus membranes (formaldehyde)
	Respiratory irritation (formaldehyde)
	Asthma attacks in asthmatics (formaldehyde)
	Asthma-like symptoms in non-asthmatics (formaldehyde)
	Irritation of the eyes, skin, and respiratory tract (acetaldehyde)
	Upper respiratory tract irritation and congestion (acrolein)
HC/Toxics Welfare	Direct toxic effects to animals
	Bioaccumulation in the food chain
	Damage to ecosystem function
	Odor

Notes:
(a) The public health impact of biological responses such as increased airway responsiveness to stimuli, inflammation in the lung, acute inflammation and respiratory cell damage, and increased susceptibility to respiratory infection are likely partially represented by our quantified endpoints.
(b) The public health impact of effects such as chronic respiratory damage and premature aging of the lungs may be partially represented by quantified endpoints such as hospital admissions or premature mortality, but a number of other related health impacts, such as doctor visits and decreased athletic performance, remain unquantified.
(c) In addition to primary economic endpoints, there are a number of biological responses that have been associated with PM health effects including morphological changes and altered host defense mechanisms. The public health impact of these biological responses may be partly represented by our quantified endpoints.
(d) While some of the effects of short-term exposures are likely to be captured in the estimates, there may be premature mortality due to short-term exposure to PM not captured in the cohort studies used in this analysis. However, the PM mortality results derived from the expert elicitation do take into account premature mortality effects of short term exposures.
(e) May result in benefits or disbenefits.
(f) Many of the key hydrocarbons related to this rule are also hazardous air pollutants listed in the Clean Air Act.

(3) What Are the Significant Limitations of the Benefit-Cost Analysis?

Every benefit-cost analysis examining the potential effects of a change in environmental protection requirements is limited to some extent by data gaps, limitations in model capabilities (such as geographic coverage), and uncertainties in the underlying scientific and economic studies used to configure the benefit and cost models. Limitations of the scientific literature often result in the inability to estimate quantitative changes in health and environmental effects, such as potential increases in premature mortality associated with increased exposure to carbon monoxide. Deficiencies in the economics literature often result in the inability to assign economic values even to those health and environmental outcomes which can be quantified. These general uncertainties in the underlying scientific and economics literature, which can lead to valuations that are higher or lower, are discussed in detail in the RIA and its supporting references. Key uncertainties that have a bearing on the results of the benefit-cost analysis of the final standards include the following:

- The exclusion of potentially significant and unquantified benefit categories (such as health, odor, and ecological benefits of reduction in air toxics, ozone, and PM);
- Errors in measurement and projection for variables such as population growth;
- Uncertainties in the estimation of future year emissions inventories and air quality;
- Uncertainty in the estimated relationships of health and welfare effects to changes in pollutant concentrations including the shape of the C–R function, the size of the effect estimates, and the relative toxicity of the many components of the PM mixture;
- Uncertainties in exposure estimation; and
- Uncertainties associated with the effect of potential future actions to limit emissions.

As Table VI–3 indicates, total benefits are driven primarily by the reduction in premature mortalities each year. Some key assumptions underlying the premature mortality estimates include the following, which may also contribute to uncertainty:

- Inhalation of fine particles is causally associated with premature death at concentrations near those experienced by most Americans on a daily basis. Although biological mechanisms for this effect have not yet been completely established, the weight of the available epidemiological, toxicological, and experimental evidence supports an assumption of causality. The impacts of including a probabilistic representation of causality were explored in the expert elicitation-

based results of the recently published PM NAAQS RIA. Consistent with that analysis, we discuss the implications of these results in the RIA for the final standards.

- All fine particles, regardless of their chemical composition, are equally potent in causing premature mortality. This is an important assumption, because PM produced via transported precursors emitted from locomotive and marine engines may differ significantly from PM precursors released from electric generating units and other industrial sources. However, no clear scientific grounds exist for supporting differential effects estimates by particle type.
- The C–R function for fine particles is approximately linear within the range of ambient concentrations under consideration (above the assumed threshold of 10 μg/m^3). Thus, the estimates include health benefits from reducing fine particles in areas with varied concentrations of PM, including both regions that may be in attainment with $PM_{2.5}$ standards and those that are at risk of not meeting the standards.
- There is considerable uncertainty in the magnitude of the association between ozone and premature mortality. The range of ozone benefits associated with the final standards is estimated based on the risk of several sources of ozone-related mortality effect estimates. Recognizing that additional research is necessary to clarify the underlying mechanisms causing these effects, we also consider the possibility that the observed associations between ozone and mortality may not be causal in nature. EPA has requested advice from the National Academy of Sciences on how best to quantify uncertainty in the relationship between ozone exposure and premature mortality in the context of quantifying benefits.

Despite these uncertainties, we believe this benefit-cost analysis provides a conservative estimate of the estimated economic benefits of the final standards in future years because of the exclusion of potentially significant benefit categories. Acknowledging benefits omissions and uncertainties, we present a best estimate of the total benefits based on our interpretation of the best available scientific literature and methods supported by EPA's technical peer review panel, the Science Advisory Board's Health Effects Subcommittee (SAB–HES). The National Academies of Science (NRC, 2002) also reviewed EPA's methodology for analyzing the health benefits of measures taken to reduce air pollution. EPA addressed many of these comments in the analysis of the final PM NAAQS.[199, 200] The analysis of the final standards incorporates this most recent work to the extent possible.

(4) Benefit-Cost Analysis

In estimating the net benefits of the final standards, the appropriate cost measure is ''social costs.'' Social costs represent the welfare costs of a rule to society. These costs do not consider transfer payments (such as taxes) that are simply redistributions of wealth. Table VI–7 contains the estimates of monetized benefits and estimated social welfare costs for the final rule and each of the final control programs. The annual social welfare costs of all provisions of this final rule are described more fully in Section VII of this preamble.

The results in Table VI–7 suggest that the 2020 monetized benefits of the final standards are greater than the expected social welfare costs. Specifically, the annual benefits of the total program will range between $3.9 to $8.8 billion annually in 2020 using a three percent discount rate, or between $3.6 to $8.0 billion assuming a 7 percent discount rate, compared to estimated social costs of approximately $330 million in that same year. These benefits are expected to increase to between $9.2 and $22 billion annually in 2030 using a three percent discount rate, or between $8.4 and $20 billion assuming a 7 percent discount rate, while the social costs are estimated to be approximately $740 million. Though there are a number of health and environmental effects associated with the final standards that we are unable to quantify or monetize (see Table VI–6), the benefits of the final standards far outweigh the projected costs. When we examine the benefit-to-cost comparison for the rule standards separately, we also find that the benefits of the specific engine standards far outweigh their projected costs.

TABLE VI–7.—SUMMARY OF ANNUAL BENEFITS, COSTS, AND NET BENEFITS OF THE FINAL LOCOMOTIVE AND MARINE ENGINE STANDARDS (MILLIONS, 2006$) [a]

Description	2020 (Millions of 2006 dollars)	2030 (Millions of 2006 dollars)
Estimated Social Costs: [b]		
Locomotive:	$200	$460.
Marine:	$140	$280.
Total Social Costs	$330	$740.
Estimated Health Benefits of the Final Standards: [c, d, e, f]		
Locomotive:		
3 percent discount rate	$2,000 to $4,400	$4,300 to $11,000.
7 percent discount rate	$1,900 to $4,000	$4,000 to $10,000.
Marine:		
3 percent discount rate	$1,900 to $4,400	$4,900 to $11,000.
7 percent discount rate	$1,700 to $4,000	$4,400 to $10,000
Total Benefits:		
3 percent discount rate	$3,900 to $8,800	$9,200 to $22,000.
7 percent discount rate	$3,600 to $8,000	$8,400 to $20,000.
Annual Net Benefits (Total Benefits – Total Costs):		
3 percent discount rate	$3,600 to $8,500	$8,500 to $21,000
7 percent discount rate	$3,300 to $7,700	$7,700 to $19,000

Notes:

[a] All estimates represent annualized benefits and costs anticipated for the years 2020 and 2030. Totals may not sum due to rounding.

[199] National Research Council (NRC). 2002. Estimating the Public Health Benefits of Proposed Air Pollution Regulations. The National Academies Press: Washington, DC.

[200] U.S. Environmental Protection Agency. October 2006. Final Regulatory Impact Analysis (RIA) for the Proposed National Ambient Air Quality Standards for Particulate Matter. Prepared by: Office of Air and Radiation. Available at *http://www.epa.gov/ttn/ecas/ria.html.*

[b] The calculation of annual costs does not require amortization of costs over time. Therefore, the estimates of annual cost do not include a discount rate or rate of return assumption (see Chapter 7 of the RIA). In Section V, however, we do use both a 3 percent and 7 percent social discount rate to calculate the net present value of total social costs consistent with EPA and OMB guidelines for preparing economic analyses.

[c] Total includes ozone and $PM_{2.5}$ benefits. Range was developed by adding the estimate from the ozone premature mortality function, including an assumption that the association is not causal, to both estimates of $PM_{2.5}$-related premature mortality derived from the ACS (Pope et al., 2002) and Six-Cities (Laden et al., 2006) studies, respectively.

[d] Annual benefits analysis results reflect the use of a 3 percent and 7 percent discount rate in the valuation of premature mortality and nonfatal myocardial infarctions, consistent with EPA and OMB guidelines for preparing economic analyses (US EPA, 2000 and OMB, 2003).[201, 202]

[e] Valuation of premature mortality based on long-term PM exposure assumes discounting over the SAB recommended 20-year segmented lag structure described in the Regulatory Impact Analysis for the Final Clean Air Interstate Rule (March, 2005).

[f] Not all possible benefits or disbenefits are quantified and monetized in this analysis. Potential benefit categories that have not been quantified and monetized are listed in Table VI–6.

VII. Alternative Program Options

The program we are finalizing today represents a broad and comprehensive approach to reducing emissions from locomotive and marine diesel engines. As we developed this final rule, we considered a number of alternatives with regard to the scope and timing of the standards. After carefully evaluating these alternatives, we believe that our new program provides the best opportunity for achieving timely and substantial emission reductions from locomotive and marine diesel engines. Our final program balances a number of key factors: (1) Achieving significant emissions reductions as early as possible, (2) providing appropriate lead time to develop and apply advanced control technologies, and (3) coordinating requirements in this final rule with existing highway and nonroad diesel engine programs. The alternative scenarios described here were constructed to further evaluate each individual aspect of our program, and have enabled us to achieve the appropriate balance between these key factors. This section presents a summary of our analysis of these alternative control scenarios. For a more detailed explanation of our analysis, including a year by year breakout of expected costs and emission reductions, please refer to Chapter 8 of the Regulatory Impact Analysis (RIA) prepared for this final rulemaking.

A. Summary of Alternatives

(1) Alternative 1: Proposed Program From the Notice of Proposed Rulemaking

Alternative 1 examines the differences between the program we proposed and the program we are finalizing in this rulemaking. The proposal consisted of a three-part program. First, it proposed more stringent standards for existing locomotives that would apply when they were remanufactured. These standards would go into effect as soon as a certified remanufacture system became available. Second, we proposed a set of near-term emission standards, referred to as Tier 3, for freshly manufactured locomotives and marine engines that reflected the application of technologies to reduce engine-out PM and NO_X. Third, we proposed longer-term standards, referred to as Tier 4, that utilized high-efficiency catalytic aftertreatment technology enabled by the availability of ULSD. These standards would phase in over time, beginning in 2014. In addition, we proposed eliminating emissions from unnecessary locomotive idling.

The final rule makes a number of important changes to the program originally set out in the proposal which we believe will yield significantly greater overall NO_X and PM reductions, especially in the critical early years of the program. In particular, the adoption of standards for remanufactured marine engines and a 2-year pull-ahead of the Tier 4 NO_X requirements for line-haul locomotives and for 2000–3700 kW marine engines provide greater near-term reductions than the proposal. The final rule also expands the remanufactured locomotive program to include Class II railroads.

As a stand-alone program, through the year 2040 Alternative 1 provides $PM_{2.5}$ reductions of 286,000 tons NPV 3%, or 121,000 tons NPV 7%, and NO_X reductions of 8,140,000 tons NPV 3%, or 3,320,000 tons NPV 7%. The cost of this alternative through 2040 is estimated to be $8,760 million NPV 3%, or $3,900 million NPV 7%. In 2020, this alternative provides monetized health and welfare benefits of $3.3 billion at a 3% discount rate, or $3.0 billion at a 7% discount rate, and $8.8 billion in 2030 at a 3% discount rate, or $8.0 billion at a 7% discount rate. Through 2040 our final program provides additional $PM_{2.5}$ reductions of 22,000 tons NPV 3%, or 13,000 tons NPV 7%, and additional NO_X reductions of 620,000 tons NPV 3%, or 390,000 tons NPV 7%. Through 2040, the additional costs of our final program will be $650 million NPV 3%, or $410 million NPV 7%. The additional $PM_{2.5}$ monetized health and welfare benefits in 2020 of our final program are $0.6 billion at a 3% discount rate, or $0.6 billion at a 7% discount rate, while in 2030 the additional monetized health and welfare benefits total $0.4 billion at a 3% discount rate, or $0.4 billion at a 7% discount rate.

(2) Alternative 2: Exclusion of Remanufacturing Standards

Alternative 2 examines the potential impacts of the locomotive and marine remanufacturing programs by excluding them from the analysis (see sections III.B.(1)(a)(i), III.B.(1)(b), and III.B.(2)(b) of this Preamble for more details on the remanufacturing standards). As a stand-alone program, Alternative 2 provides $PM_{2.5}$ reductions of 240,000 tons NPV 3%, or 96,000 tons NPV 7%, and NO_X reductions of 7,640,000 tons NPV 3%, or 3,030,000 tons NPV 7%, through the year 2040. The cost of this alternative through 2040 is estimated to be $8,080 million NPV 3%, or $3,430 million NPV 7%. In 2020, this alternative provides monetized health and welfare benefits of $2.5 billion at a 3% discount rate, or $2.3 billion at a 7% discount rate, and $8.2 billion in 2030 at a 3% discount rate, or $7.5 billion at a 7% discount rate. Compared to the final program, our analysis shows that by 2040 eliminating the locomotive and marine remanufacture programs lessen $PM_{2.5}$ emission reductions by 68,000 tons NPV 3%, or 38,000 tons NPV 7%, and NO_X emission reductions by nearly 1,120,000 tons NPV 3%, or 680,000 tons NPV 7%. The cost of this alternative, as compared to our final program through 2040, is estimated to be $1,330 million less NPV 3%, or $880 million less NPV 7%. Compared to our final program, eliminating the locomotive and marine remanufacture programs reduce the monetized health and welfare benefits by $1.4 billion at a 3% discount rate, or $1.3 billion at a 7% discount rate in 2020, and $1.0 billion at a 3% discount rate, or $0.9 billion at a 7% discount rate in 2030.

(3) Alternative 3: Elimination of Tier 3

Alternative 3 eliminates the Tier 3 standards, while retaining the Tier 4 standards and the combined marine and

[201] U.S. Environmental Protection Agency, 2000. Guidelines for Preparing Economic Analyses. *www.yosemite1.epa.gov/ee/epa/eed/hsf/pages/Guideline.html.*

[202] Office of Management and Budget, The Executive Office of the President, 2003. Circular A–4. *http://www.whitehouse.gov/omb/circulars.*

locomotive remanufacturing requirements. As a stand-alone program, Alternative 3 provides $PM_{2.5}$ reductions of 237,000 tons NPV 3%, or 100,000 tons NPV 7%, and NO_X reductions of 8,360,000 tons NPV 3%, or 3,530,000 tons NPV 7%, through the year 2040. The cost of this alternative through 2040 is estimated to be $9,240 million NPV 3%, or $4,160 million NPV 7%. In 2020, this alternative provides monetized health and welfare benefits of $2.8 billion at a 3% discount rate, or $2.6 billion at a 7% discount rate, and $7.8 billion in 2030 at a 3% discount rate, or $7.1 billion at a 7% discount rate. Comparing this alternative to our final program allows us to consider the value of the Tier 3 standards on their own merits. Specifically, this alternative would lessen $PM_{2.5}$ emissions reductions by nearly 71,000 tons NPV 3%, or 34,000 tons NPV 7%, and NO_X emissions by 400,000 tons NPV 3%, or 180,000 tons NPV 7%. The cost of this alternative, as compared to our final program through 2040, is estimated to be $170 million less at NPV 3%, or $150 million less at NPV 7%. The monetized health and welfare benefits that would be forgone by eliminating Tier 3 are $1.1 billion at a 3% discount rate, or $1.0 billion at a 7% discount rate in 2020, and $1.4 billion at a 3% discount rate, or $1.3 billion at a 7% discount rate in 2030. Although the remanufacturing programs provide substantial benefits in the near-term, as evidenced by the analysis of Alternative 2, it is clear that Tier 3 also plays an important role in providing both near- and long-term emission reductions.

(4) Alternative 4: Tier 4 Exclusively in 2013

Alternative 4 most closely reflects the program described in our Advanced Notice of Proposed Rulemaking, whereby we would set new aftertreatment based emission standards as soon as possible. In this case, we believe the earliest that such standards could logically be started is in 2013 (three months after the introduction of 15 ppm ULSD in this sector). Alternative 4 eliminates our Tier 3 standards along with the locomotive and marine remanufacturing standards, while pulling the Tier 4 standards ahead to 2013 for all portions of the Tier 4 program. We are unable to make an accurate estimate of the cost for such an approach since we do not believe it to be technically feasible at this time. However, we have reported a cost in the summary table reflecting the same cost estimation method we used for our primary case and have denoted unestimated additional costs as 'C'. These additional unestimated costs would include costs for additional engine test cells, engineering staff, and engineering facilities necessary to introduce Tier 4 early. As a stand-alone program, Alternative 4 provides $PM_{2.5}$ reductions of 249,000 tons NPV 3%, or 101,000 tons NPV 7%, and NO_X reductions of 8,320,000 tons NPV 3%, or 3,420,000 tons NPV 7% through the year 2040. In 2020, this alternative provides monetized health and welfare benefits of $3.0 billion at a 3% discount rate, or $2.8 billion at a 7% discount rate, and $8.4 billion in 2030 at a 3% discount rate, or $7.6 billion at a 7% discount rate. Through 2040, this alternative, as compared to our final program, would decrease $PM_{2.5}$ reductions by more than 59,000 NPV 3% tons, or 33,000 tons NPV 7%, and NO_X emissions by 440,000 tons NPV 3%, or 290,000 tons NPV 7%. Compared to our final program, the reduction in monetized health and welfare benefits of this alternative would be $0.9 billion at a 3% discount rate, or $0.8 billion at a 7% discount rate in 2020, while in 2030 the reductions in monetized benefits would be $0.8 billion at a 3% discount rate, or $0.8 billion at a 7% discount rate.

B. Summary of Results

A summary of the four alternatives is contained in Table VII–1 and Table VII–2 below. The PM and NO_X emissions reductions from the alternatives described here compare favorably—in terms of cost effectiveness—to other mobile source control programs that have been or will soon be implemented. These alternatives show that each element of our comprehensive program: the locomotive and marine remanufacturing programs, the near-term Tier 3 emission standards, and the long-term Tier 4 emission standards, represent valuable emission control programs on their own. The collective program results in the greatest emission reductions we believe to be possible giving consideration to all of the elements described in this final rule. Overall, our final program will provide very large reductions in PM, NO_X, and toxic compounds in both the near-term and the long-term. These reductions will be achieved in a manner that: (1) Leverages technology developments in other diesel sectors, (2) aligns well with the clean diesel fuel requirements already being implemented, and (3) provides the lead time needed to deal with the significant engineering design workload that is involved.

TABLE VII–1.—SUMMARY OF INVENTORY AND COSTS AT NPV 3% AND 7%

Alternatives	Standards	Estimated $PM_{2.5}$ reductions 2006–2040		Estimated NO_X reductions 2006–2040		Total costs [a] millions 2006–2040	
		NPV 3%	NPV 7%	NPV 3%	NPV 7%	NPV 3%	NPV 7%
Final Rule	• Locomotive Remanufacturing .. • Marine Remanufacturing, • Tier 3 Near-term program, • Tier 4 Long-term standards	308,000	134,000	8,760,000	3,710,000	$9,410	$4,310
Alternative 1: Proposed Case (NPRM).	• Proposed Locomotive Remanufacturing program,. • Proposed Tier 3 Near-term program, • Proposed Tier 4 Long-term standards	286,000	121,000	8,140,000	3,320,000	8,760	3,900
Alternative 2: Exclusion of Remanufacturing Standards.	• Tier 3 Near-term program, ... • Tier 4 Long-term standards	240,000	96,000	7,640,000	3,030,000	8,080	3,430
Alternative 3: Elimination of Tier 3.	• Locomotive Remanufacturing, • Marine Remanufacturing, • Tier 4 Long-term standards	237,000	10,000	8,360,000	3,530,000	9,240	4,160

TABLE VII–1.—SUMMARY OF INVENTORY AND COSTS AT NPV 3% AND 7%—Continued

Alternatives	Standards	Estimated $PM_{2.5}$ reductions 2006–2040		Estimated NO_X reductions 2006–2040		Total costs [a] millions 2006–2040	
		NPV 3%	NPV 7%	NPV 3%	NPV 7%	NPV 3%	NPV 7%
Alternative 4: Tier 4 Exclusively in 2013.	• Tier 4 Long-term standards only in 2013.	249,000	101,000	8,320,000	3,420,000	9,070+C	3950+C

Note: [a] 'C' represents the additional costs necessary to accelerate the introduction of Tier 4 technologies that we are unable to estimate at this time.

TABLE VII–2.—INVENTORY, COST, AND BENEFITS FOR 2020 AND 2030

	$PM_{2.5}$ emissions reductions (tons)		NO_X emissions reductions (tons)		Total costs[a] (millions)		Benefits[b,c] (billions) $PM_{2.5}$ only 3% discount rate		Benefits[b,c] (billions) $PM_{2.5}$ only 7% discount rate	
	2020	2030	2020	2030	2020	2030	2020	2030	2020	2030
Final Rule	14,000	27,000	370,000	790,000	$350	$760	$3.9	$9.2	$3.6	$8.4
Alternative 1: Proposed Case (NPRM)	13,000	26,000	310,000	780,000	300	750	3.3	8.8	3.0	8.0
Alternative 2: Exclusion of Remanufacturing Standards	8,800	24,000	280,000	760,000	290	720	2.5	8.2	2.3	7.5
Alternative 3: Elimination of Tier 3	8,800	21,000	350,000	760,000	350	760	2.8	7.8	2.6	7.1
Alternative 4: Tier 4 Exclusively in 2013	10,000	24,000	350,000	790,000	360	780	3.0	8.4	2.8	7.6

Notes:

[a] 'C' represents the additional costs necessary to accelerate the introduction of Tier 4 technologies that we are unable to estimate at this time.

[b] Note that the range of PM-related benefits reflects the use of an empirically-derived estimate of PM mortality benefits, based on the ACS cohort study (Pope et al., 2002).

[c] Annual benefits analysis results reflect the use of a 3 percent and 7 percent discount rate in the valuation of premature mortality and nonfatal myocardial infarctions, consistent with EPA and OMB guidelines for preparing economic analyses (US EPA, 2000 and OMB, 2003). U.S. Environmental Protection Agency, 2000. Guidelines for Preparing Economic Analyses. *http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/Guidelines.html.*

VIII. Public Participation

Many interested parties participated in the rulemaking process that culminates with this final rule. This process provided opportunity for submitting written public comments following the proposal that we published on April 3, 2007 (72 FR 15938). We considered these comments in developing the final rule. In addition, we held public hearings on the proposed rulemaking on May 8 and 10, 2007, and we have considered comments presented at the hearings.

Throughout the rulemaking process, EPA met with stakeholders including representatives from industry, government, environmental organizations, and others. The program we are finalizing today was developed as a collaborative effort with these stakeholders.

We have prepared a detailed Summary and Analysis of Comments document, which describes comments we received on the proposal and our response to each of these comments. The Summary and Analysis of Comments is available in the docket for this rule at the Internet address listed under **ADDRESSES**, as well as on the Office of Transportation and Air Quality Web site (*www.epa.gov/otaq/locomotv.htm* and *www.epa.gov/otaq/marine.htm*). In addition, comments and responses for key issues are included throughout this preamble.

IX. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under section 3(f)(1) of Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is an ''economically significant regulatory action'' because it is likely to have an annual effect on the economy of $100 million or more. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under EO 12866, and any changes made by EPA after submission to OMB have been documented in the docket for this action.

In addition, EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis is contained in the final Regulatory Impact Analysis that was prepared for this rulemaking, and is available in the docket at the docket internet address listed under **ADDRESSES** above.

B. Paperwork Reduction Act

The information collection requirements in this final rule have been submitted for approval to the Office of Management and Budget (OMB) under the *Paperwork Reduction Act,* 44 U.S.C. 3501 *et seq.* EPA may not conduct the information collection requirements in this rule and may not penalize anyone for failing to comply with the information collection requirements in the rule unless they are currently approved by OMB.

EPA plans to collect information to ensure that locomotives and marine diesel engines conform to the regulations throughout their useful lives. Section 208(a) of the Clean Air Act requires that manufacturers provide information the Administrator may reasonably require to determine compliance with the regulations; submission of the information is therefore mandatory. We will consider confidential all information meeting the requirements of Section 208(c) of the Clean Air Act.

The annual public reporting and recordkeeping burden for this collection of information is estimated to be 287 hours per respondent for locomotives, and 149 hours per respondent for marine. The projected number of

respondents and annual reporting, recordkeeping, and cost burdens to respondents are as follows:

- Estimated total number of potential respondents: for locomotives—7; for marine—13.
- Estimated total annual burden hours: for locomotives—14,040 (2,010 per respondent); for marine—25,167 (1,940 per respondent).
- Estimated total annual costs: for locomotives—$1.65 million ($315,000 per respondent); for marine—$1.45 million ($112,000 per respondent).

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9. When this ICR is approved by OMB, EPA will publish a technical amendment to 40 CFR part 9 in the **Federal Register** to display the OMB control number for the approved information collection requirements contained in this final rule.

C. Regulatory Flexibility Act

(1) Overview

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201 (see Table IX–1, below); (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

TABLE IX–1.—PRIMARY SBA SMALL BUSINESS CATEGORIES POTENTIALLY AFFECTED BY THIS REGULATION

Industry	NAICS [a] Codes	Defined by SBA as a small business if less than or equal to:[b]
Locomotive:		
Manufacturers, remanufacturers and importers of locomotives and locomotive engines	333618, 336510	1,000 employees.
Railroad owners and operators	482110, 482111	1,500 employees.
	482112	500 employees.
Engine repair and maintenance	488210	$6.5 million annual sales.
Marine:		
Manufacturers of freshly manufactured marine diesel engines	333618	1,000 employees.
Ship and boat building; ship building and repairing	336611, 346611	1,000 employees.
Engine repair and maintenance	811310	$6.5 million annual sales.
Water transportation, freight and passenger	483	500 employees.
Water transportation, freight and passenger—Offshore Marine Services	483	$25.5 million annual sales.
Scenic and Sightseeing Transportation, Water	487210	$6.5 million annual sales.
Navigational Services to Shipping	488330	$6.5 million annual sales.
Commercial Fishing	114	$4.0 million annual sales.
Boat building (watercraft not built in shipyards and typically of the type suitable or intended for personal use).	336612	500 employees.

Notes:
[a] North American Industry Classification System
[b] According to SBA's regulations (13 CFR 121), businesses with no more than the listed number of employees or dollars in annual receipts are considered ''small entities'' for RFA purposes.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The small entities directly regulated by this final rule are shown in Table IX–1 (and are not small governmental jurisdictions or small non-profit organizations). We have determined that about five small entities representing less than one percent of the total number of companies affected will have an estimated impact exceeding three percent of their annual sales revenues. The vast majority of small entities (about several thousand small companies) will have an estimated impact of less than one percent on their annual sales revenues. (An analysis of the impacts of the rule on small entities was performed for the rule, and can be found in the docket for this rulemaking.[203, 204])

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities, as described below.

[203] U.S. EPA, Assessment and Standards Division, *Locomotive and Marine Diesel RFA/SBREFA Screening Analysis,* Memorandum from Chester J. France to Alexander Cristofaro of U.S. EPA's Office of Policy, Economics, and Innovation, September 25, 2006.

[204] U.S. EPA, Assessment and Standards Division, *Supplement to Locomotive and Marine Diesel RFA/SBREFA Screening Analysis—Marine Existing Fleet Program Impact Analysis,* Memorandum from Lucie Audette and Bryan Manning to Docket EPA–HQ–OAR–2003–0190, December 12, 2007.

(2) Outreach Efforts and Special Compliance Provisions for Small Entities

In addition to the inputs we sought prior to issuing the proposed rule, we also received additional comments following its publication. First we summarize the pre-proposal outreach, followed by additional comments we received after the proposal was published.

Early on, we sought the input of a number of small entities affected by the rule on potential regulatory flexibility provisions and the needs of these small businesses. For marine diesel engine manufacturers, we had separate meetings with the four small companies in this sector, which are post-manufacture marinizers (companies that purchase a complete or semi-complete engine from an engine manufacturer and modify it for use in the marine environment by changing the engine in ways that may affect emissions). We also met individually with one small commercial vessel builder and a few vessel trade associations whose members include small vessel builders. For locomotive manufacturers and remanufacturers, we met separately with the three small businesses in these sectors, which are all remanufacturers. In addition, we met with a railroad trade association whose members include small railroads. For nearly all meetings, EPA provided each small business with an outreach packet that included background information on this proposed rulemaking; and a document outlining some flexibility provisions for small businesses that we have implemented in past rulemakings. (This outreach packet and a complete summary of our discussions with small entities can be found in the docket for this rulemaking.) [205]

The primary feedback we received from these small entities pre-proposal was to continue the flexibility provisions that we have provided to small entities in earlier locomotive and marine diesel rulemakings. A number of these provisions are listed below. Therefore, we will largely continue the existing flexibility provisions finalized in the 1998 Locomotive and Locomotive Engines Rule (April 16, 1998; 63 FR 18977); our 1999 Commercial Marine Diesel Engines Rule (December 29, 1999; 64 FR 73299) and our 2002 Recreational Diesel Marine program (November 8, 2002; 67 FR 68304).

[205] U.S. EPA, *Summary of Small Business Outreach for Locomotive and Marine Diesel NPRM,* Memorandum to Docket EPA–HQ–OAR–2003–0190 from Bryan Manning, January 18, 2007.

In the proposed rule, we requested comment on an alternative program option—a marine existing fleet or remanufacture program (*Alternative 5: Existing Engines*)—and as described earlier in this preamble, we are finalizing a portion of this alternative. Based on oral testimony at the hearings and written comments (from trade associations, small entities, etc.), we are providing flexibilities to vessel operators and/or marine remanufacturers as described below. For a complete description of the flexibilities in this final rule, please refer to the Certification and Compliance Program, section IV.A.(13)—Small Business Provisions.

(a) Transition Flexibilities

(i) Locomotive Sector

Small locomotive remanufacturers are granted a waiver from production-line and in-use testing for up to five calendar years after this program becomes effective.

Class III railroads qualifying as small businesses are exempt from new Tier 0, 1, and 2 remanufacturing requirements for locomotives in their existing fleets. The Certification and Compliance Program section IV.A.(13) provides a discussion on the revisions being made in this program.

Railroads qualifying as small businesses continue being exempt from the in-use testing program.

(ii) Marine Sector

Post-manufacture marinizers and small-volume manufacturers (annual worldwide production of fewer than 1,000 engines) are allowed to group all engines into one engine family, based on the worst-case emitter.

Small-volume manufacturers producing engines less than or equal to 600 kW (800 hp) are exempted from production-line and deterioration testing (assigned deterioration factors) for Tier 3 standards.

Post-manufacture marinizers qualifying as small businesses and producing engines less than or equal to 600 kW (800 hp) may delay compliance with the Tier 3 standards by one model year.

Post-manufacture marinizers qualifying as small businesses and producing engines less than or equal to 600 kW (800 hp) may delay compliance with the Not-to-Exceed requirements for Tier 3 standards by up to three model years.

Marine engine dressers (modify base engine without affecting the emission characteristics of the engine) are exempted from certification and compliance requirements.

Post-manufacture marinizers, small-volume manufacturers, and small-volume boat builders (less than 500 employees and annual worldwide production of fewer than 100 boats) have hardship relief provisions—i.e., apply for additional time.

For the marine existing fleet or remanufacture program, vessel operators and marine remanufacturers qualifying as small businesses also have hardship relief provisions allowing them if necessary to apply for additional time to comply with program requirements.

Vessel operators who earn less than $5 million in gross annual sales revenue are exempted from the marine existing fleet or remanufacture program. If at some future date annual gross revenues exceed $5 million, they become subject to the existing fleet program at that point.

(b) Small Entity Compliance Information

In addition to the above flexibilities, EPA is also preparing documentation to help small entities comply with this rule. This documentation will be available on the Office of Transportation and Air Quality Web site. Small entities may also contact our office to obtain copies of this documentation.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), P.L. 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with ''Federal mandates'' that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small

governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

This rule contains no federal mandates for state, local, or tribal governments as defined by the provisions of Title II of the UMRA. The rule imposes no enforceable duties on any of these governmental entities. Nothing in the rule would significantly or uniquely affect small governments. EPA has determined that this rule contains federal mandates that may result in expenditures of more than $100 million to the private sector in any single year. Accordingly, EPA has evaluated under section 202 of the UMRA the potential impacts to the private sector. EPA believes that this rule represents the least costly, most cost-effective approach to achieve the statutory requirements of the rule. The costs and benefits associated with this rule are included in the final Regulatory Impact Analysis (RIA), as required by the UMRA. This analysis can be found in chapter 6 of the final RIA. A complete discussion of why the approach being finalized in this action was chosen is located in chapter 8 of the final RIA. EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments.

Thus, this rule is not subject to the requirements of sections 202 and 205 of the UMRA.

E. Executive Order 13132 (Federalism)

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Although section 6 of Executive Order 13132 does not apply to this rule, EPA did consult with representatives of various State and local governments in developing this rule. EPA consulted with representatives from the National Association of Clean Air Agencies (NACAA, formerly STAPPA/ALAPCO), the Northeast States for Coordinated Air Use Management (NESCAUM), and the California Air Resources Board (CARB). These organizations and other state organizations submitted comments on the proposed rule. Their comments are available in the rulemaking docket, and are summarized and addressed in the Summary and Analysis of Comments document (which is also available in the rulemaking docket).

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicited comment on the proposed rule from State and local officials.

F. Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments)

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' This final rule does not have tribal implications, as specified in Executive Order 13175. The rule will be implemented at the Federal level and impose compliance costs only on locomotive manufacturers, locomotive engine manufacturers, locomotive operators, locomotive remanufacturers, marine engine manufacturers, and marine vessel manufacturers. Tribal governments will be affected only to the extent they purchase and use the regulated engines and vehicles. Thus, Executive Order 13175 does not apply to this rule.

Although Executive Order 13175 does not apply to this rule, EPA did solicit additional comment on this rule from tribal officials. A comment was received from one tribal government; that comment is available in the rulemaking docket, and is summarized and addressed in the Summary and Analysis of Comments document (which is also available in the rulemaking docket).

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

Executive Order 13045: ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be ''economically significant'' as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is subject to the Executive Order because it is an economically significant regulatory action as defined by Executive Order 12866, and we believe that the environmental health or safety risk addressed by this action may have a disproportionate effect on children. Accordingly, we have evaluated the environmental health or safety effects of these risks on children. The results of this evaluation are discussed above in section II of this preamble, and in chapter 2 of the Regulatory Impact Analysis (RIA).

EPA recently conducted an initial screening-level analysis of selected marine port areas and rail yards[206, 207] to begin to understand the populations, including children, that are exposed to DPM emissions from these facilities. This screening-level analysis [208] indicates that at the 47 marine ports and 37 rail yards studied, at least 13 million people, including 3.5 million children live in neighborhoods that are exposed to higher levels of DPM from these

[206] ICF International. September 28, 2007. Estimation of diesel particulate matter concentration isopleths for marine harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[207] ICF International. September 28, 2007. Estimation of diesel particulate matter population exposure near selected harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[208] This type of screening-level analysis is an inexact tool and not appropriate for regulatory decision-making; it is useful in beginning to understand potential impacts and for illustrative purposes. Additionally, the emissions inventories used as inputs into our analysis are not official estimates and they likely underestimate overall emissions because they are not inclusive of all emissions sources at the individual ports in our sample.

facilities than people living further away and will benefit from the controls being finalized in this action.

With regard to children, the screening-level analysis shows that the age composition of the total affected population near both the marine ports and rail yards matches closely the age composition of the overall U.S. population. However, for some individual facilities the young appear to be over-represented in the affected population compared to the overall U.S. population. See section VI of this preamble and chapters 2 and 6 of the RIA for a discussion on the air quality and monetized health benefits of this rule, including the benefits to children's health.

This rulemaking will achieve significant reductions of various emissions from locomotive and marine diesel engines, including NO_X, PM, and air toxics. These pollutants raise concerns regarding environmental health or safety risks that EPA has reason to believe may have a disproportionate effect on children, such as impacts from ozone, PM, and certain toxic air pollutants.

EPA has evaluated several regulatory strategies for reductions in emissions from locomotive and marine diesel engines, and we believe that we have selected the most stringent and effective control reasonably feasible at this time (in light of the technology and cost requirements of the Clean Air Act), which will benefit the health of children.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355 (May 22, 2001)), requires EPA to prepare and submit a Statement of Energy Effects to the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, for certain actions identified as ''significant energy actions.'' Section 4(b) of Executive Order 13211 defines ''significant energy actions'' as ''any action by an agency (normally published in the **Federal Register**) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) that is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action.'' We have prepared a Statement of Energy Effects for this action as follows.

This rule's potential effects on energy supply, distribution, or use have been analyzed and are discussed in detail in section 5.8 of the RIA. In summary, while we project that this rule would result in an energy effect that exceeds the 4,000 barrel per day threshold noted in E.O. 13211 in or around the year 2022 and thereafter, the program consists of performance-based standards with averaging, banking, and trading provisions that make it likely that our estimated impact is overstated. Further, the fuel consumption estimates upon which we are basing this energy effect analysis, which are discussed in full in sections 5.4 and 5.5 of the RIA, do not reflect the potential fuel savings associated with automatic engine stop/start (AESS) systems or other idle reduction technologies. Such technologies can provide significant fuel savings which could offset our projected estimates of increased fuel consumption. Nonetheless, our projections show that this rule could result in energy usage exceeding the 4,000 barrel per day threshold noted in E.O. 13211.

I. National Technology Transfer Advancement Act

As noted in the proposed rule, Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (''NTTAA''), Public Law No. 104–113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This rule references technical standards adopted by EPA through previous rulemakings. No new technical standards are established in this rule. The standards referenced in today's rule involve test procedures for measuring engine emissions. These measurement standards include those that were developed by EPA as well as the International Organization for Standardization (ISO) engine testing voluntary consensus standards, adopted in previous rulemakings. These standards have served EPA's emissions control goals well since their implementation and have been well accepted by industry. Therefore, EPA will continue to use the ISO and existing EPA-developed standards referenced in 40 CFR Parts 94 and 1065.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population.

This rulemaking will achieve significant reductions of various emissions from locomotive and marine diesel engines, including NO_X, PM, and air toxics. Exposure to these pollutants raises concerns regarding environmental health for the U.S. population in general including the minority populations and low-income populations that are the focus of the environmental justice executive order.

EPA has evaluated several regulatory strategies for reductions in emissions from locomotive and marine diesel engines, and we believe that we have selected the most stringent and effective control reasonably feasible at this time (in light of the technology and cost requirements of the Clean Air Act).

The emission reductions from the stringent new standards finalized in the locomotive and marine diesel rule will have large beneficial effects on communities in proximity to port, harbor, waterway, railway, and rail yard locations, including low-income and minority communities. In addition to stringent exhaust emission standards for freshly manufactured and

remanufactured engines, the final rule includes provisions targeted to further reduce emissions from regulated engines that directly impact low-income and minority communities. The idle reduction provision is one example: ''Even in very efficient railroad operations, locomotive engines spend a substantial amount of time idling, during which they emit harmful pollutants, consume fuel, create noise, and increase maintenance costs. A significant portion of this idling occurs in rail yards, as railcars and locomotives are transferred to build up trains. Many of these rail yards are in urban neighborhoods, close to where people live, work, and go to school'' (from section III.C(1)(c) of this preamble). The final rule includes a mandatory locomotive idle reduction requirement that will begin to take effect as early as 2008. Another example is the emission standards for freshly manufactured switch locomotives. Switch locomotives are major polluters in urban rail yards. These standards are earlier and more stringent than the line-haul locomotive standards, and include incentives for introducing cleaner switchers using Tier 4 nonroad engines. Further examples can be found in averaging, banking, and trading program provisions aimed at ensuring that emissions are not shifted from line-haul locomotives operating in rural areas to rail yards in urban communities.

EPA recently conducted an initial screening-level analysis of selected marine port areas and rail yards [209, 210] to better understand the populations, including minority and low-income, that are exposed to DPM emissions from these facilities. This screening-level analysis [211] indicates that at the 47 marine ports and 37 rail yards studied at least 13 million people, including a high percentage of low-income households, African-Americans, and Hispanics, live in the vicinity of these facilities and are exposed to higher levels of DPM than urban background levels. Thus, these residents will benefit from the controls being finalized in this action. See section II.A and II.B of this preamble and chapter 2 of the RIA for a discussion on the benefits of this rule, including the benefits to minority and low-income communities. Because those living in the vicinity of marine ports and rail yards are more likely to be low-income and minority residents, these populations will receive a significant benefit from this rule.

[209] ICF International. September 28, 2007. Estimation of diesel particulate matter concentration isopleths for marine harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[210] ICF International. September 28, 2007. Estimation of diesel particulate matter population exposure near selected harbor areas and rail yards. Memorandum to EPA under Work Assignment Number 0–3, Contract Number EP–C–06–094. This memo is available in Docket EPA–HQ–OAR–2003–0190.

[211] This type of screening analysis is an inexact tool and not appropriate for regulatory decision-making; it is useful in beginning to understand potential impacts and for illustrative purposes. Additionally, the emissions inventories used as inputs into our analysis are not official estimates and they likely underestimate overall emissions because they are not inclusive of all emission sources at the individual ports in our sample.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A Major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is a ''major rule'' as defined by 5 U.S.C. 804(2). This rule will be effective July 7, 2008.

X. Statutory Provisions and Legal Authority

Statutory authority for the controls in this final rule can be found in sections 213 (which specifically authorizes controls on emissions from nonroad engines and vehicles), 203–209, 216, and 301 of the Clean Air Act (CAA), 42 U.S.C. 7547, 7522, 7523, 7424, 7525, 7541, 7542, 7543, 7550, and 7601.

List of Subjects

40 CFR Part 9

Reporting and recordkeeping requirements.

40 CFR Part 85

Confidential business information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Warranties.

40 CFR Part 86

Administrative practice and procedure, Confidential business information, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements.

40 CFR Part 89

Environmental protection, Administrative practice and procedure, Confidential business information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Vessels, Warranties.

40 CFR Part 92

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Incorporation by reference, Labeling, Penalties, Railroads, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 94

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Incorporation by reference, Labeling, Penalties, Vessels, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1033

Environmental protection, Administrative practice and procedure, Confidential business information, Incorporation by reference, Labeling, Penalties, Railroads, Reporting and recordkeeping requirements.

40 CFR Part 1039

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Incorporation by reference, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1042

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Incorporation by reference, Labeling, Penalties, Vessels, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1065

Environmental protection, Administrative practice and procedure, Incorporation by reference, Reporting and recordkeeping requirements, Research.

40 CFR Part 1068

Environmental protection, Administrative practice and procedure, Confidential business information, Imports, Motor vehicle pollution,

Penalties, Reporting and recordkeeping requirements, Warranties.

Dated: March 14, 2008.

Stephen L. Johnson,

Administrator.

■ For the reasons set forth in the preamble, chapter I of title 40 of the Code of Federal Regulations is amended as follows:

PART 9—OMB APPROVALS UNDER THE PAPERWORK REDUCTION ACT

■ 1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 et seq., 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 *et seq.*, 1311, 1313d, 1314, 1318 1321, 1326, 1330, 1342 1344, 1345(d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 *et seq.*, 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

■ 2. Section 9.1 is amended in the table by adding the center headings and the entries under those center headings in numerical order to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

40 CFR citation	OMB control No.
* * * *	
Control of Emissions from Locomotives	
1033.825	2060–0287
* * * * *	
Control of Emissions From New and In-use Marine Compression-ignition Engines and Vessels	
1042.825	2060–0827
* * * * *	

* * * * *

PART 85—CONTROL OF AIR POLLUTION FROM MOBILE SOURCES

■ 3. The authority citation for part 85 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart Y—[Amended]

■ 4. Section 85.2401 is amended by revising paragraphs (a)(7) and (a)(8) to read as follows:

§ 85.2401 To whom do these requirements apply?

(a) * * *

(7) Locomotives (See 40 CFR parts 92 and 1033);

(8) Marine engines (See 40 CFR parts 91, 94, and 1042 and MARPOL Annex VI, as applicable);

* * * * *

PART 86—CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

■ 5. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart A—[Amended]

■ 6. Section 86.007–11 is amended by revising paragraph (a)(2) introductory text to read as follows:

§ 86.007–11 Emission standards and supplemental requirements for 2007 and later model year diesel heavy-duty engines and vehicles.

* * * * *

(a) * * *

(2) The standards set forth in paragraph (a)(1) of this section refer to the exhaust emitted over the duty cycle specified in paragraphs (a)(2)(i) through (iii) of this section, where exhaust emissions are measured and calculated as specified in paragraphs (a)(2)(iv) and (v) of this section in accordance with the procedures set forth in subpart N of this part, except as noted in § 86.007–23(c)(2):

* * * * *

■ 7. Section 86.117–96 is amended by revising the first equation in paragraph (d)(2) to read as follows:

§ 86.117–96 Evaporative emission enclosure calibrations.

* * * * *

(d) * * *

(2) * * *

$$M_{HC} = \left(kV_n \quad 10^{-4}\right)\left(\frac{\left(C_{HC_f} - rC_{CH_3OH_f}\right)P_{B_f}}{T_f} - \frac{(C_{HC_i} - rC_{CH_3OH_i})P_{B_i}}{T_i}\right) + \left(M_{HC,out} - M_{HC,in}\right)$$

* * * * *

Subpart N—[Amended]

■ 8. Section 86.1305–2010 is amended by revising paragraph (b) to read as follows:

§ 86.1305–2010 Introduction; structure of subpart.

* * * * *

(b) Use the applicable equipment and procedures for spark-ignition or compression-ignition engines in 40 CFR part 1065 to determine whether engines meet the duty-cycle emission standards in subpart A of this part. Measure the emissions of all regulated pollutants as specified in 40 CFR part 1065. Use the duty cycles and procedures specified in §§ 86.1333–2010, 86.1360–2007, and 86.1362–2007. Adjust emission results from engines using aftertreatment technology with infrequent regeneration events as described in § 86.004–28.

* * * * *

■ 9. Section 86.1333–2010 is amended by adding paragraph (d) to read as follows:

§ 86.1333–2010 Transient test cycle generation.

* * * * *

(d) Determine idle speeds as specified in § 86.1337–2007(a)(9).

■ 10. Section 86.1360–2007 is amended by adding paragraph (b)(3) to read as follows:

§ 86.1360–2007 Supplemental emission test; test cycle and procedures.

* * * * *

(b) * * *

(3) For engines certified using the ramped-modal cycle specified in § 86.1362, perform the three discrete test points described in paragraph (b)(2) of this section as follows:

(i) Allow the engine to idle as needed to complete equipment checks following the supplemental emission test described in this section, then operate the engine over the three additional discrete test points.

(ii) Validate the additional discrete test points as a composite test separate from the supplemental emission test, but in the same manner.

(iii) Use the emission data collected during the time interval from 35 to 5 seconds before the end of each mode (excluding transitions) to perform the MAEL calculations in paragraph (f) of this section.

* * * * *

§ 86.1362–2007 [Amended]

■ 11. Section 86.1362–2007 is amended by removing and reserving paragraph (d).

■ 12. A new § 86.1362–2010 is added to read as follows:

§ 86.1362–2010 Steady-state testing with a ramped-modal cycle.

This section describes how to test engines under steady-state conditions. For model years through 2009, manufacturers may use the mode order described in this section or in § 86.1362–2007. Starting in model year 2010 manufacturers must use the mode order described in this section with the following exception: for model year 2010, manufacturers may continue to use the cycle specified in § 86.1362–2007 as long as it does not adversely affect the ability to demonstrate compliance with the standards.

(a) Start sampling at the beginning of the first mode and continue sampling until the end of the last mode. Calculate emissions as described in 40 CFR 1065.650 and cycle statistics as described in 40 CFR 1065.514.

(b) Measure emissions by testing the engine on a dynamometer with the following ramped-modal duty cycle to determine whether it meets the applicable steady-state emission standards:

RMC mode	Time in mode (seconds)	Engine speed [1 2]	Torque (percent) [2 3]
1a Steady-state	170	Warm Idle	0
1b Transition	20	Linear Transition	Linear Transition.
2a Steady-state	173	A	100
2b Transition	20	Linear Transition	Linear Transition.
3a Steady-state	219	B	50
3b Transition	20	B	Linear Transition.
4a Steady-state	217	B	75
4b Transition	20	Linear Transition	Linear Transition.
5a Steady-state	103	A	50
5b Transition	20	A	Linear Transition.
6a Steady-state	100	A	75
6b Transition	20	A	Linear Transition.
7a Steady-state	103	A	25
7b Transition	20	Linear Transition	Linear Transition.
8a Steady-state	194	B	100
8b Transition	20	B	Linear Transition.
9a Steady-state	218	B	25
9b Transition	20	Linear Transition	Linear Transition.
10a Steady-state	171	C	100
10b Transition	20	C	Linear Transition.
11a Steady-state	102	C	25
11b Transition	20	C	Linear Transition.
12a Steady-state	100	C	75
12b Transition	20	C	Linear Transition.
13a Steady-state	102	C	50
13b Transition	20	Linear Transition	Linear Transition.
14 Steady-state	168	Warm Idle	0

[1] Speed terms are defined in 40 CFR part 1065.
[2] Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the speed or torque setting of the current mode to the speed or torque setting of the next mode.
[3] The percent torque is relative to maximum torque at the commanded engine speed.

(c) During idle mode, operate the engine at its warm idle as described in 40 CFR part 1065.

(d) See 40 CFR part 1065 for detailed specifications of tolerances and calculations.

(e) Perform the ramped-modal test with a warmed-up engine. If the ramped-modal test follows directly after testing over the Federal Test Procedure, consider the engine warm. Otherwise, operate the engine to warm it up as described in 40 CFR part 1065, subpart F.

■ 13. Section 86.1363–2007 is amended by revising paragraph (a) and the equation in paragraph (g)(1) to read as follows:

§ 86.1363–2007 Steady-state testing with a discrete-mode cycle.

* * * * *

(a) Use the following 13-mode cycle in dynamometer operation on the test engine:

Mode No.	Engine speed [1]	Percent load [2]	Weighting factors	Mode length (minutes) [3]
1	Warm Idle		0.15	4
2	A	100	0.08	2
3	B	50	0.10	2
4	B	75	0.10	2
5	A	50	0.05	2
6	A	75	0.05	2
7	A	25	0.05	2
8	B	100	0.09	2
9	B	25	0.10	2

Mode No.	Engine speed [1]	Percent load [2]	Weighting factors	Mode length (minutes) [3]
10	C	100	0.08	2
11	C	25	0.05	2
12	C	75	0.05	2
13	C	50	0.05	2

[1] Speed terms are defined in 40 CFR part 1065.
[2] The percent torque is relative to the maximum torque at the commanded test speed.
[3] Upon Administrator approval, the manufacturer may use other mode lengths.

* * * * *

(g) * * *

(1) * * *

$$A_{WA} = \frac{\sum_{i=1}^{N}\left[A_{Mi} \cdot WF_i\right]}{\sum_{i=2}^{N}\left[A_{Pi} \cdot WF_i\right]}$$

* * * * *

Subpart P—[Amended]

■ 14. Subpart P is amended by removing § 86.1504–94.

§§ 86.1501–94 through 86.1544–84 [Redesignated]

■ 15. Redesignate §§ 86.1501–94 through 86.1544–84 as follows:

Old section	New section
86.1501–94	86.1501
86.1502–84	86.1502
86.1503–84	86.1503
86.1505–94	86.1505
86.1506–94	86.1506
86.1509–84	86.1509
86.1511–84	86.1511
86.1513–94	86.1513
86.1514–84	86.1514
86.1516–84	86.1516
86.1519–84	86.1519
86.1522–84	86.1522
86.1524–84	86.1524
86.1526–84	86.1526
86.1527–84	86.1527
86.1530–84	86.1530
86.1537–84	86.1537
86.1540–84	86.1540
86.1542–84	86.1542
86.1544–84	86.1544

■ 16. Newly desginated § 86.1506 is amended by adding paragraph (b) to read as follows:

§ 86.1506 Equipment required and specifications; overview.

* * * * *

(b) Through the 2009 model year, manufacturers may elect to use the appropriate test procedures in this part 86 instead of the procedures referenced in 40 CFR part 1065 without getting advance approval by the Administrator.

PART 89—CONTROL OF EMISSIONS FROM NEW AND IN-USE NONROAD COMPRESSION-IGNITION ENGINES

■ 17. The authority citation for part 89 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart J—[Amended]

■ 18. A new § 89.916 is added to read as follows:

§ 89.916 Emergency-vessel exemption for marine engines below 37 kW.

The prohibitions in § 89.1003(a)(1) do not apply to new marine engines used in lifeboats and rescue boats as described in 40 CFR 94.914.

PART 92—CONTROL OF AIR POLLUTION FROM LOCOMOTIVES AND LOCOMOTIVE ENGINES

■ 19. The authority citation for part 92 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 20. Section 92.1 is amended by revising paragraph (a) introductory text and adding paragraph (e) to read as follows:

§ 92.1 Applicability.

(a) Except as noted in paragraphs (b), (d) and (e) of this section, the provisions of this part apply to manufacturers, remanufacturers, owners and operators of:

* * * * *

(e) The provisions of this part do not apply for locomotives that are subject to the emissions standards of 40 CFR part 1033.

■ 21. Section 92.2 is amended by revising the definition for ''Freshly manufactured locomotive'' to read as follows:

§ 92.2 Definitions.

* * * * *

Freshly manufactured locomotive means a locomotive which is powered by a freshly manufactured engine, and which contains fewer than 25 percent previously used parts (weighted by the dollar value of the parts). See 40 CFR 1033.640 for information about how to calculate this.

* * * * *

■ 22. Section 92.12 is amended by revising paragraph (b) and adding paragraphs (i) and (j) to read as follows:

§ 92.12 Interim provisions.

* * * * *

(b) *Production line and in-use testing.* (1) The requirements of Subpart F of this part (i.e., production line testing) do not apply prior to January 1, 2002.

(2) The testing requirements of subpart F of this part (i.e., production line testing) do not apply to small manufacturers/remanufacturers prior to January 1, 2013. Note that the production line audit requirements apply as specified.

(3) The requirements of Subpart G of this part (i.e., in-use testing) only apply for locomotives and locomotive engines that become new on or after January 1, 2002.

(4) For locomotives and locomotive engines that are covered by a small business certificate of conformity, the requirements of Subpart G of this part (i.e., in-use testing) only apply for locomotives and locomotive engines that become new on or after January 1, 2007. We will also not require small remanufacturers to perform any in-use testing prior to January 1, 2013.

* * * * *

(i) *Diesel test fuels.* Manufacturers and remanufacturers may use LSD or ULSD test fuel to certify to the standards of this part, instead of the otherwise specified test fuel, provided PM emissions are corrected as described in this paragraph (i). Measure your PM emissions and determine your cycle-weighted emission rates as specified in subpart B of this part. If you test using LSD, add 0.04 g/bhp-hr to these weighted emission rates to determine your official emission result. If you test using ULSD, add 0.05 g/bhp-hr to these weighted emission rates to determine your official emission result.

(j) *Subchapter U provisions.* For model years 2008 through 2012, certain locomotives will be subject to the requirements of this part 92 while others will be subject to the

requirements of 40 CFR subchapter U. This paragraph (j) describes allowances for manufacturers or remanufacturers to ask for flexibility in transitioning to the new regulations.

(1) You may ask to use a combination of the test procedures of this part and those of 40 CFR part 1033. We will approve your request if you show us that it does not affect your ability to show compliance with the applicable emission standards. Generally this requires that the combined procedures would result in emission measurements at least as high as those that would be measured using the procedures specified in this part. Alternatively, you may demonstrate that the combined effects of the procedures is small relative to your compliance margin (the degree to which your locomotives are below the applicable standards).

(2) You may ask to comply with the administrative requirements of 40 CFR part 1033 and 1068 instead of the equivalent requirements of this part.

■ 23. Section 92.204 is amended by adding paragraph (f) to read as follows:

§ 92.204 Designation of engine families.

* * * * *

(f) Remanufactured Tier 2 locomotives may be included in the same engine family as freshly manufactured Tier 2 locomotives, provided such engines are used for locomotive models included in the engine family.

■ 24. Section 92.206 is amended by revising paragraph (c) to read as follows:

§ 92.206 Required information.

* * * * *

(c) Emission data, including exhaust methane data in the case of locomotives or locomotive engines subject to a non-methane hydrocarbon standard, on such locomotives or locomotive engines tested in accordance with applicable test procedures of subpart B of this part. These data shall include zero hour data, if generated. In lieu of providing the emission data required by paragraph (a) of this section, the Administrator may, upon request of the manufacturer or remanufacturer, allow the manufacturer or remanufacturer to demonstrate (on the basis of previous emission tests, development tests, or other testing information) that the engine or locomotive will conform with the applicable emission standards of § 92.8. The requirement to measure smoke emissions is waived for certification and production line testing of Tier 2 locomotives, except where there is reason to believe the locomotives do not meet the applicable smoke standards.

* * * * *

■ 25. Section 92.208 is amended by revising paragraph (a) to read as follows:

§ 92.208 Certification.

(a) This paragraph (a) applies to manufacturers of new locomotives and new locomotive engines. If, after a review of the application for certification, test reports and data acquired from a freshly manufactured locomotive or locomotive engine or from a development data engine, and any other information required or obtained by EPA, the Administrator determines that the application is complete and that the engine family meets the requirements of the Act and this part, he/she will issue a certificate of conformity with respect to such engine family except as provided by paragraph (c)(3) of this section. The certificate of conformity is valid for each engine family starting with the indicated effective date, but it is not valid for any production after December 31 of the model year for which it is issued (except as specified in (92.12). The certificate of conformity is valid upon such terms and conditions as the Administrator deems necessary or appropriate to ensure that the production engines covered by the certificate will meet the requirements of the Act and of this part.

* * * * *

■ 26. Section 92.212 is amended by revising paragraph (b)(2)(iv) to read as follows:

§ 92.212 Labeling.

* * * * *

(b) * * *

(2) * * *

(iv) The label may be made up of more than one piece permanently attached to the same locomotive part, except for Tier 0 locomotives, where you may attach it to separate parts.

* * * * *

■ 27. Section 92.501 is amended by adding paragraph (c) to read as follows:

§ 92.501 Applicability.

* * * * *

(c) Manufacturers may comply with the provisions of subpart D of 40 CFR part 1033 instead of the provisions of this subpart F.

■ 28. A new § 92.1007 is added to read as follows:

§ 92.1007 Remanufacturing requirements.

(a) See the definition of ''remanufacture'' in § 92.2 to determine if you are remanufacturing your locomotive or engine. (**Note:** Replacing power assemblies one at a time may qualify as remanufacturing, depending on the interval between replacement.)

(b) See the definition of ''new'' in § 92.2 to determine if remanufacturing your locomotive makes it subject to the requirements of this part. If the locomotive is considered to be new, it is subject to the certification requirements of this part, unless it is exempt under subpart J of this part. The standards to which your locomotive is subject will depend on factors such as the following:

(1) Its date of original manufacture.

(2) The FEL to which it was previously certified, which is listed on the ''Locomotive Emission Control Information'' label.

(3) Its power rating (whether it is above or below 2300 hp).

(4) The calendar year in which it is being remanufactured.

(c) You may comply with the certification requirements of this part for your remanufactured locomotive by either obtaining your own certificate of conformity as specified in subpart C of this part or by having a certifying remanufacturer include your locomotive under its certificate of conformity. In either case, your remanufactured locomotive must be covered by a certificate before it is reintroduced into service.

(d) If you do not obtain your own certificate of conformity from EPA, contact a certifying remanufacturer to have your locomotive included under its certificate of conformity. Confirm with the certificate holder that your locomotive's model, date of original manufacture, previous FEL, and power rating allow it to be covered by the certificate. You must do all of the following:

(1) Comply with the certificate holder's emission-related installation instructions.

(2) Provide to the certificate holder the information it identifies as necessary to comply with the requirements of this part.

(e) For parts unrelated to emissions and emission-related parts not addressed by the certificate holder in the emission-related installation instructions, you may use parts from any source. For emission-related parts listed by the certificate holder in the emission-related installation instructions, you must either use the specified parts or parts certified under 40 CFR 1033.645 for remanufacturing. If you believe that the certificate holder has included as emission-related parts, parts that are actually unrelated to emissions, you may ask us to exclude such parts from the emission-related installation instructions. (**Note:** This

paragraph (e) does not apply with respect to parts for maintenance other than remanufacturing; see § 92.1004 for provisions related to general maintenance.)

(f) Failure to comply with this section is a violation of § 92.1102(a)(1).

PART 94—CONTROL OF EMISSIONS FROM MARINE COMPRESSION-IGNITION ENGINES

■ 29. The authority citation for part 94 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart A— [Amended]

■ 30. Section 94.1 is amended by revising paragraph (b) to read as follows:

§ 94.1 Applicability.

* * * * *

(b) Notwithstanding the provisions of paragraph (c) of this section, the requirements and prohibitions of this part do not apply with respect to the engines identified in paragraphs (a)(1) and (2) of this section for any of the following engines:

(1) Marine engines with rated power below 37 kW.

(2) Marine engines on foreign vessels.

(3) Marine engines subject to the standards of 40 CFR part 1042.

* * * * *

■ 31. Section 94.2 is amended by revising paragraph (1)(ii) of the definition for ''New vessel'' and adding definitions for ''Nonroad'' and ''Nonroad engine'' in alphabetical order to read as follows:

§ 94.2 Definitions.

* * * * *

New vessel means:

(1)(i) * * *

(ii) For vessels with no Category 3 engines, a vessel that has been modified such that the value of the modifications exceeds 50 percent of the value of the modified vessel. The value of the modification is the difference in the assessed value of the vessel before the modification and the assessed value of the vessel after the modification. Use the following equation to determine if the fractional value of the modification exceeds 50 percent:

Percent of value = [(Value after modification) – (Value before modification)] × (100% ÷ (Value after modification)

* * * * *

Nonroad means relating to nonroad engines, or vessels or equipment that include nonroad engines.

Nonroad engine has the meaning given in 40 CFR 1068.30. In general, this means all internal-combustion engines except motor vehicle engines, stationary engines, engines used solely for competition, or engines used in aircraft.

* * * * *

■ 32. Section 94.12 is amended by adding paragraph (i) to read as follows:

§ 94.12 Interim provisions.

* * * * *

(i) *Early use of future provisions.* For model years 2009 through 2013, certain marine engines will be subject to the requirements of this part 94 while others will be subject to the requirements of 40 CFR part 1042. Manufacturers may ask for flexibility in making the transition to the new regulations as follows:

(1) You may ask to use a combination of the test procedures of this part and those of 40 CFR part 1042. This might include the early use of the duty cycles and NTE specifications that apply for Tier 3 or Tier 4 engines. We will approve your request only if you show us that it does not affect your ability to demonstrate compliance with the applicable emission standards. This generally requires that the combined procedures would result in emission measurements at least as high as those that would be measured using the procedures specified in this part. Alternatively, you may demonstrate that the combined effects of the procedures is small relative to your compliance margin (the degree to which your engines are below the applicable standards).

(2) You may ask to comply with the administrative requirements of 40 CFR parts 1042 and 1068 instead of the equivalent requirements of this part.

Subpart B—[Amended]

■ 33. Section 94.108 is amended by adding paragraph (a)(4) and revising paragraph (d) to read as follows:

§ 94.108 Test fuels.

(a) * * *

(4) Manufacturers may perform testing using the low-sulfur diesel test fuel or the ultra low-sulfur diesel test fuel specified in 40 CFR part 1065.

* * * * *

(d) *Correction for sulfur*—(1) *High sulfur fuel.* (i) Particulate emission measurements from Category 1 or Category 2 engines without exhaust aftertreatment obtained using a diesel fuel containing more than 0.40 weight percent sulfur may be adjusted to a sulfur content of 0.40 weight percent.

(ii) Adjustments to the particulate measurement for using high sulfur fuel shall be made using the following equation:

$$PM_{adj} = PM - [BSFC \times 0.0917 \times (FSF - 0.0040)]$$

Where:

PM_{adj}=adjusted measured PM level [g/kW-hr]
PM=measured weighted PM level [g/kW-hr]
BSFC=measured brake specific fuel consumption [g/kW-hr]
FSF=fuel sulfur weight fraction

(2) *Low sulfur fuel.* (i) Particulate emission measurements from Category 1 or Category 2 engines without exhaust aftertreatment obtained using diesel fuel containing less than 0.03 weight percent sulfur shall be adjusted to a sulfur content of 0.20 weight percent.

(ii) Adjustments to the particulate measurement for using ultra low-sulfur fuel shall be made using the following equation:

$$PM_{adj} = PM + [BSFC \times 0.0917 \times (0.0020 - FSF)]$$

Where:

PM_{adj}=adjusted measured PM level [g/kW-hr]
PM=measured weighted PM level [g/kW-hr]
BSFC=measured brake specific fuel consumption [g/kW-hr]
FSF=fuel sulfur weight fraction

* * * * *

Subpart C—[Amended]

■ 34. Section 94.208 is amended by revising paragraph (a) to read as follows:

§ 94.208 Certification.

(a) If, after a review of the application for certification, test reports and data acquired from an engine or from a development data engine, and any other information required or obtained by EPA, the Administrator determines that the application is complete and that the engine family meets the requirements of the Act and this part, he/she will issue a certificate of conformity with respect to such engine family, except as provided by paragraph (c)(3) of this section. The certificate of conformity is valid for each engine family starting with the indicated effective date, but it is not valid for any production after December 31 of the model year for which it is issued. The certificate of conformity is valid upon such terms and conditions as the Administrator deems necessary or appropriate to ensure that the production engines covered by the certificate will meet the requirements of the Act and of this part.

* * * * *

■ 35. Section 94.209 is amended by revising paragraph (a) introductory text to read as follows:

§ 94.209 Special provisions for post-manufacture marinizers and small-volume manufacturers.

* * * * *

(a) *Broader engine families.* Instead of the requirements of § 94.204, an engine family may consist of any or all of a manufacturer's engines within a given category. This does not change any of the requirements of this part for showing that an engine family meets emission standards. To be eligible to use the provisions of this paragraph (a), the manufacturer must demonstrate one of the following:

* * * * *

Subpart F—[Amended]

■ 36. Section 94.501 is amended by adding paragraph (c) to read as follows:

§ 94.501 Applicability.

* * * * *

(c) Manufacturers may comply with the provisions of 40 CFR part 1042, subpart D, instead of the provisions of this subpart F.

Subpart J—[Amended]

■ 37. A new § 94.914 is added to read as follows:

§ 94.914 Emergency vessel exemption.

(a) Except as specified in paragraph (c) of this section, the prohibitions in § 94.1103(a)(1) do not apply to a new engine that is subject to Tier 2 standards according to the following provisions:

(1) The engine must be intended for installation in a lifeboat or a rescue boat as specified in 40 CFR 1042.625(a)(1)(i) or (ii).

(2) This exemption is available from the initial effective date for the Tier 2 standards until the engine model (or an engine of comparable size, weight, and performance) has been certified as complying with the Tier 2 standards and Coast Guard requirements. For example, this exemption would apply for new engine models that have not yet been certified to the Tier 2 standards.

(3) The engine must meet the Tier 1 emission standards specified in § 94.8.

(b) If you introduce an engine into U.S. commerce under this section, you must meet the labeling requirements in § 94.212, but add the following statement instead of the compliance statement in § 94.212(b)(6):

THIS ENGINE DOES NOT COMPLY WITH CURRENT U.S. EPA EMISSION STANDARDS UNDER 40 CFR 94.914 AND IS FOR USE SOLELY IN LIFEBOATS OR RESCUE BOATS (COAST GUARD APPROVAL SERIES 160.135 OR 160.156). INSTALLATION OR USE OF THIS ENGINE IN ANY OTHER APPLICATION MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.

(c) Introducing into commerce a vessel containing an engine exempted under this section violates the prohibitions in § 94.1103(a)(1) where the vessel is not a lifeboat or rescue boat, unless it is exempt under a different provision. Similarly, using such an engine or vessel as something other than a lifeboat or rescue boat as specified in paragraph (a) of this section violates the prohibitions in § 94.1103(a)(1), unless it is exempt under a different provision.

■ 38. A new part 1033 is added to subchapter U of chapter I to read as follows:

PART 1033—CONTROL OF EMISSIONS FROM LOCOMOTIVES

Subpart A—Overview and Applicability

Sec.

Subpart B—Emission Standards and Related Requirements

Subpart C—Certifying Engine Families

Subpart D—Manufacturer and Remanufacturer Production Line Testing and Audit Programs

Subpart E—In-use Testing

Subpart F—Test Procedures

Subpart G—Special Compliance Provisions

Subpart H—Averaging, Banking, and Trading for Certification

Authority: 42 U.S.C. 7401–7671q.

Subpart A—Overview and Applicability

§ 1033.1 Applicability.

The regulations in this part 1033 apply for all new locomotives and all locomotives containing a new locomotive engine, except as provided in § 1033.5.

(a) Standards begin to apply each time a locomotive or locomotive engine is originally manufactured or otherwise becomes new (defined in § 1033.901). The requirements of this part continue to apply as specified after locomotives cease to be new.

(b) Standards apply to the locomotive. However, in certain cases, the manufacturer/remanufacturer is allowed to test a locomotive engine instead of a complete locomotive, such as for certification. Also, you are not required to complete assembly of a locomotive to obtain a certificate of conformity for it, provided you meet the definition of ''manufacturer'' or ''remanufacturer'' (as applicable) in § 1033.901. For example, an engine manufacturer may obtain a certificate for locomotives which it does not manufacture, if the locomotives use its engines.

(c) Standards apply based on the year in which the locomotive was originally manufactured. The date of original manufacture is generally the date on which assembly is completed for the first time. For example, all locomotives originally manufactured in calendar years 2002, 2003, and 2004 are subject to the Tier 1 emission standards for their entire service lives.

(d) The following provisions apply when there are multiple persons meeting the definition of manufacturer or remanufacturer in § 1033.901:

(1) Each person meeting the definition of manufacturer must comply with the requirements of this part that apply to manufacturers; and each person meeting the definition of remanufacturer must comply with the requirements of this part that apply to remanufacturers. However, if one person complies with a specific requirement for a given locomotive, then all manufacturers/remanufacturers are deemed to have complied with that specific requirement.

(2) We will apply the requirements of subparts C, D, and E of this part to the manufacturer/remanufacturer that obtains the certificate of conformity for the locomotive. Other manufacturers and remanufacturers are required to comply with the requirements of subparts C, D, and E of this part only when notified by us. In our notification, we will specify a reasonable time period in which you need to comply with the requirements identified in the notice. See § 1033.601 for the applicability of 40 CFR part 1068 to these other manufacturers and remanufacturers.

(3) For example, we may require a railroad that installs certified kits but does not hold the certificate to perform production line auditing of the locomotives that it remanufactures. However, if we did, we would allow the railroad a reasonable amount of time to develop the ability to perform such auditing.

(e) The provisions of this part apply as specified for locomotives manufactured or remanufactured on or after July 7, 2008. See § 1033.102 to determine whether the standards of this part or the standards of 40 CFR part 92 apply for model years 2008 through 2012. For example, for a locomotive that was originally manufactured in 2007 and remanufactured on April 10, 2014, the provisions of this part begin to apply on April 10, 2014.

§ 1033.5 Exemptions and exclusions.

(a) Subpart G of this part exempts certain locomotives from the standards of this part.

(b) The definition of ''locomotive'' in § 1033.901 excludes certain vehicles. In general, the engines used in such excluded equipment are subject to standards under other regulatory parts. For example, see 40 CFR part 1039 for requirements that apply to diesel engines used in equipment excluded from the definition of ''locomotive'' in § 1033.901. The following locomotives are also excluded from the provisions of this part 1033:

(1) Historic locomotives powered by steam engines. For a locomotive that was originally manufactured after January 1, 1973 to be excluded under this paragraph (b)(1), it may not use any internal combustion engines and must be used only for historical purposes such as at a museum or similar public attraction.

(2) Locomotives powered only by an external source of electricity.

(c) The requirements and prohibitions of this part apply only for locomotives that have become ''new'' (as defined in § 1033.901) on or after July 7, 2008.

(d) The provisions of this part do not apply for any auxiliary engine that only provides hotel power. In general, these engines are subject to the provisions of 40 CFR part 1039. However, depending on the engine cycle, model year and power rating, the engines may be subject to other regulatory parts instead.

(e) Manufacturers and owners of locomotives that operate only on non-standard gauge rails may ask us to exclude such locomotives from this part by excluding them from the definition of ''locomotive''.

§ 1033.10 Organization of this part.

The regulations in this part 1033 contain provisions that affect locomotive manufacturers, remanufacturers, and others. However, the requirements of this part are generally addressed to the locomotive manufacturer/remanufacturer. The term ''you'' generally means the manufacturer/remanufacturer, as defined in § 1033.901. This part 1033 is divided into the following subparts:

(a) Subpart A of this part defines the applicability of part 1033 and gives an overview of regulatory requirements.

(b) Subpart B of this part describes the emission standards and other requirements that must be met to certify locomotives under this part. Note that § 1033.150 discusses certain interim requirements and compliance provisions that apply only for a limited time.

(c) Subpart C of this part describes how to apply for a certificate of conformity.

(d) Subpart D of this part describes general provisions for testing and auditing production locomotives.

(e) Subpart E of this part describes general provisions for testing in-use locomotives.

(f) Subpart F of this part and 40 CFR part 1065 describe how to test locomotives and engines.

(g) Subpart G of this part and 40 CFR part 1068 describe requirements, prohibitions, exemptions, and other provisions that apply to locomotive manufacturer/remanufacturers, owners, operators, and all others.

(h) Subpart H of this part describes how you may generate and use emission credits to certify your locomotives.

(i) Subpart I of this part describes provisions for locomotive owners and operators.

(j) Subpart J of this part contains definitions and other reference information.

§ 1033.15 Other regulation parts that apply for locomotives.

(a) Part 1065 of this chapter describes procedures and equipment specifications for testing engines. Subpart F of this part 1033 describes how to apply the provisions of part 1065 of this chapter to test locomotives to determine whether they meet the emission standards in this part.

(b) The requirements and prohibitions of part 1068 of this chapter apply to everyone, including anyone who manufactures, remanufactures, imports, maintains, owns, or operates any of the locomotives subject to this part 1033. See § 1033.601 to determine how to apply the part 1068 regulations for locomotives. Part 1068 of this chapter describes general provisions, including the following areas:

(1) Prohibited acts and penalties for locomotive manufacturer/remanufacturers and others.

(2) Exclusions and exemptions for certain locomotives.

(3) Importing locomotives.

(4) Selective enforcement audits of your production.

(5) Defect reporting and recall.

(6) Procedures for hearings.

(c) Other parts of this chapter apply if referenced in this part.

Subpart B—Emission Standards and Related Requirements

§ 1033.101 Exhaust emission standards.

See §§ 1033.102 and 1033.150 to determine how the emission standards of this section apply before 2023.

(a) *Emission standards for line-haul locomotives.* Exhaust emissions from your new locomotives may not exceed the applicable emission standards in Table 1 to this section during the useful life of the locomotive. (**Note:** § 1033.901 defines locomotives to be ''new'' when originally manufactured and when remanufactured.) Measure emissions using the applicable test procedures described in subpart F of this part.

TABLE 1 TO § 1033.101.—LINE-HAUL LOCOMOTIVE EMISSION STANDARDS

Year of original manufacture	Tier of standards	Standards (g/bhp-hr)			
		NO_X	PM	HC	CO
1973–1992[a]	Tier 0[b]	8.0	0.22	1.00	5.0
1993[a]–2004	Tier 1[b]	7.4	0.22	0.55	2.2
2005–2011	Tier 2[b]	5.5	[e]0.10	0.30	1.5
2012–2014	Tier 3[c]	5.5	0.10	0.30	1.5
2015 or later	Tier 4[d]	1.3	0.03	0.14	1.5

[a] Locomotive models that were originally manufactured in model years 1993 through 2001, but that were not originally equipped with a separate coolant system for intake air are subject to the Tier 0 rather than the Tier 1 standards.
[b] Line-haul locomotives subject to the Tier 0 through Tier 2 emission standards must also meet switch standards of the same tier.
[c] Tier 3 line-haul locomotives must also meet Tier 2 switch standards.
[d] Manufacturers may elect to meet a combined NO_X+HC standard of 1.4 g/bhp-hr instead of the otherwise applicable Tier 4 NO_X and HC standards, as described in paragraph (j) of this section.
[e] The PM standard for newly remanufactured Tier 2 line-haul locomotives is 0.20 g/bhp-hr until January 1, 2013, except as specified in § 1033.150(a).

(b) *Emission standards for switch locomotives.* Exhaust emissions from your new locomotives may not exceed the applicable emission standards in Table 2 to this section during the useful life of the locomotive. (**Note:** § 1033.901 defines locomotives to be ''new'' when originally manufactured and when remanufactured.) Measure emissions using the applicable test procedures described in subpart F of this part.

TABLE 2 TO § 1033.101.—SWITCH LOCOMOTIVE EMISSION STANDARDS

Year of original manufacture	Tier of standards	Standards (g/bhp-hr)			
		NO_X	PM	HC	CO
1973–2001	Tier 0	11.8	0.26	2.10	8.0
2002–2004	Tier 1[a]	11.0	0.26	1.20	2.5
2005–2010	Tier 2[a]	8.1	[b]0.13	0.60	2.4
2011–2014	Tier 3	5.0	0.10	0.60	2.4
2015 or later	Tier 4	[c]1.3	0.03	[c]0.14	2.4

[a] Switch locomotives subject to the Tier 1 through Tier 2 emission standards must also meet line-haul standards of the same tier.
[b] The PM standard for new Tier 2 switch locomotives is 0.24 g/bhp-hr until January 1, 2013, except as specified in § 1033.150(a).
[c] Manufacturers may elect to meet a combined NO_X+HC standard of 1.3 g/bhp-hr instead of the otherwise applicable Tier 4 NO_X and HC standards, as described in paragraph (j) of this section.

(c) *Smoke standards.* The smoke opacity standards specified in Table 3 to this section apply only for locomotives certified to one or more PM standards or FELs greater than 0.05 g/bhp-hr. Smoke emissions, when measured in accordance with the provisions of Subpart F of this part, shall not exceed these standards.

TABLE 3 TO § 1033.101.—SMOKE STANDARDS FOR LOCOMOTIVES (PERCENT OPACITY)

	Steady-state	30-sec peak	3-sec peak
Tier 0	30	40	50
Tier 1	25	40	50

TABLE 3 TO § 1033.101.—SMOKE STANDARDS FOR LOCOMOTIVES (PERCENT OPACITY)—Continued

	Steady-state	30-sec peak	3-sec peak
Tier 2 and later	20	40	50

(d) *Averaging, banking, and trading.* You may generate or use emission credits under the averaging, banking, and trading (ABT) program as described in subpart H of this part to comply with the NO_X and/or PM standards of this part. You may also use ABT to comply with the Tier 4 HC standards of this part as described in paragraph (j) of this section. Generating or using emission credits requires that you specify a family emission limit (FEL) for each pollutant you include in the ABT program for each engine family. These FELs serve as the emission standards for the engine family with respect to all required testing instead of the standards specified in paragraphs (a) and (b) of this section. No FEL may be higher than the previously applicable Tier of standards. For example, no FEL for a Tier 1 locomotive may be higher than the Tier 0 standard.

(e) *Notch standards.* (1) Exhaust emissions from locomotives may not exceed the notch standards specified in paragraph (e)(2) of this section, except as allowed in paragraph (e)(3) of this section, when measured using any test procedures under any test conditions.

(2) Except as specified in paragraph (e)(5) of this section, calculate the applicable notch standards for each pollutant for each notch from the certified notch emission rate as follows:

Notch standard = $(E_i) \times (1.1 + (1—ELH_i/std))$

Where:

E_i = The deteriorated brake-specific emission rate (for pollutant i) for the notch (i.e., the brake-specific emission rate calculated under subpart F of this part, adjusted by the deterioration factor in the application for certification); where i is NO_X, HC, CO or PM.

ELH_i = The deteriorated line-haul duty-cycle weighted brake-specific emission rate for pollutant i, as reported in the application for certification, except as specified in paragraph (e)(6) of this section.

std = The applicable line-haul duty-cycle standard/FEL, except as specified in paragraph (e)(6) of this section.

(3) Exhaust emissions that exceed the notch standards specified in paragraph (e)(2) of this section are allowed only if one of the following is true:

(i) The same emission controls are applied during the test conditions causing the noncompliance as were applied during certification test conditions (and to the same degree).

(ii) The exceedance result from a design feature that was described (including its effect on emissions) in the approved application for certification, and is:

(A) Necessary for safety;

(B) Addresses infrequent regeneration of an aftertreatment device; or

(C) Otherwise allowed by this part.

(4) Since you are only required to test your locomotive at the highest emitting dynamic brake point, the notch caps that you calculate for the dynamic brake point that you test also apply for other dynamic brake points.

(5) No PM notch caps apply for locomotives certified to a PM standard or FEL of 0.05 g/bhp-hr or lower.

(6) For switch locomotives that are not subject to line-haul standards, ELH^i equals the deteriorated switch duty-cycle weighted brake-specific emission rate for pollutant i and std is the applicable switch cycle standard/FEL.

(f) *Fuels.* The exhaust emission standards in this section apply for locomotives using the fuel type on which the locomotives in the engine family are designed to operate.

(1) You must meet the numerical emission standards for HC in this section based on the following types of hydrocarbon emissions for locomotives powered by the following fuels:

(i) Alcohol-fueled locomotives: THCE emissions for Tier 3 and earlier locomotives and NMHCE for Tier 4.

(ii) Gaseous-fueled locomotives: NMHC emissions.

(iii) Diesel-fueled and other locomotives: THC emissions for Tier 3 and earlier locomotives and NMHC for Tier 4. Note that manufacturers/remanufacturers may choose to not measure NMHC and assume that NMHC is equal to THC multiplied by 0.98 for diesel-fueled locomotives.

(2) You must certify your diesel-fueled locomotives to use the applicable grades of diesel fuel as follows:

(i) Certify your Tier 4 and later diesel-fueled locomotives for operation with only Ultra Low Sulfur Diesel (ULSD) fuel. Use ULSD as the test fuel for these locomotives.

(ii) Certify your Tier 3 and earlier diesel-fueled locomotives for operation with only ULSD fuel if they include sulfur-sensitive technology and you demonstrate compliance using a ULSD test fuel.

(iii) Certify your Tier 3 and earlier diesel-fueled locomotives for operation with either ULSD fuel or Low Sulfur Diesel (LSD) fuel if they do not include sulfur-sensitive technology or if you demonstrate compliance using an LSD test fuel (including commercial LSD fuel).

(iv) For Tier 1 and earlier diesel-fueled locomotives, if you demonstrate compliance using a ULSD test fuel, you must adjust the measured PM emissions upward by 0.01 g/bhp-hr to make them equivalent to tests with LSD. We will not apply this adjustment for our testing.

(g) *Useful life.* The emission standards and requirements in this subpart apply to the emissions from new locomotives for their useful life. The useful life is generally specified as MW-hrs and years, and ends when either of the values (MW-hrs or years) is exceeded or the locomotive is remanufactured.

(1) The minimum useful life in terms of MW-hrs is equal to the product of the rated horsepower multiplied by 7.50. The minimum useful life in terms of years is ten years. For locomotives originally manufactured before January 1, 2000 and not equipped with MW-hr meters, the minimum useful life is equal to 750,000 miles or ten years, whichever is reached first. See (1033.140 for provisions related to rated power.

(2) You must specify a longer useful life if the locomotive or locomotive engine is designed to last longer than the applicable minimum useful life. Recommending a time to remanufacture that is longer than the minimum useful life is one indicator of a longer design life.

(3) Manufacturers/remanufacturers of locomotives with non-locomotive-specific engines (as defined in (1033.901) may ask us (before certification) to allow a shorter useful life for an engine family containing only non-locomotive-specific engines. We may approve a shorter useful life, in MW-hrs of locomotive operation but not in years, if we determine that these locomotives will rarely operate longer than the shorter useful life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information

equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information.

(4) Remanufacturers of locomotive or locomotive engine configurations that have been previously certified under paragraph (g)(3) of this section to a useful life that is shorter than the value specified in paragraph (g)(1) of this section may certify to that same shorter useful life value without request.

(5) In unusual circumstances, you may ask us to allow you to certify some locomotives in your engine family to a partial useful life. This allowance is limited to cases in which some or all of the locomotive(s power assemblies have been operated previously such that the locomotive will need to be remanufactured prior to the end of the otherwise applicable useful life. Unless we specify otherwise, define the partial useful life based on the total MW-hrs since the last remanufacture to be consistent with other locomotives in the family. For example, this may apply for a previously uncertified locomotive that becomes ''new'' when it is imported, but that was remanufactured two years earlier (representing 25 percent of the normal useful life period). If such a locomotive could be brought into compliance with the applicable standards without being remanufactured, you may ask to include it in your engine family for the remaining 75 percent of its useful life period.

(h) *Applicability for testing.* The emission standards in this subpart apply to all testing, including certification testing, production-line testing, and in-use testing.

(i) *Alternate CO standards.* Manufacturers/remanufacturers may certify Tier 0, Tier 1, or Tier 2 locomotives to an alternate CO emission standard of 10.0 g/bhp-hr instead of the otherwise applicable CO standard if they also certify those locomotives to alternate PM standards less than or equal to one-half of the otherwise applicable PM standard. For example, a manufacturer certifying Tier 1 locomotives to a 0.11 g/bhp-hr PM standard may certify those locomotives to the alternate CO standard of 10.0 g/bhp-hr.

(j) *Alternate* NO_X+HC standards for Tier 4. Manufacturers/remanufacturers may use credits accumulated through the ABT program to certify Tier 4 locomotives to an alternate NO_X+HC emission standard of 1.4 g/bhp-hr (instead of the otherwise applicable NO_X and NMHC standards). You may use NO_X credits to show compliance with this standard by certifying your family to a NO_X+HC FEL. Calculate the NO_X credits needed as specified in subpart H of this part using the NO_X+HC emission standard and FEL in the calculation instead of the otherwise applicable NO_X standard and FEL. You may not generate credits relative to the alternate standard or certify to the standard without using credits.

(k) *Upgrading.* Upgraded locomotives that were originally manufactured prior to January 1, 1973 are subject to the Tier 0 standards. (See the definition of upgrade in § 1033.901.)

(l) *Other optional standard provisions.* Locomotives may be certified to a higher tier of standards than would otherwise be required. Tier 0 switch locomotives may be certified to both the line-haul and switch cycle standards. In both cases, once the locomotives become subject to the additional standards, they remain subject to those standards for the remainder of their service lives.

§ 1033.102 Transition to the standards of this part.

(a) Except as specified in § 1033.150(a), the Tier 0 and Tier 1 standards of § 1033.101 apply for new locomotives beginning January 1, 2010, except as specified in § 1033.150(a). The Tier 0 and Tier 1 standards of 40 CFR part 92 apply for earlier model years.

(b) Except as specified in § 1033.150(a), the Tier 2 standards of § 1033.101 apply for new locomotives beginning January 1, 2013. The Tier 2 standards of 40 CFR part 92 apply for earlier model years.

(c) The Tier 3 and Tier 4 standards of § 1033.101 apply for the model years specified in that section.

§ 1033.110 Emission diagnostics—general requirements.

The provisions of this section apply if you equip your locomotives with a diagnostic system that will detect significant malfunctions in their emission-control systems and you choose to base your emission-related maintenance instructions on such diagnostics. See § 1033.420 for information about how to select and maintain diagnostic-equipped locomotives for in-use testing. Notify the owner/operator that the presence of this diagnostic system affects their maintenance obligations under § 1033.815. Except as specified in § 1033.112, this section does not apply for diagnostics that you do not include in your emission-related maintenance instructions. The provisions of this section address diagnostic systems based on malfunction-indicator lights (MILs). You may ask to use other indicators instead of MILs.

(a) The MIL must be readily visible to the operator. When the MIL goes on, it must display ''Check Emission Controls'' or a similar message that we approve. You may use sound in addition to the light signal.

(b) To ensure that owner/operators consider MIL illumination seriously, you may not illuminate it for malfunctions that would not otherwise require maintenance. This section does not limit your ability to display other indicator lights or messages, as long as they are clearly distinguishable from MILs affecting the owner/operator's maintenance obligations under § 1033.815.

(c) Control when the MIL can go out. If the MIL goes on to show a malfunction, it must remain on during all later engine operation until servicing corrects the malfunction. If the engine is not serviced, but the malfunction does not recur during the next 24 hours, the MIL may stay off during later engine operation.

(d) Record and store in computer memory any diagnostic trouble codes showing a malfunction that should illuminate the MIL. The stored codes must identify the malfunctioning system or component as uniquely as possible. Make these codes available through the data link connector as described in paragraph (e) of this section. You may store codes for conditions that do not turn on the MIL. The system must store a separate code to show when the diagnostic system is disabled (from malfunction or tampering). Provide instructions to the owner/operator regarding how to interpret malfunction codes.

(e) Make data, access codes, and devices accessible. Make all required data accessible to us without any access codes or devices that only you can supply. Ensure that anyone servicing your locomotive can read and understand the diagnostic trouble codes stored in the onboard computer with generic tools and information.

(f) Follow standard references for formats, codes, and connections.

§ 1033.112 Emission diagnostics for SCR systems.

Engines equipped with SCR systems using separate reductant tanks must also meet the requirements of this section in addition to the requirements of

§ 1033.110. This section does not apply for SCR systems using the engine's fuel as the reductant.

(a) The diagnostic system must monitor reductant quality and tank levels and alert operators to the need to refill the reductant tank before it is empty, or to replace the reductant if it does not meet your concentration specifications. Unless we approve other alerts, use a malfunction-indicator light (MIL) as specified in § 1033.110 and an audible alarm. You do not need to separately monitor reductant quality if you include an exhaust NO_X sensor (or other sensor) that allows you to determine inadequate reductant quality. However, tank level must be monitored in all cases.

(b) Your onboard computer must record in nonvolatile computer memory all incidents of engine operation with inadequate reductant injection or reductant quality. It must record the total amount of operation without adequate reductant. It may total the operation by hours, work, or excess NO_X emissions.

§ 1033.115 Other requirements.

Locomotives that are required to meet the emission standards of this part must meet the requirements of this section. These requirements apply when the locomotive is new (for freshly manufactured or remanufactured locomotives) and continue to apply throughout the useful life.

(a) *Crankcase emissions.* Crankcase emissions may not be discharged directly into the ambient atmosphere from any locomotive, except as follows:

(1) Locomotives may discharge crankcase emissions to the ambient atmosphere if the emissions are added to the exhaust emissions (either physically or mathematically) during all emission testing. If you take advantage of this exception, you must do both of the following things:

(i) Manufacture the locomotives so that all crankcase emissions can be routed into the applicable sampling systems specified in 40 CFR part 1065, consistent with good engineering judgment.

(ii) Account for deterioration in crankcase emissions when determining exhaust deterioration factors.

(2) For purposes of this paragraph (a), crankcase emissions that are routed to the exhaust upstream of exhaust aftertreatment during all operation are not considered to be discharged directly into the ambient atmosphere.

(b) *Adjustable parameters.* Locomotives that have adjustable parameters must meet all the requirements of this part for any adjustment in the approved adjustable range. You must specify in your application for certification the adjustable range of each adjustable parameter on a new locomotive or new locomotive engine to:

(1) Ensure that safe locomotive operating characteristics are available within that range, as required by section 202(a)(4) of the Clean Air Act (42 U.S.C. 7521(a)(4)), taking into consideration the production tolerances.

(2) Limit the physical range of adjustability to the maximum extent practicable to the range that is necessary for proper operation of the locomotive or locomotive engine.

(c) *Prohibited controls.* You may not design or produce your locomotives with emission control devices, systems, or elements of design that cause or contribute to an unreasonable risk to public health, welfare, or safety while operating. For example, this would apply if the locomotive emits a noxious or toxic substance it would otherwise not emit that contributes to such an unreasonable risk.

(d) *Evaporative and refueling controls.* For locomotives fueled with a volatile fuel you must design and produce them to minimize evaporative emissions during normal operation, including periods when the engine is shut down. You must also design and produce them to minimize the escape of fuel vapors during refueling. Hoses used to refuel gaseous-fueled locomotives may not be designed to be bled or vented to the atmosphere under normal operating conditions. No valves or pressure relief vents may be used on gaseous-fueled locomotives except as emergency safety devices that do not operate at normal system operating flows and pressures.

(e) *Altitude requirements.* All locomotives must be designed to include features that compensate for changes in altitude so that the locomotives will comply with the applicable emission standards when operated at any altitude less than:

(1) 7000 feet above sea level for line-haul locomotives.

(2) 5500 feet above sea level for switch locomotives.

(f) *Defeat devices.* You may not equip your locomotives with a defeat device. A defeat device is an auxiliary emission control device (AECD) that reduces the effectiveness of emission controls under conditions that the locomotive may reasonably be expected to encounter during normal operation and use.

(1) This does not apply to AECDs you identify in your certification application if any of the following is true:

(i) The conditions of concern were substantially included in the applicable duty cycle test procedures described in subpart F of this part.

(ii) You show your design is necessary to prevent locomotive damage or accidents.

(iii) The reduced effectiveness applies only to starting the locomotive.

(iv) The locomotive emissions when the AECD is functioning are at or below the notch caps of § 1033.101.

(g) *Idle controls.* All new locomotives must be equipped with automatic engine stop/start as described in this paragraph (g). All new locomotives must be designed to allow the engine(s) to be restarted at least six times per day without causing engine damage that would affect the expected interval between remanufacturing. Note that it is a violation of 40 CFR 1068.101(b)(1) to circumvent the provisions of this paragraph (g).

(1) Except as allowed by paragraph (g)(2) of this section, the stop/start systems must shut off the main locomotive engine(s) after 30 minutes of idling (or less).

(2) Stop/start systems may restart or continue idling for the following reasons:

(i) To prevent engine damage such as to prevent the engine coolant from freezing.

(ii) To maintain air pressure for brakes or starter system, or to recharge the locomotive battery.

(iii) To perform necessary maintenance.

(iv) To otherwise comply with federal regulations.

(4) You may ask to use alternate stop/start systems that will achieve equivalent idle control.

(5) See § 1033.201 for provisions that allow you to obtain a separate certificate for idle controls.

(6) It is not considered circumvention to allow a locomotive to idle to heat or cool the cab, provided such heating or cooling is necessary.

(h) *Power meters.* Tier 1 and later locomotives must be equipped with MW-hr meters (or the equivalent) consistent with the specifications of § 1033.140.

§ 1033.120 Emission-related warranty requirements.

(a) *General requirements.* Manufacturers/remanufacturers must warrant to the ultimate purchaser and each subsequent purchaser that the new locomotive, including all parts of its emission control system, meets two conditions:

(1) It is designed, built, and equipped so it conforms at the time of sale to the ultimate purchaser with the requirements of this part.

(2) It is free from defects in materials and workmanship that may keep it from meeting these requirements.

(b) *Warranty period.* Except as specified in this paragraph, the minimum warranty period is one-third of the useful life. Your emission-related warranty must be valid for at least as long as the minimum warranty periods listed in this paragraph (b) in MW-hrs of operation and years, whichever comes first. You may offer an emission-related warranty more generous than we require. The emission-related warranty for the locomotive may not be shorter than any published warranty you offer without charge for the locomotive. Similarly, the emission-related warranty for any component may not be shorter than any published warranty you offer without charge for that component. If you provide an extended warranty to individual owners for any components covered in paragraph (c) of this section for an additional charge, your emission-related warranty must cover those components for those owners to the same degree. If the locomotive does not record MW-hrs, we base the warranty periods in this paragraph (b) only on years. The warranty period begins when the locomotive is placed into service, or back into service after remanufacture.

(c) *Components covered.* The emission-related warranty covers all components whose failure would increase a locomotive's emissions of any pollutant. This includes components listed in 40 CFR part 1068, Appendix I, and components from any other system you develop to control emissions. The emission-related warranty covers the components you sell even if another company produces the component. Your emission-related warranty does not cover components whose failure would not increase a locomotive's emissions of any pollutant. For remanufactured locomotives, your emission-related warranty does not cover used parts that are not replaced during the remanufacture.

(d) *Limited applicability.* You may deny warranty claims under this section if the operator caused the problem through improper maintenance or use, as described in 40 CFR 1068.115.

(e) *Owners manual.* Describe in the owners manual the emission-related warranty provisions from this section that apply to the locomotive.

§ 1033.125 Maintenance instructions.

Give the owner of each new locomotive written instructions for properly maintaining and using the locomotive, including the emission-control system. Include in the instructions a notification that owners and operators must comply with the requirements of subpart I of this part 1033. The emission-related maintenance instructions also apply to any service accumulation on your emission-data locomotives, as described in § 1033.245 and in 40 CFR part 1065. If you equip your locomotives with a diagnostic system that will detect significant malfunctions in their emission-control systems, specify the extent to which your emission-related maintenance instructions include such diagnostics.

§ 1033.130 Instructions for engine remanufacturing or engine installation.

(a) If you do not complete assembly of the new locomotive (such as selling a kit that allows someone else to remanufacture a locomotive under your certificate), give the assembler instructions for completing assembly consistent with the requirements of this part. Include all information necessary to ensure that the locomotive will be assembled in its certified configuration.

(b) Make sure these instructions have the following information:

(1) Include the heading: ''Emission-related assembly instructions''.

(2) Describe any instructions necessary to make sure the assembled locomotive will operate according to design specifications in your application for certification.

(3) Describe how to properly label the locomotive. This will generally include instructions to remove and destroy the previous Engine Emission Control Information label.

(4) State one of the following as applicable:

(i) ''Failing to follow these instructions when remanufacturing a locomotive or locomotive engine violates federal law (40 CFR 1068.105(b)), and may subject you to fines or other penalties as described in the Clean Air Act.''.

(ii) ''Failing to follow these instructions when installing this locomotive engine violates federal law (40 CFR 1068.105(b)), and may subject you to fines or other penalties as described in the Clean Air Act.''.

(c) You do not need installation instructions for locomotives you assemble.

(d) Provide instructions in writing or in an equivalent format. For example, you may post instructions on a publicly available Web site for downloading or printing. If you do not provide the instructions in writing, explain in your application for certification how you will ensure that each assembler is informed of the assembly requirements.

(e) Your emission-related assembly instructions may not include specifications for parts unrelated to emissions. For the basic mechanical parts listed in this paragraph (e), you may not specify a part manufacturer unless we determine that such a specification is necessary. You may include design specifications for such parts addressing the dimensions and material constraints as necessary. You may also specify a part number, as long you make it clear that alternate part suppliers may be used. This paragraph (e) covers the following parts or other parts we determine qualify as basic mechanical parts:

(1) Intake and exhaust valves.

(2) Intake and exhaust valve retainers.

(3) Intake and exhaust valve springs.

(4) Intake and exhaust valve rotators.

(5) Oil coolers.

§ 1033.135 Labeling.

As described in this section, each locomotive must have a label on the locomotive and a separate label on the engine. The label on the locomotive stays on the locomotive throughout its service life. It generally identifies the original certification of the locomotive, which is when it was originally manufactured for Tier 1 and later locomotives. The label on the engine is replaced each time the locomotive is remanufactured and identifies the most recent certification.

(a) *Serial numbers.* At the point of original manufacture, assign each locomotive and each locomotive engine a serial number or other unique identification number and permanently affix, engrave, or stamp the number on the locomotive and engine in a legible way.

(b) *Locomotive labels.* (1) Locomotive labels meeting the specifications of paragraph (b)(2) of this section must be applied as follows:

(i) The manufacturer must apply a locomotive label at the point of original manufacture.

(ii) The remanufacturer must apply a locomotive label at the point of original remanufacture, unless the locomotive was labeled by the original manufacturer.

(iii) Any remanufacturer certifying a locomotive to an FEL or standard different from the previous FEL or standard to which the locomotive was previously certified must apply a locomotive label.

(2) The locomotive label must meet all of the following criteria:

(i) The label must be permanent and legible and affixed to the locomotive in a position in which it will remain readily visible. Attach it to a locomotive chassis part necessary for normal operation and not normally requiring

replacement during the service life of the locomotive. You may not attach this label to the engine or to any equipment that is easily detached from the locomotive. Attach the label so that it cannot be removed without destroying or defacing the label. For Tier 0 locomotives, the label may be made up of more than one piece, as long as all pieces are permanently attached to the locomotive.

(ii) The label must be lettered in the English language using a color that contrasts with the background of the label.

(iii) The label must include all the following information:

(A) The label heading: ''ORIGINAL LOCOMOTIVE EMISSION CONTROL INFORMATION.'' Manufacturers/remanufacturers may add a subheading to distinguish this label from the engine label described in paragraph (c) of this section.

(B) Full corporate name and trademark of the manufacturer (or remanufacturer).

(C) The applicable engine family and configuration identification. In the case of locomotive labels applied by the manufacturer at the point of original manufacture, this will be the engine family and configuration identification of the certificate applicable to the freshly manufactured locomotive. In the case of locomotive labels applied by a remanufacturer during remanufacture, this will be the engine family and configuration identification of the certificate under which the remanufacture is being performed.

(D) Date of original manufacture of the locomotive, as defined in § 1033.901.

(E) The standards/FELs to which the locomotive was certified and the following statement: ''THIS LOCOMOTIVE MUST COMPLY WITH THESE EMISSION LEVELS EACH TIME THAT IT IS REMANUFACTURED, EXCEPT AS ALLOWED BY 40 CFR 1033.750.''.

(3) Label diesel-fueled locomotives near the fuel inlet to identify the allowable fuels, consistent with § 1033.101. For example, Tier 4 locomotives should be labeled ''ULTRA LOW SULFUR DIESEL FUEL ONLY''. You do not need to label Tier 3 and earlier locomotives certified for use with both LSD and ULSD.

(c) *Engine labels.* (1) For engines not requiring aftertreatment devices, apply engine labels meeting the specifications of paragraph (c)(2) of this section once an engine has been assembled in its certified configuration. For engines that require aftertreatment devices, apply the label after the engine has been fully assembled, which may occur before installing the aftertreatment devices. These labels must be applied by:

(i) The manufacturer at the point of original manufacture; and

(ii) The remanufacturer at the point of each remanufacture (including the original remanufacture and subsequent remanufactures).

(2) The engine label must meet all of the following criteria:

(i) The label must be durable throughout the useful life of the engine, be legible and affixed to the engine in a position in which it will be readily visible after installation of the engine in the locomotive. Attach it to an engine part necessary for normal operation and not normally requiring replacement during the useful life of the locomotive. You may not attach this label to any equipment that is easily detached from the engine. Attach the label so it cannot be removed without destroying or defacing the label. The label may be made up of more than one piece, as long as all pieces are permanently attached to the same engine part.

(ii) The label must be lettered in the English language using a color that contrasts with the background of the label.

(iii) The label must include all the following information:

(A) The label heading: ''ENGINE EMISSION CONTROL INFORMATION.'' Manufacturers/remanufacturers may add a subheading to distinguish this label from the locomotive label described in paragraph (b) of this section.

(B) Full corporate name and trademark of the manufacturer/remanufacturer.

(C) Engine family and configuration identification as specified in the certificate under which the locomotive is being manufactured or remanufactured.

(D) A prominent unconditional statement of compliance with U.S. Environmental Protection Agency regulations which apply to locomotives, as applicable:

(*1*) ''This locomotive conforms to U.S. EPA regulations applicable to Tier 0+ switch locomotives.''

(*2*) ''This locomotive conforms to U.S. EPA regulations applicable to Tier 0+ line-haul locomotives.''

(*3*) ''This locomotive conforms to U.S. EPA regulations applicable to Tier 1+ locomotives.''

(*4*) ''This locomotive conforms to U.S. EPA regulations applicable to Tier 2+ locomotives.''

(*5*) ''This locomotive conforms to U.S. EPA regulations applicable to Tier 3 switch locomotives.''

(*6*) ''This locomotive conforms to U.S. EPA regulations applicable to Tier 3 line-haul locomotives.''

(*7*) ''This locomotive conforms to U.S. EPA regulations applicable to Tier 4 switch locomotives.''

(*8*) ''This locomotive conforms to U.S. EPA regulations applicable to Tier 4 line-haul locomotives.''

(E) The useful life of the locomotive.

(F) The standards/FELS to which the locomotive was certified.

(iv) You may include other critical operating instructions such as specifications for adjustments or reductant use for SCR systems.

(d) You may add information to the emission control information label as follows:

(1) You may identify other emission standards that the engine/locomotive meets or does not meet (such as international standards). You may include this information by adding it to the statement we specify or by including a separate statement.

(2) You may add other information to ensure that the locomotive will be properly maintained and used.

(3) You may add appropriate features to prevent counterfeit labels. For example, you may include the engine's unique identification number on the label.

(e) You may ask us to approve modified labeling requirements in this part 1033 if you show that it is necessary or appropriate. We will approve your request if your alternate label is consistent with the requirements of this part.

§ 1033.140 Rated power.

This section describes how to determine the rated power of a locomotive for the purposes of this part.

(a) A locomotive configuration's rated power is the maximum brake power point on the nominal power curve for the locomotive configuration, as defined in this section. See § 1033.901 for the definition of brake power. Round the power value to the nearest whole horsepower. Generally, this will be the brake power of the engine in notch 8.

(b) The nominal power curve of a locomotive configuration is its maximum available brake power at each possible operator demand setpoint or ''notch''. See 40 CFR 1065.1001 for the definition of operator demand. The maximum available power at each operator demand setpoint is based on your design and production specifications for that locomotive. The nominal power curve does not include any operator demand setpoints that are not achievable during in-use operation. For example, for a locomotive with only

eight discrete operator demand setpoints, or notches, the nominal power curve would be a series of eight power points versus notch, rather than a continuous curve.

(c) The nominal power curve must be within the range of the actual power curves of production locomotives considering normal production variability. If after production begins it is determined that your nominal power curve does not represent production locomotives, we may require you to amend your application for certification under § 1033.225.

(d) For the purpose of determining useful life, you may need to use a rated power based on power other than brake power according to the provisions of this paragraph (d). The useful life must be based on the power measured by the locomotive's megawatt-hour meter. For example, if your megawatt-hour meter reads and records the electrical work output of the alternator/generator rather than the brake power of the engine, and the power output of the alternator/generator at notch 8 is 4000 horsepower, calculate your useful life as 30,000 MW-hrs (7.5 × 4000).

§ 1033.150 Interim provisions.

The provisions of this section apply instead of other provisions of this part for a limited time. This section describes when these provisions apply.

(a) *Early availability of Tier 0, Tier 1, or Tier 2 systems.* Except as specified in paragraph (a)(2) of this section, for model years 2008 and 2009, you may remanufacture locomotives to meet the applicable standards in 40 CFR part 92 only if no remanufacture system has been certified to meet the standards of this part and is available at a reasonable cost at least 90 days prior to the completion of the remanufacture as specified in paragraph (a)(3) of this section. This same provision continues to apply after 2009, but only for Tier 2 locomotives. Note that remanufacturers may certify remanufacturing systems that will not be available at a reasonable cost; however such certification does not trigger the requirements of this paragraph (a).

(1) For the purpose of this paragraph (a), ''available at a reasonable cost'' means available for use where all of the following are true:

(i) The total incremental cost to the owner and operators of the locomotive due to meeting the new standards (including initial hardware, increased fuel consumption, and increased maintenance costs) during the useful life of the locomotive is less than $250,000, adjusted as specified in paragraph (a)(4)(i) of this section.

(ii) The initial incremental hardware costs are reasonably related to the technology included in the remanufacturing system and are less than $125,000, adjusted as specified in paragraph (a)(4)(i) of this section.

(iii) The remanufactured locomotive will have reliability throughout its useful life that is similar to the reliability the locomotive would have had if it had been remanufactured without the certified remanufacture system.

(iv) The remanufacturer must demonstrate at the time of certification that the system meets the requirements of this paragraph (a)(1).

(v) The system does not generate or use emission credits.

(2) The number of locomotives that each railroad must remanufacture under this paragraph (a) is capped as follows:

(i) For the period October 3, 2008 to December 31, 2008, the maximum number of locomotives that a railroad must remanufacture under this paragraph (a) is 50 percent of the total number of the railroad's locomotives that are remanufactured during this period under this part or 40 CFR part 92. Include in the calculation both locomotives you own and locomotives you lease.

(ii) For the period January 1, 2009 to December 31, 2009, the maximum number of locomotives that a railroad must remanufacture under this paragraph (a) is 70 percent of the total number of the railroad's locomotives that are remanufactured during this period under this part or 40 CFR part 92. Include in the calculation both locomotives you own and locomotives you lease.

(3) Remanufacturers applying for certificates under this paragraph (a) are responsible to notify owner/operators (and other customers as applicable) that they have requested such certificates. The notification should occur at the same time that the remanufacturer submits its application, and should include a description of the remanufacturing system, price, expected incremental operating costs, and draft copies of your installation and maintenance instructions. The system is considered to be available for a customer 120 days after this notification, or 90 days after the certificate is issued, whichever is later. Where we issue a certificate of conformity under this part based on carryover data from an engine family that we previously considered available for the configuration, the system is considered to be available when we issue the certificate.

(4) Estimate costs as described in this paragraph (a)(4).

(i) The cost limits described in paragraph (a)(1) of this section are specified in terms of 2007 dollars. Adjust these values for future years according to the following equation:

Actual Limit = (2007 Limit) × [(0.6000)×(Commodity Index) + (0.4000)×(Earnings Index)]

Where:

2007 Limit = The value specified in paragraph (a)(1) of this section ($250,000 or $125,000).

Commodity Index = The U.S. Bureau of Labor Statistics Producer Price Index for Industrial Commodities Less Fuel (Series WPU03T15M05) for the month prior to the date you submit your application divided by 173.1.

Earnings Index = The U.S. Bureau of Labor Statistics Estimated Average Hourly Earnings of Production Workers for Durable Manufacturing (Series CES3100000008) for the month prior to the date you submit your application divided by 18.26.

(ii) Calculate all costs in current dollars (for the month prior to the date you submit your application). Calculate fuel costs based on a fuel price adjusted by the Association of American Railroads' monthly railroad fuel price index (P), which is available at *https://www.aar.org/PubCommon/Documents/AboutTheIndustry/Index_MonthlyFuelPrices.pdf*. (Use the value for the column in which P equals 539.8 for November 2007.) Calculate a new fuel price using the following equation:

Fuel Price = ($2.76 per gallon) × (P/539.8)

(b) *Idle controls.* A locomotive equipped with an automatic engine stop/start system that was originally installed before January 1, 2008 and that conforms to the requirements of § 1033.115(g) is deemed to be covered by a certificate of conformity with respect to the requirements of § 1033.115(g). Note that the provisions of subpart C of this part also allow you to apply for a conventional certificate of conformity for such systems.

(c) *Locomotive labels for transition to new standards.* This paragraph (c) applies when you remanufacture a locomotive that was previously certified under 40 CFR part 92. You must remove the old locomotive label and replace it with the locomotive label specified in § 1033.135.

(d) *Small manufacturer/remanufacturer provisions.* The production-line testing requirements and in-use testing requirements of this part do not apply until January 1, 2013 for manufacturers/remanufacturers that

qualify as small manufacturers under § 1033.901.

(e) *Producing switch locomotives using certified nonroad engines.* You may use the provisions of this paragraph (e) to produce any number of freshly manufactured or refurbished switch locomotives in model years 2008 through 2017. Locomotives produced under this paragraph (e) are exempt from the standards and requirements of this part and 40 CFR part 92 subject to the following provisions:

(1) All of the engines on the switch locomotive must be covered by a certificate of conformity issued under 40 CFR part 89 or 1039 for model year 2008 or later. Engines over 750 hp certified to the Tier 4 standards for non-generator set engines are not eligible for this allowance after 2014.

(2) You must reasonably project that more of the engines will be sold and used for non-locomotive use than for use in locomotives.

(3) You may not generate or use locomotive credits under this part for these locomotives.

(4) Include the following statement on a permanent locomotive label: ''THIS LOCOMOTIVE WAS CERTIFIED UNDER 40 CFR 1033.150(e). THE ENGINES USED IN THIS LOCOMOTIVE ARE SUBJECT TO REQUIREMENTS OF 40 CFR PARTS 1039 (or 89) AND 1068.''

(5) The rebuilding requirements of 40 CFR part 1068 apply when remanufacturing engines used in these locomotives.

(f) *In-use compliance limits.* For purposes of determining compliance other than for certification or production-line testing, calculate the applicable in-use compliance limits by adjusting the applicable standards/FELs. The PM adjustment applies only for model year 2017 and earlier locomotives and does not apply for locomotives with a PM FEL higher than 0.03 g/bhp-hr. The NO_X adjustment applies only for model year 2017 and earlier locomotives and does not apply for locomotives with a NO_X FEL higher than 2.0 g/bhp-hr. Add the applicable adjustments in Tables 1 or 2 of this section (which follow) to the otherwise applicable standards (or FELs) and notch caps. You must specify during certification which add-ons, if any, will apply for your locomotives.

TABLE 1 TO § 1033.150.—IN-USE ADJUSTMENTS FOR TIER 4 LOCOMOTIVES

Fraction of useful life already used	In-use adjustments (g/bhp-hr)	
	For model year 2017 and earlier Tier 4 NO_X standards	For model year 2017 and earlier Tier 4 PM standards
0 < MW-hrs ≤ 50% of UL	0.7	0.01
50 < MW-hrs > 75% of UL	1.0	0.01
MW-hrs > 75% of UL	1.3	0.01

TABLE 2 TO § 1033.150.—OPTIONAL IN-USE ADJUSTMENTS FOR TIER 4 LOCOMOTIVES

Fraction of useful life already used	In-use adjustments (g/bhp-hr)	
	For model year 2017 and earlier Tier 4 NO_X standards	For model year 2017 and earlier Tier 4 PM standards
0 < MW-hrs ≤ 50% of UL	0.2	0.03
50 < MW-hrs ≤ 75% of UL	0.3	0.03
MW-hrs > 75% of UL	0.4	0.03

(g) Optional interim Tier 4 compliance provisions for NO_X emissions. For model years 2015 through 2022, manufacturers may choose to certify some or all of their Tier 4 line-haul engine families according to the optional compliance provisions of this paragraph (g). The following provisions apply to all locomotives in those families:

(1) The provisions of this paragraph (g) apply instead of the deterioration factor requirements of §§ 1033.240 and 1033.245 for NO_X emissions. You must certify that the locomotives in the engine family will conform to the requirements of this paragraph (g) for their full useful lives.

(2) The applicable NO_X emission standard for locomotives certified under this paragraph (g) is:

(i) 1.3 g/bhp-hr for locomotives that have accumulated less than 50 hours of operation.

(ii) 1.3 plus 0.6 g/bhp-hr for locomotives that have accumulated 50 hours or more of operation.

(3) The engine family may not generate NO_X emission credits.

(4) The design certification provisions of § 1033.240(c) do not apply for these locomotives for the next remanufacture.

(5) Manufacturers must comply with the production-line testing program in subpart D of this part for these engine families or the following optional program:

(i) You are not required to test locomotives in the family under subpart D of this part if you comply with the requirements of this paragraph (g)(5).

(ii) Test the locomotives as specified in subpart E of this part, with the following exceptions:

(A) The minimum test sample size is one percent of the number of locomotives in the family or five, whichever is less.

(B) The locomotives must be tested after they have accumulated 50 hours or more of operation but before they have reached 50 percent of their useful life.

(iii) The standards in this part for pollutants other than NO_X apply as specified for testing conducted under this optional program.

(6) The engine family may use NO_X emission credits to comply with this paragraph (g). However, a 1.5 g/bhp-hr NO_X FEL cap applies for engine families certified under this paragraph (g). The applicable standard for locomotives that

have accumulated 50 hours or more of operation is the FEL plus 0.6 g/bhp-hr.

(7) The in-use NO_X add-ons specified in paragraph (f) of this section do not apply for these locomotives.

(8) All other provisions of this part apply to such locomotives, except as specified otherwise in this paragraph (g).

(h) *Test procedures.* You are generally required to use the test procedures specified in subpart F of this part (including the applicable test procedures in 40 CFR part 1065). As specified in this paragraph (h), you may use a combination of the test procedures specified in this part and the test procedures specified in 40 CFR part 92 prior to January 1, 2015. After this date, you must use only the test procedures specified in this part.

(1) Prior to January 1, 2015, you may ask to use some or all of the procedures specified in 40 CFR part 92 for locomotives certified under this part 1033.

(2) If you ask to rely on a combination of procedures under this paragraph (h), we will approve your request only if you show us that it does not affect your ability to demonstrate compliance with the applicable emission standards. Generally this requires that the combined procedures would result in emission measurements at least as high as those that would be measured using the procedures specified in this part. Alternatively, you may demonstrate that the combined effects of the different procedures is small relative to your compliance margin (the degree to which your emissions are below the applicable standards).

(i) *Certification testing.* Prior to model year 2014, you may use the simplified steady-state engine test procedure specified in this paragraph (i) for certification testing. The normal certification procedures and engine testing procedures apply, except as specified in this paragraph (i).

(1) Use good engineering judgment to operate the engine consistent with its expected operation in the locomotive, to the extent practical. You are not required to exactly replicate the transient behavior of the engine.

(2) You may delay sampling during notch transition for up to 20 seconds after you begin the notch change.

(3) We may require you provide additional information in your application for certification to support the expectation that production locomotives will meet all applicable emission standards when tested as locomotives.

(4) You may not use this simplified procedure for production-line or in-use testing.

(j) *Administrative requirements.* For model years 2008 and 2009, you may use a combination of the administrative procedures specified in this part and the test procedures specified in 40 CFR part 92. For example, this would allow you to use the certification procedures of 40 CFR part 92 to apply for certificates under this part 1033.

(k) *Test fuels.* Testing performed during calendar years 2008 and 2009 may be performed using test fuels that meet the specifications of 40 CFR 92.113. If you do, adjust PM emissions downward by 0.04 g/bhp-hr to account for the difference in sulfur content of the fuel.

(l) *Refurbished switch locomotives.* In 2008 and 2009 remanufactured Tier 0 switch locomotives that are deemed to be refurbished may be certified as remanufactured switch locomotives under 40 CFR part 92.

Subpart C—Certifying Engine Families

§ 1033.201 General requirements for obtaining a certificate of conformity.

Certification is the process by which you demonstrate to us that your freshly manufactured or remanufactured locomotives will meet the applicable emission standards throughout their useful lives (explaining to us how you plan to manufacture or remanufacture locomotives, and providing test data showing that such locomotives will comply with all applicable emission standards). Anyone meeting the definition of manufacturer in § 1033.901 may apply for a certificate of conformity for freshly manufactured locomotives. Anyone meeting the definition of remanufacturer in § 1033.901 may apply for a certificate of conformity for remanufactured locomotives.

(a) You must send us a separate application for a certificate of conformity for each engine family. A certificate of conformity is valid starting with the indicated effective date, but it is not valid for any production after December 31 of the model year for which it is issued. No certificate will be issued after December 31 of the model year.

(b) The application must contain all the information required by this part and must not include false or incomplete statements or information (see § 1033.255).

(c) We may ask you to include less information than we specify in this subpart, as long as you maintain all the information required by § 1033.250.

(d) You must use good engineering judgment for all decisions related to your application (see 40 CFR 1068.5).

(e) An authorized representative of your company must approve and sign the application.

(f) See § 1033.255 for provisions describing how we will process your application.

(g) We may require you to deliver your test locomotives to a facility we designate for our testing (see § 1033.235(c)).

(h) By applying for a certificate of conformity, you are accepting responsibility for the in-use emission performance of all properly maintained and used locomotives covered by your certificate. This responsibility applies without regard to whether you physically manufacture or remanufacture the entire locomotive. If you do not physically manufacture or remanufacture the entire locomotive, you must take reasonable steps (including those specified by this part) to ensure that the locomotives produced under your certificate conform to the specifications of your application for certification. Note that this paragraph does not limit any liability under this part or the Clean Air Act for entities that do not obtain certificates. This paragraph also does not prohibit you from making contractual arrangements with noncertifiers related to recovering damages for noncompliance.

(i) The provisions of this subpart describe how to obtain a certificate that covers all standards and requirements. Manufacturer/remanufacturers may ask to obtain a certificate of conformity that does not cover the idle control requirements of § 1033.115 or one that only covers the idle control requirements of § 1033.115. Remanufacturers obtaining such partial certificates must include a statement in their installation instructions that two certificates and labels are required for a locomotive to be in a fully certified configuration. We may modify the certification requirements for certificates that will only cover idle control systems.

§ 1033.205 Applying for a certificate of conformity.

(a) Send the Designated Compliance Officer a complete application for each engine family for which you are requesting a certificate of conformity.

(b) The application must be approved and signed by the authorized representative of your company.

(c) You must update and correct your application to accurately reflect your production, as described in § 1033.225.

(d) Include the following information in your application:

(1) A description of the basic engine design including, but not limited to, the engine family specifications listed in § 1033.230. For freshly manufactured locomotives, a description of the basic locomotive design. For remanufactured locomotives, a description of the basic locomotive designs to which the remanufacture system will be applied. Include in your description, a list of distinguishable configurations to be included in the engine family. Note whether you are requesting a certificate that will or will not cover idle controls.

(2) An explanation of how the emission control system operates, including detailed descriptions of:

(i) All emission control system components.

(ii) Injection or ignition timing for each notch (i.e., degrees before or after top-dead-center), and any functional dependence of such timing on other operational parameters (e.g., engine coolant temperature).

(iii) Each auxiliary emission control device (AECD).

(iv) All fuel system components to be installed on any production or test locomotives.

(v) Diagnostics.

(3) A description of the test locomotive.

(4) A description of the test equipment and fuel used. Identify any special or alternate test procedures you used.

(5) A description of the operating cycle and the period of operation necessary to accumulate service hours on the test locomotive and stabilize emission levels. You may also include a Green Engine Factor that would adjust emissions from zero-hour engines to be equivalent to stabilized engines.

(6) A description of all adjustable operating parameters (including, but not limited to, injection timing and fuel rate), including the following:

(i) The nominal or recommended setting and the associated production tolerances.

(ii) The intended adjustable range, and the physically adjustable range.

(iii) The limits or stops used to limit adjustable ranges.

(iv) Production tolerances of the limits or stops used to establish each physically adjustable range.

(v) Information relating to why the physical limits or stops used to establish the physically adjustable range of each parameter, or any other means used to inhibit adjustment, are the most effective means possible of preventing adjustment of parameters to settings outside your specified adjustable ranges on in-use engines.

(7) Projected U.S. production information for each configuration. If you are projecting substantially different sales of a configuration than you had previously, we may require you to explain why you are projecting the change.

(8) All test data you obtained for each test engine or locomotive. As described in § 1033.235, we may allow you to demonstrate compliance based on results from previous emission tests, development tests, or other testing information. Include data for NO_X, PM, HC, CO, and CO_2.

(9) The intended deterioration factors for the engine family, in accordance with § 1033.245. If the deterioration factors for the engine family were developed using procedures that we have not previously approved, you should request preliminary approval under § 1033.210.

(10) The intended useful life period for the engine family, in accordance with § 1033.101(g). If the useful life for the engine family was determined using procedures that we have not previously approved, you should request preliminary approval under § 1033.210.

(11) Copies of your proposed emission control label(s), maintenance instructions, and installation instructions (where applicable).

(12) An unconditional statement declaring that all locomotives included in the engine family comply with all requirements of this part and the Clean Air Act.

(e) If we request it, you must supply such additional information as may be required to evaluate the application.

(f) Provide the information to read, record, and interpret all the information broadcast by a locomotive's onboard computers and electronic control units. State that, upon request, you will give us any hardware, software, or tools we would need to do this. You may reference any appropriate publicly released standards that define conventions for these messages and parameters. Format your information consistent with publicly released standards.

(g) Include the information required by other subparts of this part. For example, include the information required by § 1033.725 if you participate in the ABT program.

(h) Include other applicable information, such as information specified in this part or part 1068 of this chapter related to requests for exemptions.

(i) Name an agent for service located in the United States. Service on this agent constitutes service on you or any of your officers or employees for any action by EPA or otherwise by the United States related to the requirements of this part.

(j) For imported locomotives, we may require you to describe your expected importation process.

§ 1033.210 Preliminary approval.

(a) If you send us information before you finish the application, we will review it and make any appropriate determinations for questions related to engine family definitions, auxiliary emission-control devices, deterioration factors, testing for service accumulation, maintenance, and useful lives.

(b) Decisions made under this section are considered to be preliminary approval, subject to final review and approval. We will generally not reverse a decision where we have given you preliminary approval, unless we find new information supporting a different decision.

(c) If you request preliminary approval related to the upcoming model year or the model year after that, we will make best-efforts to make the appropriate determinations as soon as practicable. We will generally not provide preliminary approval related to a future model year more than three years ahead of time.

(d) You must obtain preliminary approval for your plan to develop deterioration factors prior to the start of any service accumulation to be used to develop the factors.

§ 1033.220 Amending maintenance instructions.

You may amend your emission-related maintenance instructions after you submit your application for certification, as long as the amended instructions remain consistent with the provisions of § 1033.125. You must send the Designated Compliance Officer a request to amend your application for certification for an engine family if you want to change the emission-related maintenance instructions in a way that could affect emissions. In your request, describe the proposed changes to the maintenance instructions. We will approve your request if we determine that the amended instructions are consistent with maintenance you performed on emission-data engines such that your durability demonstration would remain valid. If owners/operators follow the original maintenance instructions rather than the newly specified maintenance, this does not allow you to disqualify those locomotives from in-use testing or deny a warranty claim.

(a) If you are decreasing, replacing, or eliminating any of the specified

maintenance, you may distribute the new maintenance instructions to your customers 30 days after we receive your request, unless we disapprove your request. This would generally include replacing one maintenance step with another. We may approve a shorter time or waive this requirement.

(b) If your requested change would not decrease the specified maintenance, you may distribute the new maintenance instructions anytime after you send your request. For example, this paragraph (b) would cover adding instructions to increase the frequency of filter changes for locomotives in severe-duty applications.

(c) You do not need to request approval if you are making only minor corrections (such as correcting typographical mistakes), clarifying your maintenance instructions, or changing instructions for maintenance unrelated to emission control. We may ask you to send us copies of maintenance instructions revised under this paragraph (c).

§ 1033.225 Amending applications for certification.

Before we issue you a certificate of conformity, you may amend your application to include new or modified locomotive configurations, subject to the provisions of this section. After we have issued your certificate of conformity, you may send us an amended application requesting that we include new or modified locomotive configurations within the scope of the certificate, subject to the provisions of this section. You must also amend your application if any changes occur with respect to any information included in your application. For example, you must amend your application if you determine that your actual production variation for an adjustable parameter exceeds the tolerances specified in your application.

(a) You must amend your application before you take either of the following actions:

(1) Add a locomotive configuration to an engine family. In this case, the locomotive added must be consistent with other locomotives in the engine family with respect to the criteria listed in § 1033.230. For example, you must amend your application if you want to produce 12-cylinder versions of the 16-cylinder locomotives you described in your application.

(2) Change a locomotive already included in an engine family in a way that may affect emissions, or change any of the components you described in your application for certification. This includes production and design changes that may affect emissions any time during the locomotive's lifetime. For example, you must amend your application if you want to change a part supplier if the part was described in your original application and is different in any material respect than the part you described.

(3) Modify an FEL for an engine family as described in paragraph (f) of this section.

(b) To amend your application for certification, send the Designated Compliance Officer the following information:

(1) Describe in detail the addition or change in the locomotive model or configuration you intend to make.

(2) Include engineering evaluations or data showing that the amended engine family complies with all applicable requirements. You may do this by showing that the original emission-data locomotive is still appropriate with respect to showing compliance of the amended family with all applicable requirements.

(3) If the original emission-data locomotive for the engine family is not appropriate to show compliance for the new or modified locomotive, include new test data showing that the new or modified locomotive meets the requirements of this part.

(c) We may ask for more test data or engineering evaluations. You must give us these within 30 days after we request them.

(d) For engine families already covered by a certificate of conformity, we will determine whether the existing certificate of conformity covers your new or modified locomotive. You may ask for a hearing if we deny your request (see § 1033.920).

(e) For engine families already covered by a certificate of conformity, you may start producing the new or modified locomotive anytime after you send us your amended application, before we make a decision under paragraph (d) of this section. However, if we determine that the affected locomotives do not meet applicable requirements, we will notify you to cease production of the locomotives and may require you to recall the locomotives at no expense to the owner. Choosing to produce locomotives under this paragraph (e) is deemed to be consent to recall all locomotives that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days, you must stop producing the new or modified locomotives.

(f) You may ask us to approve a change to your FEL in certain cases after the start of production. The changed FEL may not apply to locomotives you have already introduced into U.S. commerce, except as described in this paragraph (f). If we approve a changed FEL after the start of production, you must include the new FEL on the emission control information label for all locomotives produced after the change. You may ask us to approve a change to your FEL in the following cases:

(1) You may ask to raise your FEL for your engine family at any time. In your request, you must show that you will still be able to meet the emission standards as specified in subparts B and H of this part. If you amend your application by submitting new test data to include a newly added or modified locomotive, as described in paragraph (b)(3) of this section, use the appropriate FELs with corresponding production volumes to calculate your production-weighted average FEL for the model year, as described in subpart H of this part. If you amend your application without submitting new test data, you must use the higher FEL for the entire family to calculate your production-weighted average FEL under subpart H of this part.

(2) You may ask to lower the FEL for your emission family only if you have test data from production locomotives showing that emissions are below the proposed lower FEL. The lower FEL applies only to engines or fuel-system components you produce after we approve the new FEL. Use the appropriate FELs with corresponding production volumes to calculate your production-weighted average FEL for the model year, as described in subpart H of this part.

§ 1033.230 Grouping locomotives into engine families.

(a) Divide your product line into engine families of locomotives that are expected to have similar emission characteristics throughout the useful life. Your engine family is limited to a single model year. Freshly manufactured locomotives may not be included in the same engine family as remanufactured locomotives, except as allowed by paragraph (f) of this section. Paragraphs (b) and (c) of this section specify default criteria for dividing locomotives into engine families. Paragraphs (d) and (e) of this section allow you deviate from these defaults in certain circumstances.

(b) This paragraph (b) applies for all locomotives other than Tier 0 locomotives. Group locomotives in the same engine family if they are the same in all the following aspects:

(1) The combustion cycle (e.g., diesel cycle).

(2) The type of engine cooling employed and procedure(s) employed to maintain engine temperature within desired limits (thermostat, on-off radiator fan(s), radiator shutters, etc.).

(3) The nominal bore and stroke dimensions.

(4) The approximate intake and exhaust event timing and duration (valve or port).

(5) The location of the intake and exhaust valves (or ports).

(6) The size of the intake and exhaust valves (or ports).

(7) The overall injection or ignition timing characteristics (i.e., the deviation of the timing curves from the optimal fuel economy timing curve must be similar in degree).

(8) The combustion chamber configuration and the surface-to-volume ratio of the combustion chamber when the piston is at top dead center position, using nominal combustion chamber dimensions.

(9) The location of the piston rings on the piston.

(10) The method of air aspiration (turbocharged, supercharged, naturally aspirated, Roots blown).

(11) The general performance characteristics of the turbocharger or supercharger (e.g., approximate boost pressure, approximate response time, approximate size relative to engine displacement).

(12) The type of air inlet cooler (air-to-air, air-to-liquid, approximate degree to which inlet air is cooled).

(13) The intake manifold induction port size and configuration.

(14) The type of fuel and fuel system configuration.

(15) The configuration of the fuel injectors and approximate injection pressure.

(16) The type of fuel injection system controls (i.e., mechanical or electronic).

(17) The type of smoke control system.

(18) The exhaust manifold port size and configuration.

(19) The type of exhaust aftertreatment system (oxidation catalyst, particulate trap), and characteristics of the aftertreatment system (catalyst loading, converter size vs. engine size).

(c) Group Tier 0 locomotives in the same engine family if they are the same in all the following aspects:

(1) The combustion cycle (e.g., diesel cycle).

(2) The type of engine cooling employed and procedure(s) employed to maintain engine temperature within desired limits (thermostat, on-off radiator fan(s), radiator shutters, etc.).

(3) The approximate bore and stroke dimensions.

(4) The approximate location of the intake and exhaust valves (or ports).

(5) The combustion chamber general configuration and the approximate surface-to-volume ratio of the combustion chamber when the piston is at top dead center position, using nominal combustion chamber dimensions.

(6) The method of air aspiration (turbocharged, supercharged, naturally aspirated, Roots blown).

(7) The type of air inlet cooler (air-to-air, air-to-liquid, approximate degree to which inlet air is cooled).

(8) The type of fuel and general fuel system configuration.

(9) The general configuration of the fuel injectors and approximate injection pressure.

(10) The type of fuel injection system control (electronic or mechanical).

(d) You may subdivide a group of locomotives that is identical under paragraph (b) or (c) of this section into different engine families if you show the expected emission characteristics are different during the useful life. This allowance also covers locomotives for which only calculated emission rates differ, such as locomotives with and without energy-saving design features. For the purposes of determining whether an engine family is a small engine family in § 1033.405(a)(2), we will consider the number of locomotives that could have been classed together under paragraph (b) or (c) of this section, instead of the number of locomotives that are included in a subdivision allowed by this paragraph (d).

(e) In unusual circumstances, you may group locomotives that are not identical with respect to the things listed in paragraph (b) or (c) of this section in the same engine family if you show that their emission characteristics during the useful life will be similar.

(f) During the first six calendar years after a new tier of standards become applicable, remanufactured engines/locomotives may be included in the same engine family as freshly manufactured locomotives, provided the same engines and emission controls are used for locomotive models included in the engine family.

§ 1033.235 Emission testing required for certification.

This section describes the emission testing you must perform to show compliance with the emission standards in § 1033.101.

(a) Select an emission-data locomotive (or engine) from each engine family for testing. It may be a low mileage locomotive, or a development engine (that is equivalent in design to the engines of the locomotives being certified), or another low hour engine. Use good engineering judgment to select the locomotive configuration that is most likely to exceed (or have emissions nearest to) an applicable emission standard or FEL. In making this selection, consider all factors expected to affect emission control performance and compliance with the standards, including emission levels of all exhaust constituents, especially NO_X and PM.

(b) Test your emission-data locomotives using the procedures and equipment specified in subpart F of this part.

(c) We may measure emissions from any of your test locomotives or other locomotives from the engine family.

(1) We may decide to do the testing at your plant or any other facility. If we do this, you must deliver the test locomotive to a test facility we designate. If we do the testing at your plant, you must schedule it as soon as possible and make available the instruments, personnel, and equipment we need.

(2) If we measure emissions from one of your test locomotives, the results of that testing become the official emission results for the locomotive. Unless we later invalidate these data, we may decide not to consider your data in determining if your engine family meets applicable requirements.

(3) Before we test one of your locomotives, we may set its adjustable parameters to any point within the adjustable ranges (see § 1033.115(b)).

(4) Before we test one of your locomotives, we may calibrate it within normal production tolerances for anything we do not consider an adjustable parameter.

(d) You may ask to use emission data from a previous model year instead of doing new tests if all the following are true:

(1) The engine family from the previous model year differs from the current engine family only with respect to model year, or other factors not related to emissions. You may include additional configurations subject to the provisions of § 1033.225.

(2) The emission-data locomotive from the previous model year remains the appropriate emission-data locomotive under paragraph (b) of this section.

(3) The data show that the emission-data locomotive would meet all the requirements that apply to the engine family covered by the application for certification.

(e) You may ask to use emission data from a different engine family you have already certified instead of testing a locomotive in the second engine family if all the following are true:

(1) The same engine is used in both engine families.

(2) You demonstrate to us that the differences in the two families are sufficiently small that the locomotives in the untested family will meet the same applicable notch standards calculated from the test data.

(f) We may require you to test a second locomotive of the same or different configuration in addition to the locomotive tested under paragraph (b) of this section.

(g) If you use an alternate test procedure under 40 CFR 1065.10 and later testing shows that such testing does not produce results that are equivalent to the procedures specified in subpart F of this part, we may reject data you generated using the alternate procedure.

(h) The requirement to measure smoke emissions is waived for certification and production line testing, except where there is reason to believe your locomotives do not meet the applicable smoke standards.

§ 1033.240 Demonstrating compliance with exhaust emission standards.

(a) For purposes of certification, your engine family is considered in compliance with the applicable numerical emission standards in § 1033.101 if all emission-data locomotives representing that family have test results showing deteriorated emission levels at or below these standards.

(1) If you include your locomotive in the ABT program in subpart H of this part, your FELs are considered to be the applicable emission standards with which you must comply.

(2) If you do not include your remanufactured locomotive in the ABT program in subpart H of this part, but it was previously included in the ABT program in subpart H of this part, the previous FELs are considered to be the applicable emission standards with which you must comply.

(b) Your engine family is deemed not to comply if any emission-data locomotive representing that family has test results showing a deteriorated emission level above an applicable FEL or emission standard from § 1033.101 for any pollutant. Use the following steps to determine the deteriorated emission level for the test locomotive:

(1) Collect emission data using measurements with enough significant figures to calculate the cycle-weighted emission rate to at least one more decimal place than the applicable standard. Apply any applicable humidity corrections before weighting emissions.

(2) Apply the regeneration factors if applicable. At this point the emission rate is generally considered to be an official emission result.

(3) Apply the deterioration factor to the official emission result, as described in § 1033.245, then round the adjusted figure to the same number of decimal places as the emission standard. This adjusted value is the deteriorated emission level. Compare these emission levels from the emission-data locomotive with the applicable emission standards. In the case of NO_X+NMHC standards, apply the deterioration factor to each pollutant and then add the results before rounding.

(4) The highest deteriorated emission levels for each pollutant are considered to be the certified emission levels.

(c) An owner/operator remanufacturing its locomotives to be identical to their previously certified configuration may certify by design without new emission test data. To do this, submit the application for certification described in § 1033.205, but instead of including test data, include a description of how you will ensure that your locomotives will be identical in all material respects to their previously certified condition. You may use reconditioned parts consistent with good engineering judgment. You have all of the liabilities and responsibilities of the certificate holder for locomotives you certify under this paragraph.

§ 1033.245 Deterioration factors.

Establish deterioration factors for each pollutant to determine, as described in § 1033.240, whether your locomotives will meet emission standards for each pollutant throughout the useful life. Determine deterioration factors as described in this section, either with an engineering analysis, with pre-existing test data, or with new emission measurements. The deterioration factors are intended to reflect the deterioration expected to result during the useful life of a locomotive maintained as specified in § 1033.125. If you perform durability testing, the maintenance that you may perform on your emission-data locomotive is limited to the maintenance described in § 1033.125.

(a) Your deterioration factors must take into account any available data from in-use testing with similar locomotives, consistent with good engineering judgment. For example, it would not be consistent with good engineering judgment to use deterioration factors that predict emission increases over the useful life of a locomotive or locomotive engine that are significantly less than the emission increases over the useful life observed from in-use testing of similar locomotives.

(b) Deterioration factors may be additive or multiplicative.

(1) *Additive deterioration factor for exhaust emissions.* Except as specified in paragraph (b)(2) of this section, use an additive deterioration factor for exhaust emissions. An additive deterioration factor for a pollutant is the difference between exhaust emissions at the end of the useful life and exhaust emissions at the low-hour test point. In these cases, adjust the official emission results for each tested locomotive at the selected test point by adding the factor to the measured emissions. The deteriorated emission level is intended to represent the highest emission level during the useful life. Thus, if the factor is less than zero, use zero. Additive deterioration factors must be specified to one more decimal place than the applicable standard.

(2) *Multiplicative deterioration factor for exhaust emissions.* Use a multiplicative deterioration factor if good engineering judgment calls for the deterioration factor for a pollutant to be the ratio of exhaust emissions at the end of the useful life to exhaust emissions at the low-hour test point. For example, if you use aftertreatment technology that controls emissions of a pollutant proportionally to engine-out emissions, it is often appropriate to use a multiplicative deterioration factor. Adjust the official emission results for each tested locomotive at the selected test point by multiplying the measured emissions by the deterioration factor. The deteriorated emission level is intended to represent the highest emission level during the useful life. Thus, if the factor is less than one, use one. A multiplicative deterioration factor may not be appropriate in cases where testing variability is significantly greater than locomotive-to-locomotive variability. Multiplicative deterioration factors must be specified to one more significant figure than the applicable standard.

(c) Deterioration factors for smoke are always additive.

(d) If your locomotive vents crankcase emissions to the exhaust or to the atmosphere, you must account for crankcase emission deterioration, using

good engineering judgment. You may use separate deterioration factors for crankcase emissions of each pollutant (either multiplicative or additive) or include the effects in combined deterioration factors that include exhaust and crankcase emissions together for each pollutant.

(e) Include the following information in your application for certification:

(1) If you determine your deterioration factors based on test data from a different engine family, explain why this is appropriate and include all the emission measurements on which you base the deterioration factor.

(2) If you determine your deterioration factors based on engineering analysis, explain why this is appropriate and include a statement that all data, analyses, evaluations, and other information you used are available for our review upon request.

(3) If you do testing to determine deterioration factors, describe the form and extent of service accumulation, including a rationale for selecting the service-accumulation period and the method you use to accumulate hours.

§ 1033.250 Reporting and recordkeeping.

(a) Within 45 days after the end of the model year, send the Designated Compliance Officer a report describing the following information about locomotives you produced during the model year:

(1) Report the total number of locomotives you produced in each engine family by locomotive model and engine model.

(2) If you produced exempted locomotives, report the number of exempted locomotives you produced for each locomotive model and identify the buyer or shipping destination for each exempted locomotive. You do not need to report under this paragraph (a)(2) locomotives that were temporarily exempted, exported locomotives, locomotives exempted as manufacturer/remanufacturer-owned locomotives, or locomotives exempted as test locomotives.

(b) Organize and maintain the following records:

(1) A copy of all applications and any summary information you send us.

(2) Any of the information we specify in § 1033.205 that you were not required to include in your application.

(3) A detailed history of each emission-data locomotive. For each locomotive, describe all of the following:

(i) The emission-data locomotive's construction, including its origin and buildup, steps you took to ensure that it represents production locomotives, any components you built specially for it, and all the components you include in your application for certification.

(ii) How you accumulated locomotive operating hours (service accumulation), including the dates and the number of hours accumulated.

(iii) All maintenance, including modifications, parts changes, and other service, and the dates and reasons for the maintenance.

(iv) All your emission tests, including documentation on routine and standard tests, as specified in part 40 CFR part 1065, and the date and purpose of each test.

(v) All tests to diagnose locomotive or emission control performance, giving the date and time of each and the reasons for the test.

(vi) Any other significant events.

(4) If you test a development engine for certification, you may omit information otherwise required by paragraph (b)(3) of this section that is unrelated to emissions and emission-related components.

(5) Production figures for each engine family divided by assembly plant.

(6) Keep a list of locomotive identification numbers for all the locomotives you produce under each certificate of conformity.

(c) Keep data from routine emission tests (such as test cell temperatures and relative humidity readings) for one year after we issue the associated certificate of conformity. Keep all other information specified in paragraph (a) of this section for eight years after we issue your certificate.

(d) Store these records in any format and on any media, as long as you can promptly send us organized, written records in English if we ask for them. You must keep these records readily available. We may review them at any time.

(e) Send us copies of any locomotive maintenance instructions or explanations if we ask for them.

§ 1033.255 EPA decisions.

(a) If we determine your application is complete and shows that the engine family meets all the requirements of this part and the Clean Air Act, we will issue a certificate of conformity for your engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny your application for certification if we determine that your engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. Our decision may be based on a review of all information available to us. If we deny your application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke your certificate if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information (paragraph (e) of this section applies if this is fraudulent).

(3) Render inaccurate any test data.

(4) Deny us from completing authorized activities. This includes a failure to provide reasonable assistance.

(5) Produce locomotives for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend your application to include all locomotives being produced.

(7) Take any action that otherwise circumvents the intent of the Clean Air Act or this part.

(d) We may void your certificate if you do not keep the records we require or do not give us information when we ask for it.

(e) We may void your certificate if we find that you intentionally submitted false or incomplete information.

(f) If we deny your application or suspend, revoke, or void your certificate, you may ask for a hearing (see § 1033.920).

Subpart D—Manufacturer and Remanufacturer Production Line Testing and Audit Programs

§ 1033.301 Applicability.

The requirements of this part apply to manufacturers/remanufacturers of locomotives certified under this part, with the following exceptions:

(a) The requirements of §§ 1033.310 1033.315, 1033.320, and 1033.330 apply only to manufacturers of freshly manufactured locomotives or locomotive engines (including those used for repowering). We may also apply these requirements to remanufacturers of any locomotives for which there is reason to believe production problems exist that could affect emission performance. When we make a determination that production problems may exist that could affect emission performance, we will notify the remanufacturer(s). The requirements of §§ 1033.310, 1033.315, 1033.320, and 1033.330 will apply as specified in the notice.

(b) The requirements of § 1033.335 apply only to remanufacturers.

(c) As specified in § 1033.1(d), we may apply the requirements of this subpart to manufacturers/remanufacturers that do not certify the

locomotives. However, unless we specify otherwise, the requirements of this subpart apply to manufacturers/remanufacturers that hold the certificates for the locomotives.

§ 1033.305 General requirements.

(a) Manufacturers (and remanufacturers, where applicable) are required to test production line locomotives using the test procedures specified in § 1033.315. While this subpart refers to locomotive testing, you may ask to test locomotive engines instead of testing locomotives.

(b) Remanufacturers are required to conduct audits according to the requirements of § 1033.335 to ensure that remanufactured locomotives comply with the requirements of this part.

(c) If you certify an engine family with carryover emission data, as described in § 1033.235, and these equivalent engine families consistently pass the production-line testing requirements over the preceding two-year period, you may ask for a reduced testing rate for further production-line testing for that family. If we reduce your testing rate, we may limit our approval to any number of model years. In determining whether to approve your request, we may consider the number of locomotives that have failed emission tests.

(d) You may ask to use an alternate program or measurement method for testing production-line engines. In your request, you must show us that the alternate program gives equal assurance that your engines meet the requirements of this part. We may waive some or all of this subpart's requirements if we approve your alternate program.

§ 1033.310 Sample selection for testing.

(a) At the start of each model year, begin randomly selecting locomotives from each engine family for production line testing at a rate of one percent. Make the selection of the test locomotive after it has been assembled. Perform the testing throughout the entire model year to the extent possible, unless we specify a different schedule for your tests. For example, we may require you to disproportionately select locomotives from the early part of a model year for a new locomotive model that has not been subject to PLT previously.

(1) The required sample size for an engine family (provided that no locomotive tested fails to meet applicable emission standards) is the lesser of five tests per model year or one percent of projected annual production, with a minimum sample size for an engine family of one test per model year. See paragraph (d) of this section to determine the required number of test locomotives if any locomotives fail to comply with any standards.

(2) You may elect to test additional locomotives. All additional locomotives must be tested in accordance with the applicable test procedures of this part.

(b) You must assemble the test locomotives using the same production process that will be used for locomotives to be introduced into commerce. You may ask us to allow special assembly procedures for catalyst-equipped locomotives.

(c) Unless we approve it, you may not use any quality control, testing, or assembly procedures that you do not use during the production and assembly of all other locomotives of that family. This applies for any test locomotive or any portion of a locomotive, including engines, parts, and subassemblies.

(d) If one or more locomotives fail a production line test, then you must test two additional locomotives from the next fifteen produced in that engine family for each locomotive that fails. These two additional locomotives do not count towards your minimum number of locomotives. For example, if you are required to test a minimum of four locomotives under paragraph (a) of this section and the second locomotive fails to comply with one or more standards, then you must test two additional locomotives from the next fifteen produced in that engine family. If both of those locomotives pass all standards, you are required to test two additional locomotives to complete the original minimum number of four. If they both pass, you are done with testing for that family for the year since you tested six locomotives (the four originally required plus the two additional locomotives).

§ 1033.315 Test procedures.

(a) *Test procedures.* Use the test procedures described in subpart F of this part, except as specified in this section.

(1) You may ask to use other test procedures. We will approve your request if we determine that it is not possible to perform satisfactory testing using the specified procedures. We may also approve alternate test procedures under § 1033.305(d).

(2) If you used test procedures other than those in subpart F of this part during certification for the engine family (other than alternate test procedures necessary for testing a development engine or a low hour engine instead of a low mileage locomotive), use the same test procedures for production line testing that you used in certification.

(b) *Modifying a test locomotive.* Once an engine is selected for testing, you may adjust, repair, maintain, or modify it or check its emissions only if one of the following is true:

(1) You document the need for doing so in your procedures for assembling and inspecting all your production engines and make the action routine for all the engines in the engine family.

(2) This subpart otherwise specifically allows your action.

(3) We approve your action in advance.

(c) *Adjustable parameters.* (1) Confirm that adjustable parameters are set to values or positions that are within the range recommended to the ultimate purchaser.

(2) We may require to be adjusted any adjustable parameter to any setting within the specified adjustable range of that parameter prior to the performance of any test.

(d) *Stabilizing emissions.* You may stabilize emissions from the locomotives to be tested through service accumulation by running the engine through a typical duty cycle. Emissions are considered stabilized after 300 hours of operation. You may accumulate fewer hours, consistent with good engineering judgment. You may establish a Green Engine Factor for each regulated pollutant for each engine family, instead of (or in combination with) accumulating actual operation, to be used in calculating emissions test results. You must obtain our approval prior to using a Green Engine Factor. For catalyst-equipped locomotives, you may operate the locomotive for up to 1000 hours (in revenue or other service) prior to testing.

(e) *Adjustment after shipment.* If a locomotive is shipped to a facility other than the production facility for production line testing, and an adjustment or repair is necessary because of such shipment, you may perform the necessary adjustment or repair only after the initial test of the locomotive, unless we determine that the test would be impossible to perform or would permanently damage the locomotive.

(f) *Malfunctions.* If a locomotive cannot complete the service accumulation or an emission test because of a malfunction, you may request that we authorize either the repair of that locomotive or its deletion from the test sequence.

(g) *Retesting.* If you determine that any production line emission test of a locomotive is invalid, you must retest it in accordance with the requirements of

this subpart. Report emission results from all tests to us, including test results you determined are invalid. You must also include a detailed explanation of the reasons for invalidating any test in the quarterly report required in § 1033.320(e). In the event a retest is performed, you may ask us within ten days of the end of the production quarter for permission to substitute the after-repair test results for the original test results. We will respond to the request within ten working days of our receipt of the request.

§ 1033.320 Calculation and reporting of test results.

(a) Calculate initial test results using the applicable test procedure specified in § 1033.315(a). Include applicable non-deterioration adjustments such as a Green Engine Factor or regeneration adjustment factor. Round the results to one more decimal place than the applicable emission standard.

(b) If you conduct multiple tests on any locomotives, calculate final test results by summing the initial test results derived in paragraph (a) of this section for each test locomotive, dividing by the number of tests conducted on the locomotive, and rounding to one more decimal place than the applicable emission standard. For catalyst-equipped locomotives, you may ask us to allow you to exclude an initial failed test if all of the following are true:

(1) The catalyst was in a green condition when tested initially.

(2) The locomotive met all emission standards when retested after degreening the catalyst.

(3) No additional emission-related maintenance or repair was performed between the initial failed test and the subsequent passing test.

(c) Calculate the final test results for each test locomotive by applying the appropriate deterioration factors, derived in the certification process for the engine family, to the final test results, and rounding to one more decimal place than the applicable emission standard.

(d) If, subsequent to an initial failure of a production line test, the average of the test results for the failed locomotive and the two additional locomotives tested, is greater than any applicable emission standard or FEL, the engine family is deemed to be in non-compliance with applicable emission standards, and you must notify us within ten working days of such noncompliance.

(e) Within 45 calendar days of the end of each quarter, you must send to the Designated Compliance Officer a report with the following information:

(1) The location and description of the emission test facilities which you used to conduct your testing.

(2) Total production and sample size for each engine family tested.

(3) The applicable standards against which each engine family was tested.

(4) For each test conducted, include all of the following:

(i) A description of the test locomotive, including:

(A) Configuration and engine family identification.

(B) Year, make, and build date.

(C) Engine identification number.

(D) Number of megawatt-hours (or miles if applicable) of service accumulated on locomotive prior to testing.

(E) Description of Green Engine Factor; how it is determined and how it is applied.

(ii) Location(s) where service accumulation was conducted and description of accumulation procedure and schedule, if applicable. If the locomotive was introduced into service between assembly and testing, you are only required to summarize the service accumulation, rather than identifying specific locations.

(iii) Test number, date, test procedure used, initial test results before and after rounding, and final test results for all production line emission tests conducted, whether valid or invalid, and the reason for invalidation of any test results, if applicable.

(iv) A complete description of any adjustment, modification, repair, preparation, maintenance, and testing which was performed on the test locomotive, has not been reported pursuant to any other paragraph of this subpart, and will not be performed on other production locomotives.

(v) Any other information we may ask you to add to your written report so we can determine whether your new engines conform with the requirements of this part.

(6) For each failed locomotive as defined in § 1033.330(a), a description of the remedy and test results for all retests as required by § 1033.340(g).

(7) The following signed statement and endorsement by an authorized representative of your company:

We submit this report under sections 208 and 213 of the Clean Air Act. Our production-line testing conformed completely with the requirements of 40 CFR part 1033. We have not changed production processes or quality-control procedures for the test locomotives in a way that might affect emission controls. All the information in this report is true and accurate to the best of my knowledge. I know of the penalties for violating the Clean Air Act and the regulations. (Authorized Company Representative)

§ 1033.325 Maintenance of records; submittal of information.

(a) You must establish, maintain, and retain the following adequately organized and indexed test records:

(1) A description of all equipment used to test locomotives. The equipment requirements in subpart F of this part apply to tests performed under this subpart. Maintain these records for each test cell that can be used to perform emission testing under this subpart.

(2) Individual test records for each production line test or audit including:

(i) The date, time, and location of each test or audit.

(ii) The method by which the Green Engine Factor was calculated or the number of hours of service accumulated on the test locomotive when the test began and ended.

(iii) The names of all supervisory personnel involved in the conduct of the production line test or audit;

(iv) A record and description of any adjustment, repair, preparation or modification performed on test locomotives, giving the date, associated time, justification, name(s) of the authorizing personnel, and names of all supervisory personnel responsible for the conduct of the action.

(v) If applicable, the date the locomotive was shipped from the assembly plant, associated storage facility or port facility, and the date the locomotive was received at the testing facility.

(vi) A complete record of all emission tests or audits performed under this subpart (except tests performed directly by us), including all individual worksheets and/or other documentation relating to each test, or exact copies thereof, according to the record requirements specified in subpart F of this part and 40 CFR part 1065.

(vii) A brief description of any significant events during testing not otherwise described under this paragraph (a)(2), commencing with the test locomotive selection process and including such extraordinary events as engine damage during shipment.

(b) Keep all records required to be maintained under this subpart for a period of eight years after completion of all testing. Store these records in any format and on any media, as long as you can promptly provide to us organized, written records in English if we ask for them and all the information is retained.

(c) Send us the following information with regard to locomotive production if we ask for it:

(1) Projected production for each configuration within each engine family for which certification has been requested and/or approved.

(2) Number of locomotives, by configuration and assembly plant, scheduled for production.

(d) Nothing in this section limits our authority to require you to establish, maintain, keep or submit to us information not specified by this section.

(e) Send all reports, submissions, notifications, and requests for approval made under this subpart to the Designated Compliance Officer using an approved format.

(f) You must keep a copy of all reports submitted under this subpart.

§ 1033.330 Compliance criteria for production line testing.

There are two types of potential failures: failure of an individual locomotive to comply with the standards, and a failure of an engine family to comply with the standards.

(a) A failed locomotive is one whose final test results pursuant to § 1033.320(c), for one or more of the applicable pollutants, exceed an applicable emission standard or FEL.

(b) An engine family is deemed to be in noncompliance, for purposes of this subpart, if at any time throughout the model year, the average of an initial failed locomotive and the two additional locomotives tested, is greater than any applicable emission standard or FEL.

§ 1033.335 Remanufactured locomotives: installation audit requirements.

The section specifies the requirements for certifying remanufacturers to audit the remanufacture of locomotives covered by their certificates of conformity for proper components, component settings and component installations on randomly chosen locomotives in an engine family.

(a) You must ensure that all emission related components are properly installed on the locomotive and are set to the proper specification as indicated in your instructions. You may submit audits performed by the owners/operators of the locomotives, provided the audits are performed in accordance with the provisions of this section. We may require that you obtain affidavits for audits performed by owners/operators.

(b) Audit at least five percent of your annual production per model year per installer or ten per engine family per installer, whichever is less. You must perform more audits if there are any failures. Randomly select the locomotives to be audited after the remanufacture is complete. We may allow you to select locomotives prior to the completion of the remanufacture, if the preselection would not have the potential to affect the manner in which the locomotive was remanufactured (e.g., where the installer is not aware of the selection prior to the completion of the remanufacture). Unless we specify otherwise, you are not required to audit installers that remanufacture fewer than 10 locomotives per year under your certificates (combined for all of your engine families).

(c) The audit should be completed as soon as is practical after the remanufacture is complete. In no case may the remanufactured locomotive accumulate more than 45,000 miles prior to an audit.

(d) A locomotive fails if any emission related components are found to be improperly installed, improperly adjusted or incorrectly used.

(e) If a remanufactured locomotive fails an audit, then you must audit two additional locomotives from the next ten remanufactured in that engine family by that installer.

(f) An engine family is determined to have failed an audit, if at any time during the model year, you determine that the three locomotives audited are found to have had any improperly installed, improperly adjusted or incorrectly used components. You must notify us within 2 working days of a determination of an engine family audit failure.

(g) Within 45 calendar days of the end of each quarter, each remanufacturer must send the Designated Compliance Officer a report which includes the following information:

(1) The location and description of your audit facilities which were utilized to conduct auditing reported pursuant to this section;

(2) Total production and sample size for each engine family;

(3) The applicable standards and/or FELs against which each engine family was audited;

(4) For each audit conducted:

(i) A description of the audited locomotive, including:

(A) Configuration and engine family identification;

(B) Year, make, build date, and remanufacture date; and

(C) Locomotive and engine identification numbers;

(ii) Any other information we request relevant to the determination whether the new locomotives being remanufactured do in fact conform with the regulations with respect to which the certificate of conformity was issued;

(5) For each failed locomotive as defined in paragraph (d) of this section, a description of the remedy as required by § 1033.340(g);

(6) The following signed statement and endorsement by your authorized representative:

We submit this report under sections 208 and 213 of the Clean Air Act. Our production-line auditing conformed completely with the requirements of 40 CFR part 1033. We have not changed production processes or quality-control procedures for the audited locomotives in a way that might affect emission controls. All the information in this report is true and accurate to the best of my knowledge. I know of the penalties for violating the Clean Air Act and the regulations. (Authorized Company Representative)

§ 1033.340 Suspension and revocation of certificates of conformity.

(a) A certificate can be suspended for an individual locomotive as follows:

(1) The certificate of conformity is automatically suspended for any locomotive that fails a production line test pursuant to § 1033.330(a), effective from the time the testing of that locomotive is completed.

(2) The certificate of conformity is automatically suspended for any locomotive that fails an audit pursuant to § 1033.335(d), effective from the time that auditing of that locomotive is completed.

(b) A certificate can be suspended for an engine family as follows:

(1) We may suspend the certificate of conformity for an engine family that is in noncompliance pursuant to § 1033.330(b), thirty days after the engine family is deemed to be in noncompliance.

(2) We may suspend the certificate of conformity for an engine family that is determined to have failed an audit pursuant to § 1033.335(f). This suspension will not occur before thirty days after the engine family is deemed to be in noncompliance.

(c) If we suspend your certificate of conformity for an engine family, the suspension may apply to all facilities producing engines from an engine family, even if you find noncompliant engines only at one facility.

(d) We may revoke a certificate of conformity for any engine family in whole or in part if:

(1) You fail to comply with any of the requirements of this subpart.

(2) You submit false or incomplete information in any report or information provided to us under this subpart.

(3) You render inaccurate any test data submitted under this subpart.

(4) An EPA enforcement officer is denied the opportunity to conduct activities authorized in this subpart.

(5) An EPA enforcement officer is unable to conduct authorized activities for any reason.

(e) We will notify you in writing of any suspension or revocation of a certificate of conformity in whole or in part; a suspension or revocation is effective upon receipt of such notification or thirty days from the time a locomotive or engine family is deemed to be in noncompliance under §§ 1033.320(d), 1033.330(a), 1033.330(b), or 1033.335(f) is made, whichever is earlier, except that the certificate is immediately suspended with respect to any failed locomotives as provided for in paragraph (a) of this section.

(f) We may revoke a certificate of conformity for an engine family when the certificate has been suspended under paragraph (b) or (c) of this section if the remedy is one requiring a design change or changes to the locomotive, engine and/or emission control system as described in the application for certification of the affected engine family.

(g) Once a certificate has been suspended for a failed locomotive, as provided for in paragraph (a) of this section, you must take all the following actions before the certificate is reinstated for that failed locomotive:

(1) Remedy the nonconformity.

(2) Demonstrate that the locomotive conforms to applicable standards or family emission limits by retesting, or reauditing if applicable, the locomotive in accordance with this part.

(3) Submit a written report to us after successful completion of testing (or auditing, if applicable) on the failed locomotive, which contains a description of the remedy and testing (or auditing) results for each locomotive in addition to other information that may be required by this part.

(h) Once a certificate for a failed engine family has been suspended pursuant to paragraph (b) or (c) of this section, you must take the following actions before we will consider reinstating the certificate:

(1) Submit a written report to us identifying the reason for the noncompliance of the locomotives, describing the remedy, including a description of any quality control measures you will use to prevent future occurrences of the problem, and stating the date on which the remedies will be implemented.

(2) Demonstrate that the engine family for which the certificate of conformity has been suspended does in fact comply with the regulations of this part by testing (or auditing) locomotives selected from normal production runs of that engine family. Such testing (or auditing) must comply with the provisions of this subpart. If you elect to continue testing (or auditing) individual locomotives after suspension of a certificate, the certificate is reinstated for any locomotive actually determined to be in conformance with the applicable standards or family emission limits through testing (or auditing) in accordance with the applicable test procedures, provided that we have not revoked the certificate under paragraph (f) of this section.

(i) If the certificate has been revoked for an engine family, you must take the following actions before we will issue a certificate that would allow you to continue introduction into commerce of a modified version of that family:

(1) If we determine that the change(s) in locomotive design may have an effect on emission deterioration, we will notify you within five working days after receipt of the report in paragraph (h) of this section, whether subsequent testing/auditing under this subpart will be sufficient to evaluate the change(s) or whether additional testing (or auditing) will be required.

(2) After implementing the change or changes intended to remedy the nonconformity, you must demonstrate that the modified engine family does in fact conform with the regulations of this part by testing locomotives (or auditing for remanufactured locomotives) selected from normal production runs of that engine family. When both of these requirements are met, we will reissue the certificate or issue a new certificate. If this subsequent testing (or auditing) reveals failing data the revocation remains in effect.

(j) At any time subsequent to an initial suspension of a certificate of conformity for a test or audit locomotive pursuant to paragraph (a) of this section, but not later than 30 days (or such other period as may we allow) after the notification our decision to suspend or revoke a certificate of conformity in whole or in part pursuant to this section, you may request a hearing as to whether the tests or audits have been properly conducted or any sampling methods have been properly applied. (See § 1033.920.)

(k) Any suspension of a certificate of conformity under paragraphs (a) through (d) of this section will be made only after you have been offered an opportunity for a hearing conducted in accordance with § 1033.920. It will not apply to locomotives no longer in your possession.

(l) If we suspend, revoke, or void a certificate of conformity, and you believe that our decision was based on erroneous information, you may ask us to reconsider our decision before requesting a hearing. If you demonstrate to our satisfaction that our decision was based on erroneous information, we will reinstate the certificate.

(m) We may conditionally reinstate the certificate for that family so that you do not have to store non-test locomotives while conducting subsequent testing or auditing of the noncomplying family subject to the following condition: you must commit to recall all locomotives of that family produced from the time the certificate is conditionally reinstated if the family fails subsequent testing, or auditing if applicable, and must commit to remedy any nonconformity at no expense to the owner.

Subpart E—In-use Testing

§ 1033.401 Applicability.

The requirements of this subpart are applicable to certificate holders for locomotives subject to the provisions of this part. These requirements may also be applied to other manufacturers/remanufacturers as specified in § 1033.1(d).

§ 1033.405 General provisions.

(a) Each year, we will identify engine families and configurations within families that you must test according to the requirements of this section.

(1) We may require you to test one engine family each year for which you have received a certificate of conformity. If you are a manufacturer that holds certificates of conformity for both freshly manufactured and remanufactured locomotive engine families, we may require you to test one freshly manufactured engine family and one remanufactured engine family. We may require you to test additional engine families if we have reason to believe that locomotives in such families do not comply with emission standards in use.

(2) For engine families of less than 10 locomotives per year, no in-use testing will be required, unless we have reason to believe that those engine families are not complying with the applicable emission standards in use.

(b) Test a sample of in-use locomotives from an engine family, as specified in § 1033.415. We will use these data, and any other data available to us, to determine the compliance status of classes of locomotives,

including for purposes of recall under 40 CFR part 1068, and whether remedial action is appropriate.

§ 1033.410 In-use test procedure.

(a) You must test the complete locomotives; you may not test engines that are not installed in locomotives at the time of testing.

(b) Test the locomotive according to the test procedures outlined in subpart F of this part, except as provided in this section.

(c) Use the same test procedures for in-use testing as were used for certification, except for cases in which certification testing was not conducted with a locomotive, but with a development engine or other engine. In such cases, we will specify deviations from the certification test procedures as appropriate. We may allow or require other alternate procedures, with advance approval.

(d) Set all adjustable locomotive or engine parameters to values or positions that are within the range specified in the certificate of conformity. We may require you to set these parameters to specific values.

(e) We may waive a portion of the applicable test procedure that is not necessary to determine in-use compliance.

§ 1033.415 General testing requirements.

(a) *Number of locomotives to be tested.* Determine the number of locomotives to be tested by the following method:

(1) Test a minimum of 2 locomotives per engine family, except as provided in paragraph (a)(2) of this section. You must test additional locomotives if any locomotives fail to meet any standard. Test 2 more locomotives for each failing locomotive, but stop testing if the total number of locomotives tested equals 10.

(2) If an engine family has been certified using carryover emission data from a family that has been previously tested under paragraph (a)(1) of this section (and we have not ordered or begun to negotiate remedial action of that family), you need to test only one locomotive per engine family. If that locomotive fails to meet applicable standards for any pollutant, testing for that engine family must be conducted as outlined under paragraph (a)(1) of this section.

(3) You may ask us to allow you to test more locomotives than the minimum number described above or you may concede failure before testing 10 locomotives.

(b) *Compliance criteria.* We will consider failure rates, average emission levels and the existence of any defects among other factors in determining whether to pursue remedial action. We may order a recall pursuant to 40 CFR part 1068 before testing reaches the tenth locomotive.

(c) *Collection of in-use locomotives.* Procure in-use locomotives that have been operated for 50 to 75 percent of the locomotive's useful life for testing under this subpart. Complete testing required by this section for any engine family before useful life of the locomotives in the engine family passes. (**Note:** § 1033.820 specifies that railroads must make reasonable efforts to enable you to perform this testing.)

§ 1033.420 Maintenance, procurement and testing of in-use locomotives.

(a) A test locomotive must have a maintenance history that is representative of actual in-use conditions, and identical or equivalent to your recommended emission-related maintenance requirements.

(1) When procuring locomotives for in-use testing, ask the end users about the accumulated usage, maintenance, operating conditions, and storage of the test locomotives.

(2) Your selection of test locomotives is subject to our approval. Maintain the information you used to procure locomotives for in-use testing in the same manner as is required in § 1033.250.

(b) You may perform minimal set-to-spec maintenance on a test locomotive before conducting in-use testing. Maintenance may include only that which is listed in the owner's instructions for locomotives with the amount of service and age of the acquired test locomotive. Maintain documentation of all maintenance and adjustments.

(c) If the locomotive selected for testing is equipped with emission diagnostics meeting the requirements in § 1033.110 and the MIL is illuminated, you may read the code and repair the malfunction according to your emission-related maintenance instructions, but only to the degree that an owner/operator would be required to repair the malfunction under § 1033.815.

(d) Results of at least one valid set of emission tests using the test procedure described in subpart F of this part is required for each in-use locomotive.

(e) If in-use testing results show that an in-use locomotive fails to comply with any applicable emission standards, you must determine the reason for noncompliance and report your findings in the quarterly in-use test result report described in § 1033.425.

§ 1033.425 In-use test program reporting requirements.

(a) Within 90 days of completion of testing, send us all emission test results generated from the in-use testing program. Report all of the following information for each locomotive tested:

(1) Engine family, and configuration.

(2) Locomotive and engine models.

(3) Locomotive and engine serial numbers.

(4) Date of manufacture or remanufacture, as applicable.

(5) Megawatt-hours of use (or miles, as applicable).

(6) Date and time of each test attempt.

(7) Results of all emission testing.

(8) Results (if any) of each voided or failed test attempt.

(9) Summary of all maintenance and/or adjustments performed.

(10) Summary of all modifications and/or repairs.

(11) Determinations of noncompliance.

(12) The following signed statement and endorsement by an authorized representative of your company.

We submit this report under sections 208 and 213 of the Clean Air Act. Our in-use testing conformed completely with the requirements of 40 CFR part 1033. All the information in this report is true and accurate to the best of my knowledge. I know of the penalties for violating the Clean Air Act and the regulations. (Authorized Company Representative)

(b) Report to us within 90 days of completion of testing the following information for each engine family tested:

(1) The serial numbers of all locomotive that were excluded from the test sample because they did not meet the maintenance requirements of § 1033.420.

(2) The owner of each locomotive identified in paragraph (b)(1) of this section (or other entity responsible for the maintenance of the locomotive).

(3) The specific reasons why the locomotives were excluded from the test sample.

(c) Submit the information outlined in paragraphs (a) and (b) of this section electronically using an approved format. We may exempt you from this requirement upon written request with supporting justification.

(d) Send all testing reports and requests for approvals to the Designated Compliance Officer.

Subpart F—Test Procedures

§ 1033.501 General provisions.

(a) Except as specified in this subpart, use the equipment and procedures for

compression-ignition engines in 40 CFR part 1065 to determine whether your locomotives meet the duty-cycle emission standards in § 1033.101. Use the applicable duty cycles specified in this subpart. Measure emissions of all the pollutants we regulate in § 1033.101 plus CO_2. The general test procedure is the procedure specified in 40 CFR part 1065 for steady-state discrete-mode cycles. However, if you use the optional ramped modal cycle in § 1033.520, follow the procedures for ramped modal testing in 40 CFR part 1065. The following exceptions from the 1065 procedures apply:

(1) You must average power and emissions over the sampling periods specified in this subpart for both discrete-mode testing and ramped modal testing.

(2) The test cycle is considered to be steady-state with respect to operator demand rather than engine speed and load.

(3) The provisions related to engine mapping and duty cycle generation (40 CFR 1065.510 and 1065.512) are not applicable to testing of complete locomotives or locomotive engines because locomotive operation and locomotive duty cycles are based on operator demand via locomotive notch settings rather than engine speeds and loads. The cycle validation criteria (40 CFR 1065.514) are not applicable to testing of complete locomotives but do apply for dynamometer testing of engines.

(b) You may use special or alternate procedures to the extent we allow as them under 40 CFR 1065.10. In some cases, we allow you to use procedures that are less precise or less accurate than the specified procedures if they do not affect your ability to show that your locomotives comply with the applicable emission standards. This generally requires emission levels to be far enough below the applicable emission standards so that any errors caused by greater imprecision or inaccuracy do not affect your ability to state unconditionally that the locomotives meet all applicable emission standards.

(c) This part allows (with certain limits) testing of either a complete locomotive or a separate uninstalled engine. When testing a locomotive, you must test the complete locomotive in its in-use configuration, except that you may disconnect the power output and fuel input for the purpose of testing. To calculate power from measured alternator/generator output, use an alternator/generator efficiency curve that varies with speed/load, consistent with good engineering judgment.

(d) Unless smoke standards do not apply for your locomotives or the testing requirement is waived, measure smoke emissions using the procedures in § 1033.525.

(e) Use the applicable fuel listed in 40 CFR part 1065, subpart H, to perform valid tests.

(1) For diesel-fueled locomotives, use the appropriate diesel fuel specified in 40 CFR part 1065, subpart H, for emission testing. The applicable diesel test fuel is either the ultra low-sulfur diesel or low-sulfur diesel fuel, as specified in § 1033.101. Identify the test fuel in your application for certification and ensure that the fuel inlet label is consistent with your selection of the test fuel (see §§ 1033.101 and 1033.135).

(2) You may ask to use as a test fuel commercially available diesel fuel similar but not identical to the applicable fuel specified in 40 CFR part 1065, subpart H; we will approve your request if you show us that it does not affect your ability to demonstrate compliance with the applicable emission standards. If your locomotive uses sulfur-sensitive technology, you may not use an in-use fuel that has a lower sulfur content than the range specified for the otherwise applicable test fuel in 40 CFR part 1065. If your locomotive does not use sulfur-sensitive technology, we may allow you to use an in-use fuel that has a lower sulfur content than the range specified for the otherwise applicable test fuel in 40 CFR part 1065, but may require that you correct PM emissions to account for the sulfur differences.

(3) For service accumulation, use the test fuel or any commercially available fuel that is representative of the fuel that in-use locomotives will use.

(f) See § 1033.505 for information about allowable ambient testing conditions for testing.

(g) This subpart is addressed to you as a manufacturer/remanufacturer, but it applies equally to anyone who does testing for you, and to us when we perform testing to determine if your locomotives meet emission standards.

(h) We may also perform other testing as allowed by the Clean Air Act.

(i) For passenger locomotives that can generate hotel power from the main propulsion engine, the locomotive must comply with the emission standards when in either hotel or non-hotel setting.

§ 1033.505 Ambient conditions.

This section specifies the allowable ambient conditions (including temperature and pressure) under which testing may be performed to determine compliance with the emission standards of (1068.101. Manufacturers/remanufacturers may ask to perform testing at conditions other than those allowed by this section. We will allow such testing provided it does not affect your ability to demonstrate compliance with the applicable standards. See §§ 1033.101 and 1033.115 for more information about the requirements that apply at other conditions.

(a) *Temperature.* Testing may be performed with ambient temperatures from 15.5 °C (60 °F) to 40.5 °C (105 °F). Do not correct emissions for temperature effects within this range. If we allow you to perform testing at lower ambient temperatures, you must correct NO_X emissions for temperature effects, consistent with good engineering judgment. For example, if the intake air temperature (at the manifold) is lower at the test temperature than at 15.5 °C, you generally will need to adjust your measured NO_X emissions to account for the effect of the lower intake air temperature. However, if you maintain a constant manifold air temperature, you will generally not need to correct emissions.

(b) *Altitude/pressure.* Testing may be performed with ambient pressures from 88.000 kPa (26.0 in Hg) to 103.325 kPa (30.5 in Hg). This is intended to correspond to altitudes up to 4000 feet above sea level. Do not correct emissions for pressure effects within this range.

(c) *Humidity.* Testing may be performed with any ambient humidity level. Correct NO_X emissions as specified in 40 CFR 1065.670. Do not correct any other emissions for humidity effects.

(d) *Wind.* If you test outdoors, use good engineering judgment to ensure that excessive wind does not affect your emission measurements. Winds are excessive if they disturb the size, shape, or location of the exhaust plume in the region where exhaust samples are drawn or where the smoke plume is measured, or otherwise cause any dilution of the exhaust. Tests may be conducted if wind shielding is placed adjacent to the exhaust plume to prevent bending, dispersion, or any other distortion of the exhaust plume as it passes through the optical unit or through the sample probe.

§ 1033.510 Auxiliary power units.

If your locomotive is equipped with an auxiliary power unit (APU) that operates during an idle shutdown mode, you must account for the APU's emissions rates as specified in this section, unless the APU is part of an AESS system that was certified separate from the rest of the locomotive. This

section does not apply for auxiliary engines that only provide hotel power.

(a) Adjust the locomotive main engine's idle emission rate (g/hr) as specified in § 1033.530. Add the APU emission rate (g/hr) that you determine under paragraph (b) of this section. Use the locomotive main engine's idle power as specified in § 1033.530.

(b) Determine the representative emission rate for the APU using one of the following methods.

(1) *Installed APU tested separately.* If you separately measure emission rates (g/hr) for each pollutant from the APU installed in the locomotive, you may use the measured emissions rates (g/hr) as the locomotive's idle emissions rates when the locomotive is shutdown and the APU is operating. For all testing other than in-use testing, apply appropriate deterioration factors to the measured emission rates. You may ask to carryover APU emission data for a previous test, or use data for the same APU installed on locomotives in another engine family.

(2) *Uninstalled APU tested separately.* If you separately measure emission rates (g/hr) over an appropriate duty-cycle for each pollutant from the APU when it is not installed in the locomotive, you may use the measured emissions rates (g/hr) as the locomotive's idle emissions rates when the locomotive is shutdown and the APU is operating. For the purpose of this paragraph (b)(2), an appropriate duty-cycle is one that approximates the APU engine's cycle-weighted power when operating in the locomotive. Apply appropriate deterioration factors to the measured emission rates. You may ask to carryover APU emission data for a previous test, or use data for the same APU installed on locomotives in another engine family.

(3) *APU engine certification data.* If the engine used for the APU has been certified to EPA emission standards you may calculate the APU's emissions based upon existing EPA-certification information about the APU's engine. In this case, calculate the APU's emissions as follows:

(i) For each pollutant determine the brake-specific standard/FEL to which the APU engine was originally EPA-certified.

(ii) Determine the APU engine's cycle-weighted power when operating in the locomotive.

(iii) Multiply each of the APU's applicable brake-specific standards/FELs by the APU engine's cycle-weighted power. The results are the APU's emissions rates (in g/hr).

(iv) Use these emissions rates as the locomotive's idle emissions rates when the locomotive is shutdown and the APU is running. Do not apply a deterioration factor to these values.

(4) *Other.* You may ask us to approve an alternative means to account for APU emissions.

§ 1033.515 Discrete-mode steady-state emission tests of locomotives and locomotive engines.

This section describes how to test locomotives at each notch setting so that emissions can be weighted according to either the line-haul duty cycle or the switch duty cycle. The locomotive test cycle consists of a warm-up followed by a sequence of nominally steady-state discrete test modes, as described in Table 1 to this section. The test modes are steady-state with respect to operator demand, which is the notch setting for the locomotive. Engine speeds and loads are not necessarily steady-state.

(a) Follow the provisions of 40 CFR part 1065, subpart F for general pre-test procedures (including engine and sampling system pre-conditioning which is included as engine warm-up). You may operate the engine in any way you choose to warm it up prior to beginning the sample preconditioning specified in 40 CFR part 1065.

(b) Begin the test by operating the locomotive over the pre-test portion of the cycle specified in Table 1 to this section. For locomotives not equipped with catalysts, you may begin the test as soon as the engine reaches its lowest idle setting. For catalyst-equipped locomotives, you may begin the test in normal idle mode if the engine does not reach its lowest idle setting within 15 minutes. If you do start in normal idle, run the low idle mode after normal idle, then resume the specified mode sequence (without repeating the normal idle mode).

(c) Measure emissions during the rest of the test cycle.

(1) Each test mode begins when the operator demand to the locomotive or engine is set to the applicable notch setting.

(2) Start measuring gaseous emissions, power, and fuel consumption at the start of the test mode A and continue until the completion of test mode 8. You may zero and span analyzers between modes (or take other actions consistent with good engineering judgment).

(i) The sample period over which emissions for the mode are averaged generally begins when the operator demand is changed to start the test mode and ends within 5 seconds of the minimum sampling time for the test mode is reached. However, you need to shift the sampling period to account for sample system residence times. Follow the provisions of 40 CFR 1065.308 and 1065.309 to time align emission and work measurements.

(ii) The sample period is 300 seconds for all test modes except mode 10. The sample period for test mode 8 is 600 seconds.

(3) If gaseous emissions are sampled using a batch-sampling method, begin proportional sampling at the beginning of each sampling period and terminate sampling once the minimum time in each test mode is reached, ± 5 seconds.

(4) If applicable, begin the smoke test at the start of the test mode A. Continue collecting smoke data until the completion of test mode 8. Refer to § 1033.101 to determine applicability of smoke testing and § 1033.525 for details on how to conduct a smoke test.

(5) Begin proportional sampling of PM emissions at the beginning of each sampling period and terminate sampling once the minimum time in each test mode is reached, ± 5 seconds, unless good engineering judgment requires you sample for a longer period to allow for collection of a sufficiently large PM sample.

(6) Proceed through each test mode in the order specified in Table 1 to this section until the locomotive test cycle is completed.

(7) At the end of each numbered test mode, you may continue to operate sampling and dilution systems to allow corrections for the sampling system's response time.

(8) Following the completion of Mode 8, conduct the post sampling procedures in § 1065.530. Note that cycle validation criteria do not apply to testing of complete locomotives.

TABLE 1 TO § 1033.515.—LOCOMOTIVE TEST CYCLE

Test mode	Notch setting	Time in mode (minutes) [1]	Sample averaging period for emissions [1]
Pre-test idle	Lowest idle setting	10 to 15 [3]	Not applicable
A	Low idle [2]	5 to 10	300 ± 5 seconds
B	Normal idle	5 to 10	300 ± 5 seconds

TABLE 1 TO § 1033.515.—LOCOMOTIVE TEST CYCLE—Continued

Test mode	Notch setting	Time in mode (minutes) [1]	Sample averaging period for emissions [1]
C	Dynamic brake [2]	5 to 10	300 ± 5 seconds
1	Notch 1	5 to 10	300 ± 5 seconds
2	Notch 2	5 to 10	300 ± 5 seconds
3	Notch 3	5 to 10	300 ± 5 seconds
4	Notch 4	5 to 10	300 ± 5 seconds
5	Notch 5	5 to 10	300 ± 5 seconds
6	Notch 6	5 to 10	300 ± 5 seconds
7	Notch 7	5 to 10	300 ± 5 seconds
8	Notch 8	10 to 15	600 ± 5 seconds

[1] The time in each notch and sample averaging period may be extended as needed to allow for collection of a sufficiently large PM sample.
[2] Omit if not so equipped.
[3] See paragraph (b) of this section for alternate pre-test provisions.

(f) There are two approaches for sampling PM emissions during discrete-mode steady-state testing as described in this paragraph (f).

(1) *Engines certified to a PM standard/FEL at or above 0.05 g/bhp-hr.* Use a separate PM filter sample for each test mode of the locomotive test cycle according to the procedures specified in paragraph (a) through (e) of this section. You may ask to use a shorter sampling period if the total mass expected to be collected would cause unacceptably high pressure drop across the filter before reaching the end of the required sampling time. We will not allow sampling times less than 60 seconds. When we conduct locomotive emission tests, we will adhere to the time limits for each of the numbered modes in Table 1 to § 1033.515.

(2) *Engines certified to a PM standard/FEL below 0.05 g/bhp-hr.* (i) You may use separate PM filter samples for each test mode as described in paragraph (f)(1) of this section; however, we recommend that you do not. The low rate of sample filter loading will result in very long sampling times and the large number of filter samples may induce uncertainty stack-up that will lead to unacceptable PM measurement accuracy. Instead, we recommend that you measure PM emissions as specified in paragraph (f)(2)(ii) of this section.

(ii) You may use a single PM filter for sampling PM over all of the test modes of the locomotive test cycle as specified in this paragraph (f)(2). Vary the sample time to be proportional to the applicable line-haul or switch weighting factors specified in § 1033.530 for each mode. The minimum sampling time for each mode is 400 seconds multiplied by the weighting factor. For example, for a mode with a weighting factor of 0.030, the minimum sampling time is 12.0 seconds. PM sampling in each mode must be proportional to engine exhaust flow as specified in 40 CFR part 1065. Begin proportional sampling of PM emissions at the beginning of each test mode as is specified in paragraph (c) of this section. End the sampling period for each test mode so that sampling times are proportional to the weighting factors for the applicable duty cycles. If necessary, you may extend the time limit for each of the test modes beyond the sampling times in Table 1 to § 1033.515 to increase the sampled mass of PM emissions or to account for proper weighting of the PM emission sample over the entire cycle, using good engineering judgment.

(g) This paragraph (g) describes how to test locomotive engines when not installed in a locomotive. Note that the test procedures for dynamometer engine testing of locomotive engines are intended to produce emission measurements that are essentially identical to emission measurements produced during testing of complete locomotives using the same engine configuration. The following requirements apply for all engine tests:

(1) Specify a second-by-second set of engine speed and load points that are representative of in-use locomotive operation for each of the set-points of the locomotive test cycle described in Table 1 to § 1033.515, including transitions from one notch to the next. This is your reference cycle for validating your cycle. You may ignore points between the end of the sampling period for one mode and the point at which you change the notch setting to begin the next mode.

(2) Keep the temperature of the air entering the engine after any charge air cooling to within 5 °C of the typical intake manifold air temperature when the engine is operated in the locomotive under similar ambient conditions.

(3) Proceed with testing as specified for testing complete locomotives as specified in paragraphs (a) through (f) of this section.

§ 1033.520 Alternative ramped modal cycles.

(a) Locomotive testing over a ramped modal cycle is intended to improve measurement accuracy at low emission levels by allowing the use of batch sampling of PM and gaseous emissions over multiple locomotive notch settings. Ramped modal cycles combine multiple test modes of a discrete-mode steady-state into a single sample period. Time in notch is varied to be proportional to weighting factors. The ramped modal cycle for line-haul locomotives is shown in Table 1 to this section. The ramped modal cycle for switch locomotives is shown in Table 2 to this section. Both ramped modal cycles consist of a warm-up followed by three test phases that are each weighted in a manner that maintains the duty cycle weighting of the line-haul and switch locomotive duty cycles in § 1033.530. You may use ramped modal cycle testing for any locomotives certified under this part.

(b) Ramped modal testing requires continuous gaseous analyzers and three separate PM filters (one for each phase). You may collect a single batch sample for each test phase, but you must also measure gaseous emissions continuously to allow calculation of notch caps as required under § 1033.101.

(c) You may operate the engine in any way you choose to warm it up. Then follow the provisions of 40 CFR part 1065, subpart F for general pre-test procedures (including engine and sampling system pre-conditioning).

(d) Begin the test by operating the locomotive over the pre-test portion of the cycle. For locomotives not equipped with catalysts, you may begin the test as soon as the engine reaches its lowest idle setting. For catalyst-equipped locomotives, you may begin the test in normal idle mode if the engine does not reach its lowest idle setting within 15 minutes. If you do start in normal idle, run the low idle mode after normal idle,

then resume the specified mode sequence (without repeating the normal idle mode).

(e) Start the test according to 40 CFR 1065.530.

(1) Each test phase begins when operator demand is set to the first operator demand setting of each test phase of the ramped modal cycle. Each test phase ends when the time in mode is reached for the last mode in the test phase.

(2) For PM emissions (and other batch sampling), the sample period over which emissions for the phase are averaged generally begins within 10 seconds after the operator demand is changed to start the test phase and ends within 5 seconds of the sampling time for the test mode is reached. (see Table 1 to this section). You may ask to delay the start of the sample period to account for sample system residence times longer than 10 seconds.

(3) Use good engineering judgment when transitioning between phases.

(i) You should come as close as possible to simultaneously:

(A) Ending batch sampling of the previous phase.

(B) Starting batch sampling of the next phase.

(C) Changing the operator demand to the notch setting for the first mode in the next phase.

(ii) Avoid the following:

(A) Overlapping batch sampling of the two phases.

(B) An unnecessarily long delay before starting the next phase.

(iii) For example, the following sequence would generally be appropriate:

(A) End batch sampling for phase 2 after 240 seconds in notch 7.

(B) Switch the operator demand to notch 8 one second later.

(C) Begin batch sampling for phase 3 one second after switching to notch 8.

(4) If applicable, begin the smoke test at the start of the first test phase of the applicable ramped modal cycle. Continue collecting smoke data until the completion of final test phase. Refer to § 1033.101 to determine applicability of the smoke standards and § 1033.525 for details on how to conduct a smoke test.

(5) Proceed through each test phase of the applicable ramped modal cycle in the order specified until the test is completed.

(6) If you must void a test phase you may repeat the phase. To do so, begin with a warm engine operating at the notch setting for the last mode in the previous phase. You do not need to repeat later phases if they were valid. (**Note:** you must report test results for all voided tests and test phases.)

(7) Following the completion of the third test phase of the applicable ramped modal cycle, conduct the post sampling procedures specified in 40 CFR 1065.530.

TABLE 1 TO § 1033.520.—LINE-HAUL LOCOMOTIVE RAMPED MODAL CYCLE

RMC test phase	Weighting factor	RMC mode	Time in mode (seconds)	Notch setting
Pre-test idle	NA	NA	600 to 900	Lowest idle setting.[1]
Phase 1		A	600	Low Idle.[2]
(Idle test)	0.380	B	600	Normal Idle.
Phase Transition				
		C	1000	Dynamic Brake.[3]
		1	520	Notch 1.
		2	520	Notch 2.
		3	416	Notch 3.
		4	352	Notch 4.
Phase 2	0.389	5	304	Notch 5.
Phase Transition				
		6	144	Notch 6.
		7	111	Notch 7.
Phase 3	0.231	8	600	Notch 8.

[1] See paragraph (d) of this section for alternate pre-test provisions.
[2] Operate at normal idle for modes A and B if not equipped with multiple idle settings.
[3] Operate at normal idle if not equipped with a dynamic brake.

TABLE 2 TO § 1033.520.—SWITCH LOCOMOTIVE RAMPED MODAL CYCLE

RMC test phase	Weighting factor	RMC mode	Time in mode (seconds)	Notch setting
Pre-test idle	NA	NA	600 to 900	Lowest idle setting.[1]
Phase 1		A	600	Low Idle.[2]
(Idle test)	0.598	B	600	Normal Idle.
Phase Transition				
		1	868	Notch 1.
		2	861	Notch 2.
		3	406	Notch 3.
		4	252	Notch 4.
Phase 2	0.377	5	252	Notch 5.

TABLE 2 TO § 1033.520.—SWITCH LOCOMOTIVE RAMPED MODAL CYCLE—Continued

RMC test phase	Weighting factor	RMC mode	Time in mode (seconds)	Notch setting
Phase Transition				
	.....	6	1080	Notch 6.
	.....	7	144	Notch 7.
Phase 3	0.025	8	576	Notch 8.

[1] See paragraph (d) of this section for alternate pre-test provisions.
[2] Operate at normal idle for modes A and B if not equipped with multiple idle settings.

(f) Calculate your cycle-weighted brake-specific emission rates as follows:

(1) For each test phase j:

(i) Calculate emission rates (E_{ij}) for each pollutant i as the total mass emissions divided by the total time in the phase.

(ii) Calculate average power (P_j) as the total work divided by the total time in the phase.

(2) For each pollutant, calculate your cycle-weighted brake-specific emission rate using the following equation, where w_j is the weighting factor for phase j:

$$E_{ij} = \frac{w_1 E_{i1} + w_2 E_{i2} + w_3 E_{i3}}{w_1 P_1 + w_2 P_2 + w_3 P_3}$$

§ 1033.525 Smoke testing.

This section describes the equipment and procedures for testing for smoke emissions when is required.

(a) This section specifies how to measure smoke emissions using a full-flow, open path light extinction smokemeter. A light extinction meter consists of a built-in light beam that traverses the exhaust smoke plume that issues from exhaust the duct. The light beam must be at right angles to the axis of the plume. Align the light beam to go through the plume along the hydraulic diameter (defined in 1065.1001) of the exhaust stack. Where it is difficult to align the beam to have a path length equal to the hydraulic diameter (such as a long narrow rectangular duct), you may align the beam to have a different path length and correct it to be equivalent to a path length equal to the hydraulic diameter. The light extinction meter must meet the requirements of paragraph (b) of this section and the following requirements:

(1) Use an incandescent light source with a color temperature range of 2800K to 3250K, or a light source with a spectral peak between 550 and 570 nanometers.

(2) Collimate the light beam to a nominal diameter of 3 centimeters and an angle of divergence within a 6 degree included angle.

(3) Use a photocell or photodiode light detector. If the light source is an incandescent lamp, use a detector that has a spectral response similar to the photopic curve of the human eye (a maximum response in the range of 550 to 570 nanometers, to less than four percent of that maximum response below 430 nanometers and above 680 nanometers).

(4) Attach a collimating tube to the detector with apertures equal to the beam diameter to restrict the viewing angle of the detector to within a 16 degree included angle.

(5) Amplify the detector signal corresponding to the amount of light.

(6) You may use an air curtain across the light source and detector window assemblies to minimize deposition of smoke particles on those surfaces, provided that it does not measurably affect the opacity of the plume.

(7) Minimize distance from the optical centerline to the exhaust outlet; in no case may it be more than 3.0 meters. The maximum allowable distance of unducted space upstream of the optical centerline is 0.5 meters. Center the full flow of the exhaust stream between the source and detector apertures (or windows and lenses) and on the axis of the light beam.

(8) You may use light extinction meters employing substantially identical measurement principles and producing substantially equivalent results, but which employ other electronic and optical techniques.

(b) All smokemeters must meet the following specifications:

(1) A full-scale deflection response time of 0.5 second or less.

(2) You may attenuate signal responses with frequencies higher than 10 Hz with a separate low-pass electronic filter with the following performance characteristics:

(i) Three decibel point: 10 Hz.

(ii) Insertion loss: 0.0 ± 0.5 dB.

(iii) Selectivity: 12 dB down at 40 Hz minimum.

(iv) Attenuation: 27 dB down at 40 Hz minimum.

(c) Perform the smoke test by continuously recording smokemeter response over the entire locomotive test cycle in percent opacity to within one percent resolution and also simultaneously record operator demand set point (*e.g.*, notch position). Compare the recorded opacities to the smoke standards applicable to your locomotive.

(d) You may use a partial flow sampling smokemeter if you correct for the path length of your exhaust plume. If you use a partial flow sampling meter, follow the instrument manufacturer's installation, calibration, operation, and maintenance procedures.

§ 1033.530 Duty cycles and calculations.

This section describes how to apply the duty cycle to measured emission rates to calculate cycle-weighted average emission rates.

(a) *Standard duty cycles and calculations.* Tables 1 and 2 of this section show the duty cycle to use to calculate cycle-weighted average emission rates for locomotives equipped with two idle settings, eight propulsion notches, and at least one dynamic brake notch and tested using the Locomotive Test Cycle. Use the appropriate weighting factors for your locomotive application and calculate cycle-weighted average emissions as specified in 40 CFR part 1065, subpart G.

TABLE 1 TO § 1033.530.—STANDARD DUTY CYCLE WEIGHTING FACTORS FOR CALCULATING EMISSION RATES FOR LOCOMOTIVES WITH MULTIPLE IDLE SETTINGS

Notch setting	Test mode	Line-haul weighting factors	Line-haul weighting factors (no dynamic brake)	Switch weighting factors
Low Idle	A	0.190	0.190	0.299
Normal Idle	B	0.190	0.315	0.299
Dynamic Brake	C	0.125	(1)	0.000
Notch 1	1	0.065	0.065	0.124
Notch 2	2	0.065	0.065	0.123
Notch 3	3	0.052	0.052	0.058
Notch 4	4	0.044	0.044	0.036
Notch 5	5	0.038	0.038	0.036
Notch 6	6	0.039	0.039	0.015
Notch 7	7	0.030	0.030	0.002
Notch 8	8	0.162	0.162	0.008

[1] Not applicable.

TABLE 2 TO § 1033.530.—STANDARD DUTY CYCLE WEIGHTING FACTORS FOR CALCULATING EMISSION RATES FOR LOCOMOTIVES WITH A SINGLE IDLE SETTING

Notch setting	Test mode	Line-haul	Line-haul (no dynamic brake)	Switch
Normal Idle	A	0.380	0.505	0.598
Dynamic Brake	C	0.125	(1)	0.000
Notch 1	1	0.065	0.065	0.124
Notch 2	2	0.065	0.065	0.123
Notch 3	3	0.052	0.052	0.058
Notch 4	4	0.044	0.044	0.036
Notch 5	5	0.038	0.038	0.036
Notch 6	6	0.039	0.039	0.015
Notch 7	7	0.030	0.030	0.002
Notch 8	8	0.162	0.162	0.008

[1] Not applicable.

(b) *Idle and dynamic brake notches.* The test procedures generally require you to measure emissions at two idle settings and one dynamic brake, as follows:

(1) If your locomotive is equipped with two idle settings and one or more dynamic brake settings, measure emissions at both idle settings and the worst case dynamic brake setting, and weight the emissions as specified in the applicable table of this section. Where it is not obvious which dynamic brake setting represents worst case, do one of the following:

(i) You may measure emissions and power at each dynamic brake point and average them together.

(ii) You may measure emissions and power at the dynamic brake point with the lowest power.

(2) If your locomotive is equipped with two idle settings and is not equipped with dynamic brake, use a normal idle weighting factor of 0.315 for the line-haul cycle. If your locomotive is equipped with only one idle setting and no dynamic brake, use an idle weighting factor of 0.505 for the line-haul cycle.

(c) *Nonstandard notches or no notches.* If your locomotive is equipped with more or less than 8 propulsion notches, recommend an alternate test cycle based on the in-use locomotive configuration. Unless you have data demonstrating that your locomotive will be operated differently from conventional locomotives, recommend weighting factors that are consistent with the power weightings of the specified duty cycle. For example, the average load factor for your recommended cycle (cycle-weighted power divided by rated power) should be equivalent to those of conventional locomotives. We may also allow the use of the standard power levels shown in Table 3 to this section for nonstandard locomotive testing subject to our prior approval. This paragraph (c) does not allow engines to be tested without consideration of the actual notches that will be used.

TABLE 3 TO § 1033.530.—STANDARD NOTCH POWER LEVELS EXPRESSED AS A PERCENTAGE OF RATED POWER

	Percent
Normal Idle	0.00
Dynamic Brake	0.00
Notch 1	4.50
Notch 2	11.50
Notch 3	23.50
Notch 4	35.00
Notch 5	48.50
Notch 6	64.00
Notch 7	85.00
Notch 8	100.00

(d) *Optional Ramped Modal Cycle Testing.* Tables 1 and 2 of § 1033.520 show the weighting factors to use to calculate cycle-weighted average emission rates for the applicable locomotive ramped modal cycle. Use the weighting factors for the ramped modal cycle for your locomotive application and calculate cycle-weighted average emissions as specified in 40 CFR part 1065, subpart G.

(e) *Automated Start-Stop.* For locomotive equipped with features that shut the engine off after prolonged periods of idle, multiply the measured idle mass emission rate over the idle portion of the applicable test cycles by a factor equal to one minus the estimated fraction reduction in idling time that will result in use from the shutdown feature. Do not apply this factor to the weighted idle power. Application of this adjustment is subject to our approval. This paragraph (e) does not apply if the locomotive is (or will be) covered by a separate certificates for idle control.

(f) *Multi-engine locomotives.* This paragraph (f) applies for locomotives using multiple engines where all engines are identical in all material respects. In cases where we allow engine dynamometer testing, you may test a single engine consistent with good engineering judgment, as long as you test it at the operating points at which the engines will operate when installed in the locomotive (excluding stopping and starting). Weigh the results to reflect the power demand/power-sharing of the in-use configuration for each notch setting.

(g) *Representative test cycles for freshly manufactured locomotives.* As specified in this paragraph (g), manufacturers may be required to use an alternate test cycle for freshly manufactured Tier 3 and later locomotives.

(1) If you determine that you are adding design features that will make the expected average in-use duty cycle for any of your freshly manufactured locomotive engine families significantly different from the otherwise applicable test cycle (including weighting factors), you must notify us and recommend an alternate test cycle that represents the expected average in-use duty cycle. You should also obtain preliminary approval before you begin collecting data to support an alternate test cycle. We will specify whether to use the default duty cycle, your recommended cycle, or a different cycle, depending on which cycle we believe best represents expected in-use operation.

(2) The provisions of this paragraph (g) apply differently for different types of locomotives, as follows:

(i) For Tier 4 and later line-haul locomotives, use the cycle required by (g)(1) of this section to show compliance with the line-haul cycle standards.

(ii) For Tier 3 and later switch locomotives, use the cycle required by (g)(1) of this section to show compliance with the switch cycle standards.

(iii) For Tier 3 line-haul locomotives, if we specify an alternate cycle, use it to show compliance with the line-haul cycle standards. If you include the locomotives in the ABT program of subpart H of this part, calculate line-haul cycle credits (positive or negative) using the alternate cycle and the line-haul cycle standards. Your locomotive is deemed to also generate an equal amount of switch cycle credits.

(3) For all locomotives certified using an alternate cycle, include a description of the cycle in the owners manual such that the locomotive can be remanufactured using the same cycle.

(4) For example, if your freshly manufactured line-haul locomotives are equipped with load control features that modify how the locomotive will operate when it is in a consist, and such features will cause the locomotives to operate differently from the otherwise applicable line-haul cycle, we may require you to certify using an alternate cycle.

(5) See paragraph (h) of this section for cycle-changing design features that also result in energy savings.

(h) *Calculation adjustments for energy-saving design features.* The provisions of this paragraph (h) apply for locomotives equipped with energy-saving locomotive design features. They do not apply for features that only improve the engine's brake-specific fuel consumption.

(1) Manufacturers/remanufacturers choosing to adjust emissions under this paragraph (h) must do all of the following for certification:

(i) Describe the energy-saving features in your application for certification.

(ii) Describe in your installation instruction and/or maintenance instructions all steps necessary to utilize the energy-saving features.

(2) If your design feature will also affect the locomotive's duty cycle, you must comply with the requirements of paragraph (g) of this section.

(3) Calculate energy the savings as described in this paragraph (h)(3).

(i) Estimate the expected mean in-use fuel consumption rate (on a BTU per ton-mile basis) with and without the energy saving design feature, consistent with the specifications of paragraph (h)(4) of this section. The energy savings is the ratio of fuel consumed from a locomotive operating with the new feature to fuel consumed from a locomotive operating without the feature under identical conditions. Include an estimate of the 80 percent confidence interval for your estimate of the mean, and other statistical parameters we specify.

(ii) Your estimate must be based on in-use operating data, consistent with good engineering judgment. Where we have previously certified your design feature under this paragraph (h), we may require you to update your analysis based on all new data that are available. You must obtain preliminary approval before you begin collecting operational data for this purpose.

(iii) We may allow you to consider the effects of your design feature separately for different route types, regions, or railroads. We may require that you certify these different locomotives in different engine families and may restrict their use to the specified applications.

(iv) Design your test plan so that the operation of the locomotives with and without is as similar as possible in all material aspects (other than the design feature being evaluated). Correct all data for any relevant differences, consistent with good engineering judgment.

(v) Do not include any brake-specific energy savings in your calculated values. If it is not possible to exclude such effects from your data gathering, you must correct for these effects, consistent with good engineering judgment.

(4) Calculate adjustment factors as described in this paragraph (h)(4). If the energy savings will apply broadly, calculate and apply the adjustment on a cycle-weighted basis. Otherwise, calculate and apply the adjustment separately for each notch. To apply the adjustment, multiply the emissions (either cycle-weighted or notch-specific, as applicable) by the adjustment. Use the lower bound of the 80 percent confidence interval of the estimate of the mean as your estimated energy savings rate. We may cap your energy savings rate for this paragraph (h)(4) at 80 percent of the estimate of the mean. Calculate the emission adjustment factors as:

AF = 1.000—(energy savings rate)

§ 1033.535 Adjusting emission levels to account for infrequently regenerating aftertreatment devices.

This section describes how to adjust emission results from locomotives using aftertreatment technology with infrequent regeneration events that occur during testing. See paragraph (e) of this section for how to adjust ramped modal testing. See paragraph (f) of this section for how to adjust discrete-mode testing. For this section, ''regeneration'' means an intended event during which emission levels change while the system restores aftertreatment performance. For example, hydrocarbon emissions may increase temporarily while oxidizing accumulated particulate matter in a trap. Also for this section, ''infrequent'' refers to regeneration events that are

expected to occur on average less than once per sample period.

(a) *Developing adjustment factors.* Develop an upward adjustment factor and a downward adjustment factor for each pollutant based on measured emission data and observed regeneration frequency. Adjustment factors should generally apply to an entire engine family, but you may develop separate adjustment factors for different configurations within an engine family. If you use adjustment factors for certification, you must identify the frequency factor, F, from paragraph (b) of this section in your application for certification and use the adjustment factors in all testing for that engine family. You may use carryover or carry-across data to establish adjustment factors for an engine family, as described in § 1033.235, consistent with good engineering judgment. All adjustment factors for regeneration are additive. Determine adjustment factors separately for different test segments as described in paragraphs (e) and (f) of this section. You may use either of the following different approaches for locomotives that use aftertreatment with infrequent regeneration events:

(1) You may disregard this section if you determine that regeneration does not significantly affect emission levels for an engine family (or configuration) or if it is not practical to identify when regeneration occurs. If you do not use adjustment factors under this section, your locomotives must meet emission standards for all testing, without regard to regeneration.

(2) You may ask us to approve an alternate methodology to account for regeneration events. We will generally limit approval to cases in which your locomotives use aftertreatment technology with extremely infrequent regeneration and you are unable to apply the provisions of this section.

(b) *Calculating average emission factors.* Calculate the average emission factor (EF_A) based on the following equation:

$$EF_A = (F)(EF_H) + (1\text{-}F)(EF_L)$$

Where:

F = the frequency of the regeneration event during normal in-use operation, expressed in terms of the fraction of equivalent tests during which the regeneration occurs. You may determine F from in-use operating data or running replicate tests. For example, if you observe that the regeneration occurs 125 times during 1000 MW-hrs of operation, and your locomotive typically accumulates 1 MW-hr per test, F would be $(125) \div (1000) \times (1) = 0.125$.

EF_H = measured emissions from a test segment in which the regeneration occurs.

EF_L = measured emissions from a test segment in which the regeneration does not occur.

(c) *Applying adjustment factors.* Apply adjustment factors based on whether regeneration occurs during the test run. You must be able to identify regeneration in a way that is readily apparent during all testing.

(1) If regeneration does not occur during a test segment, add an upward adjustment factor to the measured emission rate. Determine the upward adjustment factor (UAF) using the following equation:

$$UAF = EF_A - EF_L$$

(2) If regeneration occurs or starts to occur during a test segment, subtract a downward adjustment factor from the measured emission rate. Determine the downward adjustment factor (DAF) using the following equation:

$$DAF = EF_H - EF_A$$

(d) *Sample calculation.* If EF_L is 0.10 g/bhp-hr, EF_H is 0.50 g/ bhp-hr, and F is 0.10 (the regeneration occurs once for each ten tests), then:

$EF_A = (0.10)(0.50$ g/ bhp-hr) + $(1.00 - 0.10)(0.10$ g/ bhp-hr) = 0.14 g/ bhp-hr.

UAF = 0.14 g/ bhp-hr − 0.10 g/ bhp-hr = 0.04 g/ bhp-hr.

DAF = 0.50 g/ bhp-hr − 0.14 g/ bhp-hr = 0.36 g/ bhp-hr

(e) *Ramped modal testing.* Develop separate adjustment factors for each test phase. If a regeneration has started but has not been completed when you reach the end of a test phase, use good engineering judgment to reduce your downward adjustments to be proportional to the emission impact that occurred in the test phases.

(f) *Discrete-mode testing.* Develop separate adjustment factors for each test mode. If a regeneration has started but has not been completed when you reach the end of the sampling time for a test mode extend the sampling period for that mode until the regeneration is completed.

Subpart G—Special Compliance Provisions

§ 1033.601 General compliance provisions.

Locomotive manufacturer/ remanufacturers, as well as owners and operators of locomotives subject to the requirements of this part, and all other persons, must observe the provisions of this part, the requirements and prohibitions in 40 CFR part 1068, and the provisions of the Clean Air Act. The provisions of 40 CFR part 1068 apply for locomotives as specified in that part, except as otherwise specified in this section.

(a) *Meaning of manufacturer.* When used in 40 CFR part 1068, the term ''manufacturer'' means manufacturer and/or remanufacturer.

(b) *Engine rebuilding.* The provisions of 40 CFR 1068.120 do not apply when remanufacturing locomotives under a certificate of conformity issued under this part.

(c) *Exemptions.* (1) The exemption provisions of 40 CFR 1068.240 (*i.e.*, exemptions for replacement engines) do not apply for domestic or imported locomotives. (**Note:** You may introduce into commerce freshly manufactured replacement engines under this part, provided the locomotives into which they are installed are covered by a certificate of conformity.

(2) The exemption provisions of 40 CFR 1068.250 and 1068.255 (i.e., exemptions for hardship relief) do not apply for domestic or imported locomotives. See § 1033.620 for provisions related to hardship relief.

(3) The exemption provisions of 40 CFR 1068.260 (i.e., exemptions for delegated assembly) do not apply for domestic or imported locomotives, except as specified in § 1033.630.

(4) The provisions for importing engines and equipment under the identical configuration exemption of 40 CFR 1068.315(i) do not apply for locomotives.

(5) The provisions for importing engines and equipment under the ancient engine exemption of 40 CFR 1068.315(j) do not apply for locomotives.

(d) *SEAs, defect reporting, and recall.* The provisions of 40 CFR part 1068, subpart E (i.e., SEA provisions) do not apply for locomotives. Except as noted in this paragraph (d), the provisions of 40 CFR part 1068, subpart F, apply to certificate holders for locomotives as specified for manufacturers in that part.

(1) When there are multiple persons meeting the definition of manufacturer or remanufacturer, each person meeting the definition of manufacturer or remanufacturer must comply with the requirements of 40 CFR part 1068, subpart F, as needed so that the certificate holder can fulfill its obligations under those subparts.

(2) The defect investigation requirements of 40 CFR 1068.501(a)(5), (b)(1) and (b)(2) do not apply for locomotives. Instead, use good engineering judgment to investigate emission-related defects consistent with normal locomotive industry practice for investigating defects. You are not required to track parts shipments as indicators of possible defects.

(e) *Introduction into commerce.* The placement of a new locomotive or new

locomotive engine back into service following remanufacturing is a violation of 40 CFR 1068.101(a)(1), unless it has a valid certificate of conformity for its model year and the required label.

§ 1033.610 Small railroad provisions.

In general, the provisions of this part apply for all locomotives, including those owned by Class II and Class III railroads. This section describes how these provisions apply for railroads meeting the definition of ''small railroad'' in § 1033.901. (**Note:** The term ''small railroad'' excludes all Class II railroads and some Class III railroads, such as those owned by large parent companies.)

(a) Locomotives become subject to the provisions of this part when they become ''new'' as defined in § 1033.901. Under that definition, a locomotive is ''new'' when first assembled, and generally becomes ''new'' again when remanufactured. As an exception to this general concept, locomotives that are owned and operated by railroads meeting the definition of ''small railroad'' in § 1033.901 do not become ''new'' when remanufactured, unless they were previously certified to EPA emission standards. Certificate holders may require written confirmation from the owner/operator that the locomotive qualifies as a locomotive that is owned and operated by a small railroad. Such written confirmation to a certificate holder is deemed to also be a submission to EPA and is thus subject to the reporting requirements of 40 CFR 1068.101.

(b) The provisions of subpart I of this part apply to all owners and operators of locomotives subject to this part 1033. However, the regulations of that subpart specify some provisions that apply only for Class I freight railroads, and others that apply differently to Class I freight railroads and other railroads.

(c) We may exempt new locomotives that are owned or operated by small railroads from the prohibition against remanufacturing a locomotive without a certificate of conformity as specified in this paragraph (c). This exemption is only available in cases where no certified remanufacturing system is available for the locomotive. For example, it is possible that no remanufacturer will certify a system for very old locomotive models that comprise a tiny fraction of the fleet and that are remanufactured infrequently. We will grant the exemption in all cases in which no remanufacturing system has been certified for the applicable engine family and model year. We may also grant an exemption where we determine that a certified system is unavailable. We may consider the issue of excessive costs in determining the availability of certified systems. If we grant this exemption for a previously certified locomotive, you are required to return the locomotive to its previously certified configuration. Send your request for such exemptions to the Designated Compliance Officer.

(d) Non-Class I railroads that do not meet the definition of ''small railroad'' in § 1033.901 may ask that their remanufactured locomotives be excluded from the definition of ''new'' in § 1033.901 in cases where no certified remanufacturing system is available for the locomotive. We will grant the exemption in all cases in which no remanufacturing system has been certified for the applicable engine family and model year. If we grant this exemption for a previously certified locomotive, you are required to return the locomotive to its previously certified configuration. Send your request for such exemptions to the Designated Compliance Officer.

§ 1033.615 Voluntarily subjecting locomotives to the standards of this part.

The provisions of this section specify the cases in which an owner or manufacturer of a locomotive or similar piece of equipment can subject it to the standards and requirements of this part. Once the locomotive or equipment becomes subject to the locomotive standards and requirements of this part, it remains subject to the standards and requirements of this part for the remainder of its service life.

(a) *Equipment excluded from the definition of ''locomotive''.* (1) Manufacturers/remanufacturers of equipment that is excluded from the definition of ''locomotive'' because of its total power, but would otherwise meet the definition of locomotive may ask to have it considered to be a locomotive. To do this, submit an application for certification as specified in subpart C of this part, explaining why it should be considered to be a locomotive. If we approve your request, it will be deemed to be a locomotive for the remainder of its service life.

(2) In unusual circumstances, we may deem other equipment to be locomotives (at the request of the owner or manufacturer/remanufacturer) where such equipment does not conform completely to the definition of locomotive, but is functionally equivalent to a locomotive.

(b) *Locomotives excluded from the definition of ''new''.* Owners of remanufactured locomotives excluded from the definition of ''new'' in § 1033.901 under paragraph (2) of that definition may choose to upgrade their locomotives to subject their locomotives to the standards and requirements of this part by complying with the specifications of a certified remanufacturing system, including the labeling specifications of § 1033.135.

§ 1033.620 Hardship provisions for manufacturers and remanufacturers.

(a) If you qualify for the economic hardship provisions specified in 40 CFR 1068.245, we may approve a period of delayed compliance for up to one model year total.

(b) The provisions of this paragraph (b) are intended to address problems that could occur near the date on which more stringent emission standards become effective, such as the transition from the Tier 2 standards to the Tier 3 standards for line-haul locomotives on January 1, 2012.

(1) In appropriate extreme and unusual circumstances that are clearly outside the control of the manufacturer and could not have been avoided by the exercise of prudence, diligence, and due care, we may permit you, for a brief period, to introduce into commerce locomotives which do not comply with the applicable emission standards if all of the following conditions apply:

(i) You cannot reasonably manufacture the locomotives in such a manner that they would be able to comply with the applicable standards.

(ii) The manufacture of the locomotives was substantially completed prior to the applicability date of the standards from which you seek the relief. For example, you may not request relief for a locomotive that has been ordered, but for which you will not begin the assembly process prior to the applicability date of the standards. On the other hand, we would generally consider completion of the underframe weldment to be a substantial part of the manufacturing process.

(iii) Manufacture of the locomotives was previously scheduled to be completed at such a point in time that locomotives would have been included in the previous model year, such that they would have been subject to less stringent standards, and that such schedule was feasible under normal conditions.

(iv) You demonstrate that the locomotives comply with the less stringent standards that applied to the previous model year's production described in paragraph (b)(1)(iii) of this section, as prescribed by subpart C of this part (i.e., that the locomotives are identical to locomotives certified in the previous model year).

(v) You exercised prudent planning, were not able to avoid the violation, and have taken all reasonable steps to minimize the extent of the nonconformity.

(vi) We approve your request before you introduce the locomotives into commerce.

(2) You must notify us as soon as you become aware of the extreme or unusual circumstances.

(3)(i) Include locomotives for which we grant relief under this section in the engine family for which they were originally intended to be included.

(ii) Where the locomotives are to be included in an engine family that was certified to an FEL above the applicable standard, you must reserve credits to cover the locomotives covered by this allowance and include the required information for these locomotives in the end-of-year report required by subpart H of this part.

(c) In granting relief under this section, we may also set other conditions as appropriate, such as requiring payment of fees to negate an economic gain that such relief would otherwise provide.

§ 1033.625 Special certification provisions for non-locomotive-specific engines.

You may certify freshly manufactured or remanufactured locomotives using non-locomotive-specific engines (as defined in (1033.901) using the normal certification procedures of this part. Locomotives certified in that way are generally treated the same as other locomotives, except where specified otherwise. The provisions of this section provide for design certification to the locomotive standards in this part for locomotives using engines included in engine families certified under 40 CFR part 1039 (or part 89) in limited circumstances.

(a) Remanufactured or freshly manufactured switch locomotives powered by non-locomotive-specific engines may be certified by design without the test data required by 1033.235 if all of the following are true:

(1) Before being installed in the locomotive, the engines were covered by a certificate of conformity issued under 40 CFR Part 1039 (or part 89) that is effective for the calendar year in which the manufacture or remanufacture occurs. You may use engines certified during the previous year if it is subject to the same standards. You may not make any modifications to the engines unless we approve them.

(2) The engines were certified to standards that are numerically lower than the applicable locomotive standards of this part.

(3) More engines are reasonably projected to be sold and used under the certificate for non-locomotive use than for use in locomotives.

(4) The number of such locomotives certified under this section does not exceed 30 in any three-year period. We may waive this sales limit for locomotive models that have previously demonstrated compliance with the locomotive standards of § 1033.101 in-use.

(5) We approved the application as specified in paragraph (d) of this section.

(b) To certify your locomotives by design under this section, submit your application as specified in § 1033.205, except include the following instead of the locomotive test data otherwise required:

(1) A description of the engines to be used, including the name of the engine manufacturer and engine family identifier for the engines.

(2) A brief engineering analysis describing how the engine's emission controls will function when installed in the locomotive throughout the locomotive's useful life.

(3) The emission data submitted under 40 CFR part 1039 (or part 89).

(c) Locomotives certified under this section are subject to all of the same requirements of this part unless specified otherwise in this section. The engines used in such locomotives are not considered to be included in the otherwise applicable engines family of 40 CFR part 1039 (or part 89).

(d) We will approve or deny the application as specified in subpart C of this part. For example, we will deny your application for certification by design under this section in any case where we have evidence that your locomotives will not conform to the requirements of this part throughout their useful lives.

§ 1033.630 Staged-assembly and delegated assembly exemptions.

(a) *Staged assembly.* You may ask us to provide a temporary exemption to allow you to complete production of your engines and locomotives at different facilities, as long as you maintain control of the engines until they are in their certified configuration. We may require you to take specific steps to ensure that such locomotives are in their certified configuration before reaching the ultimate purchaser. You may request an exemption under this paragraph (a) in your application for certification, or in a separate submission. If you include your request in your application, your exemption is approved when we grant your certificate. Note that no exemption is needed to ship an engine that has been assembled in its certified configuration, is properly labeled, and will not require an aftertreatment device to be attached when installed in the locomotive.

(b) *Delegated assembly.* This paragraph (b) applies where the engine manufacturer/remanufacturer does not complete assembly of the locomotives and the engine is shipped after being manufactured or remanufactured (partially or completely). The provisions of this paragraph (b) apply differently depending on who holds the certificate of conformity and the state of the engine when it is shipped. You may request an exemption under this paragraph (b) in your application for certification, or in a separate submission. If you include your request in your application, your exemption is approved when we grant your certificate. A manufacturer/remanufacturer may request an exemption under 40 CFR 1068.260 instead of under this section.

(1) In cases where an engine has been assembled in its certified configuration, properly labeled, and will not require an aftertreatment device to be attached when installed in the locomotive, no exemption is needed to ship the engine. You do not need an exemption to ship engines without specific components if they are not emission-related components identified in Appendix I of 40 CFR part 1068.

(2) In cases where an engine has been properly labeled by the certificate holder and assembled in its certified configuration except that it does not yet have a required aftertreatment device, an exemption is required to ship the engine. You may ask for this exemption if you do all of the following:

(i) You note on the Engine Emission Control Information label that the locomotive must include the aftertreatment device to be covered by the certificate.

(ii) You make clear in your emission-related installation instructions that installation of the aftertreatment device is required for the locomotive to be covered by the certificate.

(3) In cases where an engine will be shipped to the certificate holder in an uncertified configuration, an exemption is required to ship the engine. You may ask for this exemption under 40 CFR 1068.262.

(c) *Other exemptions.* In unusual circumstances, you may ask us to provide an exemption for an assembly process that is not covered by the provisions of paragraphs (a) and (b) of this section. We will make the exemption conditional based on you complying with requirements that we

determine are necessary to ensure that the locomotives are assembled in their certified configuration before being placed (back) into service.

§ 1033.640 Provisions for repowered and refurbished locomotives.

(a) The provisions of this section apply for locomotives that are produced from an existing locomotive so that the new locomotive contains both previously used parts and parts that have never been used before.

(1) Repowered locomotives are used locomotives in which a freshly manufactured propulsion engine is installed. As described in this section, a repowered locomotive is deemed to be either remanufactured or freshly manufactured, depending on the total amount of unused parts on the locomotive. It may also be deemed to be a refurbished locomotive.

(2) Refurbished locomotives are locomotives that contain more unused parts than previously used parts. As described in this section, a locomotive containing more unused parts than previously used parts may be deemed to be either remanufactured or freshly manufactured, depending on the total amount of unused parts on the locomotive. Note that § 1033.101 defines refurbishment of a pre-1973 locomotive to be an upgrade of the locomotive.

(b) A single existing locomotive cannot be divided into parts and combined with new parts to create more than one remanufactured locomotive. However, any number of locomotives can be divided into parts and combined with new parts to create more than one remanufactured locomotive, provide the number of locomotives created (remanufactured and freshly manufactured) does not exceed the number of locomotives that were disassembled.

(c) You may determine the relative amount of previously used parts consistent with the specifications of the Federal Railroad Administration. Otherwise, determine the relative amount of previously used parts as follows:

(1) Identify the parts in the fully assembled locomotive that have been previously used and those that have never been used before.

(2) Weight the unused parts and previously used parts by the dollar value of the parts. For example, a single part valued at $1200 would count the same as six parts valued at $200 each. Group parts by system where possible (such as counting the engine as one part) if either all the parts in that system are used or all the parts in that system are unused. Calculate the used part values using dollar values from the same year as the new parts.

(3) Sum the values of the unused parts. Also sum the values of the previously used parts. The relative fraction of used parts is the total value of previously used parts divided by the combined value of the unused parts and previously used parts.

(c) If the weighted fraction of the locomotive that is comprised of previously used parts is greater than or equal to 25 percent, then the locomotive is considered to be a remanufactured locomotive and retains its original date of manufacture. Note, however, that if the weighted fraction of the locomotive that is comprised of previously used parts is less than 50 percent, then the locomotive is also considered to be a refurbished locomotive.

(d) If the weighted fraction of the locomotive that is comprised of previously used parts is less than 25 percent, then the locomotive is deemed to be a freshly manufactured locomotive and the date of original manufacture is the most recent date on which the locomotive was assembled using less than 25 percent previously used parts. For example:

(1) If you produce a new locomotive that includes a used frame, but all other parts are unused, then the locomotive would likely be considered to be a freshly manufactured locomotive because the value of the frame would likely be less than 25 percent of the total value of the locomotive. Its date of original manufacture would be the date on which you complete its assembly.

(2) If you produce a new locomotive by replacing the engine in a 1990 locomotive with a freshly manufactured engine, but all other parts are used, then the locomotive would likely be considered to be a remanufactured locomotive and its date of original manufacture is the date on which assembly was completed in 1990. (**Note:** such a locomotive would also be considered to be a repowered locomotive.)

(e) Locomotives containing used parts that are deemed to be freshly manufactured locomotives are subject to the same provisions as all other freshly manufactured locomotives. Other refurbished locomotives are subject to the same provisions as other remanufactured locomotives, with the following exceptions:

(1) *Switch locomotives.* (i) Prior to January 1, 2015, remanufactured Tier 0 switch locomotives that are deemed to be refurbished are subject to the Tier 0 line-haul cycle and switch cycle standards. Note that this differs from the requirements applicable to other Tier 0 switch locomotives, which are not subject to the Tier 0 line-haul cycle standards.

(ii) Beginning January 1, 2015, remanufactured Tier 3 and earlier switch locomotives that are deemed to be refurbished are subject to the Tier 3 switch standards.

(2) *Line-haul locomotives.* Remanufactured line-haul locomotives that are deemed to be refurbished are subject to the same standards as freshly manufactured line-haul locomotives, except that line-haul locomotives with rated power less than 3000 hp that are refurbished before January 1, 2015 are subject to the same standards as refurbished switch locomotives under paragraph (e)(1)(i) of this section. However, line-haul locomotives less than 3000 hp may not generate emission credits relative to the standards specified in paragraph (e)(1)(i) of this section.

(3) *Labels for switch and line-haul locomotives.* Remanufacturers that refurbish a locomotive must add a secondary locomotive label that includes the following:

(i) The label heading: ''REFURBISHED LOCOMOTIVE EMISSION CONTROL INFORMATION.''

(ii) The statement identifying when the locomotive was refurbished and what standards it is subject to, as follows: ''THIS LOCOMOTIVE WAS REFURBISHED IN [year of refurbishment] AND MUST COMPLY WITH THE TIER [applicable standard level] EACH TIME THAT IT IS REMANUFACTURED, EXCEPT AS ALLOWED BY 40 CFR 1033.750.''.

§ 1033.645 Non-OEM component certification program.

This section describes a voluntary program that allows you to get EPA approval of components you manufacture for use during remanufacturing.

(a) *Applicability.* This section applies only for components replaced during remanufacturing. It does not apply for other components that are replaced during a locomotive's useful life.

(1) The following components are eligible for approval under this section:

(i) Cylinder liners.

(ii) Pistons.

(iii) Piston rings.

(iv) Heads.

(v) Fuel injectors.

(vi) Turbochargers.

(vii) Aftercoolers and intercoolers.

(2) Catalysts and electronic controls are not eligible for approval under this section.

(3) We may determine that other types of components can be certified under

this section, consistent with good engineering judgment.

(b) *Approval.* To obtain approval, submit your request to the Designated Compliance Officer.

(1) Include all of the following in your request:

(i) A description of the component(s) for which you are requesting approval.

(ii) A list of all engine/locomotive models and engine families for which your component would be used. You may exclude models that are not subject to our standards or will otherwise not be remanufactured under a certificate of conformity.

(iii) A copy of the maintenance instructions for engines using your component. You may reference the other certificate holder's maintenance instructions in your instructions. For example, your instructions may specify to follow the other certificate holder's instructions in general, but list one or more exceptions to address the specific maintenance needs of your component.

(iv) An engineering analysis (including test data in some cases) demonstrating to us that your component will not cause emissions to increase. The analysis must address both low-hour and end-of-useful life emissions. The amount of information required for this analysis is less than is required to obtain a certificate of conformity under subpart C of this part and will vary depending on the type of component being certified.

(v) The following statement signed by an authorized representative of your company: We submit this request under 40 CFR 1033.645. All the information in this report is true and accurate to the best of my knowledge. I know of the penalties for violating the Clean Air Act and the regulations. (Authorized Company Representative)

(2) If we determine that there is reasonable technical basis to believe that your component is sufficiently equivalent that it will not increase emissions, we will approve your request and you will be a certificate holder for your components with respect to actual emissions performance for all locomotives that use those components (in accordance with this section).

(c) *Liability.* Being a certificate holder under this section means that if in-use testing indicates that a certified locomotive using one or more of your approved components does not comply with an applicable emission standard, we will presume that you and other certificate holders are liable for the noncompliance. However, we will not hold you liable in cases where you convince us that your components did not cause the noncompliance. Conversely, we will not hold other certificate holders liable for noncompliance caused solely by your components. You are also subject to the warranty and defect reporting requirements of this part for your certified components. Other requirements of this part apply as specified in § 1033.1.

(d) *In-use testing.* Locomotives containing your components must be tested according to the provisions of this paragraph (d).

(1) Except as specified in paragraph (d)(5) of this section, you must test at least one locomotive if 250 locomotives use your component under this section. You must test one additional locomotive for the next additional 500 locomotives that use your component under this section. After that, we may require you to test one additional locomotive for each additional 1000 locomotives that use your component under this section. These numbers apply across model years. For example, if your component is used in 125 remanufactures per year under this section, you must test one of the first 250 locomotives, one of the next 500 locomotives, and up to one every eight years after that. Do not count locomotives that use your components but are not covered by this section.

(2) Except for the first locomotive you test for a specific component under this section, locomotives tested under this paragraph (d) must be past the half-way point of the useful life in terms of MW-hrs. For the first locomotive you test, select a locomotive that has operated between 25 and 50 percent of its useful life.

(3) Unless we approve a different schedule, you must complete testing and report the results to us within 180 days of the earliest point at which you could complete the testing based on the hours of operation accumulated by the locomotives. For example, if 250 or more locomotives use your part under this section, and the first of these to reach 25 percent of its useful life does so on March 1st of a given year, you must complete testing of one of the first 250 locomotives and report to us by August 28th of that year.

(4) Unless we approve different test procedures, you must test the locomotive according to the procedures specified in subpart F of this part.

(5) If any locomotives fail to meet all standards, we may require you to test one additional locomotive for each locomotive that fails. You may choose to accept that your part is causing an emission problem rather than continuing testing. You may also test additional locomotives at any time. We will consider failure rates, average emission levels and the existence of any defects among other factors in determining whether to pursue remedial action. We may order a recall pursuant to 40 CFR part 1068 before you complete testing additional locomotives.

(6) You may ask us to allow you to rely on testing performed by others instead of requiring you to perform testing. For example, if a railroad tests a locomotive with your component as part of its testing under § 1033.810, you may ask to submit those test data as fulfillment of your test obligations under this paragraph (d). If a given test locomotive uses different components certified under this section that were manufactured by different manufacturers (such as rings from one manufacturer and cylinder liners from another manufacturer), a single test of it may be counted towards both manufacturers' test obligations. In unusual circumstances, you may also ask us to grant you hardship relief from the testing requirements of this paragraph (d). In determining whether to grant you relief, we will consider all relevant factors including the extent of the financial hardship to your company and whether the test data are available from other sources, such as testing performed by a railroad.

(e) Components certified under this section may be used when remanufacturing Category 2 engines under 40 CFR part 1042.

§ 1033.650 Incidental use exemption for Canadian and Mexican locomotives.

You may ask us to exempt from the requirements and prohibitions of this part locomotives that are operated primarily outside of the United States and that enter the United States temporarily from Canada or Mexico. We will approve this exemption only where we determine that the locomotive's operation within the United States will not be extensive and will be incidental to its primary operation. For example, we would generally exempt locomotives that will not operate more than 25 miles from the border and will operate in the United States less than 5 percent of their operating time. For existing operations, you must request this exemption before January 1, 2011. In your request, identify the locomotives for which you are requesting an exemption, and describe their projected use in the United States. We may grant the exemption broadly or limit the exemption to specific locomotives and/or specific geographic areas. However, we will typically approve exemptions for specific rail facilities rather than specific locomotives. In unusual circumstances, such as cases in which

new rail facilities are created, we may approve requests submitted after January 1, 2011.

§ 1033.655 Special provisions for certain Tier 0/Tier 1 locomotives.

(a) The provisions of this section apply only for the following locomotives (and locomotives in the same engine families as these locomotives):

(1) Locomotives listed in Table 1 of this section originally manufactured 1986–1994 by General Electric Company that have never been equipped with separate loop aftercooling. The section also applies for the equivalent passenger locomotives.

TABLE 1 TO § 1033.655

8–40C	P32ACDM
8–40B	P42DC
8–32B	8–40BPH
8–40CW	P40DC
8–40BW	8–32BWH
8–40CM	C39–8
8–41CW	B39–8E
8–44CW	

(2) SD70MAC and SD70IAC locomotives originally manufactured 1996–2000 by EMD.

(b) Any certifying remanufacturer may request relief for the locomotives covered by this section.

(c) You may ask us to allow these locomotives to exceed otherwise applicable line-haul cycle NO_X standard for high ambient temperatures and/or altitude because of limitations of the cooling system. However, the NO_X emissions may exceed the otherwise applicable standard only to the extent necessary. Relief is limited to the following conditions:

(1) For General Electric locomotives, you may ask for relief for ambient temperatures above 23 °C and/or barometric pressure below 97.5 kPa (28.8 in. Hg). NO_X emissions may not exceed 9.5 g/bhp-hr over the line-haul cycle for any temperatures up to 105 °F and any altitude up to 7000 feet above sea level.

(2) For EMD locomotives, you may ask for relief for ambient temperatures above 30 °C and/or barometric pressure below 97.5 kPa (28.8 in. Hg). NO_X emissions may not exceed 8.0 g/bhp-hr over the line-haul cycle for any temperatures up to 105 °F and any altitude up to 7000 feet above sea level.

(d) All other standards and requirements in this part apply as specified.

(e) To request this relief, submit to the Designated Compliance Officer along with your application for certification an engineering analysis showing how your emission controls operate for the following conditions:

(1) Temperatures 23–40 °C at any altitude up to 7000 feet above sea level.

(2) Altitudes 1000–7000 feet above sea level for any temperature from 15–40 °C.

Subpart H—Averaging, Banking, and Trading for Certification

§ 1033.701 General provisions.

(a) You may average, bank, and trade (ABT) emission credits for purposes of certification as described in this subpart to show compliance with the standards of this part. Participation in this program is voluntary.

(b) Section 1033.740 restricts the use of emission credits to certain averaging sets.

(c) The definitions of Subpart J of this part apply to this subpart. The following definitions also apply:

(1) *Actual emission credits* means emission credits you have generated that we have verified by reviewing your final report.

(2) *Applicable emission standard* means an emission standard that is specified in subpart B of this part. Note that for other subparts, ''applicable emission standard'' is defined to also include FELs.

(3) *Averaging set* means a set of locomotives in which emission credits may be exchanged only with other locomotives in the same averaging set.

(4) *Broker* means any entity that facilitates a trade of emission credits between a buyer and seller.

(5) *Buyer* means the entity that receives emission credits as a result of a trade.

(6) *Reserved emission credits* means emission credits you have generated that we have not yet verified by reviewing your final report.

(7) *Seller* means the entity that provides emission credits during a trade.

(8) *Trade* means to exchange emission credits, either as a buyer or seller.

(9) *Transfer* means to convey control of credits generated for an individual locomotive to the purchaser, owner, or operator of the locomotive at the time of manufacture or remanufacture; or to convey control of previously generated credits from the purchaser, owner, or operator of an individual locomotive to the manufacturer/remanufacturer at the time of manufacture/remanufacture.

(d) You may not use emission credits generated under this subpart to offset any emissions that exceed an FEL or standard. This applies for all testing, including certification testing, in-use testing, selective enforcement audits, and other production-line testing. However, if emissions from a locomotive exceed an FEL or standard (for example, during a selective enforcement audit), you may use emission credits to recertify the engine family with a higher FEL that applies only to future production.

(e) Engine families that use emission credits for one or more pollutants may not generate positive emission credits for another pollutant.

(f) Emission credits may be used in the model year they are generated or in future model years. Emission credits may not be used for past model years.

(g) You may increase or decrease an FEL during the model year by amending your application for certification under § 1033.225. The new FEL may apply only to locomotives you have not already introduced into commerce. Each locomotive's emission control information label must include the applicable FELs. You must conduct production line testing to verify that the emission levels are achieved.

(h) Credits may be generated by any certifying manufacturer/remanufacturer and may be held by any of the following entities:

(1) Locomotive or engine manufacturers.

(2) Locomotive or engine remanufacturers.

(3) Locomotive owners.

(4) Locomotive operators.

(5) Other entities after notification to EPA.

(i) All locomotives that are certified to an FEL that is different from the emission standard that would otherwise apply to the locomotives are required to comply with that FEL for the remainder of their service lives, except as allowed by § 1033.750.

(1) Manufacturers must notify the purchaser of any locomotive that is certified to an FEL that is different from the emission standard that would otherwise apply that the locomotive is required to comply with that FEL for the remainder of its service life.

(2) Remanufacturers must notify the owner of any locomotive or locomotive engine that is certified to an FEL that is different from the emission standard that would otherwise apply that the locomotive (or the locomotive in which the engine is used) is required to comply with that FEL for the remainder of its service life.

(j) The FEL to which the locomotive is certified must be included on the locomotive label required in § 1033.135. This label must include the notification specified in paragraph (i) of this section.

§ 1033.705 Calculating emission credits.

The provisions of this section apply separately for calculating emission credits for NO_X or PM.

(a) Calculate positive emission credits for an engine family that has an FEL below the otherwise applicable emission standard. Calculate negative emission credits for an engine family that has an FEL above the otherwise applicable emission standard. Do not round until the end of year report.

(b) For each participating engine family, calculate positive or negative emission credits relative to the otherwise applicable emission standard. For the end of year report, round calculated emission credits to the nearest one hundredth of a megagram (0.01 Mg). Round your end of year emission credit balance to the nearest megagram (Mg). Use consistent units throughout the calculation. When useful life is expressed in terms of megawatt-hrs, calculate credits for each engine family from the following equation:

Emission credits = (Std − FEL) × (1.341) × (UL) × (Production) × (F_p) × (10^{-3} kW-Mg/MW-g).

Where:

Std = the applicable NO_X or PM emission standard in g/bhp-hr (except that Std = previous FEL in g/bhp-hr for locomotives that were certified under this part to an FEL other than the standard during the previous useful life).

FEL = the family emission limit for the engine family in g/bhp-hr.

UL = the sales-weighted average useful life in megawatt-hours (or the subset of the engine family for which credits are being calculated), as specified in the application for certification.

Production = the number of locomotives participating in the averaging, banking, and trading program within the given engine family during the calendar year (or the number of locomotives in the subset of the engine family for which credits are being calculated). Quarterly production projections are used for initial certification. Actual applicable production/sales volumes are used for end-of-year compliance determination.

F_p = the proration factor as determined in paragraph (d) of this section.

(c) When useful life is expressed in terms of miles, calculate the useful life in terms of megawatt-hours (UL) by dividing the useful life in miles by 100,000, and multiplying by the sales-weighted average rated power of the engine family. For example, if your useful life is 800,000 miles for a family with an average rated power of 3,500 hp, then your equivalent MW-hr useful life would be 28,000 MW-hrs. Credits are calculated using this UL value in the equations of paragraph (b) of this section.

(d) The proration factor is an estimate of the fraction of a locomotive's service life that remains as a function of age. The proration factor is 1.00 for freshly manufactured locomotives.

(1) The locomotive's age is the length of time in years from the date of original manufacture to the date at which the remanufacture (for which credits are being calculated) is completed, rounded to the next higher year.

(2) The proration factors for line-haul locomotives ages 1 through 20 are specified in Table 1 to this section. For line-haul locomotives more than 20 years old, use the proration factor for 20 year old locomotives. The proration factors for switch locomotives ages 1 through 40 are specified in Table 2 to this section. For switch locomotives more than 40 years old, use the proration factor for 40 year old locomotives.

(3) For repower engines, the proration factor is based on the age of the locomotive chassis, not the age of the engine, except for remanufactured locomotives that qualify as refurbished. The minimum proration factor for remanufactured locomotives that meet the definition of refurbished but not freshly manufactured is 0.60. (**Note:** The proration factor is 1.00 for all locomotives that meet the definition of freshly manufactured.)

TABLE 1 TO § 1033.705.—PRORATION FACTORS FOR LINE-HAUL LOCOMOTIVES

Locomotive age (years)	Proration factor (F_p)
1	0.96
2	0.92
3	0.88
4	0.84
5	0.81
6	0.77
7	0.73
8	0.69
9	0.65
10	0.61
11	0.57
12	0.54
13	0.50
14	0.47
15	0.43
16	0.40
17	0.36
18	0.33
19	0.30
20	0.27

TABLE 2 TO § 1033.705.—PRORATION FACTORS FOR SWITCH LOCOMOTIVES

Locomotive age (years)	Proration factor (F_p)
1	0.98
2	0.96
3	0.94
4	0.92
5	0.90
6	0.88
7	0.86
8	0.84
9	0.82
10	0.80
11	0.78
12	0.76
13	0.74
14	0.72
15	0.70
16	0.68
17	0.66
18	0.64
19	0.62
20	0.60
21	0.58
22	0.56
23	0.54
24	0.52
25	0.50
26	0.48
27	0.46
28	0.44
29	0.42
30	0.40
31	0.38
32	0.36
33	0.34
34	0.32
35	0.30
36	0.28
37	0.26
38	0.24
39	0.22
40	0.20

(e) In your application for certification, base your showing of compliance on projected production volumes for locomotives that will be placed into service in the United States. As described in § 1033.730, compliance with the requirements of this subpart is determined at the end of the model year based on actual production volumes for locomotives that will be placed into service in the United States. Do not include any of the following locomotives to calculate emission credits:

(1) Locomotives permanently exempted under subpart G of this part or under 40 CFR part 1068.

(2) Exported locomotives. You may ask to include locomotives sold to Mexican or Canadian railroads if they will likely operate within the United States and you include all such locomotives (both credit using and credit generating locomotives).

(3) Locomotives not subject to the requirements of this part, such as those excluded under § 1033.5.

(4) Any other locomotives, where we indicate elsewhere in this part 1033 that they are not to be included in the calculations of this subpart.

§ 1033.710 Averaging emission credits.

(a) Averaging is the exchange of emission credits among your engine families. You may average emission credits only as allowed by § 1033.740.

(b) You may certify one or more engine families to an FEL above the applicable emission standard, subject to the FEL caps and other provisions in subpart B of this part, if you show in your application for certification that your projected balance of all emission-credit transactions in that model year is greater than or equal to zero.

(c) If you certify an engine family to an FEL that exceeds the otherwise applicable emission standard, you must obtain enough emission credits to offset the engine family's deficit by the due date for the final report required in § 1033.730. The emission credits used to address the deficit may come from your other engine families that generate emission credits in the same model year, from emission credits you have banked, or from emission credits you obtain through trading or by transfer.

§ 1033.715 Banking emission credits.

(a) Banking is the retention of emission credits by the manufacturer/remanufacturer generating the emission credits (or owner/operator, in the case of transferred credits) for use in averaging, trading, or transferring in future model years. You may use banked emission credits only as allowed by § 1033.740.

(b) You may use banked emission credits from the previous model year for averaging, trading, or transferring before we verify them, but we may revoke these emission credits if we are unable to verify them after reviewing your reports or auditing your records.

(c) Reserved credits become actual emission credits only when we verify them after reviewing your final report.

§ 1033.720 Trading emission credits.

(a) Trading is the exchange of emission credits between certificate holders. You may use traded emission credits for averaging, banking, or further trading transactions. Traded emission credits may be used only as allowed by § 1033.740.

(b) You may trade actual emission credits as described in this subpart. You may also trade reserved emission credits, but we may revoke these emission credits based on our review of your records or reports or those of the company with which you traded emission credits.

(c) If a negative emission credit balance results from a transaction, both the buyer and seller are liable, except in cases we deem to involve fraud. See § 1033.255(e) for cases involving fraud. We may void the certificates of all engine families participating in a trade that results in a manufacturer/remanufacturer having a negative balance of emission credits. See § 1033.745.

§ 1033.722 Transferring emission credits.

(a) Credit transfer is the conveying of control over credits, either:

(1) From a certifying manufacturer/remanufacturer to an owner/operator.

(2) From an owner/operator to a certifying manufacturer/remanufacturer.

(b) Transferred credits can be:

(1) Used by a certifying manufacturer/remanufacturer in averaging.

(2) Transferred again within the model year.

(3) Reserved for later banking. Transferred credits may not be traded unless they have been previously banked.

(c) Owners/operators participating in credit transfers must submit the reports specified in § 1033.730.

§ 1033.725 Requirements for your application for certification.

(a) You must declare in your application for certification your intent to use the provisions of this subpart for each engine family that will be certified using the ABT program. You must also declare the FELs you select for the engine family for each pollutant for which you are using the ABT program. Your FELs must comply with the specifications of subpart B of this part, including the FEL caps. FELs must be expressed to the same number of decimal places as the applicable emission standards.

(b) Include the following in your application for certification:

(1) A statement that, to the best of your belief, you will not have a negative balance of emission credits for any averaging set when all emission credits are calculated at the end of the year.

(2) Detailed calculations of projected emission credits (positive or negative) based on projected production volumes.

§ 1033.730 ABT reports.

(a) If any of your engine families are certified using the ABT provisions of this subpart, you must send an end-of-year report within 90 days after the end of the model year and a final report within 270 days after the end of the model year. We may waive the requirement to send the end-of year report, as long as you send the final report on time.

(b) Your end-of-year and final reports must include the following information for each engine family participating in the ABT program:

(1) Engine family designation.

(2) The emission standards that would otherwise apply to the engine family.

(3) The FEL for each pollutant. If you changed an FEL during the model year, identify each FEL you used and calculate the positive or negative emission credits under each FEL. Also, describe how the applicable FEL can be identified for each locomotive you produced. For example, you might keep a list of locomotive identification numbers that correspond with certain FEL values.

(4) The projected and actual production volumes for the model year that will be placed into service in the United States as described in § 1033.705. If you changed an FEL during the model year, identify the actual production volume associated with each FEL.

(5) Rated power for each locomotive configuration, and the sales-weighted average locomotive power for the engine family.

(6) Useful life.

(7) Calculated positive or negative emission credits for the whole engine family. Identify any emission credits that you traded or transferred, as described in paragraph (d)(1) or (e) of this section.

(c) Your end-of-year and final reports must include the following additional information:

(1) Show that your net balance of emission credits from all your engine families in each averaging set in the applicable model year is not negative.

(2) State whether you will retain any emission credits for banking.

(3) State that the report's contents are accurate.

(d) If you trade emission credits, you must send us a report within 90 days after the transaction, as follows:

(1) As the seller, you must include the following information in your report:

(i) The corporate names of the buyer and any brokers.

(ii) A copy of any contracts related to the trade.

(iii) The engine families that generated emission credits for the trade, including the number of emission credits from each family.

(2) As the buyer, you must include the following information in your report:

(i) The corporate names of the seller and any brokers.

(ii) A copy of any contracts related to the trade.

(iii) How you intend to use the emission credits, including the number of emission credits you intend to apply to each engine family (if known).

(e) If you transfer emission credits, you must send us a report within 90 days after the first transfer to an owner/operator, as follows:

(1) Include the following information:

(i) The corporate names of the owner/operator receiving the credits.

(ii) A copy of any contracts related to the trade.

(iii) The serial numbers and engine families for the locomotive that generated the transferred emission credits and the number of emission credits from each family.

(2) The requirements of this paragraph (e) apply separately for each owner/operator.

(3) We may require you to submit additional 90-day reports under this paragraph (e).

(f) Send your reports electronically to the Designated Compliance Officer using an approved information format. If you want to use a different format, send us a written request with justification for a waiver.

(g) Correct errors in your end-of-year report or final report as follows:

(1) You may correct any errors in your end-of-year report when you prepare the final report, as long as you send us the final report by the time it is due.

(2) If you or we determine within 270 days after the end of the model year that errors mistakenly decreased your balance of emission credits, you may correct the errors and recalculate the balance of emission credits. You may not make these corrections for errors that are determined more than 270 days after the end of the model year. If you report a negative balance of emission credits, we may disallow corrections under this paragraph (g)(2).

(3) If you or we determine anytime that errors mistakenly increased your balance of emission credits, you must correct the errors and recalculate the balance of emission credits.

(h) We may modify these requirements for owners/operators required to submit reports because of their involvement in credit transferring.

§ 1033.735 Required records.

(a) You must organize and maintain your records as described in this section. We may review your records at any time.

(b) Keep the records required by this section for eight years after the due date for the end-of-year report. You may not use emission credits on any engines if you do not keep all the records required under this section. You must therefore keep these records to continue to bank valid credits. Store these records in any format and on any media, as long as you can promptly send us organized, written records in English if we ask for them. You must keep these records readily available. We may review them at any time.

(c) Keep a copy of the reports we require in § 1033.730.

(d) Keep the following additional records for each locomotive you produce that generates or uses emission credits under the ABT program:

(1) Engine family designation.

(2) Locomotive identification number. You may identify these numbers as a range.

(3) FEL. If you change the FEL after the start of production, identify the date that you started using the new FEL and give the engine identification number for the first engine covered by the new FEL.

(4) Rated power and useful life.

(5) Purchaser and destination for freshly manufactured locomotives; or owner for remanufactured locomotives.

(e) We may require you to keep additional records or to send us relevant information not required by this section, as allowed under the Clean Air Act.

§ 1033.740 Credit restrictions.

Use of emission credits generated under this part 1033 or 40 CFR part 92 is restricted depending on the standards against which they were generated.

(a) *Credits from 40 CFR part 92.* NO_X and PM credits generated under 40 CFR part 92 may be used under this part in the same manner as NO_X and PM credits generated under this part.

(b) *General cycle restriction.* Locomotives subject to both switch cycle standards and line-haul cycle standards (such as Tier 2 locomotives) may generate both switch and line-haul credits. Except as specified in paragraph (c) of this section, such credits may only be used to show compliance with standards for the same cycle for which they were generated. For example, a Tier 2 locomotive that is certified to a switch cycle NO_X FEL below the applicable switch cycle standard and a line-haul cycle NO_X FEL below the applicable line-haul cycle standard may generate switch cycle NO_X credits for use in complying with switch cycle NO_X standards and a line-haul cycle NO_X credits for use in complying with line-haul cycle NO_X standards.

(c) *Single cycle locomotives.* As specified in § 1033.101, Tier 0 switch locomotives, Tier 3 and later switch locomotives, and Tier 4 and later line-haul locomotives are not subject to both switch cycle and line-haul cycle standards.

(1) When using credits generated by locomotives covered by paragraph (b) of this section for single cycle locomotives covered by this paragraph (c), you must use both switch and line-haul credits as described in this paragraph (c)(1).

(i) For locomotives subject only to switch cycle standards, calculate the negative switch credits for the credit using locomotive as specified in § 1033.705. Such locomotives also generate an equal number of negative line-haul cycle credits (in Mg).

(ii) For locomotives subject only to line-haul cycle standards, calculate the negative line-haul credits for the credit using locomotive as specified in § 1033.705. Such locomotives also generate an equal number of negative switch cycle credits (in Mg).

(2) Credits generated by Tier 0, Tier 3, or Tier 4 switch locomotives may be used to show compliance with any switch cycle or line-haul cycle standards.

(3) Credits generated by any line-haul locomotives may not be used by Tier 3 or later switch locomotives.

(d) *Tier 4 credit use.* The number of Tier 4 locomotives that can be certified using credits in any year may not exceed 50 percent of the total number of Tier 4 locomotives you produce in that year for U.S. sales.

(e) *Other restrictions.* Other sections of this part may specify additional restrictions for using emission credits under certain special provisions.

§ 1033.745 Compliance with the provisions of this subpart.

The provisions of this section apply to certificate holders.

(a) For each engine family participating in the ABT program, the certificate of conformity is conditional upon full compliance with the provisions of this subpart during and after the model year. You are responsible to establish to our satisfaction that you fully comply with applicable requirements. We may void the certificate of conformity for an engine family if you fail to comply with any provisions of this subpart.

(b) You may certify your engine family to an FEL above an applicable emission standard based on a projection that you will have enough emission credits to offset the deficit for the engine family. However, we may void the certificate of conformity if you cannot show in your final report that you have enough actual emission credits to offset a deficit for any pollutant in an engine family.

(c) We may void the certificate of conformity for an engine family if you fail to keep records, send reports, or give us information we request.

(d) You may ask for a hearing if we void your certificate under this section (see § 1033.920).

§ 1033.750 Changing a locomotive's FEL at remanufacture.

Locomotives are generally required to be certified to the previously applicable emission standard or FEL when remanufactured. This section describes provisions that allow a remanufactured locomotive to be certified to a different FEL (higher or lower).

(a) A remanufacturer may choose to certify a remanufacturing system to change the FEL of a locomotive from a previously applicable FEL or standard. Any locomotives remanufactured using that system are required to comply with the revised FEL for the remainder of their service lives, unless it is changed again under this section during a later remanufacture. Remanufacturers changing an FEL must notify the owner of the locomotive that it is required to comply with that FEL for the remainder of its service life.

(b) Calculate the credits needed or generated as specified in § 1033.705, except as specified in this paragraph. If the locomotive was previously certified to an FEL for the pollutant, use the previously applicable FEL as the standard.

Subpart I—Requirements for Owners and Operators

§ 1033.801 Applicability.

The requirements of this subpart are applicable to railroads and all other owners and operators of locomotives subject to the provisions of this part, except as otherwise specified. The prohibitions related to maintenance in § 1033.815 also applies to anyone performing maintenance on a locomotive subject to the provisions of this part.

§ 1033.805 Remanufacturing requirements.

(a) See the definition of ''remanufacture'' in § 1033.901 to determine if you are remanufacturing your locomotive or engine. (**Note:** Replacing power assemblies one at a time may qualify as remanufacturing, depending on the interval between replacement.)

(b) See the definition of ''new'' in § 1033.901 to determine if remanufacturing your locomotive makes it subject to the requirements of this part. If the locomotive is considered to be new, it is subject to the certification requirements of this part, unless it is exempt under subpart G of this part. The standards to which your locomotive is subject will depend on factors such as the following:

(1) Its date of original manufacture.

(2) The FEL to which it was previously certified, which is listed on the ''Locomotive Emission Control Information'' label.

(3) Its power rating (whether it is above or below 2300 hp).

(4) The calendar year in which it is being remanufactured.

(c) You may comply with the certification requirements of this part for your remanufactured locomotive by either obtaining your own certificate of conformity as specified in subpart C of this part or by having a certifying remanufacturer include your locomotive under its certificate of conformity. In either case, your remanufactured locomotive must be covered by a certificate before it is reintroduced into service.

(d) If you do not obtain your own certificate of conformity from EPA, contact a certifying remanufacturer to have your locomotive included under its certificate of conformity. Confirm with the certificate holder that your locomotive's model, date of original manufacture, previous FEL, and power rating allow it to be covered by the certificate. You must do all of the following:

(1) Comply with the certificate holder's emission-related installation instructions, which should include the following:

(i) A description of how to assemble and adjust the locomotive so that it will operate according to design specifications in the certificate. See paragraph (e) of this section for requirements related to the parts you must use.

(ii) Instructions to remove the Engine Emission Control Information label and replace it with the certificate holder's new label. **Note:** In most cases, you must not remove the Locomotive Emission Control Information label.

(2) Provide to the certificate holder the information it identifies as necessary to comply with the requirements of this part. For example, the certificate holder may require you to provide the information specified by § 1033.735.

(e) For parts unrelated to emissions and emission-related parts not addressed by the certificate holder in the emission-related installation instructions, you may use parts from any source. For emission-related parts listed by the certificate holder in the emission-related installation instructions, you must either use the specified parts or parts certified under § 1033.645 for remanufacturing. If you believe that the certificate holder has included as emission-related parts, parts that are actually unrelated to emissions, you may ask us to exclude such parts from the emission-related installation instructions. **Note:** This paragraph (e) does not apply with respect to parts for maintenance other than remanufacturing; see § 1033.815 for provisions related to general maintenance.

(f) Failure to comply with this section is a violation of 40 CFR 1068.101(a)(1).

§ 1033.810 In-use testing program.

(a) *Applicability.* This section applies to all Class I freight railroads. It does not apply to other owner/operators.

(b) *Testing requirements.* Annually test a sample of locomotives in your fleet. For purposes of this section, your fleet includes both the locomotives that you own and the locomotives that you are leasing. Use the test procedures in subpart F of this part, unless we approve different procedures.

(1) Except for the cases described in paragraph (b)(2) of this section, test at least 0.075 percent of the average number of locomotives in your fleet during the previous calendar year (i.e., determine the number to be tested by multiplying the number of locomotives in the fleet by 0.00075 and rounding up to the next whole number).

(2) We may allow you to test a smaller number of locomotives if we determine that the number of tests otherwise required by this section is not necessary.

(c) *Test locomotive selection.* Unless we specify a different option, select test locomotives as specified in paragraph (c)(1) of this section (Option 1). In no case may you exclude locomotives because of visible smoke, a history of durability problems, or other evidence of malmaintenance. You may test more locomotives than is required by this section.

(1) *Option 1.* To the extent possible, select locomotives from each manufacturer and remanufacturer, and from each tier level (e.g., Tier 0, Tier 1 and Tier 2) in proportion to their numbers in the your fleet. Exclude locomotives tested during the previous year. If possible, select locomotives that have been operated for at least 100 percent of their useful lives. Where there are multiple locomotives meeting the requirements of this paragraph (c)(1), randomly select the locomotives to be tested from among those locomotives. If the number of certified locomotives that have been operated for at least 100 percent of their useful lives is not large enough to fulfill the testing

requirement, test locomotives still within their useful lives as follows:

(i) Test locomotives in your fleet that are nearest to the end of their useful lives. You may identify such locomotives as a range of values representing the fraction of the useful life already used up for the locomotives.

(ii) For example, you may determine that 20 percent of your fleet has been operated for at least 75 percent of their useful lives. In such a case, select locomotives for testing that have been operated for at least 75 percent of their useful lives.

(2) *Option 2.* If you hold a certificate for some of your locomotives, you may ask us to allow you to select up to two locomotives as specified in subpart E of this part, and count those locomotives toward both your testing obligations of that subpart and this section.

(3) *Option 3.* You may ask us to allow you to test locomotives that use parts covered under § 1033.645. If we do, it does not change the number of locomotives that you must test.

(4) *Option 4.* We may require that you test specific locomotives, including locomotives that do not meet the criteria specified in any of the options in this section. If we do, we will specify which locomotives to test by January 1 of the calendar year for which testing is required.

(d) *Reporting requirements.* Report all testing done in compliance with the provisions of this section to us within 45 calendar days after the end of each calendar year. At a minimum, include the following:

(1) Your full corporate name and address.

(2) For each locomotive tested, all the following:

(i) Corporate name of the manufacturer and last remanufacturer(s) of the locomotive (including both certificate holder and installer, where different), and the corporate name of the manufacturer or last remanufacturer(s) of the engine if different than that of the manufacturer/remanufacturer(s) of the locomotive.

(ii) Year (and month if known) of original manufacture of the locomotive and the engine, and the manufacturer's model designation of the locomotive and manufacturer's model designation of the engine, and the locomotive identification number.

(iii) Year (and month if known) that the engine last underwent remanufacture, the engine remanufacturer's designation that reflects (or most closely reflects) the engine after the last remanufacture, and the engine family identification.

(iv) The number of MW-hrs and miles (where available) the locomotive has been operated since its last remanufacture.

(v) The emission test results for all measured pollutants.

(e) You do not have to submit a report for any year in which you performed no emission testing under this section.

(f) You may ask us to allow you to submit equivalent emission data collected for other purposes instead of some or all of the test data required by this section. If we allow it in advance, you may report emission data collected using other testing or sampling procedures instead of some or all of the data specified by this section.

(g) Submit all reports to the Designated Compliance Officer.

(h) Failure to comply fully with this section is a violation of 40 CFR 1068.101(a)(2).

§ 1033.815 Maintenance, operation, and repair.

All persons who own, operate, or maintain locomotives are subject to this section, except where we specify that a requirement applies to the owner.

(a) Unless we allow otherwise, all owners of locomotives subject to the provisions of this part must ensure that all emission-related maintenance is performed on the locomotives, as specified in the maintenance instructions provided by the certifying manufacturer/remanufacturer in compliance with § 1033.125 (or maintenance that is equivalent to the maintenance specified by the certifying manufacturer/remanufacturer in terms of maintaining emissions performance).

(b) Perform unscheduled maintenance in a timely manner. This includes malfunctions identified through the locomotive's emission control diagnostics system and malfunctions discovered in components of the diagnostics system itself. For most repairs, this paragraph (b) requires that the maintenance be performed no later than the locomotive's next periodic (92-day) inspection. See paragraph (e) of this section, for reductant replenishment requirements in a locomotive equipped with an SCR system.

(c) Use good engineering judgment when performing maintenance of locomotives subject to the provisions of this part. You must perform all maintenance and repair such that you have a reasonable technical basis for believing the locomotive will continue (after the maintenance or repair) to meet the applicable emission standards and FELs to which it was certified.

(d) The owner of the locomotive must keep records of all maintenance and repairs that could reasonably affect the emission performance of any locomotive subject to the provisions of this part. Keep these records for eight years.

(e) For locomotives equipped with emission controls requiring the use of specific fuels, lubricants, or other fluids, proper maintenance includes complying with the manufacturer/remanufacturer's specifications for such fluids when operating the locomotives. This requirement applies without regard to whether misfueling permanently disables the emission controls. The following additional provisions apply for locomotives equipped with SCR systems requiring the use of urea or other reductants:

(1) You must plan appropriately to ensure that reductant will be available to the locomotive during operation.

(2) If the SCR diagnostic indicates (or you otherwise determine) that either reductant supply or reductant quality in the locomotive is inadequate, you must replace the reductant as soon as practical.

(3) If you operate a locomotive without the appropriate urea or other reductant, you must report such operation to us within 30 days. Note that such operation violates the requirement of this paragraph (e); however, we may consider mitigating factors (such as how long the locomotive was operated without the appropriate urea or other reductant) in determining whether to assess penalties for such violations.

(f) Failure to fully comply with this section is a violation of 40 CFR 1068.101(b).

§ 1033.820 In-use locomotives.

(a) We may require you to supply in-use locomotives to us for testing. We will specify a reasonable time and place at which you must supply the locomotives and a reasonable period during which we will keep them for testing. We will make reasonable allowances for you to schedule the supply of locomotives to minimize disruption of your operations. The number of locomotives that you must supply is limited as follows:

(1) We will not require a Class I railroad to supply more than five locomotives per railroad per calendar year.

(2) We will not require a non-Class I railroad (or other entity subject to the provisions of this subpart) to supply more than two locomotives per railroad per calendar year. We will request locomotives under this paragraph (a)(2) only for purposes that cannot be

accomplished using locomotives supplied under paragraph (a)(1) of this section.

(b) You must make reasonable efforts to supply manufacturers/remanufacturers with the test locomotives needed to fulfill the in-use testing requirements in subpart E of this part.

(c) Failure to fully comply with this section is a violation of 40 CFR 1068.101(a)(2).

§ 1033.825 Refueling requirements.

(a) If your locomotive operates using a volatile fuel, your refueling equipment must be designed and used to minimize the escape of fuel vapors. This means you may not use refueling equipment in a way that renders any refueling emission controls inoperative or reduces their effectiveness.

(b) If your locomotive operates using a gaseous fuel, the hoses used to refuel it may not be designed to be bled or vented to the atmosphere under normal operating conditions.

(c) Failing to fully comply with the requirements of this section is a violation of 40 CFR 1068.101(b).

Subpart J—Definitions and Other Reference Information

§ 1033.901 Definitions.

The following definitions apply to this part. The definitions apply to all subparts unless we note otherwise. All undefined terms have the meaning the Clean Air Act gives to them. The definitions follow:

Adjustable parameter means any device, system, or element of design that someone can adjust (including those which are difficult to access) and that, if adjusted, may affect emissions or locomotive performance during emission testing or normal in-use operation. This includes, but is not limited to, parameters related to injection timing and fueling rate. You may ask us to exclude a parameter if you show us that it will not be adjusted in a way that affects emissions during in-use operation.

Aftertreatment means relating to a catalytic converter, particulate filter, or any other system, component, or technology mounted downstream of the exhaust valve (or exhaust port) whose design function is to reduce emissions in the locomotive exhaust before it is exhausted to the environment. Exhaust-gas recirculation (EGR) is not aftertreatment.

Alcohol fuel means a fuel consisting primarily (more than 50 percent by weight) of one or more alcohols: e.g., methyl alcohol, ethyl alcohol.

Alternator/generator efficiency means the ratio of the electrical power output from the alternator/generator to the mechanical power input to the alternator/generator at the operating point. Note that the alternator/generator efficiency may be different at different operating points. For example, the Institute of Electrical and Electronic Engineers Standard 115 (''Test Procedures for Synchronous Machines'') is an appropriate test procedure for determining alternator/generator efficiency. Other methods may also be used consistent with good engineering judgment.

Applicable emission standard or *applicable standard* means a standard to which a locomotive is subject; or, where a locomotive has been or is being certified to another standard or FEL, the FEL or other standard to which the locomotive has been or is being certified is the applicable standard. This definition does not apply to Subpart H of this part.

Auxiliary emission control device means any element of design that senses temperature, locomotive speed, engine RPM, transmission gear, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission-control system.

Auxiliary engine means a nonroad engine that provides hotel power or power during idle, but does not provide power to propel the locomotive.

Averaging means the exchange of emission credits among engine families within a given manufacturer's, or remanufacturer's product line.

Banking means the retention of emission credits by a credit holder for use in future calendar year averaging or trading as permitted by the regulations in this part.

Brake power means the sum of the alternator/generator input power and the mechanical accessory power, excluding any power required to circulate engine coolant, circulate engine lubricant, supply fuel to the engine, or operate aftertreatment devices.

Calibration means the set of specifications, including tolerances, specific to a particular design, version, or application of a component, or components, or assembly capable of functionally describing its operation over its working range.

Carryover means the process of obtaining a certificate for one model year using the same test data from the preceding model year, as described in § 1033.235(d). This generally requires that the locomotives in the engine family do not differ in any aspect related to emissions.

Certification means the process of obtaining a certificate of conformity for an engine family that complies with the emission standards and requirements in this part, or relating to that process.

Certified emission level means the highest deteriorated emission level in an engine family for a given pollutant from a given test cycle.

Class I freight railroad means a Class I railroad that primarily transports freight rather than passengers.

Class I railroad means a railroad that has been classified as a Class I railroad by the Surface Transportation Board.

Class II railroad means a railroad that has been classified as a Class II railroad by the Surface Transportation Board.

Class III railroad means a railroad that has been classified as a Class III railroad by the Surface Transportation Board.

Clean Air Act means the Clean Air Act, as amended, 42 U.S.C. 7401–7671q.

Configuration means a unique combination of locomotive hardware and calibration within an engine family. Locomotives within a single configuration differ only with respect to normal production variability (or factors unrelated to engine performance or emissions).

Crankcase emissions means airborne substances emitted to the atmosphere from any part of the locomotive crankcase's ventilation or lubrication systems. The crankcase is the housing for the crankshaft and other related internal parts.

Days means calendar days, unless otherwise specified. For example, where we specify working days, we mean calendar days excluding weekends and U.S. national holidays.

Design certify or *certify by design* means to certify a locomotive based on inherent design characteristics rather than your test data, such as allowed under § 1033.625. All other requirements of this part apply for such locomotives.

Designated Compliance Officer means the Manager, Heavy Duty and Nonroad Engine Group (6403–J), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

Deteriorated emission level means the emission level that results from applying the appropriate deterioration factor to the official emission result of the emission-data locomotive.

Deterioration factor means the relationship between emissions at the end of useful life and emissions at the low-hour test point, expressed in one of the following ways:

(1) For multiplicative deterioration factors, the ratio of emissions at the end of useful life to emissions at the low-hour test point.

(2) For additive deterioration factors, the difference between emissions at the end of useful life and emissions at the low-hour test point.

Discrete-mode means relating to the discrete-mode type of steady-state test described in § 1033.515.

Emission control system means any device, system, or element of design that controls or reduces the regulated emissions from a locomotive.

Emission credits represent the amount of emission reduction or exceedance, by a locomotive engine family, below or above the emission standard, respectively. Emission reductions below the standard are considered as ''positive credits,'' while emission exceedances above the standard are considered as ''negative credits.'' In addition, ''projected credits'' refer to emission credits based on the projected applicable production/sales volume of the engine family. ''Reserved credits'' are emission credits generated within a calendar year waiting to be reported to EPA at the end of the calendar year. ''Actual credits'' refer to emission credits based on actual applicable production/sales volume as contained in the end-of-year reports submitted to EPA.

Emission-data locomotive means a locomotive or engine that is tested for certification. This includes locomotives tested to establish deterioration factors.

Emission-related maintenance means maintenance that substantially affects emissions or is likely to substantially affect emission deterioration.

Engine family has the meaning given in § 1033.230.

Engine used in a locomotive means an engine incorporated into a locomotive or intended for incorporation into a locomotive (whether or not it is used for propelling the locomotive).

Engineering analysis means a summary of scientific and/or engineering principles and facts that support a conclusion made by a manufacturer/remanufacturer, with respect to compliance with the provisions of this part.

EPA Enforcement Officer means any officer or employee of the Environmental Protection Agency so designated in writing by the Administrator or his/her designee.

Exempted means relating to a locomotive that is not required to meet otherwise applicable standards. Exempted locomotives must conform to regulatory conditions specified for an exemption in this part 1033 or in 40 CFR part 1068. Exempted locomotives are deemed to be ''subject to'' the standards of this part, even though they are not required to comply with the otherwise applicable requirements. Locomotives exempted with respect to a certain tier of standards may be required to comply with an earlier tier of standards as a condition of the exemption; for example, locomotives exempted with respect to Tier 3 standards may be required to comply with Tier 2 standards.

Excluded means relating to a locomotive that either has been determined not to be a locomotive (as defined in this section) or otherwise excluded under section § 1033.5. Excluded locomotives are not subject to the standards of this part.

Exhaust emissions means substances (i.e., gases and particles) emitted to the atmosphere from any opening downstream from the exhaust port or exhaust valve of a locomotive engine.

Exhaust-gas recirculation means a technology that reduces emissions by routing exhaust gases that had been exhausted from the combustion chamber(s) back into the locomotive to be mixed with incoming air before or during combustion. The use of valve timing to increase the amount of residual exhaust gas in the combustion chamber(s) that is mixed with incoming air before or during combustion is not considered exhaust-gas recirculation for the purposes of this part.

Freshly manufactured locomotive means a new locomotive that contains fewer than 25 percent previously used parts (weighted by the dollar value of the parts) as described in § 1033.640.

Freshly manufactured engine means a new engine that has not been remanufactured. An engine becomes freshly manufactured when it is originally manufactured.

Family emission limit (FEL) means an emission level declared by the manufacturer/remanufacturer to serve in place of an otherwise applicable emission standard under the ABT program in subpart H of this part. The family emission limit must be expressed to the same number of decimal places as the emission standard it replaces. The family emission limit serves as the emission standard for the engine family with respect to all required testing.

Fuel system means all components involved in transporting, metering, and mixing the fuel from the fuel tank to the combustion chamber(s), including the fuel tank, fuel tank cap, fuel pump, fuel filters, fuel lines, carburetor or fuel-injection components, and all fuel-system vents.

Fuel type means a general category of fuels such as diesel fuel or natural gas. There can be multiple grades within a single fuel type, such as high-sulfur or low-sulfur diesel fuel.

Gaseous fuel means a fuel which is a gas at standard temperature and pressure. This includes both natural gas and liquefied petroleum gas.

Good engineering judgment means judgments made consistent with generally accepted scientific and engineering principles and all available relevant information. See 40 CFR 1068.5 for the administrative process we use to evaluate good engineering judgment.

Green Engine Factor means a factor that is applied to emission measurements from a locomotive or locomotive engine that has had little or no service accumulation. The Green Engine Factor adjusts emission measurements to be equivalent to emission measurements from a locomotive or locomotive engine that has had approximately 300 hours of use.

High-altitude means relating to an altitude greater than 4000 feet (1220 meters) and less than 7000 feet (2135 meters), or equivalent observed barometric test conditions (approximately 79 to 88 kPa).

High-sulfur diesel fuel means one of the following:

(1) For in-use fuels, high-sulfur diesel fuel means a diesel fuel with a maximum sulfur concentration greater than 500 parts per million.

(2) For testing, high-sulfur diesel fuel has the meaning given in 40 CFR part 1065.

Hotel power means the power provided by an engine on a locomotive to operate equipment on passenger cars of a train; e.g., heating and air conditioning, lights, etc.

Hydrocarbon (HC) means the hydrocarbon group (THC, NMHC, or THCE) on which the emission standards are based for each fuel type as described in § 1033.101.

Identification number means a unique specification (for example, a model number/serial number combination) that allows someone to distinguish a particular locomotive from other similar locomotives.

Idle speed means the speed, expressed as the number of revolutions of the crankshaft per unit of time (e.g., rpm), at which the engine is set to operate when not under load for purposes of propelling the locomotive. There are typically one or two idle speeds on a locomotive as follows:

(1) *Normal idle speed* means the idle speed for the idle throttle-notch position for locomotives that have one throttle-notch position, or the highest idle speed

for locomotives that have two idle throttle-notch positions.

(2) *Low idle speed* means the lowest idle speed for locomotives that have two idle throttle-notch positions.

Inspect and qualify means to determine that a previously used component or system meets all applicable criteria listed for the component or system in a certificate of conformity for remanufacturing (such as to determine that the component or system is functionally equivalent to one that has not been used previously).

Installer means an individual or entity that assembles remanufactured locomotives or locomotive engines.

Line-haul locomotive means a locomotive that does not meet the definition of switch locomotive. Note that this includes both freight and passenger locomotives.

Liquefied petroleum gas means the commercial product marketed as propane or liquefied petroleum gas.

Locomotive means a self-propelled piece of on-track equipment designed for moving or propelling cars that are designed to carry freight, passengers or other equipment, but which itself is not designed or intended to carry freight, passengers (other than those operating the locomotive) or other equipment. The following other equipment are not locomotives (see 40 CFR parts 86, 89, and 1039 for this diesel-powered equipment):

(1) Equipment designed for operation both on highways and rails is not a locomotive.

(2) Specialized railroad equipment for maintenance, construction, post-accident recovery of equipment, and repairs; and other similar equipment, are not locomotives.

(3) Vehicles propelled by engines with total rated power of less than 750 kW (1006 hp) are not locomotives, unless the owner (which may be a manufacturer) chooses to have the equipment certified to meet the requirements of this part (under § 1033.615). Where equipment is certified as a locomotive pursuant to this paragraph (3), it is subject to the requirements of this part for the remainder of its service life. For locomotives propelled by two or more engines, the total rated power is the sum of the rated power of each engine.

Locomotive engine means an engine that propels a locomotive.

Low-hour means relating to a locomotive with stabilized emissions and represents the undeteriorated emission level. This would generally involve less than 300 hours of operation.

Low mileage locomotive means a locomotive during the interval between the time that normal assembly operations and adjustments are completed and the time that either 10,000 miles of locomotive operation or 300 additional operating hours have been accumulated (including emission testing if performed). Note that we may deem locomotives with additional operation to be low mileage locomotives, consistent with good engineering judgment.

Low-sulfur diesel fuel means one of the following:

(1) For in-use fuels, *low-sulfur diesel fuel* means a diesel fuel market as low-sulfur diesel fuel having a maximum sulfur concentration of 500 parts per million.

(2) For testing, *low-sulfur diesel fuel* has the meaning given in 40 CFR part 1065.

Malfunction means a condition in which the operation of a component in a locomotive or locomotive engine occurs in a manner other than that specified by the certifying manufacturer/remanufacturer (e.g., as specified in the application for certification); or the operation of the locomotive or locomotive engine in that condition.

Manufacture means the physical and engineering process of designing, constructing, and assembling a locomotive or locomotive engine.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act with respect to freshly manufactured locomotives or engines. In general, this term includes any person who manufactures a locomotive or engine for sale in the United States or otherwise introduces a new locomotive or engine into commerce in the United States. This includes importers who import locomotives or engines for resale.

Manufacturer/remanufacturer means the manufacturer of a freshly manufactured locomotive or engine or the remanufacturer of a remanufactured locomotive or engine, as applicable.

Model year means a calendar year in which a locomotive is manufactured or remanufactured.

New, when relating to a locomotive or locomotive engine, has the meaning given in paragraph (1) of this definition, except as specified in paragraph (2) of this definition:

(1) A locomotive or engine is new if its equitable or legal title has never been transferred to an ultimate purchaser. Where the equitable or legal title to a locomotive or engine is not transferred prior to its being placed into service, the locomotive or engine ceases to be new when it is placed into service. A locomotive or engine also becomes new if it is remanufactured or refurbished (as defined in this section). A remanufactured locomotive or engine ceases to be new when placed back into service. With respect to imported locomotives or locomotive engines, the term ''new locomotive'' or ''new locomotive engine'' also means a locomotive or locomotive engine that is not covered by a certificate of conformity under this part or 40 CFR part 92 at the time of importation, and that was manufactured or remanufactured after the effective date of the emission standards in 40 CFR part 92 which would have been applicable to such locomotive or engine had it been manufactured or remanufactured for importation into the United States. Note that replacing an engine in one locomotive with an unremanufactured used engine from a different locomotive does not make a locomotive new.

(2) The provisions of paragraph (1) of this definition do not apply for the following cases:

(i) Locomotives and engines that were originally manufactured before January 1, 1973 are not considered to become new when remanufactured unless they have been upgraded (as defined in this section). The provisions of paragraph (1) of this definition apply for locomotives that have been upgraded.

(ii) Locomotives that are owned and operated by a small railroad and that have never been remanufactured into a certified configuration are not considered to become new when remanufactured. The provisions of paragraph (1) of this definition apply for locomotives that have previously been remanufactured into a certified configuration.

(iii) Locomotives originally certified under (1033.150(e) do not become new when remanufactured, except as specified in § 1033.615.

(iv) Locomotives that operate only on non-standard gauge rails do not become new when remanufactured if no certified remanufacturing system is available for them.

Nonconforming means relating to a locomotive that is not covered by a certificate of conformity prior to importation or being offered for importation (or for which such coverage has not been adequately demonstrated to EPA); or a locomotive which was originally covered by a certificate of conformity, but which is not in a certified configuration, or otherwise does not comply with the conditions of that certificate of conformity. (**Note:** Domestic locomotives and locomotive engines not covered by a certificate of conformity prior to their introduction

into U.S. commerce are considered to be noncomplying locomotives and locomotive engines.)

Non-locomotive-specific engine means an engine that is sold for and used in non-locomotive applications much more than for locomotive applications.

Nonmethane hydrocarbon has the meaning given in 40 CFR 1065.1001. This generally means the difference between the emitted mass of total hydrocarbons and the emitted mass of methane.

Nonroad means relating to nonroad engines as defined in 40 CFR 1068.30.

Official emission result means the measured emission rate for an emission-data locomotive on a given duty cycle before the application of any deterioration factor, but after the application of regeneration adjustment factors, Green Engine Factors, and/or humidity correction factors.

Opacity means the fraction of a beam of light, expressed in percent, which fails to penetrate a plume of smoke, as measured by the procedure specified in § 1033.525.

Original manufacture means the event of freshly manufacturing a locomotive or locomotive engine. The date of original manufacture is the date of final assembly, except as provided in § 1033.640. Where a locomotive is manufactured under § 1033.620(b), the date of original manufacture is the date on which the final assembly of locomotive was originally scheduled.

Original remanufacture means the first remanufacturing of a locomotive at which the locomotive is subject to the emission standards of this part.

Owner/operator means the owner and/or operator of a locomotive.

Owners manual means a written or electronic collection of instructions provided to ultimate purchasers to describe the basic operation of the locomotive.

Oxides of nitrogen has the meaning given in 40 CFR part 1065.

Particulate trap means a filtering device that is designed to physically trap all particulate matter above a certain size.

Passenger locomotive means a locomotive designed and constructed for the primary purpose of propelling passenger trains, and providing power to the passenger cars of the train for such functions as heating, lighting and air conditioning.

Petroleum fuel means gasoline or diesel fuel or another liquid fuel primarily derived from crude oil.

Placed into service means put into initial use for its intended purpose after becoming new.

Power assembly means the components of an engine in which combustion of fuel occurs, and consists of the cylinder, piston and piston rings, valves and ports for admission of charge air and discharge of exhaust gases, fuel injection components and controls, cylinder head and associated components.

Primary fuel means the type of fuel (e.g., diesel fuel) that is consumed in the greatest quantity (mass basis) when the locomotive is operated in use.

Produce means to manufacture or remanufacture. Where a certificate holder does not actually assemble the locomotives or locomotive engines that it manufactures or remanufactures, produce means to allow other entities to assemble locomotives under the certificate holder's certificate.

Railroad means a commercial entity that operates locomotives to transport passengers or freight.

Ramped-modal means relating to the ramped-modal type of testing in subpart F of this part.

Rated power has the meaning given in § 1033.140.

Refurbish has the meaning given in § 1033.640.

Remanufacture means one of the following:

(1)(i) To replace, or inspect and qualify, each and every power assembly of a locomotive or locomotive engine, whether during a single maintenance event or cumulatively within a five-year period.

(ii) To upgrade a locomotive or locomotive engine.

(iii) To convert a locomotive or locomotive engine to enable it to operate using a fuel other than it was originally manufactured to use.

(iv) To install a remanufactured engine or a freshly manufactured engine into a previously used locomotive.

(v) To repair a locomotive engine that does not contain power assemblies to a condition that is equivalent to or better than its original condition with respect to reliability and fuel consumption.

(2) Remanufacture also means the act of remanufacturing.

Remanufacture system or *remanufacturing system* means all components (or specifications for components) and instructions necessary to remanufacture a locomotive or locomotive engine in accordance with applicable requirements of this part or 40 CFR part 92.

Remanufactured locomotive means either a locomotive powered by a remanufactured locomotive engine, a repowered locomotive, or a refurbished locomotive.

Remanufactured locomotive engine means a locomotive engine that has been remanufactured.

Remanufacturer has the meaning given to ''manufacturer'' in section 216(1) of the Clean Air Act with respect to remanufactured locomotives. (See §§ 1033.1 and 1033.601 for applicability of this term.) This term includes:

(1) Any person that is engaged in the manufacture or assembly of remanufactured locomotives or locomotive engines, such as persons who:

(i) Design or produce the emission-related parts used in remanufacturing.

(ii) Install parts in an existing locomotive or locomotive engine to remanufacture it.

(iii) Own or operate the locomotive or locomotive engine and provide specifications as to how an engine is to be remanufactured (i.e., specifying who will perform the work, when the work is to be performed, what parts are to be used, or how to calibrate the adjustable parameters of the engine).

(2) Any person who imports remanufactured locomotives or remanufactured locomotive engines.

Repower means replacement of the engine in a previously used locomotive with a freshly manufactured locomotive engine. See § 1033.640.

Repowered locomotive means a locomotive that has been repowered with a freshly manufactured engine.

Revoke has the meaning given in 40 CFR 1068.30. In general this means to terminate the certificate or an exemption for an engine family.

Round means to round numbers as specified in 40 CFR 1065.1001.

Service life means the total life of a locomotive. Service life begins when the locomotive is originally manufactured and continues until the locomotive is permanently removed from service.

Small manufacturer/remanufacturer means a manufacturer/remanufacturer with 1,000 or fewer employees. For purposes of this part, the number of employees includes all employees of the manufacturer/remanufacturer's parent company, if applicable.

Small railroad means a railroad meeting the criterion of paragraph (1) of this definition, but not either of the criteria of paragraphs (2) and (3) of this definition.

(1) To be considered a small railroad, a railroad must qualify as a small business under the Small Business Administration's regulations in 13 CFR part 121.

(2) Class I and Class II railroads (and their subsidiaries) are not small railroads.

(3) Intercity passenger and commuter railroads are excluded from this

definition of small railroad. Note that this paragraph (3) does not exclude tourist railroads.

Specified adjustable range means the range of allowable settings for an adjustable component specified by a certificate of conformity.

Specified by a certificate of conformity or *specified in a certificate of conformity* means stated or otherwise specified in a certificate of conformity or an approved application for certification.

Sulfur-sensitive technology means an emission-control technology that would experience a significant drop in emission control performance or emission-system durability when a locomotive is operated on low-sulfur fuel with a sulfur concentration of 300 to 500 ppm as compared to when it is operated on ultra low-sulfur fuel (i.e., fuel with a sulfur concentration less than 15 ppm). Exhaust-gas recirculation is not a sulfur-sensitive technology.

Suspend has the meaning given in 40 CFR 1068.30. In general this means to temporarily discontinue the certificate or an exemption for an engine family.

Switch locomotive means a locomotive that is powered by an engine with a maximum rated power (or a combination of engines having a total rated power) of 2300 hp or less. Include auxiliary engines in your calculation of total power if the engines are permanently installed on the locomotive and can be operated while the main propulsion engine is operating. Do not count the power of auxiliary engines that operate only to reduce idling time of the propulsion engine.

Test locomotive means a locomotive or engine in a test sample.

Test sample means the collection of locomotives or engines selected from the population of an engine family for emission testing. This may include testing for certification, production-line testing, or in-use testing.

Tier 0 or *Tier 0+* means relating to the Tier 0 emission standards, as shown in § 1033.101.

Tier 1 or *Tier 1+* means relating to the Tier 1 emission standards, as shown in § 1033.101.

Tier 2 or *Tier 2+* means relating to the Tier 2 emission standards, as shown in § 1033.101.

Tier 3 means relating to the Tier 3 emission standards, as shown in § 1033.101.

Tier 4 means relating to the Tier 4 emission standards, as shown in § 1033.101.

Total hydrocarbon has the meaning given in 40 CFR 1065.1001. This generally means the combined mass of organic compounds measured by the specified procedure for measuring total hydrocarbon, expressed as a hydrocarbon with an atomic hydrogen-to-carbon ratio of 1.85:1.

Total hydrocarbon equivalent has the meaning given in 40 CFR 1065.1001. This generally means the sum of the carbon mass contributions of non-oxygenated hydrocarbons, alcohols and aldehydes, or other organic compounds that are measured separately as contained in a gas sample, expressed as exhaust hydrocarbon from petroleum-fueled locomotives. The hydrogen-to-carbon ratio of the equivalent hydrocarbon is 1.85:1.

Ultimate purchaser means the first person who in good faith purchases a new locomotive for purposes other than resale.

Ultra low-sulfur diesel fuel means one of the following:

(1) For in-use fuels, *ultra low-sulfur diesel fuel* means a diesel fuel marketed as ultra low-sulfur diesel fuel having a maximum sulfur concentration of 15 parts per million.

(2) For testing, *ultra low-sulfur diesel fuel* has the meaning given in 40 CFR part 1065.

Upcoming model year means for an engine family the model year after the one currently in production.

Upgrade means one of the following types of remanufacturing.

(1) Repowering a locomotive that was originally manufactured prior to January 1, 1973.

(2) Refurbishing a locomotive that was originally manufactured prior to January 1, 1973 in a manner that is not freshly manufacturing.

(3) Modifying a locomotive that was originally manufactured prior to January 1, 1973 (or a locomotive that was originally manufactured on or after January 1, 1973, and that is not subject to the emission standards of this part), such that it is intended to comply with the Tier 0 standards. See § 1033.615.

Useful life means the period during which the locomotive engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as work output or miles. It is the period during which a new locomotive is required to comply with all applicable emission standards. See § 1033.101(g).

Void has the meaning given in 40 CFR 1068.30. In general this means to invalidate a certificate or an exemption both retroactively and prospectively.

Volatile fuel means a volatile liquid fuel or any fuel that is a gas at atmospheric pressure. Gasoline, natural gas, and LPG are volatile fuels.

Volatile liquid fuel means any liquid fuel other than diesel or biodiesel that is a liquid at atmospheric pressure and has a Reid Vapor Pressure higher than 2.0 pounds per square inch.

We (us, our) means the Administrator of the Environmental Protection Agency and any authorized representatives.

§ 1033.905 Symbols, acronyms, and abbreviations.

The following symbols, acronyms, and abbreviations apply to this part:

AECD auxiliary emission control device.
AESS automatic engine stop/start
CFR Code of Federal Regulations.
CO carbon monoxide.
CO_2 carbon dioxide.
EPA Environmental Protection Agency.
FEL Family Emission Limit.
g/bhp-hr grams per brake horsepower-hour.
HC hydrocarbon.
hp horsepower.
LPG liquefied petroleum gas.
LSD low sulfur diesel.
MW megawatt.
NIST National Institute of Standards and Technology.
NMHC nonmethane hydrocarbons.
NO_X oxides of nitrogen.
PM particulate matter.
rpm revolutions per minute.
SAE Society of Automotive Engineers.
SCR selective catalytic reduction.
SEA Selective Enforcement Audit.
THC total hydrocarbon.
THCE total hydrocarbon equivalent.
UL useful life.
ULSD ultra low sulfur diesel.
U.S.C. United States Code.

§ 1033.915 Confidential information.

(a) Clearly show what you consider confidential by marking, circling, bracketing, stamping, or some other method.

(b) We will store your confidential information as described in 40 CFR part 2. Also, we will disclose it only as specified in 40 CFR part 2. This applies both to any information you send us and to any information we collect from inspections, audits, or other site visits.

(c) If you send us a second copy without the confidential information, we will assume it contains nothing confidential whenever we need to release information from it.

(d) If you send us information without claiming it is confidential, we may make it available to the public without further notice to you, as described in 40 CFR 2.204.

§ 1033.920 How to request a hearing.

(a) You may request a hearing under certain circumstances, as described elsewhere in this part. To do this, you must file a written request, including a description of your objection and any supporting data, within 30 days after we make a decision.

(b) For a hearing you request under the provisions of this part, we will

approve your request if we find that your request raises a substantial factual issue.

(c) If we agree to hold a hearing, we will use the procedures specified in 40 CFR part 1068, subpart G.

PART 1039—CONTROL OF EMISSIONS FROM NEW AND IN-USE NONROAD COMPRESSION-IGNITION ENGINES

■ 39. The authority citation for part 1039 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart F—[Amended]

■ 40. Section 1039.505 is amended by revising paragraphs (a)(1) introductory text, (c), and (d) and adding paragraph (g) to read as follows:

§ 1039.505 How do I test engines using steady-state duty cycles, including ramped-modal testing?

* * * * *

(a) * * *

(1) For discrete-mode testing, sample emissions separately for each mode, then calculate an average emission level for the whole cycle using the weighting factors specified for each mode. Calculate cycle statistics and compare with the established criteria as specified in 40 CFR 1065.514 to confirm that the test is valid. Operate the engine and sampling system as follows:

* * * * *

(c) During idle mode, operate the engine at its warm idle speed as described in 40 CFR part 1065.

(d) For constant-speed engines whose design prevents full-load operation for extended periods, you may ask for approval under 40 CFR 1065.10(c) to replace full-load operation with the maximum load for which the engine is designed to operate for extended periods.

* * * * *

(g) To allow non-motoring dynamometers on cycles with idle, you may omit additional points from the duty-cycle regression as follows:

(1) For variable-speed engines with low-speed governors, you may omit speed, torque, and power points from the duty-cycle regression statistics if the following are met:

(i) The engine operator demand is at its minimum.

(ii) The dynamometer demand is at its minimum.

(iii) It is an idle point $f_{nref} = 0$ % (idle) and $T_{ref} = 0$ % (idle).

(iv) $T_{ref} < T \leq 5\ \% \cdot T_{max}$ mapped.

(2) For variable-speed engines without low-speed governors, you may omit torque and power points from the duty-cycle regression statistics if the following are met:

(i) The dynamometer demand is at its minimum.

(ii) It is an idle point $f_{nref} = 0$ % (idle) and $T_{ref} = 0$ % (idle).

(iii) $f_{nref} - (2\ \% \cdot f_{ntest}) < f_n < f_{nref} + (2\ \% \cdot f_{ntest})$.

(iv) $T_{ref} < T \leq 5\ \% \cdot T_{max}$ mapped.

Subpart G—[Amended]

■ 41. Section 1039.645 is amended by revising paragraph (b)(1) to read as follows:

§ 1039.645 What special provisions apply to engines used for transportation refrigeration units?

* * * * *

(b) * * *

(1) The following duty cycle applies for discrete-mode testing:

TABLE 1 OF § 1039.645.—DISCRETE-MODE CYCLE FOR TRU ENGINES

Mode number	Engine speed [1]	Torque (percent) [2]	Weighting factors
1	Maximum test speed	75	0.25
2	Maximum test speed	50	0.25
3	Intermediate test speed	75	0.25
4	Intermediate test speed	50	0.25

[1] Speed terms are defined in 40 CFR part 1065.
[2] The percent torque is relative to the maximum torque at the given engine speed.

* * * * *

Appendices—[Amended]

■ 42. Appendix II to part 1039 is revised to read as follows:

Appendix II to Part 1039—Steady-State Duty Cycles

(a) The following duty cycles apply for constant-speed engines:

(1) The following duty cycle applies for discrete-mode testing:

D2 mode number	Engine speed	Torque (percent) [1]	Weighting factors
1	Engine governed	100	0.05
2	Engine governed	75	0.25
3	Engine governed	50	0.30
4	Engine governed	25	0.30
5	Engine governed	10	0.10

[1] The percent torque is relative to maximum test torque.

(2) The following duty cycle applies for ramped-modal testing:

RMC mode	Time in mode (seconds)	Engine speed	Torque (percent) [1, 2]
1a Steady-state	53	Engine governed	100.
1b Transition	20	Engine governed	Linear transition.
2a Steady-state	101	Engine governed	10.

RMC mode	Time in mode (seconds)	Engine speed	Torque (percent) [1, 2]
2b Transition	20	Engine governed	Linear transition.
3a Steady-state	277	Engine governed	75.
3b Transition	20	Engine governed	Linear transition.
4a Steady-state	339	Engine governed	25.
4b Transition	20	Engine governed	Linear transition.
5 Steady-state	350	Engine governed	50.

[1] The percent torque is relative to maximum test torque.
[2] Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the torque setting of the current mode to the torque setting of the next mode.

(b) The following duty cycles apply for variable-speed engines with maximum engine power below 19 kW:

(1) The following duty cycle applies for discrete-mode testing:

G2 mode number	Engine speed [1]	Torque (percent) [2]	Weighting factors
1	Maximum test speed	100	0.09
2	Maximum test speed	75	0.20
3	Maximum test speed	50	0.29
4	Maximum test speed	25	0.30
5	Maximum test speed	10	0.07
6	Warm idle	0	0.05

[1] Speed terms are defined in 40 CFR part 1065.
[2] The percent torque is relative to the maximum torque at the commanded test speed.

(2) The following duty cycle applies for ramped-modal testing:

RMC mode	Time in mode (seconds)	Engine speed [1, 3]	Torque (percent) [2, 3]
1a Steady-state	41	Warm idle	0.
1b Transition	20	Linear transition	Linear transition.
2a Steady-state	135	Maximum test speed	100.
2b Transition	20	Maximum test speed	Linear transition.
3a Steady-state	112	Maximum test speed	10.
3b Transition	20	Maximum test speed	Linear transition.
4a Steady-state	337	Maximum test speed	75.
4b Transition	20	Maximum test speed	Linear transition.
5a Steady-state	518	Maximum test speed	25.
5b Transition	20	Maximum test speed	Linear transition.
6a Steady-state	494	Maximum test speed	50.
6b Transition	20	Linear transition	Linear transition.
7 Steady-state	43	Warm idle	0.

[1] Speed terms are defined in 40 CFR part 1065.
[2] The percent torque is relative to the maximum torque at the commanded engine speed.
[3] Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the torque setting of the current mode to the torque setting of the next mode, and simultaneously command a similar linear progression for engine speed if there is a change in speed setting.

(c) The following duty cycles apply for variable-speed engines with maximum engine power at or above 19 kW:

(1) The following duty cycle applies for discrete-mode testing:

C1 mode number	Engine speed [1]	Torque (percent) [2]	Weighting factors
1	Maximum test speed	100	0.15
2	Maximum test speed	75	0.15
3	Maximum test speed	50	0.15
4	Maximum test speed	10	0.10
5	Intermediate test speed	100	0.10
6	Intermediate test speed	75	0.10
7	Intermediate test speed	50	0.10
8	Warm idle	0	0.15

[1] Speed terms are defined in 40 CFR part 1065.
[2] The percent torque is relative to the maximum torque at the commanded test speed.

(2) The following duty cycle applies for ramped-modal testing:

RMC mode	Time in mode (seconds)	Engine speed [1, 3]	Torque (percent) [2, 3]
1a Steady-state	126	Warm Idle	0.
1b Transition	20	Linear Transition	Linear Transition.
2a Steady-state	159	Intermediate Speed	100.
2b Transition	20	Intermediate Speed	Linear Transition.
3a Steady-state	160	Intermediate Speed	50.
3b Transition	20	Intermediate Speed	Linear Transition.
4a Steady-state	162	Intermediate Speed	75.
4b Transition	20	Linear Transition	Linear Transition.
5a Steady-state	246	Maximum Test Speed	100.
5b Transition	20	Maximum Test Speed	Linear Transition.
6a Steady-state	164	Maximum Test Speed	10.
6b Transition	20	Maximum Test Speed	Linear Transition.
7a Steady-state	248	Maximum Test Speed	75.
7b Transition	20	Maximum Test Speed	Linear Transition.
8a Steady-state	247	Maximum Test Speed	50.
8b Transition	20	Linear Transition	Linear Transition.
9 Steady-state	128	Warm Idle	0.

[1] Speed terms are defined in 40 CFR part 1065.
[2] The percent torque is relative to the maximum torque at the commanded engine speed.
[3] Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the torque setting of the current mode to the torque setting of the next mode, and simultaneously command a similar linear progression for engine speed if there is a change in speed setting.

■ 43. Appendix III and Appendix IV of part 1039 are removed and reserved.

■ 44. A new part 1042 is added to subchapter U of chapter I to read as follows:

PART 1042—CONTROL OF EMISSIONS FROM NEW AND IN-USE MARINE COMPRESSION-IGNITION ENGINES AND VESSELS

Subpart A—Overview and Applicability

Subpart B—Emission Standards and Related Requirements

Subpart C—Certifying Engine Families

Subpart D—Testing Production-Line Engines

Subpart E—In-Use Testing

Subpart F—Test Procedures

Subpart G—Special Compliance Provisions

Subpart H—Averaging, Banking, and Trading for Certification

Subpart I—Special Provisions for Remanufactured Marine Engines

Authority: 42 U.S.C. 7401–7671q.

Subpart A—Overview and Applicability

§ 1042.1 Applicability.

Except as provided in § 1042.5, the regulations in this part 1042 apply for all new compression-ignition marine engines with per-cylinder displacement below 30.0 liters per cylinder and vessels containing such engines. See § 1042.901 for the definitions of engines and vessels considered to be new. This part 1042 applies as follows:

(a) This part 1042 applies for freshly manufactured marine engines starting with the model years noted in the following tables:

BILLING CODE 1505–01–D

Table 1 to §1042.1— Part 1042 Applicability by Model Year

Engine Category	Maximum Engine Power	Displacement (L/cyl) or Application	Model Year
Category 1	kW <75	disp.< 0.9	2009[a]
	75 ≤ kW < 3700	disp.< 0.9	2012
		0.9 ≤ disp. < 1.2	2013
		1.2 ≤ disp. < 2.5	2014
		2.5 ≤ disp. < 3.5	2013
		3.5 ≤ disp.< 7.0	2012
	kW ≥ 3700	All	2014
Category 2	kW < 3700	7.0 ≤ disp. < 15.0	2013
	kW ≥ 3700	7.0 ≤ disp. < 15.0	2014
	All	15 ≤ disp. < 30	2014

[a]See Table 1 of §1042.101 for the first model year in which this part 1042 applies for engines with maximum engine power below 75 kW and displacement at or above 0.9 L/cyl.

BILLING CODE 1505–01–C

(b) The requirements of subpart I of this part apply to remanufactured engines beginning July 7, 2008.

(c) See 40 CFR part 94 for requirements that apply to engines with maximum engine power at or above 37 kW not yet subject to the requirements of this part 1042. See 40 CFR part 89 for requirements that apply to engines with maximum engine power below 37 kW not yet subject to the requirements of this part 1042.

(d) The provisions of §§ 1042.620 and 1042.901 apply for new engines used solely for competition beginning January 1, 2009.

(e) Marine engines powered by natural gas with maximum engine power at or above 250 kW are deemed to be compression-ignition engines. These engines are therefore subject to all the requirements of this part even if they do not meet the definition of ''compression-ignition'' in § 1042.901.

§ 1042.2 Who is responsible for compliance?

The regulations in this part 1042 contain provisions that affect both engine manufacturers and others. However, the requirements of this part, other than those of subpart I of this part, are generally addressed to the engine manufacturer for freshly manufactured marine engines or other certificate holders. The term ''you'' generally means the engine manufacturer, as defined in § 1042.901, especially for issues related to certification (including production-line testing, reporting, etc.).

§ 1042.5 Exclusions.

This part does not apply to the following marine engines:

(a) *Foreign vessels.* The requirements and prohibitions of this part do not apply to engines installed on foreign vessels, as defined in § 1042.901.

(b) *Hobby engines.* Engines with per-cylinder displacement below 50 cubic centimeters are not subject to the provisions of this part 1042.

§ 1042.10 Organization of this part.

This part 1042 is divided into the following subparts:

(a) Subpart A of this part defines the applicability of this part 1042 and gives an overview of regulatory requirements.

(b) Subpart B of this part describes the emission standards and other requirements that must be met to certify engines under this part. Note that § 1042.145 discusses certain interim requirements and compliance provisions that apply only for a limited time.

(c) Subpart C of this part describes how to apply for a certificate of conformity.

(d) Subpart D of this part describes general provisions for testing production-line engines.

(e) Subpart E of this part describes general provisions for testing in-use engines.

(f) Subpart F of this part and 40 CFR 1065 describe how to test your engines.

(g) Subpart G of this part and 40 CFR part 1068 describe requirements, prohibitions, and other provisions that apply to engine manufacturers, vessel manufacturers, owners, operators, rebuilders, and all others.

(h) Subpart H of this part describes how you may generate and use emission credits to certify your engines.

(i) Subpart I of this part describes how these regulations apply for remanufactured engines.

(j) Subpart J of this part contains definitions and other reference information.

§ 1042.15 Do any other regulation parts apply to me?

(a) The evaporative emission requirements of part 1060 of this chapter apply to vessels that include installed engines fueled with a volatile liquid fuel as specified in § 1042.107. (**Note:** Conventional diesel fuel is not considered to be a volatile liquid fuel.)

(b) Part 1065 of this chapter describes procedures and equipment specifications for testing engines. Subpart F of this part 1042 describes how to apply the provisions of part 1065 of this chapter to determine whether engines meet the emission standards in this part.

(c) The requirements and prohibitions of part 1068 of this chapter apply to everyone, including anyone who manufactures, imports, installs, owns, operates, or rebuilds any of the engines subject to this part 1042, or vessels containing these engines. Part 1068 of this chapter describes general provisions, including these seven areas:

(1) Prohibited acts and penalties for engine manufacturers, vessel manufacturers, and others.

(2) Rebuilding and other aftermarket changes.

(3) Exclusions and exemptions for certain engines.

(4) Importing engines.

(5) Selective enforcement audits of your production.

(6) Defect reporting and recall.

(7) Procedures for hearings.

(d) Other parts of this chapter apply if referenced in this part.

Subpart B—Emission Standards and Related Requirements

§ 1042.101 Exhaust emission standards.

(a) *Duty-cycle standards.* Exhaust emissions from your engines may not exceed emission standards, as follows:

(1) Measure emissions using the test procedures described in subpart F of this part.

(2) The following CO emission standards in this paragraph (a)(2) apply starting with the applicable model year identified in § 1042.1:

(i) 8.0 g/kW-hr for engines below 8 kW.

(ii) 6.6 g/kW-hr for engines at or above 8 kW and below 19 kW.

(iii) 5.5 g/kW-hr for engines at or above 19 kW and below 37 kW.

(iv) 5.0 g/kW-hr for engines at or above 37 kW.

(3) Except as described in paragraphs (a)(4) and (5) of this section, the Tier 3 standards for PM and NO_X+HC emissions are described in the following tables:

BILLING CODE 1505–01–D

Table 1 to §1042.101— Tier 3 Standards for Category 1 Engines Below 3700 kW [a]

Power Density and Application	Displacement (L/cyl)	Maximum Engine Power	Model Year	PM (g/kW-hr)	NOx+HC (g/kW-hr)
all	disp.< 0.9	kW <19	2009+	0.40	7.5
		19 ≤ kW < 75	2009-2013	0.30	7.5
			2014+	0.30	4.7
Commercial engines with kW/L ≤ 35 [b]	disp.< 0.9	kW ≥ 75	2012+	0.14	5.4
	0.9 ≤ disp. < 1.2	all	2013+	0.12	5.4
	1.2 ≤ disp. < 2.5	kW < 600	2014-2017	0.11	5.6
			2018+	0.10	5.6
		kW ≥ 600	2014+	0.11	5.6
	2.5 ≤ disp. < 3.5	kW < 600	2013-2017	0.11	5.6
			2018+	0.10	5.6
		kW ≥ 600	2013+	0.11	5.6
	3.5 ≤ disp.< 7.0	kW < 600	2012-2017	0.11	5.8
			2018+	0.10	5.8
		kW ≥ 600	2012+	0.11	5.8
Commercial engines with kW/L > 35 and all recreational engines	disp. < 0.9	kW ≥ 75	2012+	0.15	5.8
	0.9 ≤ disp. < 1.2	all	2013+	0.14	5.8
	1.2 ≤ disp. < 2.5		2014+	0.12	5.8
	2.5 ≤ disp. < 3.5		2013+	0.12	5.8
	3.5 ≤ disp. < 7.0		2012+	0.11	5.8

[a] No Tier 3 standards apply for commercial Category 1 engines at or above 3700 kW. See §1042.1(c) and paragraph (a)(7) of this section for the standards that apply for these engines.
[b] The applicable NOx+HC standards specified for Tier 2 engines in Appendix I of this part continue to apply instead of the values noted in the table for commercial engines at or above 2000 kW. FELs for these engines may not be higher than the Tier 1 NOx standard specified in Appendix I of this part.

BILLING CODE 1505–01–C

TABLE 2 TO § 1042.101.—TIER 3 STANDARDS FOR CATEGORY 2 ENGINES BELOW 3700 kW [a]

Displacement (L/cyl)	Maximum engine power	Model year	PM (g/kW-hr)	NO_X+HC (g/kW-hr)
7.0 ≤ disp. < 15.0	kW < 2000	2013+	0.14	6.2
	2000 ≤ kW < 3700	2013+	0.14	[b] 7.8
15.0 ≤ disp. < 20.0 [c]	kW < 2000	2014+	0.34	7.0
20.0 ≤ disp. < 25.0 [c]	kW < 2000	2014+	0.27	9.8
25.0 ≤ disp. < 30.0 [c]	kW < 2000	2014+	0.27	11.0

[a] No Tier 3 standards apply for Category 2 engines at or above 3700 kW. See § 1042.1(c) and paragraph (a)(7) of this section for the standards that apply for these engines.
[b] For engines subject to the 7.8 g/kW-hr NO_X+HC standard, FELs may not be higher than the Tier 1 NO_X standard specified in Appendix I of this part.
[c] No Tier 3 standards apply for Category 2 engines with per-cylinder displacement above 15.0 liters if maximum engine power is at or above 2000 kW. See § 1042.1(c) and paragraph (a)(7) of this section for the standards that apply for these engines.

(4) For Tier 3 engines at or above 19 kW and below 75 kW with displacement below 0.9 L/cyl, you may alternatively certify some or all of your engine families to a PM emission standard of 0.20 g/kW-hr and a NO_X+HC emission standard of 5.8 g/kW-hr for 2014 and later model years.

(5) Starting with the 2014 model year, recreational marine engines at or above 3700 kW (with any displacement) must be certified under this part 1042 to the Tier 3 standards specified in this section for 3.5 to 7.0 L/cyl recreational marine engines.

(6) Interim Tier 4 PM standards apply for 2014 and 2015 model year engines between 2000 and 3700 kW as specified in this paragraph (a)(6). These engines are considered to be Tier 4 engines.

(i) For Category 1 engines, the Tier 3 PM standards from Table 1 to this section continue to apply. PM FELs for these engines may not be higher than the applicable Tier 2 PM standards specified in Appendix I of this part.

(ii) For Category 2 engines with per-cylinder displacement below 15.0 liters, the Tier 3 PM standards from Table 2 to this section continue to apply. PM FELs for these engines may not be higher than 0.27 g/kW-hr.

(iii) For Category 2 engines with per-cylinder displacement at or above 15.0 liters, the PM standard is 0.34 g/kW-hr for engines at or above 2000 kW and

below 3300 kW, and 0.27 g/kW-hr for engines at or above 3300 kW and below 3700 kW. PM FELs for these engines may not be higher than 0.50 g/kW-hr.

(7) Except as described in paragraph (a)(8) of this section, the Tier 4 standards for PM, NO_X, and HC emissions are described in the following table:

TABLE 3 TO § 1042.101.—TIER 4 STANDARDS FOR CATEGORY 2 AND COMMERCIAL CATEGORY 1 ENGINES ABOVE 600 KW

Maximum engine power	Displacement (L/cyl)	Model year	PM (g/kW-hr)	NO_X (g/kW-hr)	HC (g/kW-hr)
600 ≤ kW < 1400	all	2017+	0.04	1.8	0.19
1400 ≤ kW < 2000	all	2016+	0.04	1.8	0.19
2000 ≤ kW < 3700 [a]	all	2014+	0.04	1.8	0.19
kW ≥ 3700	disp. <15.0	2014–2015	0.12	1.8	0.19
	15.0 ≤ disp.< 30.0	2014–2015	0.25	1.8	0.19
	all	2016+	0.06	1.8	0.19

[a] See paragraph (a)(6) of this section for interim PM standards that apply for model years 2014 and 2015 for engines between 2000 and 3700 kW. The Tier 4 NO_X FEL cap for engines at or above 2000 kW and below 3700 kW is 7.0 g/kW-hr. Starting in the 2016 model year, the Tier 4 PM FEL cap for engines at or above 2000 kW and below 3700 kW is 0.34 g/kW-hr.

(8) The following optional provisions apply for complying with the Tier 3 and Tier 4 standards specified in paragraphs (a)(3) and (6) of this section:

(i) You may use NO_X credits accumulated through the ABT program to certify Tier 4 engines to a NO_X+HC emission standard of 1.9 g/kW-hr instead of the NO_X and HC standards that would otherwise apply by certifying your family to a NO_X+HC FEL. Calculate the NO_X credits needed as specified in subpart H of this part using the NO_X+HC emission standard and FEL in the calculation instead of the otherwise applicable NO_X standard and FEL. You may not generate credits relative to the alternate standard or certify to the standard without using credits.

(ii) For engines below 1000 kW, you may delay complying with the Tier 4 standards in the 2017 model year for up to nine months, but you must comply no later than October 1, 2017.

(iii) For engines at or above 3700 kW, you may delay complying with the Tier 4 standards in the 2016 model year for up to twelve months, but you must comply no later than December 31, 2016.

(iv) For Category 2 engines at or above 1400 kW, you may alternatively comply with the Tier 3 and Tier 4 standards specified in Table 4 of this section instead of the NO_X, HC, NO_X+HC, and PM standards specified in paragraphs (a)(3) and (6) of this section. The CO standards specified in paragraph (a)(2) of this section apply without regard to whether you choose this option. If you choose this option, you must do so for all engines at or above 1400 kW in the same displacement category (that is, 7–15, 15–20, 20–25, or 25–30 liters per cylinder) in model years 2012 through 2015.

TABLE 4 TO § 1042.101.—OPTIONAL TIER 3 AND TIER 4 STANDARDS FOR CATEGORY 2 ENGINES AT OR ABOVE 1400 KW

Tier	Maximum engine power	Model year	PM (g/kW-hr)	NO_X (g/kW-hr)	HC (g/kW-hr)
Tier 3	kW ≥ 1400	2012–2014	0.14	7.8 NO_X+HC	
Tier 4	1400 ≤ kW < 3700	2015	0.04	1.8	0.19
	kW ≥ 3700	2015	0.06	1.8	0.19

(b) *Averaging, banking, and trading.* You may generate or use emission credits under the averaging, banking, and trading (ABT) program as described in subpart H of this part for demonstrating compliance with NO_X, NO_X+HC, and PM emission standards for Category 1 and Category 2 engines. You may also use NO_X or NO_X+HC emission credits to comply with the alternate NO_X+HC standard in paragraph (a)(8)(i) of this section. Generating or using emission credits requires that you specify a family emission limit (FEL) for each pollutant you include in the ABT program for each engine family. These FELs serve as the emission standards for the engine family with respect to all required testing instead of the standards specified in paragraph (a) of this section. The FELs determine the not-to-exceed standards for your engine family, as specified in paragraph (c) of this section. Unless otherwise specified, the following FEL caps apply:

(1) FELs for Tier 3 engines may not be higher than the applicable Tier 2 standards specified in Appendix I of this part.

(2) FELs for Tier 4 engines may not be higher than the applicable Tier 3 standards specified in paragraph (a)(3) of this section.

(c) *Not-to-exceed standards.* Except as noted in § 1042.145(e), exhaust emissions from all engines subject to the requirements of this part may not exceed the not-to-exceed (NTE) standards as follows:

(1) Use the following equation to determine the NTE standards:

(i) NTE standard for each pollutant = STD × M.

Where:

STD = The standard specified for that pollutant in this section if you certify without using ABT for that pollutant; or the FEL for that pollutant if you certify using ABT.

M = The NTE multiplier for that pollutant.

(ii) Round each NTE standard to the same number of decimal places as the emission standard.

(2) Determine the applicable NTE zone and subzones as described in § 1042.515. Determine NTE multipliers for specific zones and subzones and pollutants as follows:

(i) For commercial marine engines certified using the duty cycle specified in § 1042.505(b)(1), except for variable-speed propulsion marine engines used

with controllable-pitch propellers or with electrically coupled propellers, apply the following NTE multipliers:

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzone 2: 1.5 for NO_X+HC standards.

(D) Subzone 2: 1.9 for PM and CO standards.

(ii) For recreational marine engines certified using the duty cycle specified in § 1042.505(b)(2), except for variable-speed marine engines used with controllable-pitch propellers or with electrically coupled propellers, apply the following NTE multipliers:

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzones 2 and 3: 1.5 for NO_X+HC standards.

(D) Subzones 2 and 3: 1.9 for PM and CO standards.

(iii) For variable-speed marine engines used with controllable-pitch propellers or with electrically coupled propellers that are certified using the duty cycle specified in § 1042.505(b)(1), (2), or (3), apply the following NTE multipliers:

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzone 2: 1.5 for NO_X+HC standards.

(D) Subzone 2: 1.9 for PM and CO standards. However, there is no NTE standard in Subzone 2b for PM emissions if the engine family's applicable standard for PM is at or above 0.07 g/kW-hr.

(iv) For constant-speed engines certified using a duty cycle specified in § 1042.505(b)(3) or (4), apply the following NTE multipliers:

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzone 2: 1.5 for NO_X+HC standards.

(D) Subzone 2: 1.9 for PM and CO standards. However, there is no NTE standard for PM emissions if the engine family's applicable standard for PM is at or above 0.07 g/kW-hr.

(v) For variable-speed auxiliary marine engines certified using the duty cycle specified in § 1042.505(b)(5)(ii) or (iii):

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzone 2: 1.2 for Tier 3 NO_X+HC standards.

(D) Subzone 2: 1.5 for Tier 4 standards and Tier 3 PM and CO standards. However, there is no NTE standard for PM emissions if the engine family's applicable standard for PM is at or above 0.07 g/kW-hr.

(3) The NTE standards apply to your engines whenever they operate within the NTE zone for an NTE sampling period of at least thirty seconds, during which only a single operator demand set point may be selected. Engine operation during a change in operator demand is excluded from any NTE sampling period. There is no maximum NTE sampling period.

(4) Collect emission data for determining compliance with the NTE standards using the procedures described in subpart F of this part.

(5) You may ask us to accept as compliant an engine that does not fully meet specific requirements under the applicable NTE standards where such deficiencies are necessary for safety.

(d) *Fuel types.* The exhaust emission standards in this section apply for engines using the fuel type on which the engines in the engine family are designed to operate.

(1) You must meet the numerical emission standards for hydrocarbons in this section based on the following types of hydrocarbon emissions for engines powered by the following fuels:

(i) Alcohol-fueled engines must comply with Tier 3 HC standards based on THCE emissions and with Tier 4 standards based on NMHCE emissions.

(ii) Natural gas-fueled engines must comply with HC standards based on NMHC emissions.

(iii) Diesel-fueled and other engines must comply with Tier 3 HC standards based on THC emissions and with Tier 4 standards based on NMHC emissions.

(2) Tier 3 and later engines must comply with the exhaust emission standards when tested using test fuels containing 15 ppm or less sulfur (ultra low-sulfur diesel fuel). Manufacturers may use low-sulfur diesel fuel (without request) to certify an engine otherwise requiring an ultra low-sulfur test fuel; however, emissions may not be corrected to account for the effects of using higher sulfur fuel.

(3) Engines designed to operate using residual fuel must comply with the standards and requirements of this part when operated using residual fuel in addition to complying with the requirements of this part when operated using diesel fuel.

(e) *Useful life.* Your engines must meet the exhaust emission standards of this section over their full useful life, expressed as a period in years or hours of engine operation, whichever comes first.

(1) The minimum useful life values are as follows, except as specified by paragraph (e)(2) or (3) of this section:

(i) 10 years or 1,000 hours of operation for recreational Category 1 engines

(ii) 5 years or 3,000 hours of operation for commercial engines below 19 kW.

(iii) 7 years or 5,000 hours of operation for commercial engines at or above 19 kW and below 37kW.

(iv) 10 years or 10,000 hours of operation for commercial Category 1 engines at or above 37 kW.

(v) 10 years or 20,000 hours of operation for Category 2 engines.

(2) Specify a longer useful life in hours for an engine family under either of two conditions:

(i) If you design, advertise, or market your engine to operate longer than the minimum useful life (your recommended hours until rebuild indicates a longer design life).

(ii) If your basic mechanical warranty is longer than the minimum useful life.

(3) You may request in your application for certification that we approve a shorter useful life for an engine family. We may approve a shorter useful life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter useful life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The useful life value may not be shorter than any of the following:

(i) 1,000 hours of operation.

(ii) Your recommended overhaul interval.

(iii) Your mechanical warranty for the engine.

(f) *Applicability for testing.* The duty-cycle emission standards in this subpart apply to all testing performed according to the procedures in § 1042.505, including certification, production-line, and in-use testing. The not-to-exceed standards apply for all testing

performed according to the procedures of subpart F of this part.

§ 1042.107 Evaporative emission standards.

You must design and produce engines fueled with a volatile liquid fuel to minimize evaporative emissions during normal operation, including periods when the engine is shut down. You must also design and produce them to minimize the escape of fuel vapors during refueling. Hoses used to refuel gaseous-fueled engines may not be designed to be bled or vented to the atmosphere under normal operating conditions. No valves or pressure-relief vents may be used on gaseous-fueled engines except as emergency safety devices that do not operate at normal system operating flows and pressures.

§ 1042.110 Recording reductant use and other diagnostic functions.

(a) Engines equipped with SCR systems using a reductant other than the engine's fuel must meet the following requirements:

(1) The diagnostic system must monitor reductant quality and tank levels and alert operators to the need to refill the reductant tank before it is empty, or to replace the reductant if it does not meet your concentration specifications. Unless we approve other alerts, use a malfunction-indicator light (MIL) and an audible alarm. You do not need to separately monitor reductant quality if you include an exhaust NO_X sensor (or other sensor) that allows you to determine inadequate reductant quality. However, tank level must be monitored in all cases.

(2) The onboard computer log must record in nonvolatile computer memory all incidents of engine operation with inadequate reductant injection or reductant quality.

(b) If you determine your emission controls have failure modes that may reasonably be expected to affect safety, equip the engines with diagnostic features that will alert the operator to such failures. Use good engineering judgment to alert the operator before the failure occurs.

(c) You may equip your engine with other diagnostic features. If you do, they must be designed to allow us to read and interpret the codes. Note that §§ 1042.115 and 1042.205 require that you provide us any information needed to read, record, and interpret all the information broadcast by an engine's onboard computers and electronic control units.

§ 1042.115 Other requirements.

Engines that are required to comply with the emission standards of this part must meet the following requirements:

(a) *Crankcase emissions.* Crankcase emissions may not be discharged directly into the ambient atmosphere from any engine throughout its useful life, except as follows:

(1) Engines may discharge crankcase emissions to the ambient atmosphere if the emissions are added to the exhaust emissions (either physically or mathematically) during all emission testing. If you take advantage of this exception, you must do both of the following things:

(i) Manufacture the engines so that all crankcase emissions can be routed into the applicable sampling systems specified in 40 CFR part 1065.

(ii) Account for deterioration in crankcase emissions when determining exhaust deterioration factors.

(2) For purposes of this paragraph (a), crankcase emissions that are routed to the exhaust upstream of exhaust aftertreatment during all operation are not considered to be discharged directly into the ambient atmosphere.

(b) *Torque broadcasting.* Electronically controlled engines must broadcast their speed and output shaft torque (in newton-meters). Engines may alternatively broadcast a surrogate value for determining torque. Engines must broadcast engine parameters such that they can be read with a remote device, or broadcast them directly to their controller area networks. This information is necessary for testing engines in the field (see § 1042.515).

(c) *EPA access to broadcast information.* If we request it, you must provide us any hardware or tools we would need to readily read, interpret, and record all information broadcast by an engine's on-board computers and electronic control modules. If you broadcast a surrogate parameter for torque values, you must provide us what we need to convert these into torque units. We will not ask for hardware or tools if they are readily available commercially.

(d) *Adjustable parameters.* An operating parameter is not considered adjustable if you permanently seal it or if it is not normally accessible using ordinary tools. The following provisions apply for adjustable parameters:

(1) Category 1 engines that have adjustable parameters must meet all the requirements of this part for any adjustment in the physically adjustable range. We may require that you set adjustable parameters to any specification within the adjustable range during any testing, including certification testing, selective enforcement auditing, or in-use testing.

(2) Category 2 engines that have adjustable parameters must meet all the requirements of this part for any adjustment in the specified adjustable range. You must specify in your application for certification the adjustable range of each adjustable parameter on a new engine to—

(i) Ensure that safe engine operating characteristics are available within that range, as required by section 202(a)(4) of the Clean Air Act (42 U.S.C. 7521(a)(4)), taking into consideration the production tolerances.

(ii) Limit the physical range of adjustability to the maximum extent practicable to the range that is necessary for proper operation of the engine.

(e) *Prohibited controls.* You may not design your engines with emission-control devices, systems, or elements of design that cause or contribute to an unreasonable risk to public health, welfare, or safety while operating. For example, this would apply if the engine emits a noxious or toxic substance it would otherwise not emit, that contributes to such an unreasonable risk.

(f) *Defeat devices.* You may not equip your engines with a defeat device. A defeat device is an auxiliary emission control device that reduces the effectiveness of emission controls under conditions that the engine may reasonably be expected to encounter during normal operation and use. This does not apply to auxiliary emission control devices you identify in your certification application if any of the following is true:

(1) The conditions of concern were substantially included in the applicable duty-cycle test procedures described in subpart F of this part (the portion during which emissions are measured). See paragraph (f)(4) of this section for other conditions.

(2) You show your design is necessary to prevent engine (or vessel) damage or accidents.

(3) The reduced effectiveness applies only to starting the engine.

§ 1042.120 Emission-related warranty requirements.

(a) *General requirements.* You must warrant to the ultimate purchaser and each subsequent purchaser that the new engine, including all parts of its emission control system, meets two conditions:

(1) It is designed, built, and equipped so it conforms at the time of sale to the ultimate purchaser with the requirements of this part.

(2) It is free from defects in materials and workmanship that may keep it from meeting these requirements.

(b) *Warranty period.* Your emission-related warranty must be valid for at least as long as the minimum warranty periods listed in this paragraph (b) in hours of operation and years, whichever comes first. You may offer an emission-related warranty more generous than we require. The emission-related warranty for the engine may not be shorter than any published warranty you offer without charge for the engine. Similarly, the emission-related warranty for any component may not be shorter than any published warranty you offer without charge for that component. If an engine has no hour meter, we base the warranty periods in this paragraph (b) only on the engine's age (in years).

The warranty period begins when the engine is placed into service. The following minimum warranty periods apply:

(1) For Category 1 and Category 2 engines, your emission-related warranty must be valid for at least 50 percent of the engine's useful life in hours of operation or a number of years equal to at least 50 percent of the useful life in years, whichever comes first.

(2) [Reserved]

(c) *Components covered.* The emission-related warranty covers all components whose failure would increase an engine's emissions of any pollutant, including those listed in 40 CFR part 1068, Appendix I, and those from any other system you develop to control emissions. The emission-related warranty for freshly manufactured marine engines covers these components even if another company produces the component. Your emission-related warranty does not cover components whose failure would not increase an engine's emissions of any pollutant. For remanufactured engines, your emission-related warranty does not cover used parts that are not replaced during the remanufacture.

(d) *Limited applicability.* You may deny warranty claims under this section if the operator caused the problem through improper maintenance or use, as described in 40 CFR 1068.115.

(e) *Owners manual.* Describe in the owners manual the emission-related warranty provisions from this section that apply to the engine.

§ 1042.125 Maintenance instructions for Category 1 and Category 2 engines.

Give the ultimate purchaser of each new engine written instructions for properly maintaining and using the engine, including the emission control system, as described in this section. The maintenance instructions also apply to service accumulation on your emission-data engines as described in § 1042.245 and in 40 CFR part 1065. This section applies only to Category 1 and Category 2 engines.

(a) *Critical emission-related maintenance.* Critical emission-related maintenance includes any adjustment, cleaning, repair, or replacement of critical emission-related components. This may also include additional emission-related maintenance that you determine is critical if we approve it in advance. You may schedule critical emission-related maintenance on these components if you meet the following conditions:

(1) You demonstrate that the maintenance is reasonably likely to be done at the recommended intervals on in-use engines. We will accept scheduled maintenance as reasonably likely to occur if you satisfy any of the following conditions:

(i) You present data showing that any lack of maintenance that increases emissions also unacceptably degrades the engine's performance.

(ii) You present survey data showing that at least 80 percent of engines in the field get the maintenance you specify at the recommended intervals.

(iii) You provide the maintenance free of charge and clearly say so in maintenance instructions for the customer.

(iv) You otherwise show us that the maintenance is reasonably likely to be done at the recommended intervals.

(2) For engines below 130 kW, you may not schedule critical emission-related maintenance more frequently than the following minimum intervals, except as specified in paragraphs (a)(4), (b), and (c) of this section:

(i) For EGR-related filters and coolers, PCV valves, and fuel injector tips (cleaning only), the minimum interval is 1,500 hours.

(ii) For the following components, including associated sensors and actuators, the minimum interval is 3,000 hours: Fuel injectors, turbochargers, catalytic converters, electronic control units, particulate traps, trap oxidizers, components related to particulate traps and trap oxidizers, EGR systems (including related components, but excluding filters and coolers), and other add-on components. For particulate traps, trap oxidizers, and components related to either of these, maintenance is limited to cleaning and repair only.

(3) For Category 1 and Category 2 engines at or above 130 kW, you may not schedule critical emission-related maintenance more frequently than the following minimum intervals, except as specified in paragraphs (a)(4), (b), and (c) of this section:

(i) For EGR-related filters and coolers, PCV valves, and fuel injector tips (cleaning only), the minimum interval is 1,500 hours.

(ii) For the following components, including associated sensors and actuators, the minimum interval is 4500 hours: Fuel injectors, turbochargers, catalytic converters, electronic control units, particulate traps, trap oxidizers, components related to particulate traps and trap oxidizers, EGR systems (including related components, but excluding filters and coolers), and other add-on components. For particulate traps, trap oxidizers, and components related to either of these, maintenance is limited to cleaning and repair only.

(4) We may approve shorter maintenance intervals than those listed in paragraph (a)(3) of this section where technologically necessary.

(5) If your engine family has an alternate useful life under § 1042.101(e) that is shorter than the period specified in paragraph (a)(2) or (a)(3) of this section, you may not schedule critical emission-related maintenance more frequently than the alternate useful life, except as specified in paragraph (c) of this section.

(b) *Recommended additional maintenance.* You may recommend any additional amount of maintenance on the components listed in paragraph (a) of this section, as long as you state clearly that these maintenance steps are not necessary to keep the emission-related warranty valid. If operators do the maintenance specified in paragraph (a) of this section, but not the recommended additional maintenance, this does not allow you to disqualify those engines from in-use testing or deny a warranty claim. Do not take these maintenance steps during service accumulation on your emission-data engines.

(c) *Special maintenance.* You may specify more frequent maintenance to address problems related to special situations, such as atypical engine operation. You must clearly state that this additional maintenance is associated with the special situation you are addressing.

(d) *Noncritical emission-related maintenance.* Subject to the provisions of this paragraph (d), you may schedule any amount of emission-related inspection or maintenance that is not covered by paragraph (a) of this section (that is, maintenance that is neither explicitly identified as critical emission-related maintenance, nor that we approve as critical emission-related maintenance). Noncritical emission-

related maintenance generally includes maintenance on the components we specify in 40 CFR part 1068, Appendix I. You must state in the owners manual that these steps are not necessary to keep the emission-related warranty valid. If operators fail to do this maintenance, this does not allow you to disqualify those engines from in-use testing or deny a warranty claim. Do not take these inspection or maintenance steps during service accumulation on your emission-data engines.

(e) *Maintenance that is not emission-related.* For maintenance unrelated to emission controls, you may schedule any amount of inspection or maintenance. You may also take these inspection or maintenance steps during service accumulation on your emission-data engines, as long as they are reasonable and technologically necessary. This might include adding engine oil, changing air, fuel, or oil filters, servicing engine-cooling systems, and adjusting idle speed, governor, engine bolt torque, valve lash, or injector lash. You may perform this nonemission-related maintenance on emission-data engines at the least frequent intervals that you recommend to the ultimate purchaser (but not intervals recommended for severe service).

(f) *Source of parts and repairs.* State clearly on the first page of your written maintenance instructions that a repair shop or person of the owner's choosing may maintain, replace, or repair emission control devices and systems. Your instructions may not require components or service identified by brand, trade, or corporate name. Also, do not directly or indirectly condition your warranty on a requirement that the engine be serviced by your franchised dealers or any other service establishments with which you have a commercial relationship. You may disregard the requirements in this paragraph (f) if you do one of two things:

(1) Provide a component or service without charge under the purchase agreement.

(2) Get us to waive this prohibition in the public's interest by convincing us the engine will work properly only with the identified component or service.

(g) *Payment for scheduled maintenance.* Owners are responsible for properly maintaining their engines. This generally includes paying for scheduled maintenance. However, manufacturers must pay for scheduled maintenance during the useful life if it meets all the following criteria:

(1) Each affected component was not in general use on similar engines before the applicable dates shown in paragraph (6) of the definition of ''new marine engine'' in § 1042.901.

(2) The primary function of each affected component is to reduce emissions.

(3) The cost of the scheduled maintenance is more than 2 percent of the price of the engine.

(4) Failure to perform the maintenance would not cause clear problems that would significantly degrade the engine's performance.

(h) *Owners manual.* Explain the owner's responsibility for proper maintenance in the owners manual.

§ 1042.130 Installation instructions for vessel manufacturers.

(a) If you sell an engine for someone else to install in a vessel, give the engine installer instructions for installing it consistent with the requirements of this part. Include all information necessary to ensure that an engine will be installed in its certified configuration.

(b) Make sure these instructions have the following information:

(1) Include the heading: ''Emission-related installation instructions''.

(2) State: ''Failing to follow these instructions when installing a certified engine in a vessel violates federal law (40 CFR 1068.105(b)), subject to fines or other penalties as described in the Clean Air Act.''.

(3) Describe the instructions needed to properly install the exhaust system and any other components. Include instructions consistent with the requirements of § 1042.205(u).

(4) Describe any necessary steps for installing the diagnostic system described in § 1042.110.

(5) Describe any limits on the range of applications needed to ensure that the engine operates consistently with your application for certification. For example, if your engines are certified only for constant-speed operation, tell vessel manufacturers not to install the engines in variable-speed applications or modify the governor.

(6) Describe any other instructions to make sure the installed engine will operate according to design specifications in your application for certification. This may include, for example, instructions for installing aftertreatment devices when installing the engines.

(7) State: ''If you install the engine in a way that makes the engine's emission control information label hard to read during normal engine maintenance, you must place a duplicate label on the vessel, as described in 40 CFR 1068.105.''.

(8) Describe any vessel labeling requirements specified in § 1042.135.

(c) You do not need installation instructions for engines you install in your own vessels.

(d) Provide instructions in writing or in an equivalent format. For example, you may post instructions on a publicly available Web site for downloading or printing. If you do not provide the instructions in writing, explain in your application for certification how you will ensure that each installer is informed of the installation requirements.

§ 1042.135 Labeling.

(a) Assign each engine a unique identification number and permanently affix, engrave, or stamp it on the engine in a legible way.

(b) At the time of manufacture, affix a permanent and legible label identifying each engine. The label must be—

(1) Attached in one piece so it is not removable without being destroyed or defaced.

(2) Secured to a part of the engine needed for normal operation and not normally requiring replacement.

(3) Durable and readable for the engine's entire life.

(4) Written in English.

(c) The label must—

(1) Include the heading ''EMISSION CONTROL INFORMATION''.

(2) Include your full corporate name and trademark. You may identify another company and use its trademark instead of yours if you comply with the provisions of § 1042.640.

(3) Include EPA's standardized designation for the engine family (and subfamily, where applicable).

(4) Identify all the emission standards that apply to the engine (or FELs, if applicable). If you do not declare an FEL under subpart H of this part, you may alternatively state the engine's category, displacement (in liters or L/cyl), maximum engine power (in kW), and power density (in kW/L) as needed to determine the emission standards for the engine family. You may specify displacement, maximum engine power, or power density as a range consistent with the ranges listed in § 1042.101. See § 1042.140 for descriptions of how to specify per-cylinder displacement, maximum engine power, and power density.

(5) State the date of manufacture [DAY (optional), MONTH, and YEAR]. However, you may omit this from the label if you stamp or engrave it on the engine, in which case you must also describe in your application for certification where you will identify the date on the engine.

(6) Identify the application(s) for which the engine family is certified

(such as constant-speed auxiliary, variable-speed propulsion engines used with fixed-pitch propellers, etc.). If the engine is certified as a recreational engine, state: ''INSTALLING THIS RECREATIONAL ENGINE IN A COMMERCIAL VESSEL OR USING THE VESSEL FOR COMMERCIAL PURPOSES MAY VIOLATE FEDERAL LAW SUBJECT TO CIVIL PENALTY (40 CFR 1042.601).''.

(7) For engines requiring ULSD, state: ''ULTRA LOW SULFUR DIESEL FUEL ONLY''.

(8) State the useful life for your engine family if the applicable useful life is based on the provisions of § 1042.101(e)(2) or (3).

(9) Identify the emission control system. Use terms and abbreviations consistent with SAE J1930 (incorporated by reference in § 1042.910). You may omit this information from the label if there is not enough room for it and you put it in the owners manual instead.

(10) State: ''THIS MARINE ENGINE COMPLIES WITH U.S. EPA REGULATIONS FOR [MODEL YEAR].''.

(11) For an engine that can be modified to operate on residual fuel, but has not been certified to meet the standards on such a fuel, include the statement: ''THIS ENGINE IS CERTIFIED FOR OPERATION ONLY WITH DIESEL FUEL. MODIFYING THE ENGINE TO OPERATE ON RESIDUAL OR INTERMEDIATE FUEL MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTIES.''.

(d) You may add information to the emission control information label as follows:

(1) You may identify other emission standards that the engine meets or does not meet (such as international standards). You may include this information by adding it to the statement we specify or by including a separate statement.

(2) You may add other information to ensure that the engine will be properly maintained and used.

(3) You may add appropriate features to prevent counterfeit labels. For example, you may include the engine's unique identification number on the label.

(e) For engines requiring ULSD, create a separate label with the statement: ''ULTRA LOW SULFUR DIESEL FUEL ONLY''. Permanently attach this label to the vessel near the fuel inlet or, if you do not manufacture the vessel, take one of the following steps to ensure that the vessel will be properly labeled:

(1) Provide the label to each vessel manufacturer and include in the emission-related installation instructions the requirement to place this label near the fuel inlet.

(2) Confirm that the vessel manufacturers install their own complying labels.

(f) You may ask us to approve modified labeling requirements in this part 1042 if you show that it is necessary or appropriate. We will approve your request if your alternate label is consistent with the intent of the labeling requirements of this part.

(g) If you obscure the engine label while installing the engine in the vessel such that the label will be hard to read during normal maintenance, you must place a duplicate label on the vessel. If others install your engine in their vessels in a way that obscures the engine label, we require them to add a duplicate label on the vessel (see 40 CFR 1068.105); in that case, give them the number of duplicate labels they request and keep the following records for at least five years:

(1) Written documentation of the request from the vessel manufacturer.

(2) The number of duplicate labels you send for each family and the date you sent them.

§ 1042.140 Maximum engine power, displacement, and power density.

This section describes how to determine the maximum engine power, displacement, and power density of an engine for the purposes of this part. Note that maximum engine power may differ from the definition of ''maximum test power'' in § 1042.901.

(a) An engine configuration's maximum engine power is the maximum brake power point on the nominal power curve for the engine configuration, as defined in this section. Round the power value to the nearest whole kilowatt.

(b) The nominal power curve of an engine configuration is the relationship between maximum available engine brake power and engine speed for an engine, using the mapping procedures of 40 CFR part 1065, based on the manufacturer's design and production specifications for the engine. This information may also be expressed by a torque curve that relates maximum available engine torque with engine speed.

(c) An engine configuration's per-cylinder displacement is the intended swept volume of each cylinder. The swept volume of the engine is the product of the internal cross-section area of the cylinders, the stroke length, and the number of cylinders. Calculate the engine's intended swept volume from the design specifications for the cylinders using enough significant figures to allow determination of the displacement to the nearest 0.02 liters. Determine the final value by truncating digits to establish the per-cylinder displacement to the nearest 0.1 liters. For example, for an engine with circular cylinders having an internal diameter of 13.0 cm and a 15.5 cm stroke length, the rounded displacement would be: $(13.0/2)^2 \times (\pi) \times (15.5) \div 1000 = 2.0$ liters.

(d) The nominal power curve and intended swept volume must be within the range of the actual power curves and swept volumes of production engines considering normal production variability. If after production begins, it is determined that either your nominal power curve or your intended swept volume does not represent production engines, we may require you to amend your application for certification under § 1042.225.

(e) Throughout this part, references to a specific power value for an engine are based on maximum engine power. For example, the group of engines with maximum engine power above 600 kW may be referred to as engines above 600 kW.

(f) Calculate an engine family's power density in kW/L by dividing the unrounded maximum engine power by the engine's unrounded per-cylinder displacement, then dividing by the number of cylinders. Round the calculated value to the nearest whole number.

§ 1042.145 Interim provisions.

(a) *General.* The provisions in this section apply instead of other provisions in this part for Category 1 and Category 2 engines. This section describes when these interim provisions expire.

(b) *Delayed standards.* Post-manufacturer marinizers that are small-volume engine manufacturers may delay compliance with the Tier 3 standards for engines below 600 kW as follows:

(1) You may delay compliance with the Tier 3 standards for one model year, as long as the engines meet all the requirements that apply to Tier 2 engines.

(2) You may delay compliance with the NTE standards for Tier 3 engines for three model years in addition to the one-year delay specified in paragraph (b)(1) of this section, as long as the engines meet all other Tier 3 requirements for the appropriate model year.

(c) *Part 1065 test procedures.* You must generally use the test procedures specified in subpart F of this part, including the applicable test procedures in 40 CFR part 1065. As specified in this paragraph (c), you may use a

combination of the test procedures specified in this part and the test procedures specified for Tier 2 engines before January 1, 2015. After this date, you must use test procedures only as specified in subpart F of this part.

(1) You may determine maximum test speed for engines below 37 kW as specified in 40 CFR part 89 without request through the 2009 model year.

(2) Before January 1, 2015, you may ask to use some or all of the procedures specified in 40 CFR part 94 (or 40 CFR part 89 for engines below 37 kW) for engines certified under this part 1042. If you ask to rely on a combination of procedures under this paragraph (c)(2), we will approve your request only if you show us that it does not affect your ability to demonstrate compliance with the applicable emission standards. This generally requires that the combined procedures would result in emission measurements at least as high as those that would be measured using the procedures specified in this part. Alternatively, you may demonstrate that the combined effects of the different procedures is small relative to your compliance margin (the degree to which your emissions are below the applicable standards).

(d) [Reserved]

(e) *Delayed compliance with NTE standards.* Engines below 56 kW may delay complying with the NTE standards specified in § 1042.101(c) until the 2013 model year. Engines at or above 56 kW and below 75 kW may delay complying with the NTE standards specified in § 1042.101(c) until the 2012 model year.

(f) *In-use compliance limits.* The provisions of this paragraph (f) apply for the first three model years of the Tier 4 standards. For purposes of determining compliance based on testing other than certification or production-line testing, calculate the applicable in-use compliance limits by adjusting the applicable standards/FELs. The PM adjustment does not apply for engines with a PM standard or FEL above 0.04 g/kW-hr. The NO_X adjustment does not apply for engines with a NO_X FEL above 2.7 g/kW-hr. Add the applicable adjustments in one of the following tables to the otherwise applicable standards and NTE limits. You must specify during certification which add-ons, if any, will apply for your engines.

TABLE 1 TO § 1042.145.—IN-USE ADJUSTMENTS FOR THE FIRST THREE MODEL YEARS OF THE TIER 4 STANDARDS

Fraction of useful life already used	In-use adjustments (g/kW-hr)	
	For Tier 4 NO_X standards	For Tier 4 PM standards
0 < hours ≤ 50% of useful life	0.9	0.02
50 < hours ≤ 75% of useful life	1.3	0.02
hours > 75% of useful life	1.7	0.02

TABLE 2 TO § 1042.145.—OPTIONAL IN-USE ADJUSTMENTS FOR THE FIRST THREE MODEL YEARS OF THE TIER 4 STANDARDS

Fraction of useful life already used	In-use adjustments (g/kW-hr)	
	For model year 2017 and earlier Tier 4 NO_X standards	For model year 2017 and earlier Tier 4 PM standards
0 < hours ≤ 50% of useful life	0.3	0.05
50 < hours ≤ 75% of useful life	0.4	0.05
hours > 75% of useful life	0.5	0.05

(g) *Deficiencies for NTE standards.* You may ask us to accept as compliant an engine that does not fully meet specific requirements under the applicable NTE standards. Such deficiencies are intended to allow for minor deviations from the NTE standards under limited conditions. We expect your engines to have functioning emission control hardware that allows you to comply with the NTE standards.

(1) Request our approval for specific deficiencies in your application for certification, or before you submit your application. We will not approve deficiencies retroactively to cover engines already certified. In your request, identify the scope of each deficiency and describe any auxiliary emission control devices you will use to control emissions to the lowest practical level, considering the deficiency you are requesting.

(2) We will approve a deficiency only if compliance would be infeasible or unreasonable considering such factors as the technical feasibility of the given hardware and the applicable lead time and production cycles. We may consider other relevant factors.

(3) Our approval applies only for a single model year and may be limited to specific engine configurations. We may approve your request for the same deficiency in the following model year if correcting the deficiency would require unreasonable hardware or software modifications and we determine that you have demonstrated an acceptable level of effort toward complying.

(4) You may ask for any number of deficiencies in the first three model years during which NTE standards apply for your engines. For the next four model years, we may approve up to three deficiencies per engine family. Deficiencies of the same type that apply similarly to different power ratings within a family count as one deficiency per family. We may condition approval of any such additional deficiencies during these four years on any additional conditions we determine to be appropriate. We will not approve deficiencies after the seven-year period specified in this paragraph (g)(4), unless they are related to safety.

Subpart C—Certifying Engine Families

§ 1042.201 General requirements for obtaining a certificate of conformity.

(a) You must send us a separate application for a certificate of conformity for each engine family. A

certificate of conformity is valid starting with the indicated effective date, but it is not valid for any production after December 31 of the model year for which it is issued. No certificate will be issued after December 31 of the model year.

(b) The application must contain all the information required by this part and must not include false or incomplete statements or information (see § 1042.255).

(c) We may ask you to include less information than we specify in this subpart, as long as you maintain all the information required by § 1042.250.

(d) You must use good engineering judgment for all decisions related to your application (see 40 CFR 1068.5).

(e) An authorized representative of your company must approve and sign the application.

(f) See § 1042.255 for provisions describing how we will process your application.

(g) We may require you to deliver your test engines to a facility we designate for our testing (see § 1042.235(c)).

(h) For engines that become new as a result of substantial modifications or for engines installed on imported vessels that become subject to the requirements of this part, we may specify alternate certification provisions consistent with the intent of this part. See the definition of ''new marine engine'' in § 1042.901.

§ 1042.205 Application requirements.

This section specifies the information that must be in your application, unless we ask you to include less information under § 1042.201(c). We may require you to provide additional information to evaluate your application.

(a) Describe the engine family's specifications and other basic parameters of the engine's design and emission controls. List the fuel type on which your engines are designed to operate (for example, ultra low-sulfur diesel fuel). List each distinguishable engine configuration in the engine family. For each engine configuration, list the maximum engine power and the range of values for maximum engine power resulting from production tolerances, as described in § 1042.140.

(b) Explain how the emission control system operates. Describe in detail all system components for controlling exhaust emissions, including all auxiliary emission control devices (AECDs) and all fuel-system components you will install on any production or test engine. Identify the part number of each component you describe. For this paragraph (b), treat as separate AECDs any devices that modulate or activate differently from each other. Include all the following:

(1) Give a general overview of the engine, the emission control strategies, and all AECDs.

(2) Describe each AECD's general purpose and function.

(3) Identify the parameters that each AECD senses (including measuring, estimating, calculating, or empirically deriving the values). Include vessel-based parameters and state whether you simulate them during testing with the applicable procedures.

(4) Describe the purpose for sensing each parameter.

(5) Identify the location of each sensor the AECD uses.

(6) Identify the threshold values for the sensed parameters that activate the AECD.

(7) Describe the parameters that the AECD modulates (controls) in response to any sensed parameters, including the range of modulation for each parameter, the relationship between the sensed parameters and the controlled parameters and how the modulation achieves the AECD's stated purpose. Use graphs and tables, as necessary.

(8) Describe each AECD's specific calibration details. This may be in the form of data tables, graphical representations, or some other description.

(9) Describe the hierarchy among the AECDs when multiple AECDs sense or modulate the same parameter. Describe whether the strategies interact in a comparative or additive manner and identify which AECD takes precedence in responding, if applicable.

(10) Explain the extent to which the AECD is included in the applicable test procedures specified in subpart F of this part.

(11) Do the following additional things for AECDs designed to protect engines or vessels:

(i) Identify the engine and/or vessel design limits that make protection necessary and describe any damage that would occur without the AECD.

(ii) Describe how each sensed parameter relates to the protected components' design limits or those operating conditions that cause the need for protection.

(iii) Describe the relationship between the design limits/parameters being protected and the parameters sensed or calculated as surrogates for those design limits/parameters, if applicable.

(iv) Describe how the modulation by the AECD prevents engines and/or vessels from exceeding design limits.

(v) Explain why it is necessary to estimate any parameters instead of measuring them directly and describe how the AECD calculates the estimated value, if applicable.

(vi) Describe how you calibrate the AECD modulation to activate only during conditions related to the stated need to protect components and only as needed to sufficiently protect those components in a way that minimizes the emission impact.

(c) If your engines are equipped with an engine diagnostic system, explain how it works, describing especially the engine conditions (with the corresponding diagnostic trouble codes) that cause the malfunction-indicator light to go on.

(d) Describe the engines you selected for testing and the reasons for selecting them.

(e) Describe the test equipment and procedures that you used, including the duty cycle(s) and the corresponding engine applications. Also describe any special or alternate test procedures you used.

(f) Describe how you operated the emission-data engine before testing, including the duty cycle and the number of engine operating hours used to stabilize emission levels. Explain why you selected the method of service accumulation. Describe any scheduled maintenance you did.

(g) List the specifications of the test fuel to show that it falls within the required ranges we specify in 40 CFR part 1065.

(h) Identify the engine family's useful life.

(i) Include the maintenance and warranty instructions you will give to the ultimate purchaser of each new engine (see §§ 1042.120 and 1042.125). Describe your plan for meeting warranty obligations under §§ 1042.120.

(j) Include the emission-related installation instructions you will provide if someone else installs your engines in a vessel (see § 1042.130).

(k) Describe your emission control information label (see § 1042.135).

(l) Identify the emission standards and/or FELs to which you are certifying engines in the engine family.

(m) Identify the engine family's deterioration factors and describe how you developed them (see § 1042.245). Present any emission test data you used for this.

(n) State that you operated your emission-data engines as described in the application (including the test procedures, test parameters, and test fuels) to show you meet the requirements of this part.

(o) Present emission data for HC, NO_X, PM, and CO on an emission-data engine to show your engines meet emission standards as specified in

§ 1042.101. Show emission figures before and after applying adjustment factors for regeneration and deterioration factors for each pollutant and for each engine. If we specify more than one grade of any fuel type (for example, high-sulfur and low-sulfur diesel fuel), you need to submit test data only for one grade, unless the regulations of this part specify otherwise for your engine.

Include emission results for each mode if you do discrete-mode testing under § 1042.505. Note that §§ 1042.235 and 1042.245 allows you to submit an application in certain cases without new emission data.

(p) For Category 1 and Category 2 engines, state that all the engines in the engine family comply with the applicable not-to-exceed emission standards in § 1042.101 for all normal operation and use when tested as specified in § 1042.515. Describe any relevant testing, engineering analysis, or other information in sufficient detail to support your statement.

(q) [Reserved]

(r) Report all test results, including those from invalid tests, whether or not they were conducted according to the test procedures of subpart F of this part. If you measure CO_2, report those emission levels (in g/kW-hr). We may ask you to send other information to confirm that your tests were valid under the requirements of this part and 40 CFR part 1065.

(s) Describe all adjustable operating parameters (see § 1042.115(d)), including production tolerances. Include the following in your description of each parameter:

(1) The nominal or recommended setting.

(2) The intended physically adjustable range.

(3) The limits or stops used to establish adjustable ranges.

(4) For Category 1 engines, information showing why the limits, stops, or other means of inhibiting adjustment are effective in preventing adjustment of parameters on in-use engines to settings outside your intended physically adjustable ranges.

(5) For Category 2 engines, propose a range of adjustment for each adjustable parameter, as described in § 1042.115(d). Include information showing why the limits, stops, or other means of inhibiting adjustment are effective in preventing adjustment of parameters on in-use engines to settings outside your proposed adjustable ranges.

(t) Provide the information to read, record, and interpret all the information broadcast by an engine's onboard computers and electronic control units. State that, upon request, you will give us any hardware, software, or tools we would need to do this. If you broadcast a surrogate parameter for torque values, you must provide us what we need to convert these into torque units. You may reference any appropriate publicly released standards that define conventions for these messages and parameters. Format your information consistent with publicly released standards.

(u) Confirm that your emission-related installation instructions specify how to ensure that sampling of exhaust emissions will be possible after engines are installed in vessels and placed in service. Show how to sample exhaust emissions in a way that prevents diluting the exhaust sample with ambient air.

(v) State whether your certification is limited for certain engines. If this is the case, describe how you will prevent use of these engines in applications for which they are not certified. This applies for engines such as the following:

(1) Constant-speed engines.

(2) Engines used with controllable-pitch propellers.

(3) Recreational engines.

(w) Unconditionally certify that all the engines in the engine family comply with the requirements of this part, other referenced parts of the CFR, and the Clean Air Act.

(x) Include good-faith estimates of U.S.-directed production volumes. Include a justification for the estimated production volumes if they are substantially different than actual production volumes in earlier years for similar models.

(y) Include the information required by other subparts of this part. For example, include the information required by § 1042.725 if you participate in the ABT program.

(z) Include other applicable information, such as information specified in this part or 40 CFR part 1068 related to requests for exemptions.

(aa) Name an agent for service located in the United States. Service on this agent constitutes service on you or any of your officers or employees for any action by EPA or otherwise by the United States related to the requirements of this part.

(bb) The following provisions apply for imported engines:

(1) Describe your normal practice for importing engines. For example, this may include identifying the names and addresses of any agents you have authorized to import your engines. Engines imported by nonauthorized agents are not covered by your certificate.

(2) For engines below 560 kW, identify a test facility in the United States where you can test your engines if we select them for testing under a selective enforcement audit, as specified in 40 CFR part 1068.

§ 1042.210 Preliminary approval.

If you send us information before you finish the application, we will review it and make any appropriate determinations, especially for questions related to engine family definitions, auxiliary emission control devices, deterioration factors, useful life, testing for service accumulation, maintenance, and compliance with not-to-exceed standards. See § 1042.245 for specific provisions that apply for deterioration factors. Decisions made under this section are considered to be preliminary approval, subject to final review and approval. We will generally not reverse a decision where we have given you preliminary approval, unless we find new information supporting a different decision. If you request preliminary approval related to the upcoming model year or the model year after that, we will make best-efforts to make the appropriate determinations as soon as practicable. We will generally not provide preliminary approval related to a future model year more than two years ahead of time.

§ 1042.220 Amending maintenance instructions.

You may amend your emission-related maintenance instructions after you submit your application for certification, as long as the amended instructions remain consistent with the provisions of § 1042.125. You must send the Designated Compliance Officer a written request to amend your application for certification for an engine family if you want to change the emission-related maintenance instructions in a way that could affect emissions. In your request, describe the proposed changes to the maintenance instructions. We will approve your request if we determine that the amended instructions are consistent with maintenance you performed on emission-data engines such that your durability demonstration would remain valid. If operators follow the original maintenance instructions rather than the newly specified maintenance, this does not allow you to disqualify those engines from in-use testing or deny a warranty claim.

(a) If you are decreasing, replacing, or eliminating or any specified maintenance, you may distribute the

new maintenance instructions to your customers 30 days after we receive your request, unless we disapprove your request. We may approve a shorter time or waive this requirement.

(b) If your requested change would not decrease the specified maintenance, you may distribute the new maintenance instructions anytime after you send your request. For example, this paragraph (b) would cover adding instructions to increase the frequency of a maintenance step for engines in severe-duty applications.

(c) You do not need to request approval if you are making only minor corrections (such as correcting typographical mistakes), clarifying your maintenance instructions, or changing instructions for maintenance unrelated to emission control.

§ 1042.225 Amending applications for certification.

Before we issue you a certificate of conformity, you may amend your application to include new or modified engine configurations, subject to the provisions of this section. After we have issued your certificate of conformity, you may send us an amended application requesting that we include new or modified engine configurations within the scope of the certificate, subject to the provisions of this section. You must amend your application if any changes occur with respect to any information included in your application.

(a) You must amend your application before you take any of the following actions:

(1) Add an engine configuration to an engine family. In this case, the engine configuration added must be consistent with other engine configurations in the engine family with respect to the criteria listed in § 1042.230.

(2) Change an engine configuration already included in an engine family in a way that may affect emissions, or change any of the components you described in your application for certification. This includes production and design changes that may affect emissions any time during the engine's lifetime.

(3) Modify an FEL for an engine family as described in paragraph (f) of this section.

(b) To amend your application for certification as specified in paragraph (a) of this section, send the Designated Compliance Officer the following information:

(1) Describe in detail the addition or change in the engine model or configuration you intend to make.

(2) Include engineering evaluations or data showing that the amended engine family complies with all applicable requirements. You may do this by showing that the original emission-data engine is still appropriate with respect to showing compliance of the amended family with all applicable requirements.

(3) If the original emission-data engine for the engine family is not appropriate to show compliance for the new or modified engine configuration, include new test data showing that the new or modified engine configuration meets the requirements of this part.

(c) We may ask for more test data or engineering evaluations. You must give us these within 30 days after we request them.

(d) For engine families already covered by a certificate of conformity, we will determine whether the existing certificate of conformity covers your newly added or modified engine. You may ask for a hearing if we deny your request (see § 1042.920).

(e) For engine families already covered by a certificate of conformity, you may start producing the new or modified engine configuration anytime after you send us your amended application and before we make a decision under paragraph (d) of this section. However, if we determine that the affected engines do not meet applicable requirements, we will notify you to cease production of the engines and may require you to recall the engines at no expense to the owner. Choosing to produce engines under this paragraph (e) is deemed to be consent to recall all engines that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days, you must stop producing the new or modified engines.

(f) You may ask us to approve a change to your FEL in certain cases after the start of production. The changed FEL may not apply to engines you have already introduced into U.S. commerce, except as described in this paragraph (f). If we approve a changed FEL after the start of production, you must include the new FEL on the emission control information label for all engines produced after the change. You may ask us to approve a change to your FEL in the following cases:

(1) You may ask to raise your FEL for your emission family at any time. In your request, you must show that you will still be able to meet the emission standards as specified in subparts B and H of this part. If you amend your application by submitting new test data to include a newly added or modified engine or fuel-system component, as described in paragraph (b)(3) of this section, use the appropriate FELs with corresponding production volumes to calculate your production-weighted average FEL for the model year, as described in subpart H of this part. If you amend your application without submitting new test data, you must use the higher FEL for the entire family to calculate your production-weighted average FEL under subpart H of this part.

(2) You may ask to lower the FEL for your emission family only if you have test data from production engines showing that emissions are below the proposed lower FEL. The lower FEL applies only to engines you produce after we approve the new FEL. Use the appropriate FELs with corresponding production volumes to calculate your production-weighted average FEL for the model year, as described in subpart H of this part.

§ 1042.230 Engine families.

(a) For purposes of certification, divide your product line into families of engines that are expected to have similar emission characteristics throughout the useful life as described in this section. You may not group Category 1 and Category 2 engines in the same family. Your engine family is limited to a single model year.

(b) For Category 1 engines, group engines in the same engine family if they are the same in all the following aspects:

(1) The combustion cycle and the fuel with which the engine is intended or designed to be operated.

(2) The cooling system (for example, raw-water vs. separate-circuit cooling).

(3) Method of air aspiration.

(4) Method of exhaust aftertreatment (for example, catalytic converter or particulate trap).

(5) Combustion chamber design.

(6) Nominal bore and stroke.

(7) Number of cylinders (for engines with aftertreatment devices only).

(8) Cylinder arrangement (for engines with aftertreatment devices only).

(9) Method of control for engine operation other than governing (i.e., mechanical or electronic).

(10) Application (commercial or recreational).

(11) Numerical level of the emission standards that apply to the engine, except as allowed under paragraphs (f) and (g) of this section.

(c) For Category 2 engines, group engines in the same engine family if they are the same in all the following aspects:

(1) The combustion cycle (e.g., diesel cycle).

(2) The fuel with which the engine is intended or designed to be operated and the fuel system configuration.

(3) The cooling system (for example, air-cooled or water-cooled), and procedure(s) employed to maintain engine temperature within desired limits (thermostat, on-off radiator fans, radiator shutters, etc.).

(4) The method of air aspiration (turbocharged, supercharged, naturally aspirated, Roots blown).

(5) The turbocharger or supercharger general performance characteristics (e.g., approximate boost pressure, approximate response time, approximate size relative to engine displacement).

(6) The type of air inlet cooler (air-to-air, air-to-liquid, approximate degree to which inlet air is cooled).

(7) The type of exhaust aftertreatment system (oxidation catalyst, particulate trap), and characteristics of the aftertreatment system (catalyst loading, converter size vs. engine size).

(8) The combustion chamber configuration and the surface-to-volume ratio of the combustion chamber when the piston is at top dead center position, using nominal combustion chamber dimensions.

(9) Nominal bore and stroke dimensions.

(10) The location of the piston rings on the piston.

(11) The intake manifold induction port size and configuration.

(12) The exhaust manifold port size and configuration.

(13) The location of the intake and exhaust valves (or ports).

(14) The size of the intake and exhaust valves (or ports).

(15) The approximate intake and exhaust event timing and duration (valve or port).

(16) The configuration of the fuel injectors and approximate injection pressure.

(17) The type of fuel injection system controls (i.e., mechanical or electronic).

(18) The overall injection timing characteristics, or as appropriate ignition timing characteristics (i.e., the deviation of the timing curves from the optimal fuel economy timing curve must be similar in degree).

(19) The type of smoke control system.

(d) [Reserved]

(e) You may subdivide a group of engines that is identical under paragraph (b) or (c) of this section into different engine families if you show the expected emission characteristics are different during the useful life. However, for the purpose of applying small-volume family provisions of this part, we will consider the otherwise applicable engine family criteria of this section.

(f) You may group engines that are not identical with respect to the things listed in paragraph (b) or (c) of this section in the same engine family, as follows:

(1) In unusual circumstances, you may group such engines in the same engine family if you show that their emission characteristics during the useful life will be similar.

(2) If you are a small-volume engine manufacturer, you may group any Category 1 engines into a single engine family or you may group any Category 2 engines into a single engine family. This also applies if you are a post-manufacture marinizer modifying a base engine that has a valid certificate of conformity for any kind of nonroad or heavy-duty highway engine under this chapter.

(3) The provisions of this paragraph (f) do not exempt any engines from meeting the standards and requirements in subpart B of this part.

(g) If you combine engines that are subject to different emission standards into a single engine family under paragraph (f) of this section, you must certify the engine family to the more stringent set of standards for that model year.

§ 1042.235 Emission testing required for a certificate of conformity.

This section describes the emission testing you must perform to show compliance with the emission standards in § 1042.101(a). See § 1042.205(p) regarding emission testing related to the NTE standards. See §§ 1042.240 and 1042.245 and 40 CFR part 1065, subpart E, regarding service accumulation before emission testing.

(a) Select an emission-data engine from each engine family for testing. For engines at or above 560 kW, you may use a development engine that is equivalent in design to the engine being certified. Using good engineering judgment, select the engine configuration most likely to exceed an applicable emission standard over the useful life, considering all exhaust emission constituents and the range of installation options available to vessel manufacturers.

(b) Test your emission-data engines using the procedures and equipment specified in subpart F of this part.

(c) We may measure emissions from any of your test engines or other engines from the engine family, as follows:

(1) We may decide to do the testing at your plant or any other facility. If we do this, you must deliver the test engine to a test facility we designate. The test engine you provide must include appropriate manifolds, aftertreatment devices, electronic control units, and other emission-related components not normally attached directly to the engine block. If we do the testing at your plant, you must schedule it as soon as possible and make available the instruments, personnel, and equipment we need.

(2) If we measure emissions from one of your test engines, the results of that testing become the official emission results for the engine. Unless we later invalidate these data, we may decide not to consider your data in determining if your engine family meets applicable requirements.

(3) Before we test one of your engines, we may set its adjustable parameters to any point within the specified adjustable ranges (see § 1042.115(d)).

(4) Before we test one of your engines, we may calibrate it within normal production tolerances for anything we do not consider an adjustable parameter.

(d) You may ask to use emission data from a previous model year instead of doing new tests, but only if all the following are true:

(1) The engine family from the previous model year differs from the current engine family only with respect to model year or other characteristics unrelated to emissions. You may also ask to add a configuration subject to § 1042.225.

(2) The emission-data engine from the previous model year remains the appropriate emission-data engine under paragraph (b) of this section.

(3) The data show that the emission-data engine would meet all the requirements that apply to the engine family covered by the application for certification. For engines originally tested under the provisions of 40 CFR part 94, you may consider those test procedures to be equivalent to the procedures we specify in subpart F of this part.

(e) We may require you to test a second engine of the same or different configuration in addition to the engine tested under paragraph (b) of this section.

(f) If you use an alternate test procedure under 40 CFR 1065.10 and later testing shows that such testing does not produce results that are equivalent to the procedures specified in subpart F of this part, we may reject data you generated using the alternate procedure.

§ 1042.240 Demonstrating compliance with exhaust emission standards.

(a) For purposes of certification, your engine family is considered in compliance with the emission standards in § 1042.101(a) if all emission-data engines representing that family have test results showing deteriorated emission levels at or below these standards. Note that your FELs are considered to be the applicable emission standards with which you must comply if you participate in the ABT program in subpart H of this part.

(b) Your engine family is deemed not to comply if any emission-data engine representing that family has test results showing a deteriorated emission level above an applicable emission standard for any pollutant.

(c) To compare emission levels from the emission-data engine with the applicable emission standards for Category 1 and Category 2 engines, apply deterioration factors to the measured emission levels for each pollutant. Section 1042.245 specifies how to test your engine to develop deterioration factors that represent the deterioration expected in emissions over your engines' full useful life. Your deterioration factors must take into account any available data from in-use testing with similar engines. Small-volume engine manufacturers and post-manufacture marinizers may use assigned deterioration factors that we establish. Apply deterioration factors as follows:

(1) *Additive deterioration factor for exhaust emissions.* Except as specified in paragraph (c)(2) of this section, use an additive deterioration factor for exhaust emissions. An additive deterioration factor is the difference between exhaust emissions at the end of the useful life and exhaust emissions at the low-hour test point. In these cases, adjust the official emission results for each tested engine at the selected test point by adding the factor to the measured emissions. If the deterioration factor is less than zero, use zero. Additive deterioration factors must be specified to one more decimal place than the applicable standard.

(2) *Multiplicative deterioration factor for exhaust emissions.* Use a multiplicative deterioration factor if good engineering judgment calls for the deterioration factor for a pollutant to be the ratio of exhaust emissions at the end of the useful life to exhaust emissions at the low-hour test point. For example, if you use aftertreatment technology that controls emissions of a pollutant proportionally to engine-out emissions, it is often appropriate to use a multiplicative deterioration factor. Adjust the official emission results for each tested engine at the selected test point by multiplying the measured emissions by the deterioration factor. If the deterioration factor is less than one, use one. A multiplicative deterioration factor may not be appropriate in cases where testing variability is significantly greater than engine-to-engine variability. Multiplicative deterioration factors must be specified to one more significant figure than the applicable standard.

(3) *Deterioration factor for crankcase emissions.* If your engine vents crankcase emissions to the exhaust or to the atmosphere, you must account for crankcase emission deterioration, using good engineering judgment. You may use separate deterioration factors for crankcase emissions of each pollutant (either multiplicative or additive) or include the effects in combined deterioration factors that include exhaust and crankcase emissions together for each pollutant.

(d) Collect emission data using measurements to one more decimal place than the applicable standard. Apply the deterioration factor to the official emission result, as described in paragraph (c) of this section, then round the adjusted figure to the same number of decimal places as the emission standard. Compare the rounded emission levels to the emission standard for each emission-data engine. In the case of NO_X+HC standards, apply the deterioration factor to each pollutant and then add the results before rounding.

§ 1042.245 Deterioration factors.

For Category 1 and Category 2 engines, establish deterioration factors, as described in § 1042.240, to determine whether your engines will meet emission standards for each pollutant throughout the useful life. This section describes how to determine deterioration factors, either with an engineering analysis, with pre-existing test data, or with new emission measurements.

(a) You may ask us to approve deterioration factors for an engine family with established technology based on engineering analysis instead of testing. Engines certified to a NO_X+HC standard or FEL greater than the Tier 3 NO_X+HC standard are considered to rely on established technology for gaseous emission control, except that this does not include any engines that use exhaust-gas recirculation or aftertreatment. In most cases, technologies used to meet the Tier 1 and Tier 2 emission standards would be considered to be established technology. We must approve your plan to establish a deterioration factor under this paragraph (a) before you submit your application for certification.

(b) You may ask us to approve deterioration factors for an engine family based on emission measurements from similar highway, stationary, or nonroad engines (including locomotive engines or other marine engines) if you have already given us these data for certifying the other engines in the same or earlier model years. Use good engineering judgment to decide whether the two engines are similar. We must approve your plan to establish a deterioration factor under this paragraph (b) before you submit your application for certification. We will approve your request if you show us that the emission measurements from other engines reasonably represent in-use deterioration for the engine family for which you have not yet determined deterioration factors.

(c) If you are unable to determine deterioration factors for an engine family under paragraph (a) or (b) of this section, first get us to approve a plan for determining deterioration factors based on service accumulation and related testing. We will respond to your proposed plan within 45 days of receiving your request. Your plan must involve measuring emissions from an emission-data engine at least three times, which are evenly spaced over the service-accumulation period unless we specify otherwise, such that the resulting measurements and calculations will represent the deterioration expected from in-use engines over the full useful life. You may use extrapolation to determine deterioration factors once you have established a trend of changing emissions with age for each pollutant. You may use an engine installed in a vessel to accumulate service hours instead of running the engine only in the laboratory. You may perform maintenance on emission-data engines as described in § 1042.125 and 40 CFR part 1065, subpart E.

(d) Include the following information in your application for certification:

(1) If you determine your deterioration factors based on test data from a different engine family, explain why this is appropriate and include all the emission measurements on which you base the deterioration factor.

(2) If you determine your deterioration factors based on engineering analysis, explain why this is appropriate and include a statement that all data, analyses, evaluations, and other information you used are available for our review upon request.

(3) If you do testing to determine deterioration factors, describe the form and extent of service accumulation, including a rationale for selecting the service-accumulation period and the method you use to accumulate hours.

§ 1042.250 Recordkeeping and reporting.

(a) If you produce engines under any provisions of this part that are related to production volumes, send the Designated Compliance Officer a report within 30 days after the end of the model year describing the total number of engines you produced in each engine family. For example, if you use special provisions intended for small-volume engine manufacturers, report your U.S.-directed production volumes to show that you do not exceed the applicable limits.

(b) Organize and maintain the following records:

(1) A copy of all applications and any summary information you send us.

(2) Any of the information we specify in § 1042.205 that you were not required to include in your application.

(3) A detailed history of each emission-data engine. For each engine, describe all of the following:

(i) The emission-data engine's construction, including its origin and buildup, steps you took to ensure that it represents production engines, any components you built specially for it, and all the components you include in your application for certification.

(ii) How you accumulated engine operating hours (service accumulation), including the dates and the number of hours accumulated.

(iii) All maintenance, including modifications, parts changes, and other service, and the dates and reasons for the maintenance.

(iv) All your emission tests (valid and invalid), including documentation on routine and standard tests, as specified in part 40 CFR part 1065, and the date and purpose of each test.

(v) All tests to diagnose engine or emission control performance, giving the date and time of each and the reasons for the test.

(vi) Any other significant events.

(4) Production figures for each engine family divided by assembly plant.

(5) Keep a list of engine identification numbers for all the engines you produce under each certificate of conformity.

(c) Keep data from routine emission tests (such as test cell temperatures and relative humidity readings) for one year after we issue the associated certificate of conformity. Keep all other information specified in paragraph (a) of this section for eight years after we issue your certificate.

(d) Store these records in any format and on any media, as long as you can promptly send us organized, written records in English if we ask for them. You must keep these records readily available. We may review them at any time.

(e) Send us copies of any engine maintenance instructions or explanations if we ask for them.

§ 1042.255 EPA decisions.

(a) If we determine your application is complete and shows that the engine family meets all the requirements of this part and the Clean Air Act, we will issue a certificate of conformity for your engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny your application for certification if we determine that your engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. Our decision may be based on a review of all information available to us. If we deny your application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke your certificate if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information (paragraph (e) of this section applies if this is fraudulent).

(3) Render inaccurate any test data.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce engines for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend your application to include all engines being produced.

(7) Take any action that otherwise circumvents the intent of the Clean Air Act or this part.

(d) We may void your certificate if you do not keep the records we require or do not give us information as required under this part or the Clean Air Act.

(e) We may void your certificate if we find that you intentionally submitted false or incomplete information.

(f) If we deny your application or suspend, revoke, or void your certificate, you may ask for a hearing (see § 1042.920).

Subpart D—Testing Production-line Engines

§ 1042.301 General provisions.

(a) If you produce engines that are subject to the requirements of this part, you must test them as described in this subpart, except as follows:

(1) Small-volume engine manufacturers may omit testing under this subpart.

(2) We may exempt Category 1 engine families with a projected U.S.-directed production volume below 100 engines from routine testing under this subpart. Request this exemption in your application for certification and include your basis for projecting a production volume below 100 units. You must promptly notify us if your actual production exceeds 100 units during the model year. If you exceed the production limit or if there is evidence of a nonconformity, we may require you to test production-line engines under this subpart, or under 40 CFR part 1068, subpart D, even if we have approved an exemption under this paragraph (a)(2).

(3) [Reserved]

(b) We may suspend or revoke your certificate of conformity for certain engine families if your production-line engines do not meet the requirements of this part or you do not fulfill your obligations under this subpart (see §§ 1042.325 and 1042.340).

(c) Other requirements apply to engines that you produce. Other regulatory provisions authorize us to suspend, revoke, or void your certificate of conformity, or order recalls for engine families without regard to whether they have passed these production-line testing requirements. The requirements of this subpart do not affect our ability to do selective enforcement audits, as described in 40 CFR part 1068. Individual engines in families that pass these production-line testing requirements must also conform to all applicable regulations of this part and 40 CFR part 1068.

(d) You may use alternate programs or measurement methods for testing production-line engines in the following circumstances:

(1) [Reserved]

(2) You may test your engines using the CumSum procedures specified in 40 CFR part 1045 or 1051 instead of the procedures specified in this subpart, except that the threshold for establishing quarterly or annual test periods is based on U.S.-directed production volumes of 800 instead of 1600. This alternate program does not require prior approval.

(3) You may ask to use another alternate program or measurement

method for testing production-line engines. In your request, you must show us that the alternate program gives equal assurance that your engines meet the requirements of this part. We may waive some or all of this subpart's requirements if we approve your alternate program.

(e) If you certify an engine family with carryover emission data, as described in § 1042.235(d), and these equivalent engine families consistently pass the production-line testing requirements over the preceding two-year period, you may ask for a reduced testing rate for further production-line testing for that family. The minimum testing rate is one engine per engine family. If we reduce your testing rate, we may limit our approval to any number of model years. In determining whether to approve your request, we may consider the number of engines that have failed the emission tests.

(f) We may ask you to make a reasonable number of production-line engines available for a reasonable time so we can test or inspect them for compliance with the requirements of this part. See 40 CFR 1068.27.

§ 1042.305 Preparing and testing production-line engines.

This section describes how to prepare and test production-line engines. You must assemble the test engine in a way that represents the assembly procedures for other engines in the engine family. You must ask us to approve any deviations from your normal assembly procedures for other production engines in the engine family.

(a) *Test procedures.* Test your production-line engines using the applicable testing procedures in subpart F of this part to show you meet the duty-cycle emission standards in subpart B of this part. The not-to-exceed standards apply for this testing, but you need not do additional testing to show that production-line engines meet the not-to-exceed standards.

(b) *Modifying a test engine.* Once an engine is selected for testing (see § 1042.310), you may adjust, repair, prepare, or modify it or check its emissions only if one of the following is true:

(1) You document the need for doing so in your procedures for assembling and inspecting all your production engines and make the action routine for all the engines in the engine family.

(2) This subpart otherwise specifically allows your action.

(3) We approve your action in advance.

(c) *Engine malfunction.* If an engine malfunction prevents further emission testing, ask us to approve your decision to either repair the engine or delete it from the test sequence.

(d) *Setting adjustable parameters.* Before any test, we may require you to adjust any adjustable parameter on a Category 1 engine to any setting within its physically adjustable range. We may adjust or require you to adjust any adjustable parameter on a Category 2 engine to any setting within its specified adjustable range.

(1) We may require you to adjust idle speed outside the physically adjustable range as needed, but only until the engine has stabilized emission levels (see paragraph (e) of this section). We may ask you for information needed to establish an alternate minimum idle speed.

(2) We may specify adjustments within the physically adjustable range or the specified adjustable range by considering their effect on emission levels, as well as how likely it is someone will make such an adjustment with in-use engines.

(e) *Stabilizing emission levels.* You may stabilize emission levels (or establish a Green Engine Factor for Category 2 engines) before you test production-line engines, as follows:

(1) You may stabilize emission levels by operating the engine in a way that represents the way production engines will be used, using good engineering judgment, for no more than the greater of two periods:

(i) 300 hours.

(ii) The number of hours you operated your emission-data engine for certifying the engine family (see 40 CFR part 1065, subpart E, or the applicable regulations governing how you should prepare your test engine).

(2) For Category 2 engines, you may ask us to approve a Green Engine Factor for each regulated pollutant for each engine family. Use the Green Engine Factor to adjust measured emission levels to establish a stabilized low-hour emission level.

(f) *Damage during shipment.* If shipping an engine to a remote facility for production-line testing makes necessary an adjustment or repair, you must wait until after the initial emission test to do this work. We may waive this requirement if the test would be impossible or unsafe, or if it would permanently damage the engine. Report to us in your written report under § 1042.345 all adjustments or repairs you make on test engines before each test.

(g) *Retesting after invalid tests.* You may retest an engine if you determine an emission test is invalid under subpart F of this part. Explain in your written report reasons for invalidating any test and the emission results from all tests. If you retest an engine, you may ask us to substitute results of the new tests for the original ones. You must ask us within ten days of testing. We will generally answer within ten days after we receive your information.

§ 1042.310 Engine selection.

(a) Determine minimum sample sizes as follows:

(1) For Category 1 engines, the minimum sample size is one engine or one percent of the projected U.S.-directed production volume for all your Category 1 engine families, whichever is greater.

(2) For Category 2 engines, the minimum sample size is one engine or one percent of the projected U.S.-directed production volume for all your Category 2 engine families, whichever is greater.

(b) Randomly select one engine from each engine family early in the model year. For further testing to reach the minimum sample size, randomly select a proportional sample from each engine family, with testing distributed evenly over the course of the model year, unless we specify a different schedule for your tests. For example, we may require you to disproportionately select engines from the early part of a model year for a new engine model that has not previously been subject to production-line testing.

(c) For each engine that fails to meet emission standards, test two engines from the same engine family from the next fifteen engines produced or within seven days, whichever is later. If an engine fails to meet emission standards for any pollutant, count it as a failing engine under this paragraph (c).

(d) Continue testing until one of the following things happens:

(1) You test the number of engines specified in paragraphs (a) and (c) of this section.

(2) The engine family does not comply according to § 1042.315 or you choose to declare that the engine family does not comply with the requirements of this subpart.

(3) You test 30 engines from the engine family.

(e) You may elect to test more randomly chosen engines than we require under this section.

§ 1042.315 Determining compliance.

This section describes the pass-fail criteria for the production-line testing requirements. We apply these criteria on an engine-family basis. See § 1042.320 for the requirements that apply to individual engines that fail a production-line test.

(a) Calculate your test results as follows:

(1) *Initial and final test results.* Calculate the test results for each engine. If you do several tests on an engine, calculate the initial test results, then add them together and divide by the number of tests for the final test results on that engine. Include the Green Engine Factor to determine low-hour emission results, if applicable.

(2) *Final deteriorated test results.* Apply the deterioration factor for the engine family to the final test results (see § 1042.240(c)).

(3) *Round deteriorated test results.* Round the results to one more decimal place than the applicable emission standard.

(b) If a production-line engine fails to meet emission standards and you test two additional engines as described in § 1042.310, calculate the average emission level for each pollutant for the three engines. If the calculated average emission level for any pollutant exceeds the applicable emission standard, the engine family fails the production-line testing requirements of this subpart. Tell us within ten working days if this happens. You may request to amend the application for certification to raise the FEL of the engine family as described in § 1042.225(f).

§ 1042.320 What happens if one of my production-line engines fails to meet emission standards?

(a) If you have a production-line engine with final deteriorated test results exceeding one or more emission standards (see § 1042.315(a)), the certificate of conformity is automatically suspended for that failing engine. You must take the following actions before your certificate of conformity can cover that engine:

(1) Correct the problem and retest the engine to show it complies with all emission standards.

(2) Include in your written report a description of the test results and the remedy for each engine (see § 1042.345).

(b) You may request to amend the application for certification to raise the FEL of the entire engine family at this point (see § 1042.225).

(c) For catalyst-equipped engines, you may ask us to allow you to exclude an initial failed test if all of the following are true:

(1) The catalyst was in a green condition when tested initially.

(2) The engine met all emission standards when retested after degreening the catalyst.

(3) No additional emission-related maintenance or repair was performed between the initial failed test and the subsequent passing test.

§ 1042.325 What happens if an engine family fails the production-line testing requirements?

(a) We may suspend your certificate of conformity for an engine family if it fails under § 1042.315. The suspension may apply to all facilities producing engines from an engine family, even if you find noncompliant engines only at one facility.

(b) We will tell you in writing if we suspend your certificate in whole or in part. We will not suspend a certificate until at least 15 days after the engine family fails. The suspension is effective when you receive our notice.

(c) Up to 15 days after we suspend the certificate for an engine family, you may ask for a hearing (see § 1042.920). If we agree before a hearing occurs that we used erroneous information in deciding to suspend the certificate, we will reinstate the certificate.

(d) Section 1042.335 specifies steps you must take to remedy the cause of the engine family's production-line failure. All the engines you have produced since the end of the last test period are presumed noncompliant and should be addressed in your proposed remedy. We may require you to apply the remedy to engines produced earlier if we determine that the cause of the failure is likely to have affected the earlier engines.

(e) You may request to amend the application for certification to raise the FEL of the entire engine family as described in § 1051.225(f). We will approve your request if it is clear that you used good engineering judgment in establishing the original FEL.

§ 1042.330 Selling engines from an engine family with a suspended certificate of conformity.

You may sell engines that you produce after we suspend the engine family's certificate of conformity under § 1042.315 only if one of the following occurs:

(a) You test each engine you produce and show it complies with emission standards that apply.

(b) We conditionally reinstate the certificate for the engine family. We may do so if you agree to recall all the affected engines and remedy any noncompliance at no expense to the owner if later testing shows that the engine family still does not comply.

§ 1042.335 Reinstating suspended certificates.

(a) Send us a written report asking us to reinstate your suspended certificate. In your report, identify the reason for noncompliance, propose a remedy for the engine family, and commit to a date for carrying it out. In your proposed remedy include any quality control measures you propose to keep the problem from happening again.

(b) Give us data from production-line testing that shows the remedied engine family complies with all the emission standards that apply.

§ 1042.340 When may EPA revoke my certificate under this subpart and how may I sell these engines again?

(a) We may revoke your certificate for an engine family in the following cases:

(1) You do not meet the reporting requirements.

(2) Your engine family fails to comply with the requirements of this subpart and your proposed remedy to address a suspended certificate under § 1042.325 is inadequate to solve the problem or requires you to change the engine's design or emission control system.

(b) To sell engines from an engine family with a revoked certificate of conformity, you must modify the engine family and then show it complies with the requirements of this part.

(1) If we determine your proposed design change may not control emissions for the engine's full useful life, we will tell you within five working days after receiving your report. In this case we will decide whether production-line testing will be enough for us to evaluate the change or whether you need to do more testing.

(2) Unless we require more testing, you may show compliance by testing production-line engines as described in this subpart.

(3) We will issue a new or updated certificate of conformity when you have met these requirements.

§ 1042.345 Reporting.

(a) Within 45 days of the end of each quarter in which production-line testing occurs, send us a report with the following information:

(1) Describe any facility used to test production-line engines and state its location.

(2) State the total U.S.-directed production volume and number of tests for each engine family.

(3) Describe how you randomly selected engines.

(4) Describe each test engine, including the engine family's identification and the engine's model year, build date, model number, identification number, and number of hours of operation before testing. Also describe how you developed and applied the Green Engine Factor, if applicable.

(5) Identify how you accumulated hours of operation on the engines and

describe the procedure and schedule you used.

(6) Provide the test number; the date, time and duration of testing; test procedure; initial test results before and after rounding; final test results; and final deteriorated test results for all tests. Provide the emission results for all measured pollutants. Include information for both valid and invalid tests and the reason for any invalidation.

(7) Describe completely and justify any nonroutine adjustment, modification, repair, preparation, maintenance, or test for the test engine if you did not report it separately under this subpart. Include the results of any emission measurements, regardless of the procedure or type of engine.

(8) Report on each failed engine as described in § 1042.320.

(9) Identify when the model year ends for each engine family.

(b) We may ask you to add information to your written report so we can determine whether your new engines conform with the requirements of this subpart.

(c) An authorized representative of your company must sign the following statement:

We submit this report under sections 208 and 213 of the Clean Air Act. Our production-line testing conformed completely with the requirements of 40 CFR part 1042. We have not changed production processes or quality-control procedures for test engines in a way that might affect emission controls. All the information in this report is true and accurate to the best of my knowledge. I know of the penalties for violating the Clean Air Act and the regulations. (Authorized Company Representative)

(d) Send electronic reports of production-line testing to the Designated Compliance Officer using an approved information format. If you want to use a different format, send us a written request with justification for a waiver.

(e) We will send copies of your reports to anyone from the public who asks for them. See § 1042.915 for information on how we treat information you consider confidential.

§ 1042.350 Recordkeeping.

(a) Organize and maintain your records as described in this section. We may review your records at any time.

(b) Keep records of your production-line testing for eight years after you complete all the testing required for an engine family in a model year. You may use any appropriate storage formats or media.

(c) Keep a copy of the written reports described in § 1042.345.

(d) Keep the following additional records:

(1) A description of all test equipment for each test cell that you can use to test production-line engines.

(2) The names of supervisors involved in each test.

(3) The name of anyone who authorizes adjusting, repairing, preparing, or modifying a test engine and the names of all supervisors who oversee this work.

(4) If you shipped the engine for testing, the date you shipped it, the associated storage or port facility, and the date the engine arrived at the testing facility.

(5) Any records related to your production-line tests that are not in the written report.

(6) A brief description of any significant events during testing not otherwise described in the written report or in this section.

(7) Any information specified in § 1042.345 that you do not include in your written reports.

(e) If we ask, you must give us projected or actual production figures for an engine family. We may ask you to divide your production figures by maximum engine power, displacement, fuel type, or assembly plant (if you produce engines at more than one plant).

(f) Keep a list of engine identification numbers for all the engines you produce under each certificate of conformity. Give us this list within 30 days if we ask for it.

(g) We may ask you to keep or send other information necessary to implement this subpart.

Subpart E—In-use Testing

§ 1042.401 General Provisions.

We may perform in-use testing of any engine subject to the standards of this part.

Subpart F—Test Procedures

§ 1042.501 How do I run a valid emission test?

(a) Use the equipment and procedures for compression-ignition engines in 40 CFR part 1065 to determine whether Category 1 and Category 2 engines meet the duty-cycle emission standards in § 1042.101(a). Measure the emissions of all regulated pollutants as specified in 40 CFR part 1065. Use the applicable duty cycles specified in § 1042.505.

(b) Section 1042.515 describes the supplemental test procedures for evaluating whether engines meet the not-to-exceed emission standards in § 1042.101(c).

(c) Use the fuels and lubricants specified in 40 CFR part 1065, subpart H, for all the testing we require in this part, except as specified in § 1042.515.

(1) For service accumulation, use the test fuel or any commercially available fuel that is representative of the fuel that in-use engines will use.

(2) For diesel-fueled engines, use the appropriate diesel fuel specified in 40 CFR part 1065, subpart H, for emission testing. Unless we specify otherwise, the appropriate diesel test fuel is the ultra low-sulfur diesel fuel. If we allow you to use a test fuel with higher sulfur levels, identify the test fuel in your application for certification and ensure that the emission control information label is consistent with your selection of the test fuel (see § 1042.135(c)(11)). For Category 2 engines, you may ask to use commercially available diesel fuel similar but not necessarily identical to the applicable fuel specified in 40 CFR part 1065, subpart H; we will approve your request if you show us that it does not affect your ability to demonstrate compliance with the applicable emission standards.

(3) For Category 1 and Category 2 engines that are expected to use a type of fuel (or mixed fuel) other than diesel fuel (such as natural gas, methanol, or residual fuel), use a commercially available fuel of that type for emission testing. If an engine is designed to operate on different fuels, we may (at our discretion) require testing on each fuel. Propose test fuel specifications that take into account the engine design and the properties of commercially available fuels. Describe these test fuel specifications in the application for certification.

(4) [Reserved]

(d) You may use special or alternate procedures to the extent we allow them under 40 CFR 1065.10.

(e) This subpart is addressed to you as a manufacturer, but it applies equally to anyone who does testing for you, and to us when we perform testing to determine if your engines meet emission standards.

(f) Duty-cycle testing is limited to ambient temperatures of 20 to 30 °C. Atmospheric pressure must be between 91.000 and 103.325 kPa, and must be within ±5 percent of the value recorded at the time of the last engine map. Testing may be performed with any ambient humidity level. Correct duty-cycle NO_X emissions for humidity as specified in 40 CFR part 1065.

§ 1042.505 Testing engines using discrete-mode or ramped-modal duty cycles.

This section describes how to test engines under steady-state conditions. In some cases, we allow you to choose the appropriate steady-state duty cycle for an engine. In these cases, you must use the duty cycle you select in your application for certification for all testing you perform for that engine family. If we test your engines to confirm that they meet emission standards, we will use the duty cycles you select for your own testing. We may also perform other testing as allowed by the Clean Air Act.

(a) You may perform steady-state testing with either discrete-mode or ramped-modal cycles, as follows:

(1) For discrete-mode testing, sample emissions separately for each mode, then calculate an average emission level for the whole cycle using the weighting factors specified for each mode. Calculate cycle statistics and compare with the established criteria as specified in 40 CFR 1065.514 to confirm that the test is valid. Operate the engine and sampling system as follows:

(i) *Engines with NO_X aftertreatment.* For engines that depend on aftertreatment to meet the NO_X emission standard, operate the engine for 5–6 minutes, then sample emissions for 1–3 minutes in each mode. You may extend the sampling time to improve measurement accuracy of PM emissions, using good engineering judgment. If you have a longer sampling time for PM emissions, calculate and validate cycle statistics separately for the gaseous and PM sampling periods.

(ii) *Engines without NO_X aftertreatment.* For other engines, operate the engine for at least 5 minutes, then sample emissions for at least 1 minute in each mode.

(2) For ramped-modal testing, start sampling at the beginning of the first mode and continue sampling until the end of the last mode. Calculate emissions and cycle statistics the same as for transient testing as specified in 40 CFR part 1065, subpart G.

(b) Measure emissions by testing the engine on a dynamometer with one of the following duty cycles (as specified) to determine whether it meets the emission standards in § 1042.101(a):

(1) *General cycle.* Use the 4-mode duty cycle or the corresponding ramped-modal cycle described in paragraph (a) of Appendix II of this part for commercial propulsion marine engines that are used with (or intended to be used with) fixed-pitch propellers, propeller-law auxiliary engines, and any other engines for which the other duty cycles of this section do not apply. Use this duty cycle also for commercial variable-speed propulsion marine engines that are used with (or intended to be used with) controllable-pitch propellers or with electrically coupled propellers, unless these engines are not intended for sustained operation (e.g., for at least 30 minutes) at all four modes when installed in the vessel.

(2) *Recreational marine engines.* Except as specified in paragraph (b)(3) of this section, use the 5-mode duty cycle or the corresponding ramped-modal cycle described in paragraph (b) of Appendix II of this part for recreational marine engines with maximum engine power at or above 37 kW.

(3) *Controllable-pitch and electrically coupled propellers.* Use the 4-mode duty cycle or the corresponding ramped-modal cycle described in paragraph (c) of Appendix II of this part for constant-speed propulsion marine engines that are used with (or intended to be used with) controllable-pitch propellers or with electrically coupled propellers. Use this duty cycle also for variable-speed propulsion marine engines that are used with (or intended to be used with) controllable-pitch propellers or with electrically coupled propellers if the duty cycles in paragraph (b)(1) and (b)(2) of this section do not apply.

(4) *Constant-speed auxiliary engines.* Use the 5-mode duty cycle or the corresponding ramped-modal cycle described in 40 CFR part 1039, Appendix II, paragraph (a) for constant-speed auxiliary engines.

(5) *Variable-speed auxiliary engines.* (i) Use the duty cycle specified in paragraph (b)(1) of this section for propeller-law auxiliary engines.

(ii) Use the 6-mode duty cycle or the corresponding ramped-modal cycle described in 40 CFR part 1039, Appendix II, paragraph (b) for variable-speed auxiliary engines with maximum engine power below 19 kW that are not propeller-law engines.

(iii) Use the 8-mode duty cycle or the corresponding ramped-modal cycle described in 40 CFR part 1039, Appendix III, paragraph (c) for variable-speed auxiliary engines with maximum engine power at or above 19 kW that are not propeller-law engines.

(c) During idle mode, operate the engine at its warm idle speed as described in 40 CFR part 1065.

(d) For constant-speed engines whose design prevents full-load operation for extended periods, you may ask for approval under 40 CFR 1065.10(c) to replace full-load operation with the maximum load for which the engine is designed to operate for extended periods.

(e) See 40 CFR part 1065 for detailed specifications of tolerances and calculations.

§ 1042.515 Test procedures related to not-to-exceed standards.

(a) This section describes the procedures to determine whether your engines meet the not-to-exceed emission standards in § 1042.101(c). These procedures may include any normal engine operation and ambient conditions that the engines may experience in use. Paragraphs (c) through (e) of this section define the limits of what we will consider normal engine operation and ambient conditions.

(b) Measure emissions with one of the following procedures:

(1) Remove the selected engines for testing in a laboratory. You may use an engine dynamometer to simulate normal operation, as described in this section. Use the equipment and procedures specified in 40 CFR part 1065 to conduct laboratory testing.

(2) Test the selected engines while they remain installed in a vessel. Use the equipment and procedures specified in 40 CFR part 1065 subpart J, to conduct field testing. Use fuel meeting the specifications of 40 CFR part 1065, subpart H, or a fuel typical of what you would expect the engine to use in service.

(c) Engine testing may occur under the following ranges of ambient conditions without correcting measured emission levels:

(1) Atmospheric pressure must be between 96.000 and 103.325 kPa, except that manufacturers may test at lower atmospheric pressures if their test facility is located at an altitude that makes it impractical to stay within this range. This pressure range is intended to allow testing under most weather conditions at all altitudes up to 1,100 feet above sea level.

(2) Ambient air temperature must be between 13 and 35 °C (or between 13 °C and 30 °C for engines not drawing intake air directly from a space that could be heated by the engine).

(3) Ambient water temperature must be between 5 and 27 °C.

(4) Ambient humidity must be between 7.1 and 10.7 grams of moisture per kilogram of dry air.

(d) Engine testing may occur at any conditions expected during normal operation but that are outside the conditions described in paragraph (b) of this section, as long as measured values are corrected to be equivalent to the nearest end of the specified range, using

good engineering judgment. Correct NO_X emissions for humidity as specified in 40 CFR part 1065, subpart G.

(e) The sampling period may not begin until the engine has reached stable operating temperatures. For example, this would include only engine operation after starting and after the engine thermostat starts modulating the engine's coolant temperature. The sampling period may not include engine starting.

(f) Apply the NTE standards specified in § 1042.101(c) to an engine family based on the zones and subzones corresponding to specific duty cycles and engine types as defined in Appendix III of this part. For an engine family certified to multiple duty cycles, the broadest applicable NTE zone applies for that family at the time of certification. Whenever an engine family is certified to multiple duty cycles and a specific engine from that family is tested for NTE compliance in use, determine the applicable NTE zone for that engine according to its in-use application. An engine family's NTE zone may be modified as follows:

(1) You may ask us to approve a narrower NTE zone for an engine family at the time of certification, based on information such as how that engine family is expected to normally operate in use. For example, if an engine family is always coupled to a pump or jet drive, the engine might be able to operate only within a narrow range of engine speed and power.

(2) You may ask us to approve a Limited Testing Region (LTR). An LTR is a region of engine operation, within the applicable NTE zone, where you have demonstrated that your engine family operates for no more than 5.0 percent of its normal in-use operation, on a time-weighted basis. You must specify an LTR using boundaries based on engine speed and power (or torque), where the LTR boundaries must coincide with some portion of the boundary defining the overall NTE zone. Any emission data collected within an LTR for a time duration that exceeds 5.0 percent of the duration of its respective NTE sampling period (as defined in paragraph (c)(3) of this section) will be excluded when determining compliance with the applicable NTE standards. Any emission data collected within an LTR for a time duration of 5.0 percent or less of the duration of the respective NTE sampling period will be included when determining compliance with the NTE standards.

(3) You must notify us if you design your engines for normal in-use operation outside the applicable NTE zone. If we learn that normal in-use operation for your engines includes other speeds and loads, we may specify a broader NTE zone, as long as the modified zone is limited to normal in-use operation for speeds greater than 70 percent of maximum test speed and loads greater than 30 percent of maximum power at maximum test speed (or 30 percent of maximum test torque for constant-speed engines).

(4) You may exclude emission data based on ambient or engine parameter limit values as follows:

(i) *NO_X catalytic aftertreatment minimum temperature.* For an engine equipped with a catalytic NO_X aftertreatment system, exclude NO_X emission data that is collected when the exhaust temperature is less than 250 °C, as measured within 30 cm downstream of the last NO_X aftertreatment device. Where there are parallel paths, measure the temperature 30 cm downstream of the last NO_X aftertreatment device in the path with the greatest exhaust flow.

(ii) *Oxidizing aftertreatment minimum temperature.* For an engine equipped with an oxidizing catalytic aftertreatment system, exclude HC, CO, and PM emission data that is collected when the exhaust temperature is less than 250 °C, as measured within 30 cm downstream of the last oxidizing aftertreatment device. Where there are parallel paths, measure the temperature 30 cm downstream of the last oxidizing aftertreatment device in the path with the greatest exhaust flow.

(iii) *Other parameters.* You may request our approval for other minimum or maximum ambient or engine parameter limit values at the time of certification.

(g) For engines equipped with emission controls that include discrete regeneration events, if a regeneration event occurs during the NTE test, the averaging period must be at least as long as the time between the events multiplied by the number of full regeneration events within the sampling period. This requirement applies only for engines that send an electronic signal indicating the start of the regeneration event.

§ 1042.520 What testing must I perform to establish deterioration factors?

Sections 1042.240 and 1042.245 describe the required methods for testing to establish deterioration factors for an engine family.

§ 1042.525 How do I adjust emission levels to account for infrequently regenerating aftertreatment devices?

This section describes how to adjust emission results from engines using aftertreatment technology with infrequent regeneration events. See paragraph (e) of this section for how to adjust ramped-modal testing. See paragraph (f) of this section for how to adjust discrete-mode testing. For this section, ''regeneration'' means an intended event during which emission levels change while the system restores aftertreatment performance. For example, exhaust gas temperatures may increase temporarily to remove sulfur from adsorbers or to oxidize accumulated particulate matter in a trap. For this section, ''infrequent'' refers to regeneration events that are expected to occur on average less than once over the applicable transient duty cycle or ramped-modal cycle, or on average less than once per typical mode in a discrete-mode test.

(a) *Developing adjustment factors.* Develop an upward adjustment factor and a downward adjustment factor for each pollutant based on measured emission data and observed regeneration frequency. Adjustment factors should generally apply to an entire engine family, but you may develop separate adjustment factors for different engine configurations within an engine family. If you use adjustment factors for certification, you must identify the frequency factor, F, from paragraph (b) of this section in your application for certification and use the adjustment factors in all testing for that engine family. You may use carryover or carry-across data to establish adjustment factors for an engine family, as described in § 1042.235(d), consistent with good engineering judgment. All adjustment factors for regeneration are additive. Determine adjustment factors separately for different test segments. For example, determine separate adjustment factors for different modes of a discrete-mode steady-state test. You may use either of the following different approaches for engines that use aftertreatment with infrequent regeneration events:

(1) You may disregard this section if regeneration does not significantly affect emission levels for an engine family (or configuration) or if it is not practical to identify when regeneration occurs. If you do not use adjustment factors under this section, your engines must meet emission standards for all testing, without regard to regeneration.

(2) If your engines use aftertreatment technology with extremely infrequent regeneration and you are unable to apply the provisions of this section, you may ask us to approve an alternate methodology to account for regeneration events.

(b) *Calculating average adjustment factors.* Calculate the average adjustment factor (EF_A) based on the following equation:

$EF_A = (F)(EF_H) + (1-F)(EF_L)$

Where:

F = the frequency of the regeneration event during normal in-use operation, expressed in terms of the fraction of equivalent tests during which the regeneration occurs. You may determine F from in-use operating data or running replicate tests. For example, if you observe that the regeneration occurs 125 times during 1000 MW-hrs of operation, and your engine typically accumulates 1 MW-hr per test, F would be (125) ÷ (1000) ÷ (1) = 0.125.

EF_H = Measured emissions from a test segment in which the regeneration occurs.

EF_L = Measured emissions from a test segment in which the regeneration does not occur.

(c) *Applying adjustment factors.* Apply adjustment factors based on whether regeneration occurs during the test run. You must be able to identify regeneration in a way that is readily apparent during all testing.

(1) If regeneration does not occur during a test segment, add an upward adjustment factor to the measured emission rate. Determine the upward adjustment factor (UAF) using the following equation:

$UAF = EF_A - EF_L$

(2) If regeneration occurs or starts to occur during a test segment, subtract a downward adjustment factor from the measured emission rate. Determine the downward adjustment factor (DAF) using the following equation:

$DAF = EF_H - EF_A$

(d) *Sample calculation.* If EF_L is 0.10 g/kW-hr, EF_H is 0.50 g/kW-hr, and F is 0.1 (the regeneration occurs once for each ten tests), then:

EF_A = (0.1)(0.5 g/kW-hr) + (1.0 − 0.1)(0.1 g/kW-hr) = 0.14 g/kW-hr.

UAF = 0.14 g/kW-hr − 0.10 g/kW-hr = 0.04 g/kW-hr.

DAF = 0.50 g/kW-hr − 0.14 g/kW-hr = 0.36 g/kW-hr.

(e) *Ramped-modal testing.* Develop a single sets of adjustment factors for the entire test. If a regeneration has started but has not been completed when you reach the end of a test, use good engineering judgment to reduce your downward adjustments to be proportional to the emission impact that occurred in the test.

(f) *Discrete-mode testing.* Develop separate adjustment factors for each test mode. If a regeneration has started but has not been completed when you reach the end of the sampling time for a test mode extend the sampling period for that mode until the regeneration is completed.

Subpart G—Special Compliance Provisions

§ 1042.601 General compliance provisions for marine engines and vessels.

Engine and vessel manufacturers, as well as owners, operators, and rebuilders of engines and vessels subject to the requirements of this part, and all other persons, must observe the provisions of this part, the requirements and prohibitions in 40 CFR part 1068, and the provisions of the Clean Air Act. The provisions of 40 CFR part 1068 apply for compression-ignition marine engines as specified in that part, subject to the following provisions:

(a) The following prohibitions apply with respect to recreational marine engines and recreational vessels:

(1) Installing a recreational marine engine in a vessel that is not a recreational vessel is a violation of 40 CFR 1068.101(a)(1).

(2) For a vessel with an engine that is certified and labeled as a recreational marine engine, using it in a manner inconsistent with its intended use as a recreational vessel violates 40 CFR 1068.101(a)(1), except as allowed by this chapter.

(b) Subpart I of this part describes how the prohibitions of 40 CFR 1068.101(a)(1) apply for remanufactured engines. The provisions of 40 CFR 1068.105 do not allow the installation of a new remanufactured engine in a vessel that is defined as a ''new vessel'' unless the remanufactured engine is subject to the same standards as the standards applicable to freshly manufactured engines of the required model year.

(c) The provisions of 40 CFR 1068.120 apply when rebuilding marine engines, except as specified in subpart I of this part. The following additional requirements also apply when rebuilding marine engines equipped with exhaust aftertreatment:

(1) Follow all instructions from the engine manufacturer and aftertreatment manufacturer for checking, repairing, and replacing aftertreatment components. For example, you must replace the catalyst if the catalyst assembly is stamped with a build date more than ten years ago and the manufacturer's instructions state that catalysts over ten years old must be replaced when the engine is rebuilt.

(2) Measure pressure drop across the catalyst assembly to ensure that it is neither higher nor lower than the manufacturer's specifications and repair or replace exhaust-system components as needed to bring the pressure drop within the manufacturer's specifications.

(3) For engines equipped with exhaust sensors, verify that sensor outputs are within the manufacturer's recommended range and repair or replace any malfunctioning components (sensors, catalysts, or other components).

(d) The provisions of § 1042.635 for the national security exemption apply instead of 40 CFR 1068.225.

(e) For replacement engines, apply the provisions of 40 CFR 1068.240 as described in § 1042.615.

(f) For the purpose of meeting the defect-reporting requirements in 40 CFR 1068.501, if you manufacture other nonroad engines that are substantially similar to your marine engines, you may consider defects using combined marine and non-marine families.

(g) For a marine engine labeled as requiring the use of ultra low-sulfur diesel fuel, is a violation of 40 CFR 1068.101(b)(1) to operate it with higher-sulfur fuel. It is also a violation of 40 CFR 1068.101(b)(1) if an engine installer or vessel manufacturer fails to follow the engine manufacturer's emission-related installation instructions when installing a certified engine in a marine vessel.

§ 1042.605 Dressing engines already certified to other standards for nonroad or heavy-duty highway engines for marine use.

(a) *General provisions.* If you are an engine manufacturer (including someone who marinizes a land-based engine), this section allows you to introduce new marine engines into U.S. commerce if they are already certified to the requirements that apply to compression-ignition engines under 40 CFR parts 85 and 86 or 40 CFR part 89, 92, 1033, or 1039 for the appropriate model year. If you comply with all the provisions of this section, we consider the certificate issued under 40 CFR part 86, 89, 92, 1033, or 1039 for each engine to also be a valid certificate of conformity under this part 1042 for its model year, without a separate application for certification under the requirements of this part 1042.

(b) *Vessel-manufacturer provisions.* If you are not an engine manufacturer, you may install an engine certified for the appropriate model year under 40 CFR part 86, 89, 92, 1033, or 1039 in a marine vessel as long as you do not make any of the changes described in paragraph (d)(3) of this section and you meet the requirements of paragraph (e) of this section. If you modify the non-marine engine in any of the ways

described in paragraph (d)(3) of this section, we will consider you a manufacturer of a new marine engine. Such engine modifications prevent you from using the provisions of this section.

(c) *Liability.* Engines for which you meet the requirements of this section are exempt from all the requirements and prohibitions of this part, except for those specified in this section. Engines exempted under this section must meet all the applicable requirements from 40 CFR parts 85 and 86 or 40 CFR part 89, 92, 1033, or 1039. This paragraph (c) applies to engine manufacturers, vessel manufacturers that use such an engine, and all other persons as if the engine were used in its originally intended application. The prohibited acts of 40 CFR 1068.101(a)(1) apply to these new engines and vessels; however, we consider the certificate issued under 40 CFR part 86, 89, 92, 1033, or 1039 for each engine to also be a valid certificate of conformity under this part 1042 for its model year. If we make a determination that these engines do not conform to the regulations during their useful life, we may require you to recall them under 40 CFR part 85, 89, 92, or 1068.

(d) *Specific criteria and requirements.* If you are an engine manufacturer and meet all the following criteria and requirements regarding your new marine engine, the engine is eligible for an exemption under this section:

(1) You must produce it by marinizing an engine covered by a valid certificate of conformity from one of the following programs:

(i) Heavy-duty highway engines (40 CFR part 86).

(ii) Land-based compression-ignition nonroad engines (40 CFR part 89 or 1039).

(iii) Locomotives (40 CFR part 92 or 1033). To be eligible for dressing under this section, the engine must be from a locomotive certified to standards that are at least as stringent as either the standards applicable to new marine engines or freshly manufactured locomotives in the model year that the engine is being dressed.

(2) The engine must have the label required under 40 CFR part 86, 89, 92, 1033, or 1039.

(3) You must not make any changes to the certified engine that could reasonably be expected to increase its emissions. For example, if you make any of the following changes to one of these engines, you do not qualify for the engine dressing exemption:

(i) Change any fuel system parameters from the certified configuration, or change, remove, or fail to properly install any other component, element of design, or calibration specified in the engine manufacturer's application for certification. This includes aftertreatment devices and all related components.

(ii) Replacing an original turbocharger, except that small-volume engine manufacturers may replace an original turbocharger on a recreational engine with one that matches the performance of the original turbocharger.

(iii) Modify or design the marine engine cooling or aftercooling system so that temperatures or heat rejection rates are outside the original engine manufacturer's specified ranges.

(4) You must show that fewer than 10 percent of the engine family's total sales in the United States are used in marine applications. This includes engines used in any application, without regard to which company manufactures the vessel or equipment. Show this as follows:

(i) If you are the original manufacturer of the engine, base this showing on your sales information.

(ii) In all other cases, you must confirm this based on your best estimate of the original manufacturer's sales information.

(e) *Labeling and documentation.* If you are an engine manufacturer or vessel manufacturer using this exemption, you must do all of the following:

(1) Make sure the original engine label will remain clearly visible after installation in the vessel.

(2) Add a permanent supplemental label to the engine in a position where it will remain clearly visible after installation in the vessel. In your engine label, do the following:

(i) Include the heading: ''Marine Engine Emission Control Information''.

(ii) Include your full corporate name and trademark.

(iii) State: ''This engine was marinized without affecting its emission controls.''.

(iv) State the date you finished marinizing the engine (month and year).

(3) Send the Designated Compliance Officer a signed letter by the end of each calendar year (or less often if we tell you) with all the following information:

(i) Identify your full corporate name, address, and telephone number.

(ii) List the engine models for which you expect to use this exemption in the coming year and describe your basis for meeting the sales restrictions of paragraph (d)(4) of this section.

(iii) State: ''We prepare each listed engine model for marine application without making any changes that could increase its certified emission levels, as described in 40 CFR 1042.605.''.

(f) *Failure to comply.* If your engines do not meet the criteria listed in paragraph (d) of this section, they will be subject to the standards, requirements, and prohibitions of this part 1042 and the certificate issued under 40 CFR part(s) 86, 89, 92, 1033, or 1039 will not be deemed to also be a certificate issued under this part 1042. Introducing these engines into U.S. commerce as marine engines without a valid exemption or certificate of conformity under this part violates the prohibitions in 40 CFR 1068.101(a)(1).

(g) *Data submission.* (1) If you are both the original manufacturer and marinizer of an exempted engine, you must send us emission test data on the appropriate marine duty cycles. You can include the data in your application for certification or in the letter described in paragraph (e)(3) of this section.

(2) If you are the original manufacturer of an exempted engine that is marinized by a post-manufacture marinizer, you may be required to send us emission test data on the appropriate marine duty cycles. If such data are requested you will be allowed a reasonable amount of time to collect the data.

(h) *Participation in averaging, banking and trading.* Engines adapted for marine use under this section may not generate or use emission credits under this part 1042. These engines may generate credits under the ABT provisions in 40 CFR part(s) 86, 89, 92, 1033, or 1039, as applicable. These engines must use emission credits under 40 CFR part(s) 86, 89, 92, 1033, or 1039 as applicable if they are certified to an FEL that exceeds an emission standard.

(i) *Operator requirements.* The requirements specified for vessel manufacturers, owners, and operators in this subpart (including requirements in 40 CFR part 1068) apply to these engines whether they are certified under this part 1042 or another part as allowed by this section.

§ 1042.610 Certifying auxiliary marine engines to land-based standards.

This section applies to auxiliary marine engines that are identical to certified land-based engines. See § 1042.605 for provisions that apply to propulsion marine engines or auxiliary marine engines that are modified for marine applications.

(a) *General provisions.* If you are an engine manufacturer, this section allows you to introduce new marine engines into U.S. commerce if they are already certified to the requirements that apply to compression-ignition engines under

40 CFR part 89 or 1039 for the appropriate model year. If you comply with all the provisions of this section, we consider the certificate issued under 40 CFR part 89 or 1039 for each engine to also be a valid certificate of conformity under this part 1042 for its model year, without a separate application for certification under the requirements of this part 1042.

(b) *Vessel-manufacturer provisions.* If you are not an engine manufacturer, you may install an engine certified for land-based applications in a marine vessel as long as you meet all the qualifying criteria and requirements specified in paragraphs (d) and (e) of this section. If you modify the non-marine engine, we will consider you a manufacturer of a new marine engine. Such engine modifications prevent you from using the provisions of this section.

(c) *Liability.* Engines for which you meet the requirements of this section are exempt from all the requirements and prohibitions of this part, except for those specified in this section. Engines exempted under this section must meet all the applicable requirements from 40 CFR part 89 or 1039. This paragraph (c) applies to engine manufacturers, vessel manufacturers that use such an engine, and all other persons as if the engine were used in its originally intended application. The prohibited acts of 40 CFR 1068.101(a)(1) apply to these new engines and vessels; however, we consider the certificate issued under 40 CFR part 89 or 1039 for each engine to also be a valid certificate of conformity under this part 1042 for its model year. If we make a determination that these engines do not conform to the regulations during their useful life, we may require you to recall them under 40 CFR part 89 or 1068.

(d) *Qualifying criteria.* If you are an engine manufacturer and meet all the following criteria and requirements regarding your new marine engine, the engine is eligible for an exemption under this section:

(1) The marine engine must be identical in all material respects to a land-based engine covered by a valid certificate of conformity for the appropriate model year showing that it meets emission standards for engines of that power rating under 40 CFR part 89 or 1039.

(2) The engines may not be used as propulsion marine engines.

(3) You must show that the number of auxiliary marine engines from the engine family must be smaller than the number of land-based engines from the engine family sold in the United States, as follows:

(i) If you are the original manufacturer of the engine, base this showing on your sales information.

(ii) In all other cases, you must get the original manufacturer of the engine to confirm this based on its sales information.

(e) *Specific requirements.* If you are an engine manufacturer or vessel manufacturer using this exemption, you must do all of the following:

(1) Make sure the original engine label will remain clearly visible after installation in the vessel. This label or a supplemental label must identify that the original certification is valid for auxiliary marine applications.

(2) Send a signed letter to the Designated Compliance Officer by the end of each calendar year (or less often if we tell you) with all the following information:

(i) Identify your full corporate name, address, and telephone number.

(ii) List the engine models you expect to produce under this exemption in the coming year and describe your basis for meeting the sales restrictions of paragraph (d)(3) of this section.

(iii) State: ''We produce each listed engine model for marine application without making any changes that could increase its certified emission levels, as described in 40 CFR 1042.610.''.

(3) If you are the certificate holder, you must describe in your application for certification how you plan to produce engines for both land-based and auxiliary marine applications, including projected sales of auxiliary marine engines to the extent this can be determined. If the projected marine sales are substantial, we may ask for the year-end report of production volumes to include actual auxiliary marine engine sales.

(f) *Failure to comply.* If your engines do not meet the criteria listed in paragraph (d) of this section, they will be subject to the standards, requirements, and prohibitions of this part 1042 and the certificate issued under 40 CFR part 89 or 1039 will not be deemed to also be a certificate issued under this part 1042. Introducing these engines into U.S. commerce as marine engines without a valid exemption or certificate of conformity under this part 1042 violates the prohibitions in 40 CFR 1068.101(a)(1).

(g) *Participation in averaging, banking and trading.* Engines using this exemption may not generate or use emission credits under this part 1042. These engines may generate credits under the ABT provisions in 40 CFR part 89 or 1039, as applicable. These engines must use emission credits under 40 CFR part 89 or 1039 as applicable if they are certified to an FEL that exceeds an emission standard.

(h) *Operator requirements.* The requirements specified for vessel manufacturers, owners, and operators in this subpart (including requirements in 40 CFR part 1068) apply to these engines whether they are certified under this part 1042 or another part as allowed by this section.

§ 1042.615 Replacement engine exemption.

For replacement engines, apply the provisions of 40 CFR 1068.240 as described in this section.

(a) This paragraph (a) applies instead of the provisions of 40 CFR 1068.240(b)(3). The prohibitions in 40 CFR 1068.101(a)(1) do not apply for a new replacement engine meeting Tier 3 standards if the engine being replaced is a Tier 3 or earlier engine (this applies where new engines would otherwise be subject to Tier 4 or later standards). For other cases, the prohibitions in 40 CFR 1068.101(a)(1) do not apply to a new replacement engine if all the following conditions are met:

(1) You use good engineering judgment to determine that no engine certified to the current requirements of this part is produced by any manufacturer with the appropriate physical or performance characteristics to repower the vessel.

(2) You make a record of your determination for each replacement engine with the following information and keep these records for eight years:

(i) If you determine that no engine certified to the current requirements of this part is available with the appropriate performance characteristics, explain why certified engines produced by you and other manufacturers cannot be used as a replacement because they are not similar to the engine being replaced in terms of power or speed.

(ii) You may determine that all engines certified to the current requirements of this part that have appropriate performance characteristics are not available because they do not have the appropriate physical characteristics. If this is the case, explain why these certified engines produced by you and other manufacturers cannot be used as a replacement because their weight or dimensions are substantially different than those of the engine being replaced, or because they will not fit within the vessel's engine compartment or engine room.

(iii) In evaluating appropriate physical or performance characteristics, you may account for compatibility with vessel components you would not

otherwise replace when installing a new engine, including transmissions or reduction gears, drive shafts or propeller shafts, propellers, cooling systems, operator controls, or electrical systems for generators or indirect-drive configurations. If you make your determination on this basis, you must identify the vessel components that are incompatible with engines certified to current standards and explain how they are incompatible and why it would be unreasonable to replace them.

(iv) In evaluating appropriate physical or performance characteristics, you may account for compatibility in a set of two or more propulsion engines on a vessel where only one of the engines needs replacement, but only if each engine not needing replacement has operated for less than 75 percent of its applicable useful life in hours or years (see § 1042.101). If any engine not otherwise needing replacement exceeds this 75 percent threshold, your determination must consider replacement of all the propulsion engines.

(v) In addition to the determination specified in paragraph (a)(1) of this section, you must make a separate determination for your own product line addressing every tier of emission standards that is more stringent than the emission standards for the engine being replaced. For example, if the engine being replaced was built before the Tier 1 standards started to apply and engines of that size are currently subject to Tier 3 standards, you must consider whether any Tier 1 or Tier 2 engines that you produce have the appropriate physical and performance characteristics for replacing the old engine; if you can produce a Tier 2 engine with the appropriate physical and performance characteristics, you must use it as the replacement engine.

(3) You must notify us within 30 days after you ship each replacement engine under this section. Your notification must include all the following things and be signed by an authorized representative of your company:

(i) A copy of your records describing how you made the determination described in paragraph (a)(2) of this section for this particular engine.

(ii) The total number of replacement engines you have shipped in the applicable calendar year, from all your marine engine models.

(iii) The following statement:

I certify that the statements and information in the enclosed document are true, accurate, and complete to the best of my knowledge. I am aware that there are significant civil and criminal penalties for submitting false statements and information, or omitting required statements and information.

(4) We may reduce the reporting and recordkeeping requirements in this section.

(b) Modifying a vessel to significantly increase its value within six months after installing a replacement engine produced under this section is a violation of 40 CFR 1068.101(a)(1).

(c) We may void an exemption for an engine if we determine that any of the conditions described in paragraph (a) of this section are not met.

§ 1042.620 Engines used solely for competition.

The provisions of this section apply for new engines and vessels built on or after January 1, 2009.

(a) We may grant you an exemption from the standards and requirements of this part for a new engine on the grounds that it is to be used solely for competition. The requirements of this part, other than those in this section, do not apply to engines that we exempt for use solely for competition. The prohibitions in § 1068.101(a)(1) do not apply to engines exempted under this section.

(b) We will exempt engines that we determine will be used solely for competition. The basis of our determination is described in paragraphs (c) and (d) of this section. Exemptions granted under this section are good for only one model year and you must request renewal for each subsequent model year. We will not approve your renewal request if we determine the engine will not be used solely for competition.

(c) Engines meeting all the following criteria are considered to be used solely for competition:

(1) Neither the engine nor any vessels containing the engine may be displayed for sale in any public dealership or otherwise offered for sale to the general public.

(2) Sale of the vessel in which the engine is installed must be limited to professional racing teams, professional racers, or other qualified racers. Keep records documenting this, such as a letter requesting an exempted engine.

(3) The engine and the vessel in which it is installed must have performance characteristics that are substantially superior to noncompetitive models.

(4) The engines are intended for use only as specified in paragraph (e) of this section.

(d) You may ask us to approve an exemption for engines not meeting the applicable criteria listed in paragraph (c) of this section as long as you have clear and convincing evidence that the engines will be used solely for competition.

(e) Engines will not be considered to be used solely for competition if they are ever used for any recreational or other noncompetitive purpose. This means that their use must be limited to competition events sanctioned by the U.S. Coast Guard or another public organization with authorizing permits for participating competitors. Operation for such engines may include only racing events or trials to qualify for racing events. Authorized attempts to set speed records (and the associated official trials) are also considered racing events. Any use of exempt engines in recreational events, such as poker runs and lobsterboat races, is a violation of 40 CFR 1068.101(b)(4).

(f) You must permanently label engines exempted under this section to clearly indicate that they are to be used only for competition. Failure to properly label an engine will void the exemption for that engine.

(g) If we request it, you must provide us any information we need to determine whether the engines or vessels are used solely for competition. This would include documentation regarding the number of engines and the ultimate purchaser of each engine. Keep these records for five years.

§ 1042.625 Special provisions for engines used in emergency applications.

(a) Except as specified in paragraph (d) of this section, the prohibitions in § 1068.101(a)(1) do not apply to a new engine that is subject to Tier 4 standards if the following conditions are met:

(1) The engine is intended for installation in one of the following vessels or applications:

(i) A lifeboat approved by the U.S. Coast Guard under approval series 160.135 (see for example 46 CFR 199.201(a)(1)), as long as such a vessel is not also used as a launch or tender.

(ii) A rescue boat approved by the U.S. Coast Guard under approval series 160.156 (see for example 46 CFR 199.202(a)).

(iii) Generator sets or other auxiliary equipment that qualify as final emergency power sources under 46 CFR part 112.

(2) The engine meets the Tier 3 emission standards specified in § 1042.101 as specified in 40 CFR 1068.265.

(3) The engine is used only for its intended purpose, as specified on the emission control information label.

(b) Except as specified in paragraph (d) of this section, the prohibitions in § 1068.101(a)(1) do not apply to a new

engine that is subject to Tier 3 standards according to the following provisions:

(1) The engine must be intended for installation in a lifeboat or a rescue boat as specified in paragraph (a)(1)(i) or (ii) of this section.

(2) This exemption is available from the initial effective date for the Tier 3 standards until the engine model (or one of comparable size, weight, and performance) has been certified as complying with the Tier 3 standards and Coast Guard requirements.

(3) The engine must meet the Tier 2 emission standards specified in Appendix I of this part as specified in 40 CFR 1068.265.

(c) If you introduce an engine into U.S. commerce under this section, you must meet the labeling requirements in § 1042.135, but add one of the following statements instead of the compliance statement in § 1042.135(c)(10):

(1) For lifeboats and rescue boats, add the following statement:

THIS ENGINE DOES NOT COMPLY WITH CURRENT U.S. EPA EMISSION STANDARDS UNDER 40 CFR 1042.625 AND IS FOR USE SOLELY IN LIFEBOATS OR RESCUE BOATS (COAST GUARD APPROVAL SERIES 160.135 OR 160.156). INSTALLATION OR USE OF THIS ENGINE IN ANY OTHER APPLICATION MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.

(2) For engines serving as final emergency power sources, add the following statement:

THIS ENGINE DOES NOT COMPLY WITH CURRENT U.S. EPA EMISSION STANDARDS UNDER 40 CFR 1042.625 AND IS FOR USE SOLELY IN EMERGENCY EQUIPMENT REGULATED BY 46 CFR 112. INSTALLATION OR USE OF THIS ENGINE IN ANY OTHER APPLICATION MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.

(d) Introducing into commerce a vessel containing an engine exempted under this section violates the prohibitions in 40 CFR 1068.101(a)(1) where the vessel is not covered by paragraph (a) or (b) of this section, unless it is exempt under a different provision. Similarly, using such an engine or vessel as something other than a lifeboat, rescue boat, or emergency engine as specified in paragraph (a)(1) of this section violates the prohibitions in 40 CFR 1068.101(a)(1), unless it is exempt under a different provision.

§ 1042.630 Personal-use exemption.

This section applies to individuals who manufacture vessels for personal use. If you and your vessel meet all the conditions of this section, the vessel and its engine are considered to be exempt from the standards and requirements of this part that apply to new engines and new vessels. The prohibitions in § 1068.101(a)(1) do not apply to engines exempted under this section. For example, you may install an engine that was not certified as a marine engine.

(a) The vessel may not be manufactured from a previously certified vessel, nor may it be manufactured from a partially complete vessel that is equivalent to a certified vessel. The vessel must be manufactured primarily from unassembled components, but may incorporate some preassembled components. For example, fully preassembled steering assemblies may be used. You may also power the vessel with an engine that was previously used in a highway or land-based nonroad application.

(b) The vessel may not be sold within five years after the date of final assembly.

(c) No individual may manufacture more than one vessel in any ten-year period under this exemption.

(d) You may not use the vessel in any revenue-generating service or for any other commercial purpose, except that you may use a vessel exempt under this section for commercial fishing that you personally do.

(e) This exemption may not be used to circumvent the requirements of this part or the requirements of the Clean Air Act. For example, this exemption would not cover a case in which a person sells an almost completely assembled vessel to another person, who would then complete the assembly. This would be considered equivalent to the sale of the complete new vessel. This section also does not allow engine manufacturers to produce new engines that are exempt from emission standards and it does not provide an exemption from the prohibition against tampering with certified engines.

(f) The vessel must be a vessel that is not classed or subject to Coast Guard inspections or surveys.

§ 1042.635 National security exemption.

The standards and requirements of this part and prohibitions in § 1068.101(a)(1) do not apply to engines exempted under this section.

(a) You are eligible for the exemption for national security only if you are a manufacturer.

(b) Your engine is exempt without a request if it will be used or owned by an agency of the federal government responsible for national defense, where the vessel has armor, permanently attached weaponry, specialized electronic warfare systems, unique stealth performance requirements, and/or unique combat maneuverability requirements.

(c) You may request a national security exemption for engines not meeting the conditions of paragraph (b) of this section, as long as your request is endorsed by an agency of the federal government responsible for national defense. In your request, explain why you need the exemption.

(d) Add a legible label, written in English, to all engines exempted under this section. The label must be permanently secured to a readily visible part of the engine needed for normal operation and not normally requiring replacement, such as the engine block. This label must include at least the following items:

(1) The label heading ''EMISSION CONTROL INFORMATION''.

(2) Your corporate name and trademark.

(3) Engine displacement, family identification, and model year of the engine (as applicable), or whom to contact for further information.

(4) The statement ''THIS ENGINE HAS AN EXEMPTION FOR NATIONAL SECURITY UNDER 40 CFR 1042.635.''.

§ 1042.640 Special provisions for branded engines.

The following provisions apply if you identify the name and trademark of another company instead of your own on your emission control information label, as provided by § 1042.135(c)(2):

(a) You must have a contractual agreement with the other company that obligates that company to take the following steps:

(1) Meet the emission warranty requirements that apply under § 1042.120. This may involve a separate agreement involving reimbursement of warranty-related expenses.

(2) Report all warranty-related information to the certificate holder.

(b) In your application for certification, identify the company whose trademark you will use.

(c) You remain responsible for meeting all the requirements of this chapter, including warranty and defect-reporting provisions.

§ 1042.650 Migratory vessels.

The provisions of this section address concerns for vessel owners related to extended use of vessels with Tier 4 engines outside the United States where ultra low-sulfur diesel fuel is not available.

(a) *Temporary exemption.* A vessel owner may ask us for a temporary

exemption from the tampering prohibition in 40 CFR 1068.101(b)(1) for a vessel if it will operate only in areas outside the United States where ULSD is not available. In your request, describe where the vessel will operate, how long it will operate there, why ULSD will be unavailable, and how you will modify the engine, including its emission controls. If we approve your request, you may modify the engine, but only as needed to disable or remove the emission controls needed for meeting the Tier 4 standards. You must return the engine to its original certified configuration before the vessel returns to the United States to avoid violating the tampering prohibition in 40 CFR 1068.101(b)(1). We may set additional conditions to prevent circumvention of the provisions of this part.

(b) *SOLAS exemption.* We may approve a permanent exemption from the prohibitions in 40 CFR 1068.101(a)(1) for an engine that is subject to Tier 4 standards as described in this paragraph (b).

(1) Vessel owners may ask for a permanent exemption from the Tier 4 standards for an engine that will be installed on vessels that will operate for extended periods outside the United States, provided they demonstrate all of the following are true:

(i) Prior to introduction into service, the vessel will comply with applicable certification requirements for international safety pursuant to the U.S. Coast Guard and the International Convention for the Protection of Life at Sea (SOLAS). The vessel owner must maintain compliance with these requirements for the life of the exempted engine.

(ii) The vessel will be used in areas outside of the United States where ULSD will not be available.

(iii) The mix of vessels with engines certified to Tier 3 or earlier standards in the owner's current fleet and the owner's current business operation of those vessels makes the exemption necessary. Note that because of the large fraction of pre-Tier 4 engines in the fleet prior to 2021, a request for a Tier 4 exemption prior to that year must clearly demonstrate that unusual circumstances apply.

(2) An engine exempted under this paragraph (b) must meet the Tier 3 emission standards described in § 1402.101, subject to the procedural requirements of 40 CFR 1068.265.

(3) If you introduce an engine into U.S. commerce under this section, you must meet the labeling requirements in § 1042.135, but add the following statement instead of the compliance statement in § 1042.135(c)(10):

THIS ENGINE DOES NOT COMPLY WITH CURRENT U.S. EPA EMISSION STANDARDS UNDER 40 CFR 1042.650 AND IS FOR USE SOLELY IN SOLAS VESSELS. INSTALLATION OR USE OF THIS ENGINE IN ANY OTHER APPLICATION MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.

(4) Operating a vessel containing an engine exempted under this paragraph (b) violates the prohibitions in 40 CFR 1068.101(a)(1) if the vessel in not in full compliance with applicable requirements for international safety specified in paragraph (b)(1)(i) of this section.

(c) *Vessels less than 500 gross tons.* In unusual circumstances for vessels less than 500 gross tons, we may approve a vessel owner's request for a permanent exemption from the prohibitions in 40 CFR 1068.101(a)(1) for an engine that is subject to Tier 4 standards that will operate for extended periods outside the United States without it being in compliance with applicable certification requirements for international safety. We may set appropriate additional conditions on such exemptions, and may void the exemption if those conditions are not met.

§ 1042.660 Requirements for vessel manufacturers, owners, and operators.

(a) The provisions of 40 CFR part 94, subpart K, apply to manufacturers, owners, and operators of marine vessels that contain Category 3 engines subject to the provisions of 40 CFR part 94, subpart A.

(b) For vessels equipped with emission controls requiring the use of specific fuels, lubricants, or other fluids, owners and operators must comply with the manufacturer/remanufacturer's specifications for such fluids when operating the vessels. Failure to comply with the requirements of this paragraph is a violation of 40 CFR 1068.101(b)(1).

(c) For vessels equipped with SCR systems requiring the use of urea or other reductants, owners and operators must report to us within 30 days any operation of such vessels without the appropriate reductant. Failure to comply with the requirements of this paragraph is a violation of 40 CFR 1068.101(a)(2).

Subpart H—Averaging, Banking, and Trading for Certification

§ 1042.701 General provisions.

(a) You may average, bank, and trade (ABT) emission credits for purposes of certification as described in this subpart to show compliance with the standards of this part. Participation in this program is voluntary.

(b) The definitions of subpart J of this part apply to this subpart. The following definitions also apply:

(1) *Actual emission credits* means emission credits you have generated that we have verified by reviewing your final report.

(2) *Applicable emission standard* means an emission standard that is specified in subpart B of this part. Note that for other subparts, ''applicable emission standard'' is defined to also include FELs.

(3) *Averaging set* means a set of engines in which emission credits may be exchanged only with other engines in the same averaging set.

(4) *Broker* means any entity that facilitates a trade of emission credits between a buyer and seller.

(5) *Buyer* means the entity that receives emission credits as a result of a trade.

(6) *Reserved emission credits* means emission credits you have generated that we have not yet verified by reviewing your final report.

(7) *Seller* means the entity that provides emission credits during a trade.

(8) *Standard* means the emission standard that applies under subpart B of this part for engines not participating in the ABT program of this subpart.

(9) *Trade* means to exchange emission credits, either as a buyer or seller.

(c) Emission credits may be exchanged only within an averaging set. Except as specified in paragraph (d) of this section, the following criteria define the applicable averaging sets:

(1) Recreational engines.

(2) Commercial Category 1 engines.

(3) Category 2 engines.

(d) Emission credits generated by commercial Category 1 engine families may be used for compliance by Category 2 engine families. Such credits must be discounted by 25 percent.

(e) You may not use emission credits generated under this subpart to offset any emissions that exceed an FEL or standard. This applies for all testing, including certification testing, in-use testing, selective enforcement audits, and other production-line testing. However, if emissions from an engine exceed an FEL or standard (for example, during a selective enforcement audit), you may use emission credits to recertify the engine family with a higher FEL that applies only to future production.

(f) Engine families that use emission credits for one or more pollutants may not generate positive emission credits for another pollutant.

(g) Emission credits may be used in the model year they are generated or in

future model years. Emission credits may not be used for past model years.

(h) You may increase or decrease an FEL during the model year by amending your application for certification under § 1042.225.

(i) You may use NO_X+HC credits to show compliance with a NO_X emission standard or use NO_X credits to show compliance with a NO_X+HC emission standard.

§ 1042.705 Generating and calculating emission credits.

The provisions of this section apply separately for calculating emission credits for NO_X, NO_X+HC, or PM.

(a) For each participating family, calculate positive or negative emission credits relative to the otherwise applicable emission standard. Calculate positive emission credits for a family that has an FEL below the standard. Calculate negative emission credits for a family that has an FEL above the standard. Sum your positive and negative credits for the model year before rounding. Round calculated emission credits to the nearest kilogram (kg), using consistent units throughout the following equation:

$$\text{Emission credits (kg)} = (\text{Std} - \text{FEL}) \times (\text{Volume}) \times (\text{Power}) \times (\text{LF}) \times (\text{UL}) \times (10^{-3})$$

Where:

Std = The emission standard, in g/kW-hr.

FEL = The family emission limit for the engine family, in g/kW-hr.

Volume = The number of engines eligible to participate in the averaging, banking, and trading program within the given engine family during the model year, as described in paragraph (c) of this section.

Power = The average value of maximum engine power of all the engine configurations within an engine family, calculated on a production-weighted basis, in kilowatts.

LF = Load factor. Use 0.69 for propulsion marine engines and 0.51 for auxiliary marine engines. We may specify a different load factor if we approve the use of special test procedures for an engine family under 40 CFR 1065.10(c)(2), consistent with good engineering judgment.

UL = The useful life for the given engine family, in hours.

(b) [Reserved]

(c) In your application for certification, base your showing of compliance on projected production volumes for engines whose point of first retail sale is in the United States. As described in § 1042.730, compliance with the requirements of this subpart is determined at the end of the model year based on actual production volumes for engines whose point of first retail sale is in the United States. Do not include any of the following engines to calculate emission credits:

(1) Engines permanently exempted under subpart G of this part or under 40 CFR part 1068.

(2) Exported engines.

(3) Engines not subject to the requirements of this part, such as those excluded under § 1042.5.

(4) [Reserved]

(5) Any other engines, where we indicate elsewhere in this part 1042 that they are not to be included in the calculations of this subpart.

§ 1042.710 Averaging emission credits.

(a) Averaging is the exchange of emission credits among your engine families.

(b) You may certify one or more engine families to an FEL above the emission standard, subject to the FEL caps and other provisions in subpart B of this part, if you show in your application for certification that your projected balance of all emission-credit transactions in that model year is greater than or equal to zero.

(c) If you certify an engine family to an FEL that exceeds the otherwise applicable emission standard, you must obtain enough emission credits to offset the engine family's deficit by the due date for the final report required in § 1042.730. The emission credits used to address the deficit may come from your other engine families that generate emission credits in the same model year, from emission credits you have banked, or from emission credits you obtain through trading.

§ 1042.715 Banking emission credits.

(a) Banking is the retention of emission credits by the manufacturer generating the emission credits for use in averaging or trading in future model years.

(b) You may use banked emission credits from the previous model year for averaging or trading before we verify them, but we may revoke these emission credits if we are unable to verify them after reviewing your reports or auditing your records.

(c) Reserved credits become actual emission credits only when we verify them in reviewing your final report.

§ 1042.720 Trading emission credits.

(a) Trading is the exchange of emission credits between manufacturers. You may use traded emission credits for averaging, banking, or further trading transactions.

(b) You may trade actual emission credits as described in this subpart. You may also trade reserved emission credits, but we may revoke these emission credits based on our review of your records or reports or those of the company with which you traded emission credits. You may trade banked credits to any certifying manufacturer.

(c) If a negative emission credit balance results from a transaction, both the buyer and seller are liable, except in cases we deem to involve fraud. See § 1042.255(e) for cases involving fraud. We may void the certificates of all engine families participating in a trade that results in a manufacturer having a negative balance of emission credits. See § 1042.745.

§ 1042.725 Information required for the application for certification.

(a) You must declare in your application for certification your intent to use the provisions of this subpart for each engine family that will be certified using the ABT program. You must also declare the FELs you select for the engine family for each pollutant for which you are using the ABT program. Your FELs must comply with the specifications of subpart B of this part, including the FEL caps. FELs must be expressed to the same number of decimal places as the emission standards.

(b) Include the following in your application for certification:

(1) A statement that, to the best of your belief, you will not have a negative balance of emission credits for any averaging set when all emission credits are calculated at the end of the year.

(2) Detailed calculations of projected emission credits (positive or negative) based on projected production volumes.

§ 1042.730 ABT reports.

(a) If any of your engine families are certified using the ABT provisions of this subpart, you must send an end-of-year report within 90 days after the end of the model year and a final report within 270 days after the end of the model year. We may waive the requirement to send the end-of-year report, as long as you send the final report on time.

(b) Your end-of-year and final reports must include the following information for each engine family participating in the ABT program:

(1) Engine-family designation.

(2) The emission standards that would otherwise apply to the engine family.

(3) The FEL for each pollutant. If you changed an FEL during the model year, identify each FEL you used and calculate the positive or negative emission credits under each FEL. Also, describe how the FEL can be identified for each engine you produced. For example, you might keep a list of engine

identification numbers that correspond with certain FEL values.

(4) The projected and actual production volumes for the model year with a point of first retail sale in the United States, as described in § 1042.705(c). If you changed an FEL during the model year, identify the actual production volume associated with each FEL.

(5) Maximum engine power for each engine configuration, and the production-weighted average engine power for the engine family.

(6) Useful life.

(7) Calculated positive or negative emission credits for the whole engine family. Identify any emission credits that you traded, as described in paragraph (d)(1) of this section.

(c) Your end-of-year and final reports must include the following additional information:

(1) Show that your net balance of emission credits from all your participating engine families in each averaging set in the applicable model year is not negative.

(2) State whether you will retain any emission credits for banking.

(3) State that the report's contents are accurate.

(d) If you trade emission credits, you must send us a report within 90 days after the transaction, as follows:

(1) Sellers must include the following information in their report:

(i) The corporate names of the buyer and any brokers.

(ii) A copy of any contracts related to the trade.

(iii) The engine families that generated emission credits for the trade, including the number of emission credits from each family.

(2) Buyers must include the following information in their report:

(i) The corporate names of the seller and any brokers.

(ii) A copy of any contracts related to the trade.

(iii) How you intend to use the emission credits, including the number of emission credits you intend to apply to each engine family (if known).

(e) Send your reports electronically to the Designated Compliance Officer using an approved information format. If you want to use a different format, send us a written request with justification for a waiver.

(f) Correct errors in your end-of-year report or final report as follows:

(1) You may correct any errors in your end-of-year report when you prepare the final report, as long as you send us the final report by the time it is due.

(2) If you or we determine within 270 days after the end of the model year that errors mistakenly decreased your balance of emission credits, you may correct the errors and recalculate the balance of emission credits. You may not make these corrections for errors that are determined more than 270 days after the end of the model year. If you report a negative balance of emission credits, we may disallow corrections under this paragraph (f)(2).

(3) If you or we determine anytime that errors mistakenly increased your balance of emission credits, you must correct the errors and recalculate the balance of emission credits.

§ 1042.735 Recordkeeping.

(a) You must organize and maintain your records as described in this section. We may review your records at any time.

(b) Keep the records required by this section for eight years after the due date for the end-of-year report. You may not use emission credits on any engines if you do not keep all the records required under this section. You must therefore keep these records to continue to bank valid credits. Store these records in any format and on any media, as long as you can promptly send us organized, written records in English if we ask for them. You must keep these records readily available. We may review them at any time.

(c) Keep a copy of the reports we require in § 1042.730.

(d) Keep the following additional records for each engine you produce that generates or uses emission credits under the ABT program:

(1) Engine family designation.

(2) Engine identification number. You may identify these numbers as a range.

(3) FEL and useful life. If you change the FEL after the start of production, identify the date that you started using the new FEL and give the engine identification number for the first engine covered by the new FEL.

(4) Maximum engine power.

(5) Purchaser and destination.

(e) We may require you to keep additional records or to send us relevant information not required by this section, as allowed under the Clean Air Act.

§ 1042.745 Noncompliance.

(a) For each engine family participating in the ABT program, the certificate of conformity is conditional upon full compliance with the provisions of this subpart during and after the model year. You are responsible to establish to our satisfaction that you fully comply with applicable requirements. We may void the certificate of conformity for an engine family if you fail to comply with any provisions of this subpart.

(b) You may certify your engine family to an FEL above an emission standard based on a projection that you will have enough emission credits to offset the deficit for the engine family. However, we may void the certificate of conformity if you cannot show in your final report that you have enough actual emission credits to offset a deficit for any pollutant in an engine family.

(c) We may void the certificate of conformity for an engine family if you fail to keep records, send reports, or give us information we request.

(d) You may ask for a hearing if we void your certificate under this section (see § 1042.920).

Subpart I—Special Provisions for Remanufactured Marine Engines

§ 1042.801 General provisions.

This section describes how the provisions of this part 1042 apply for certain remanufactured marine engines.

(a) The requirements of this subpart apply for remanufactured Tier 2 and earlier commercial marine engines at or above 600 kW, excluding those engines originally manufactured before 1973. Note that the requirements of this subpart do not apply for engines below 600 kW, engines installed on recreational vessels, or Tier 3 and later engines.

(b) Any person meeting the definition of ''remanufacturer'' in § 1042.901 may apply for a certificate of conformity for a remanufactured engine family.

(c) The rebuilding requirements of 40 CFR 1068.120 do not apply to remanufacturing of engines using a certified remanufacturing system under this subpart. However, the requirements of 40 CFR 1068.120 do apply to all other remanufacturing of engines.

(d) Unless specified otherwise, engines certified under this subpart are also subject to the other requirements of this part.

(e) For remanufactured engines required to have a valid certificate of conformity, placing a new marine engine back into service following remanufacturing is a violation of 40 CFR 1068.101(a)(1), unless it has a valid certificate of conformity for its model year and the required label.

(f) Remanufacturing systems that require a fuel change or use of a fuel additive may be certified under this part. However, they are not considered to be ''available'' with respect to triggering the requirement for an engine to be covered by a certificate of conformity under § 1042.815. The following provisions apply:

(i) Only fuels and additives registered under 40 CFR part 79 may be used under this paragraph.

(ii) You must demonstrate in your application that the fuel or additive will actually be used by operators, including a description of how the vessels and dispensing tanks will be labeled. We may require you to provide the labels to the operators.

(iii) You must also describe analytical methods that can be used by EPA or others to verify that fuel meets your specifications.

(iv) You must provide clear instructions to the operators specifying that they may only use the specified fuel/additive, label their vessels and fuel dispensing tanks, and keep records of their use of the fuel/additive in order for their engine to be covered by your certificate. Use of the incorrect fuel (or fuel without the specified additive) or any other failure to comply with the requirements of this paragraph is a violation of 40 CFR 1068.101(b)(1).

(g) Vessels equipped with emission controls as part of a state or local retrofit program prior to January 1, 2017 are exempt from the requirements of this subpart, as specified in this paragraph (g).

(1) This exemption only applies for retrofit programs sponsored by a state government (or one of its political subdivisions) for the purpose of reducing emissions. The exemption does not apply where the sponsoring government specifies that inclusion in the retrofit program is not intended to provide an exemption from the requirements of this subpart.

(2) The prohibitions against tampering and defeat devices in 40 CFR 1068.101(b) and the rebuilding requirements in 40 CFR 1068.120 apply for the exempt engines in the same manner as if they were covered by a certificate.

(3) Vessel owners must request an exemption prior to remanufacturing the engine. Your request must include documentation that your vessel has been retrofitted consistent with the specifications of paragraph (g)(1) of this section, and a signed statement declaring that to be true. Except for the initial request for a specific vessel and a specific retrofit, you may consider your request to be approved unless we notify you otherwise within 30 days of the date that we receive your request.

§ 1042.810 Requirements for owner/operators and installers during remanufacture.

This section describes how the remanufacturing regulations affect owner/operators and installers for engines subject to this subpart.

(a) See the definition of ''remanufacture'' in § 1042.901 to determine if you are remanufacturing your engine. (**Note:** Replacing cylinders one at a time may qualify as remanufacturing, depending on the interval between replacement.)

(b) See the definition of ''new marine engine'' in § 1042.901 to determine if remanufacturing your engine makes it subject to the requirements of this part. If the engine is considered to be new, it is subject to the certification requirements of this subpart, unless it is exempt under subpart G of this part.

(c) Your engine is not subject to the standards of this part if we determine that no certified remanufacturing system is available for your engine as described in § 1042.815. For engines that are remanufactured during multiple events within a five-year period, you are not required to use a certified system until all of your engine's cylinders have been replaced after the system became available. For example, if you remanufacture your 16-cylinder engine by replacing four cylinders each January and a system becomes available for your engine June 1, 2010, your engine must be in a certified configuration when you replace four cylinders in January of 2014. At that point, all 16 cylinders would have been replaced after June 1, 2010.

(d) You may comply with the certification requirements of this part for your remanufactured engine by either obtaining your own certificate of conformity as specified in subpart C of this part or by having a certifying remanufacturer include your engine under its certificate of conformity. In either case, your remanufactured engine must be covered by a certificate before it is reintroduced into service.

(e) Contact a certifying remanufacturer to have your engine included under its certificate of conformity. You must comply with the certificate holder's emission-related installation instructions.

§ 1042.815 Demonstrating availability.

(a) A certified remanufacturing system is considered to be available for a specific engine only if EPA has certified the remanufacturing system as being in compliance with the provisions of this part and the certificate holder has demonstrated during certification that the system meets the criteria of this paragraph (a). We may issue a certificate for a remanufacturing system that does not meet these criteria, but such systems would not be considered available.

(1) The engine configuration must be included in the engine family for the remanufacturing system.

(2) The total marginal cost of the remanufacturing system, as calculated under paragraph (c) of this section, must be less than $45,000 per ton of PM reduction.

(3) It must be possible to obtain and install the remanufacturing system in a timely manner consistent with normal remanufacturing procedures. For example, a remanufacturing system would generally not be considered to be available if it required that the engine be removed from the vessel and shipped to a factory to be remanufactured.

(4) The remanufacturing system may result in increased maintenance costs, provided the incremental maintenance costs are included in the total costs. The remanufacturing system may not adversely affect engine reliability or power. Note that owner/operators may ask us to determine that a remanufacturing system is not considered available for their vessels because of excessive costs under § 1042.850.

(b) We will maintain a list of available remanufacturing systems. A new remanufacturing system is considered to be available 120 days after we first issue a certificate of conformity for it. Where we issue a certificate of conformity based on carryover data for a system that is already considered to be available for the configuration, the 120-day delay does not apply and the new system is considered to be available when we issue the certificate.

(c) For the purpose of paragraph (a)(2) of this section, marginal cost means the difference in costs between remanufacturing the engine using the remanufacturing system and remanufacturing the engine conventionally, divided by the projected amount that PM emissions will be reduced over the engine's useful life.

(1) Total costs include:

(i) Incremental hardware costs.

(ii) Incremental labor costs.

(iii) Incremental operating costs over one useful life period.

(iv) Other costs (such as shipping).

(2) Calculate the projected amount that PM emissions will be reduced over the engine's useful life using the following equation:

$$\text{PM tons} = (EF_{base} - EF_{cont}) \times (PR) \times (UL) \times (LF) \times (10^{-6})$$

Where:

EF_{base} = deteriorated baseline PM emission rate (g/kW-hr).

EF_{cont} = deteriorated controlled PM emission rate (g/kW-hr).

PR = maximum engine power for the engine (kW).

UL = useful life (hr).
LF = the load factor that would apply for your engine under § 1042.705.

§ 1042.820 Emission standards and required emission reductions for remanufactured engines.

(a) The requirements of this section apply with respect to emissions as measured according to subpart F of this part. See paragraph (g) of this section for special provisions related to remanufacturing systems certified for both locomotive and marine engines. Remanufactured Tier 2 and earlier engines may be certified under this subpart only if they have NO_X emissions equivalent to or less than baseline NO_X levels and PM emissions at least 25.0 percent less than baseline PM emission levels. See § 1042.825 for provisions for determining baseline NO_X and PM emissions. See § 1042.835 for provisions related to demonstrating compliance with these requirements.

(b) The NTE and ABT provisions of this part do not apply for remanufactured engines.

(c) The exhaust emission standards in this section apply for engines using the fuel type on which the engines in the engine family are designed to operate. Engines designed to operate using residual fuel must comply with the standards and requirements of this part when operated using residual fuel.

(d) Your engines must meet the exhaust emission standards of this section over their full useful life, as defined in § 1042.101(e).

(e) The duty-cycle emission standards in this subpart apply to all testing performed according to the procedures in § 1042.505, including certification, production-line, and in-use testing.

(f) Sections 1042.120, 1042.125, 1042.130, 1042.140 apply for remanufactured engines as written. Section 1042.115 applies for remanufactured engines as written, except for the requirement that electronically controlled engines broadcast their speed and output shaft torque.

(g) A remanufacturing system certified for locomotive engines under 40 CFR part 1033 may be deemed to also meet the requirements of this section, as specified in § 1042.836.

§ 1042.825 Baseline determination.

(a) For the purpose of this subpart, the term ''baseline emissions'' means the average measured emission rate specified by this section. Baseline emissions are specific to a given certificate holder and a given engine configuration.

(b) Select a used engine to be the emission-data engine for the engine family for testing. Using good engineering judgment, select the engine configuration expected to represent the most common configuration in the family.

(c) Remanufacture the engine according to OEM specifications (or equivalent). The engine is considered ''the baseline engine'' at this point. If the OEM specifications include a range of adjustment for any parameter, set the parameter to the midpoint of the range. You may ask us to allow you to adjust it differently, consistent with good engineering judgment.

(d) Test the baseline engine four times according to the test procedures in subpart F of this part. The baseline emissions are the average of those four tests.

(e) We may require you to test a second engine of the same or different configuration in addition to the engine tested under this section. If we require you to test the same configuration, average the results of the testing with previous results, unless we determine that your previous results are not valid.

(f) Use good engineering judgment for all aspects of the baseline determination. We may reject your baseline if we determine that you did not use good engineering judgment, consistent with the provisions of 40 CFR 1068.5.

§ 1042.830 Labeling.

(a) At the time of remanufacture, affix a permanent and legible label identifying each engine. The label must be—

(1) Attached in one piece so it is not removable without being destroyed or defaced.

(2) Secured to a part of the engine needed for normal operation and not normally requiring replacement.

(3) Durable and readable for the engine's entire useful life.

(4) Written in English.

(b) The label must—

(1) Include the heading ''EMISSION CONTROL INFORMATION''.

(2) Include your full corporate name and trademark.

(3) Include EPA's standardized designation for the engine family.

(4) State the engine's category, displacement (in liters or L/cyl), maximum engine power (in kW), and power density (in kW/L) as needed to determine the emission standards for the engine family. You may specify displacement, maximum engine power, and power density as ranges consistent with the ranges listed in § 1042.101. See § 1042.140 for descriptions of how to specify per-cylinder displacement, maximum engine power, and power density.

(5) State: ''THIS MARINE ENGINE COMPLIES WITH 40 CFR 1042, SUBPART I, FOR [CALENDAR YEAR OF REMANUFACTURE].''.

(c) You may add information to the emission control information label to identify other emission standards that the engine meets or does not meet (such as international standards). You may also add other information to ensure that the engine will be properly maintained and used.

(d) You may ask us to approve modified labeling requirements in this section if you show that it is necessary or appropriate. We will approve your request if your alternate label is consistent with the intent of the labeling requirements of this section.

§ 1042.835 Certification of remanufactured engines.

(a) *General requirements.* See §§ 1042.201, 1042.210, 1042.220, 1042.225, 1042.250, and 1042.255 for the general requirements related to obtaining a certificate of conformity. See § 1042.836 for special certification provisions for remanufacturing systems certified for locomotive engines under 40 CFR 1033.936.

(b) *Applications.* See § 1042.840 for a description of what you must include in your application.

(c) *Engine families.* See § 1042.845 for instruction about dividing your engines into engine families.

(d) *Test data.* (1) Measure baseline emissions for the test configuration as specified in § 1042.825.

(2) Measure emissions from the test engine for your remanufacturing system according to the procedures of subpart F of this part.

(3) We may measure emissions from any of your test engines or other engines from the engine family, as follows:

(i) We may decide to do the testing at your plant or any other facility. If we do this, you must deliver the test engine to a test facility we designate. The test engine you provide must include appropriate manifolds, aftertreatment devices, electronic control units, and other emission-related components not normally attached directly to the engine block. If we do the testing at your plant, you must schedule it as soon as possible and make available the instruments, personnel, and equipment we need.

(ii) If we measure emissions from one of your test engines, the results of that testing become the official emission results for the engine. Unless we later invalidate these data, we may decide not to consider your data in determining if your engine family meets applicable requirements.

(iii) Before we test one of your engines, we may set its adjustable parameters to any point within the specified adjustable ranges (see § 1042.115(d)).

(iv) Before we test one of your engines, we may calibrate it within normal production tolerances for anything we do not consider an adjustable parameter.

(4) You may ask to use emission data from a previous model year instead of doing new tests, but only if all the following are true:

(i) The engine family from the previous model year differs from the current engine family only with respect to model year or other characteristics unrelated to emissions. You may also ask to add a configuration subject to § 1042.225.

(ii) The emission-data engine from the previous model year remains the appropriate emission-data engine.

(iii) The data show that the emission-data engine would meet all the requirements that apply to the engine family covered by the application for certification.

(5) We may require you to test a second engine of the same or different configuration in addition to the engine tested under this section.

(6) If you use an alternate test procedure under 40 CFR 1065.10 and later testing shows that such testing does not produce results that are equivalent to the procedures specified in subpart F of this part, we may reject data you generated using the alternate procedure.

(e) *Demonstrating compliance.* (1) For purposes of certification, your engine family is considered in compliance with the emission standards in § 1042.820 if all emission-data engines representing that family have test results showing compliance with the standards and percent reductions required by that section. To compare emission levels from the emission-data engine with the applicable emission standards, apply an additive deterioration factor of 0.015 g/kW-hr to the measured emission levels for PM. Alternatively, you may test your engine as specified in § 1042.245 to develop deterioration factors that represent the deterioration expected in emissions over your engines' full useful life.

(2) Collect emission data using measurements to one more decimal place than the applicable standard. Apply the deterioration factor to the official emission result, then round the adjusted figure to the same number of decimal places as the emission standard. Compare the rounded emission levels to the emission standard for each emission-data engine.

(3) Your applicable NO_X standard for each configuration is the baseline NO_X emission rate for that configuration plus 5.0 percent (to account for test-to-test and engine-to-engine variability). Your applicable PM standard for each configuration is the baseline PM emission rate for that configuration multiplied by 0.750 plus the deterioration factor. If you choose to include configurations in your engine family for which you do not measure baseline emissions, you must demonstrate through engineering analysis that your remanufacturing system will reduce PM emissions by at least 25.0 percent for those configurations and not increase NO_X emissions.

(4) Your engine family is deemed not to comply if any emission-data engine representing that family for certification has test results showing a deteriorated emission level above an applicable emission standard for any pollutant.

(f) *Safety Evaluation.* You must exercise due diligence in ensuring that your system will not adversely affect safety or otherwise violate the prohibition of § 1042.115(e).

(g) *Compatibility Evaluation.* If you are not the original manufacturer of the engine, you must contact the original manufacturer of the engine to verify that your system is compatible with the engine. Keep records of your contact with the original manufacturer.

§ 1042.836 Marine certification of locomotive remanufacturing systems.

If you certify a Tier 0, Tier 1, or Tier 2 remanufacturing system for locomotives under 40 CFR part 92 or part 1033, you may also certify the system under this part 1042, according to the provisions of this section.

(a) Include the following with your application for certification under 40 CFR part 1033:

(1) A statement of your intent to use your remanufacturing system for marine engines. Include a list of marine engine models for which your system may be used.

(2) If there are significant differences in how your remanufacture system will be applied to marine engines relative to locomotives, in an engineering analysis demonstrating that your system will achieve emission reductions from marine engines similar to those from locomotives.

(3) A description of modifications needed for marine applications.

(4) A demonstration of availability as described in § 1042.815, except that the total marginal cost threshold does not apply.

(5) An unconditional statement that all the engines in the engine family comply with the requirements of this part, other referenced parts of the CFR, and the Clean Air Act.

(b) Sections 1042.835 and 1042.840 do not apply for engines certified under this section.

(c) Systems certified under 40 CFR part 92 are subject to the following restrictions:

(1) Tier 0 locomotives systems may not be used for any Category 1 engines or Tier 1 or later Category 2 engines.

(2) Where systems certified under 40 CFR part 1033 are also available for an engine, you may not use a system certified under 40 CFR part 92.

§ 1042.840 Application requirements for remanufactured engines.

This section specifies the information that must be in your application, unless we ask you to include less information under § 1042.201(c). We may require you to provide additional information to evaluate your application.

(a) Describe the engine family's specifications and other basic parameters of the engine's design and emission controls. List the fuel type on which your engines are designed to operate (for example, ultra low-sulfur diesel fuel). List each distinguishable engine configuration in the engine family. For each engine configuration, list the maximum engine power and the range of values for maximum engine power resulting from production tolerances, as described in § 1042.140.

(b) Explain how the emission control system operates. Describe in detail all system components for controlling exhaust emissions, including any auxiliary emission control devices (AECDs) you add to the engine. Identify the part number of each component you describe.

(c) Summarize your cost effectiveness analysis used to demonstrate your system will meet the availability criteria of § 1042.815. Identify the maximum allowable costs for vessel modifications to meet the these criteria.

(d) Describe the engines you selected for testing and the reasons for selecting them.

(e) Describe the test equipment and procedures that you used, including the duty cycle(s) and the corresponding engine applications. Also describe any special or alternate test procedures you used.

(f) Describe how you operated the emission-data engine before testing, including the duty cycle and the number of engine operating hours used

to stabilize emission levels. Explain why you selected the method of service accumulation. Describe any scheduled maintenance you did.

(g) List the specifications of the test fuel to show that it falls within the required ranges we specify in 40 CFR part 1065. See § 1042.801 if your certification is based on the use of special fuels or additives.

(h) Identify the engine family's useful life.

(i) Include the maintenance and warranty instructions you will give to the owner/operator (see §§ 1042.120 and 1042.125).

(j) Include the emission-related installation instructions you will provide if someone else installs your engines in a vessel (see § 1042.130).

(k) Describe your emission control information label (see § 1042.830).

(l) Identify the engine family's deterioration factors and describe how you developed them (see § 1042.245). Present any emission test data you used for this.

(m) State that you operated your emission-data engines as described in the application (including the test procedures, test parameters, and test fuels) to show you meet the requirements of this part.

(n) Present emission data for HC, NO_X, PM, and CO as required by § 1042.820. Show emission figures before and after applying adjustment factors for regeneration and deterioration factors for each pollutant and for each engine.

(o) Report all test results, including those from invalid tests, whether or not they were conducted according to the test procedures of subpart F of this part. If you measure CO_2, report those emission levels. We may ask you to send other information to confirm that your tests were valid under the requirements of this part and 40 CFR part 1065.

(p) Describe all adjustable operating parameters (see § 1042.115(d)), including production tolerances. Include the following in your description of each parameter:

(1) The nominal or recommended setting.

(2) The intended physically adjustable range.

(3) The limits or stops used to establish adjustable ranges.

(4) For Category 1 engines, information showing why the limits, stops, or other means of inhibiting adjustment are effective in preventing adjustment of parameters on in-use engines to settings outside your intended physically adjustable ranges.

(5) For Category 2 engines, propose a range of adjustment for each adjustable parameter, as described in § 1042.115(d). Include information showing why the limits, stops, or other means of inhibiting adjustment are effective in preventing adjustment of parameters on in-use engines to settings outside your proposed adjustable ranges.

(q) Unconditionally certify that all the engines in the engine family comply with the requirements of this part, other referenced parts of the CFR, and the Clean Air Act.

(r) Include the information required by other subparts of this part.

(s) Include other applicable information, such as information specified in this part or 40 CFR part 1068 related to requests for exemptions.

(t) Name an agent for service located in the United States. Service on this agent constitutes service on you or any of your officers or employees for any action by EPA or otherwise by the United States related to the requirements of this part.

(u) If you are not the original manufacturer of the engine, include a summary of your contact with the original manufacturer of the engine and provide to us any documentation provided to you by the original manufacturer.

§ 1042.845 Remanufactured engine families.

(a) For purposes of certification, divide your product line into families of engines that are expected to have similar emission characteristics throughout the useful life as described in this section. You may not group Category 1 and Category 2 engines in the same family.

(b) In general, group engines in the same engine family if they are the same in all the following aspects:

(1) The combustion cycle and fuel (the fuels with which the engine is intended or designed to be operated).

(2) The cooling system (for example, raw-water vs. separate-circuit cooling).

(3) Method of air aspiration.

(4) Method of exhaust aftertreatment (for example, catalytic converter or particulate trap).

(5) Combustion chamber design.

(6) Nominal bore and stroke.

(7) Method of control for engine operation other than governing (i.e., mechanical or electronic).

(8) Original engine manufacturer.

(c) Alternatively, you may ask us to allow you to include other engine configurations in your engine family, consistent with good engineering judgment.

(d) Do not include in your family any configurations for which good engineering judgment indicates that your emission controls are unlikely to provide PM emission reductions similar to the configuration(s) tested.

§ 1042.850 Exemptions and hardship relief.

This section describes exemption and hardship provisions that are available for owner/operators of engine subject to the provisions of this subpart.

(a) Vessels owned and operated by entities that meet the size criterion of this paragraph (a) are exempt from the requirements of this subpart I. To be exempt, your gross annual revenue for the calendar year before the remanufacture must be less than $5,000,000 in 2008 dollars or the equivalent value for future years based on the Bureau of Labor Statistics' Producer Price Index (see *www.bls.gov*). Include all revenues from any parent company and its subsidiaries. The exemption applies only for years in which you meet this criterion.

(b) In unusual circumstances, we may exempt you from an otherwise applicable requirement that you apply a certified remanufacturing system when remanufacturing your marine engine.

(1) To be eligible, you must demonstrate that all of the following are true:

(i) Unusual circumstances prevent you from meeting requirements from this chapter.

(ii) You have taken all reasonable steps to minimize the extent of the nonconformity.

(iii) Not having the exemption will jeopardize the solvency of your company.

(iv) No other allowances are available under the regulations in this chapter to avoid the impending violation.

(2) Send the Designated Compliance Officer a written request for an exemption before you are in violation.

(3) We may impose other conditions, including provisions to use an engine meeting less stringent emission standards or to recover the lost environmental benefit.

(4) In determining whether to grant the exemptions, we will consider all relevant factors, including the following:

(i) The number of engines to be exempted.

(ii) The size of your company and your ability to endure the hardship.

(iii) The length of time a vessel is expected to remain in service.

(c) If you believe that a remanufacturing system that we identified as being available cannot be

installed without significant modification of your vessel, you may ask us to determine that a remanufacturing system is not considered available for your vessel because the cost would be excessive.

Subpart J—Definitions and Other Reference Information

§ 1042.901 Definitions.

The following definitions apply to this part. The definitions apply to all subparts unless we note otherwise. All undefined terms have the meaning the Clean Air Act gives to them. The definitions follow:

Adjustable parameter means any device, system, or element of design that someone can adjust (including those which are difficult to access) and that, if adjusted, may affect emissions or engine performance during emission testing or normal in-use operation. This includes, but is not limited to, parameters related to injection timing and fueling rate. You may ask us to exclude a parameter that is difficult to access if it cannot be adjusted to affect emissions without significantly degrading engine performance, or if you otherwise show us that it will not be adjusted in a way that affects emissions during in-use operation.

Aftertreatment means relating to a catalytic converter, particulate filter, or any other system, component, or technology mounted downstream of the exhaust valve (or exhaust port) whose design function is to decrease emissions in the engine exhaust before it is exhausted to the environment. Exhaust-gas recirculation and turbochargers are not aftertreatment.

Amphibious vehicle means a vehicle with wheels or tracks that is designed primarily for operation on land and secondarily for operation in water.

Annex VI Technical Code means the ''Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, 1997,'' adopted by the International Maritime Organization (incorporated by reference in § 1042.910).

Applicable emission standard or *applicable standard* means an emission standard to which an engine is subject; or, where an engine has been or is being certified to another standard or FEL, applicable emission standards means the FEL and other standards to which the engine has been or is being certified. This definition does not apply to subpart H of this part.

Auxiliary emission control device means any element of design that senses temperature, vessel speed, engine RPM, transmission gear, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system.

Base engine means a land-based engine to be marinized, as configured prior to marinization.

Baseline emissions has the meaning given in § 1042.825.

Brake power means the usable power output of the engine, not including power required to fuel, lubricate, or heat the engine, circulate coolant to the engine, or to operate aftertreatment devices.

Calibration means the set of specifications and tolerances specific to a particular design, version, or application of a component or assembly capable of functionally describing its operation over its working range.

Carryover means the process of obtaining a certificate for one model year using the same test data from the preceding model year, as described in § 1042.235(d). This generally requires that the locomotives in the engine family do not differ in any aspect related to emissions.

Category 1 means relating to a marine engine with specific engine displacement below 7.0 liters per cylinder.

Category 2 means relating to a marine engine with a specific engine displacement at or above 7.0 liters per cylinder but less than 30.0 liters per cylinder.

Category 3 means relating to a marine engine with a specific engine displacement at or above 30.0 liters per cylinder.

Certification means relating to the process of obtaining a certificate of conformity for an engine family that complies with the emission standards and requirements in this part.

Certified emission level means the highest deteriorated emission level in an engine family for a given pollutant from either transient or steady-state testing.

Clean Air Act means the Clean Air Act, as amended, 42 U.S.C. 7401–7671q.

Commercial means relating to an engine or vessel that is not a recreational marine engine or a recreational vessel.

Compression-ignition means relating to a type of reciprocating, internal-combustion engine that is not a spark-ignition engine. Note that marine engines powered by natural gas with maximum engine power at or above 250 kW are deemed to be compression-ignition engines in § 1042.1.

Constant-speed engine means an engine whose certification is limited to constant-speed operation. Engines whose constant-speed governor function is removed or disabled are no longer constant-speed engines.

Constant-speed operation has the meaning given in 40 CFR 1065.1001.

Crankcase emissions means airborne substances emitted to the atmosphere from any part of the engine crankcase's ventilation or lubrication systems. The crankcase is the housing for the crankshaft and other related internal parts.

Critical emission-related component means any of the following components:

(1) Electronic control units, aftertreatment devices, fuel-metering components, EGR-system components, crankcase-ventilation valves, all components related to charge-air compression and cooling, and all sensors and actuators associated with any of these components.

(2) Any other component whose primary purpose is to reduce emissions.

Days means calendar days, unless otherwise specified. For example, where we specify working days, we mean calendar days excluding weekends and U.S. national holidays.

Designated Compliance Officer means the Manager, Heavy-Duty and Nonroad Engine Group (6403-J), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

Deteriorated emission level means the emission level that results from applying the appropriate deterioration factor to the official emission result of the emission-data engine.

Deterioration factor means the relationship between emissions at the end of useful life and emissions at the low-hour test point (or between highest and lowest emission levels, if applicable), expressed in one of the following ways:

(1) For multiplicative deterioration factors, the ratio of emissions at the end of useful life to emissions at the low-hour test point.

(2) For additive deterioration factors, the difference between emissions at the end of useful life and emissions at the low-hour test point.

Diesel fuel has the meaning given in 40 CFR 80.2. This generally includes No. 1 and No. 2 petroleum diesel fuels and biodiesel fuels.

Discrete-mode means relating to the discrete-mode type of steady-state test described in § 1042.505.

Emission control system means any device, system, or element of design that controls or reduces the emissions of regulated pollutants from an engine.

Emission-data engine means an engine that is tested for certification. This includes engines tested to establish deterioration factors.

Emission-related maintenance means maintenance that substantially affects emissions or is likely to substantially affect emission deterioration.

Engine has the meaning given in 40 CFR 1068.30. This includes complete and partially complete engines.

Engine configuration means a unique combination of engine hardware and calibration within an engine family. Engines within a single engine configuration differ only with respect to normal production variability.

Engine family has the meaning given in § 1042.230.

Engine manufacturer means a manufacturer of an engine. See the definition of ''manufacturer'' in this section.

Engineering analysis means a summary of scientific and/or engineering principles and facts that support a conclusion made by a manufacturer, with respect to compliance with the provisions of this part.

Excluded means relating to an engine that either:

(1) Has been determined not to be a nonroad engine, as specified in 40 CFR 1068.30; or

(2) Is a nonroad engine that, according to § 1042.5, is not subject to this part 1042.

Exempted has the meaning given in 40 CFR 1068.30.

Exhaust-gas recirculation means a technology that reduces emissions by routing exhaust gases that had been exhausted from the combustion chamber(s) back into the engine to be mixed with incoming air before or during combustion. The use of valve timing to increase the amount of residual exhaust gas in the combustion chamber(s) that is mixed with incoming air before or during combustion is not considered exhaust-gas recirculation for the purposes of this part.

Family emission limit (FEL) means an emission level declared by the manufacturer to serve in place of an otherwise applicable emission standard under the ABT program in subpart H of this part. The family emission limit must be expressed to the same number of decimal places as the emission standard it replaces. The family emission limit serves as the emission standard for the engine family with respect to all required testing.

Freshly manufactured marine engine means a new marine engine that has not been remanufactured. An engine becomes freshly manufactured when it is originally manufactured.

Foreign vessel means a vessel of foreign registry or a vessel operated under the authority of a country other than the United States.

Fuel system means all components involved in transporting, metering, and mixing the fuel from the fuel tank to the combustion chamber(s), including the fuel tank, fuel tank cap, fuel pump, fuel filters, fuel lines, carburetor or fuel-injection components, and all fuel-system vents.

Fuel type means a general category of fuels such as gasoline, diesel fuel, residual fuel, or natural gas. There can be multiple grades within a single fuel type, such as high-sulfur or low-sulfur diesel fuel.

Good engineering judgment has the meaning given in 40 CFR 1068.30. See 40 CFR 1068.5 for the administrative process we use to evaluate good engineering judgment.

Green Engine Factor means a factor that is applied to emission measurements from a Category 2 engine that has had little or no service accumulation. The Green Engine Factor adjusts emission measurements to be equivalent to emission measurements from an engine that has had approximately 300 hours of use.

High-sulfur diesel fuel means one of the following:

(1) For in-use fuels, *high-sulfur diesel fuel* means a diesel fuel with a maximum sulfur concentration above 500 parts per million.

(2) For testing, *high-sulfur diesel fuel* has the meaning given in 40 CFR part 1065.

Hydrocarbon (HC) means the hydrocarbon group on which the emission standards are based for each fuel type, as described in § 1042.101(d).

Identification number means a unique specification (for example, a model number/serial number combination) that allows someone to distinguish a particular engine from other similar engines.

Low-hour means relating to an engine that has stabilized emissions and represents the undeteriorated emission level. This would generally involve less than 125 hours of operation for engines below 560 kW and less than 300 hours for engines at or above 560 kW.

Low-sulfur diesel fuel means one of the following:

(1) For in-use fuels, *low-sulfur diesel fuel* means a diesel fuel market as low-sulfur diesel fuel having a maximum sulfur concentration of 500 parts per million.

(2) For testing, *low-sulfur diesel fuel* has the meaning given in 40 CFR part 1065.

Manufacture means the physical and engineering process of designing, constructing, and assembling an engine or a vessel.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act (42 U.S.C. 7550(1)). In general, this term includes any person who manufactures an engine or vessel for sale in the United States or otherwise introduces a new marine engine into U.S. commerce. This includes importers who import engines or vessels for resale. It also includes post-manufacture marinizers, but not dealers. All manufacturing entities under the control of the same person are considered to be a single manufacturer.

Marine engine means a nonroad engine that is installed or intended to be installed on a marine vessel. This includes a portable auxiliary marine engine only if its fueling, cooling, or exhaust system is an integral part of the vessel. A fueling system is considered integral to the vessel only if one or more essential elements are permanently affixed to the vessel. There are two kinds of marine engines:

(1) Propulsion marine engine means a marine engine that moves a vessel through the water or directs the vessel's movement.

(2) Auxiliary marine engine means a marine engine not used for propulsion.

Marine vessel has the meaning given in 1 U.S.C. 3, except that it does not include amphibious vehicles. The definition in 1 U.S.C. 3 very broadly includes every craft capable of being used as a means of transportation on water.

Maximum engine power has the meaning given in § 1042.140.

Maximum test power means the power output observed at the maximum test speed with the maximum fueling rate possible.

Maximum test speed has the meaning given in 40 CFR 1065.1001.

Maximum test torque has the meaning given in 40 CFR 1065.1001.

Model year means one of the following things:

(1) For freshly manufactured marine engines (see definition of ''new marine engine,'' paragraph (1)), model year means one of the following:

(i) Calendar year.

(ii) Your annual new model production period if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a marine engine after originally being placed into service as a motor-vehicle

engine, a nonroad engine that is not a marine engine, or a stationary engine, model year means the calendar year in which the engine was converted (see definition of ''new marine engine,'' paragraph (2)).

(3) For a marine engine excluded under § 1042.5 that is later converted to operate in an application that is not excluded, model year means the calendar year in which the engine was converted (see definition of ''new marine engine, (paragraph (3)).

(4) For engines that are not freshly manufactured but are installed in new vessels, model year means the calendar year in which the engine is installed in the new vessel (see definition of ''new marine engine,'' paragraph (4)).

(5) For imported engines:

(i) For imported engines described in paragraph (5)(i) of the definition of ''new marine engine,'' *model year* has the meaning given in paragraphs (1) through (4) of this definition.

(ii) For imported engines described in paragraph (5)(ii) of the definition of new marine engine,'' *model year* means the calendar year in which the engine is modified.

(iii) For imported engines described in paragraph (5)(iii) of the definition of ''new marine engine,'' *model year* means the calendar year in which the importation occurs.

(6) For freshly manufactured vessels, model year means the calendar year in which the keel is laid or the vessel is at a similar stage of construction. For vessels that become new as a result of substantial modifications, model year means the calendar year in which the modifications physically begin.

(7) For remanufactured engines, model year means the calendar year in which the remanufacture takes place.

Motor vehicle has the meaning given in 40 CFR 85.1703(a).

New marine engine means any of the following things:

(1) A freshly manufactured marine engine for which the ultimate purchaser has never received the equitable or legal title. This kind of engine might commonly be thought of as ''brand new.'' In the case of this paragraph (1), the engine is new from the time it is produced until the ultimate purchaser receives the title or the product is placed into service, whichever comes first.

(2) An engine intended to be installed in a vessel that was originally manufactured as a motor-vehicle engine, a nonroad engine that is not a marine engine, or a stationary engine. In this case, the engine is no longer a motor-vehicle, nonmarine, or stationary engine and becomes a ''new marine engine.'' The engine is no longer new when it is placed into marine service.

(3) A marine engine that has been previously placed into service in an application we exclude under § 1042.5, where that engine is installed in a vessel that is covered by this part 1042. The engine is no longer new when it is placed into marine service covered by this part 1042. For example, this would apply to an engine that is no longer used in a foreign vessel.

(4) An engine not covered by paragraphs (1) through (3) of this definition that is intended to be installed in a new vessel. The engine is no longer new when the ultimate purchaser receives a title for the vessel or it is placed into service, whichever comes first. This generally includes installation of used engines in new vessels.

(5) A remanufactured marine engine. An engine becomes new when it is remanufactured (as defined in this section) and ceases to be new when placed back into service.

(6) An imported marine engine, subject to the following provisions:

(i) An imported marine engine covered by a certificate of conformity issued under this part that meets the criteria of one or more of paragraphs (1) through (4) of this definition, where the original engine manufacturer holds the certificate, is new as defined by those applicable paragraphs.

(ii) An imported remanufactured engine that would have been required to be certified if it had been remanufactured in the United States.

(iii) An imported engine that will be covered by a certificate of conformity issued under this part, where someone other than the original engine manufacturer holds the certificate (such as when the engine is modified after its initial assembly), is a new marine engine when it is imported. It is no longer new when the ultimate purchaser receives a title for the engine or it is placed into service, whichever comes first.

(iv) An imported marine engine that is not covered by a certificate of conformity issued under this part at the time of importation is new, but only if it was produced on or after the dates shown in the following table. This addresses uncertified engines and vessels initially placed into service that someone seeks to import into the United States. Importation of this kind of engine (or vessel containing such an engine) is generally prohibited by 40 CFR part 1068.

APPLICABILITY OF EMISSION STANDARDS FOR COMPRESSION-IGNITION MARINE ENGINES

Engine category and type	Power (kW)	Per-cylinder displacement (L/cyl)	Initial model year of emission standards
Category 1	P < 19	All	2000
Category 1	19 ≤ P < 37	All	1999
Category 1, Recreational	P ≥ 37	disp. < 0.9	2007
Category 1, Recreational	All	0.9 ≤ disp. < 2.5	2006
Category 1, Recreational	All	disp. ≥ 2.5	2004
Category 1, Commercial	P ≥ 37	disp. < 0.9	2005
Category 1, Commercial	All	disp. ≥ 0.9	2004
Category 2 and 3	All	disp. ≥ 5.0	2004

New vessel means any of the following:

(1) A vessel for which the ultimate purchaser has never received the equitable or legal title. The vessel is no longer new when the ultimate purchaser receives this title or it is placed into service, whichever comes first.

(2) For vessels with no Category 3 engines, a vessel that has been modified such that the value of the modifications exceeds 50 percent of the value of the modified vessel, excluding temporary modifications (as defined in this section). The value of the modification is the difference in the assessed value of the vessel before the modification and the assessed value of the vessel after the modification. The vessel is no longer new when it is placed into service. Use

the following equation to determine if the fractional value of the modification exceeds 50 percent:

Percent of value = [(Value after modification) − (Value before modification)] × 100% ÷ (Value after modification)

(3) For vessels with Category 3 engines, a vessel that has undergone a modification that substantially alters the dimensions or carrying capacity of the vessel, changes the type of vessel, or substantially prolongs the vessel's life.

(4) An imported vessel that has already been placed into service, where it has an engine not covered by a certificate of conformity issued under this part at the time of importation that was manufactured after the requirements of this part start to apply (see § 1042.1).

Noncompliant engine means an engine that was originally covered by a certificate of conformity but is not in the certified configuration or otherwise does not comply with the conditions of the certificate.

Nonconforming engine means an engine not covered by a certificate of conformity that would otherwise be subject to emission standards.

Nonmethane hydrocarbon has the meaning given in 40 CFR 1065.1001. This generally means the difference between the emitted mass of total hydrocarbons and the emitted mass of methane.

Nonroad means relating to nonroad engines, or vessels, or equipment that include nonroad engines.

Nonroad engine has the meaning given in 40 CFR 1068.30. In general, this means all internal-combustion engines except motor vehicle engines, stationary engines, engines used solely for competition, or engines used in aircraft.

Official emission result means the measured emission rate for an emission-data engine on a given duty cycle before the application of any deterioration factor, but after the applicability of regeneration adjustment factors.

Operator demand has the meaning given in 40 CFR 1065.1001.

Owners manual means a document or collection of documents prepared by the engine manufacturer for the owner or operator to describe appropriate engine maintenance, applicable warranties, and any other information related to operating or keeping the engine. The owners manual is typically provided to the ultimate purchaser at the time of sale. The owners manual may be in paper or electronic format.

Oxides of nitrogen has the meaning given in 40 CFR 1065.1001.

Particulate trap means a filtering device that is designed to physically trap particulate matter above a certain size.

Passenger means a person that provides payment as a condition of boarding a vessel. This does not include the owner or any paid crew members.

Placed into service means put into initial use for its intended purpose.

Point of first retail sale means the location at which the initial retail sale occurs. This generally means a vessel dealership or manufacturing facility, but may also include an engine seller or distributor in cases where loose engines are sold to the general public for uses such as replacement engines.

Post-manufacture marinizer means an entity that produces a marine engine by modifying a non-marine engine, whether certified or uncertified, complete or partially complete, where the entity is not controlled by the manufacturer of the base engine or by an entity that also controls the manufacturer of the base engine. In addition, vessel manufacturers that substantially modify marine engines are post-manufacture marinizers. For the purpose of this definition, ''substantially modify'' means changing an engine in a way that could change engine emission characteristics.

Power density has the meaning given in § 1042.140.

Ramped-modal means relating to the ramped-modal type of steady-state test described in § 1042.505.

Rated speed means the maximum full-load governed speed for governed engines and the speed of maximum power for ungoverned engines.

Recreational marine engine means a Category 1 propulsion marine engine that is intended by the manufacturer to be installed on a recreational vessel.

Recreational vessel means a vessel that is intended by the vessel manufacturer to be operated primarily for pleasure or leased, rented or chartered to another for the latter's pleasure. However, this does not include the following vessels:

(1) Vessels below 100 gross tons that carry more than 6 passengers.

(2) Vessels at or above 100 gross tons that carry one or more passengers.

(3) Vessels used solely for competition (see § 1042.620).

Remanufacture means to replace every cylinder liner in a commercial engine with maximum engine power at or above 600 kW, whether during a single maintenance event or cumulatively within a five-year period. For the purpose of this definition, ''replace'' includes removing, inspecting, and requalifying a liner. Rebuilding a recreational engine or an engine with maximum engine power below 600 kW is not remanufacturing.

Remanufacture system or *remanufacturing system* means all components (or specifications for components) and instructions necessary to remanufacture an engine in accordance with applicable requirements of this part 1042.

Remanufacturer has the meaning given to ''manufacturer'' in section 216(1) of the Clean Air Act (42 U.S.C. 7550(1)) with respect to remanufactured marine engines. This term includes any person that is engaged in the manufacture or assembly of remanufactured engines, such as persons who:

(1) Design or produce the emission-related parts used in remanufacturing.

(2) Install parts in or on an existing engine to remanufacture it.

(3) Own or operate the engine and provide specifications as to how an engine is to be remanufactured (i.e., specifying who will perform the work, when the work is to be performed, what parts are to be used, or how to calibrate the adjustable parameters of the engine).

Residual fuel has the meaning given in 40 CFR 80.2. This generally includes all RM grades of marine fuel without regard to whether they are known commercially as residual fuel. For example, fuel marketed as intermediate fuel may be residual fuel.

Revoke has the meaning given in 40 CFR 1068.30. In general this means to terminate the certificate or an exemption for an engine family.

Round has the meaning given in 40 CFR 1065.1001.

Scheduled maintenance means adjusting, repairing, removing, disassembling, cleaning, or replacing components or systems periodically to keep a part or system from failing, malfunctioning, or wearing prematurely. It also may mean actions you expect are necessary to correct an overt indication of failure or malfunction for which periodic maintenance is not appropriate.

Small volume boat builder means a boat manufacturer with fewer than 500 employees and with annual worldwide production of fewer than 100 boats. For manufacturers owned by a parent company, these limits apply to the combined production and number of employees of the parent company and all its subsidiaries.

Small-volume engine manufacturer means a manufacturer with annual worldwide production of fewer than 1,000 internal combustion engines (marine and nonmarine). For manufacturers owned by a parent company, the limit applies to the

production of the parent company and all its subsidiaries.

Spark-ignition means relating to a gasoline-fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark-ignition engines usually use a throttle to regulate intake air flow to control power during normal operation.

Specified adjustable range means a range of adjustment for an adjustable parameter that is approved as part of certification. Note that Category 1 engines must comply with emission standards over the full physically adjustable range for any adjustable parameters.

Steady-state has the meaning given in 40 CFR 1065.1001.

Sulfur-sensitive technology means an emission control technology that experiences a significant drop in emission control performance or emission-system durability when an engine is operated on low-sulfur fuel (i.e., fuel with a sulfur concentration of 300 to 500 ppm) as compared to when it is operated on ultra low-sulfur fuel (i.e., fuel with a sulfur concentration less than 15 ppm). Exhaust-gas recirculation is not a sulfur-sensitive technology.

Suspend has the meaning given in 40 CFR 1068.30. In general this means to temporarily discontinue the certificate or an exemption for an engine family.

Temporary modification means a modification to a vessel based on a written contract for marine services such that the modifications will be removed from the vessel when the contract expires. This provision is intended to address short-term contracts that would generally be less than 12 months in duration. You may ask us to consider modifications that will be in place longer than 12 months as temporary modifications.

Test engine means an engine in a test sample.

Test sample means the collection of engines selected from the population of an engine family for emission testing. This may include testing for certification, production-line testing, or in-use testing.

Tier 1 means relating to the Tier 1 emission standards, as shown in Appendix I.

Tier 2 means relating to the Tier 2 emission standards, as shown in Appendix I.

Tier 3 means relating to the Tier 3 emission standards, as shown in § 1042.101.

Tier 4 means relating to the Tier 4 emission standards, as shown in § 1042.101.

Total hydrocarbon has the meaning given in 40 CFR 1065.1001. This generally means the combined mass of organic compounds measured by the specified procedure for measuring total hydrocarbon, expressed as a hydrocarbon with an atomic hydrogen-to-carbon ratio of 1.85:1.

Total hydrocarbon equivalent has the meaning given in 40 CFR 1065.1001. This generally means the sum of the carbon mass contributions of non-oxygenated hydrocarbons, alcohols and aldehydes, or other organic compounds that are measured separately as contained in a gas sample, expressed as exhaust hydrocarbon from petroleum-fueled locomotives. The hydrogen-to-carbon ratio of the equivalent hydrocarbon is 1.85:1.

Ultimate purchaser means, with respect to any new vessel or new marine engine, the first person who in good faith purchases such new vessel or new marine engine for purposes other than resale.

Ultra low-sulfur diesel fuel means one of the following:

(1) For in-use fuels, *ultra low-sulfur diesel fuel* means a diesel fuel marketed as ultra low-sulfur diesel fuel having a maximum sulfur concentration of 15 parts per million.

(2) For testing, *ultra low-sulfur diesel fuel* has the meaning given in 40 CFR part 1065.

United States has the meaning given in 40 CFR 1068.30.

Upcoming model year means for an engine family the model year after the one currently in production.

U.S.-directed production volume means the number of engine units, subject to the requirements of this part, produced by a manufacturer for which the manufacturer has a reasonable assurance that sale was or will be made to ultimate purchasers in the United States.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. It is the period during which a new engine is required to comply with all applicable emission standards. See § 1042.101(e).

Variable-speed engine means an engine that is not a constant-speed engine.

Vessel means a marine vessel.

Vessel operator means any individual that physically operates or maintains a vessel or exercises managerial control over the operation of the vessel.

Vessel owner means the individual or company that holds legal title to a vessel.

Void has the meaning given in 40 CFR 1068.30. In general this means to invalidate a certificate or an exemption both retroactively and prospectively.

Volatile liquid fuel means any fuel other than diesel fuel or biodiesel that is a liquid at atmospheric pressure and has a Reid Vapor Pressure higher than 2.0 pounds per square inch.

We (us, our) means the Administrator of the Environmental Protection Agency and any authorized representatives.

§ 1042.905 Symbols, acronyms, and abbreviations.

The following symbols, acronyms, and abbreviations apply to this part:

ABT Averaging, banking, and trading.
AECD auxiliary-emission control device.
CFR Code of Federal Regulations.
CO carbon monoxide.
CO_2 carbon dioxide.
cyl cylinder.
disp. displacement.
EPA Environmental Protection Agency.
FEL Family Emission Limit.
g grams.
HC hydrocarbon.
hr hours.
kPa kilopascals.
kW kilowatts.
L liters.
LTR Limited Testing Region.
NARA National Archives and Records Administration.
NMHC nonmethane hydrocarbons.
NO_X oxides of nitrogen (NO and NO_2).
NTE not-to-exceed.
PM particulate matter.
RPM revolutions per minute.
SAE Society of Automotive Engineers.
SCR selective catalytic reduction.
THC total hydrocarbon.
THCE total hydrocarbon equivalent.
ULSD ultra low-sulfur diesel fuel.
U.S.C. United States Code.

§ 1042.910 Reference materials.

Documents listed in this section have been incorporated by reference into this part. The Director of the Federal Register approved the incorporation by reference as prescribed in 5 U.S.C. 552(a) and 1 CFR part 51. Anyone may inspect copies at the U.S. EPA, Air and Radiation Docket and Information Center, 1301 Constitution Ave., NW., Room B102, EPA West Building, Washington, DC 20460 or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

(a) *SAE material.* Table 1 to this section lists material from the Society of Automotive Engineers that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the sections of this part where we reference it. Anyone may purchase copies of these materials from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096 or *www.sae.org.* Table 1 follows:

TABLE 1 TO §1042.910.—SAE MATERIALS

Document No. and name	Part 1042 reference
SAE J1930, Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms, revised May 1998	1042.135

(b) *IMO material.* Table 2 to this section lists material from the International Maritime Organization that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the section of this part where we reference it. Anyone may purchase copies of these materials from the International Maritime Organization, 4 Albert Embankment, London SE1 7SR, United Kingdom or *www.imo.org.* Table 2 follows:

TABLE 2 TO §1042.910.—IMO MATERIALS

Document No. and name	Part 1042 reference
Resolutions of the 1997 MARPOL Conference: Resolution 2—Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, 1997	1042.901

§ 1042.915 Confidential information.

(a) Clearly show what you consider confidential by marking, circling, bracketing, stamping, or some other method.

(b) We will store your confidential information as described in 40 CFR part 2. Also, we will disclose it only as specified in 40 CFR part 2. This applies both to any information you send us and to any information we collect from inspections, audits, or other site visits.

(c) If you send us a second copy without the confidential information, we will assume it contains nothing confidential whenever we need to release information from it.

(d) If you send us information without claiming it is confidential, we may make it available to the public without further notice to you, as described in 40 CFR 2.204.

§ 1042.920 Hearings.

(a) You may request a hearing under certain circumstances, as described elsewhere in this part. To do this, you must file a written request, including a description of your objection and any supporting data, within 30 days after we make a decision.

(b) For a hearing you request under the provisions of this part, we will approve your request if we find that your request raises a substantial factual issue.

(c) If we agree to hold a hearing, we will use the procedures specified in 40 CFR part 1068, subpart G.

§ 1042.925 Reporting and recordkeeping requirements.

Under the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget approves the reporting and recordkeeping specified in the applicable regulations. The following items illustrate the kind of reporting and recordkeeping we require for engines regulated under this part:

(a) We specify the following requirements related to engine certification in this part 1042:

(1) In §1042.135 we require engine manufacturers to keep certain records related to duplicate labels sent to vessel manufacturers.

(2) In §1042.145 we state the requirements for interim provisions.

(3) In subpart C of this part we identify a wide range of information required to certify engines.

(4) In §§1042.345 and 1042.350 we specify certain records related to production-line testing.

(5) In subpart G of this part we identify several reporting and recordkeeping items for making demonstrations and getting approval related to various special compliance provisions.

(6) In §§1042.725, 1042.730, and 1042.735 we specify certain records related to averaging, banking, and trading.

(7) In subpart I of this part we specify certain records related to meeting requirements for remanufactured engines.

(b) We specify the following requirements related to testing in 40 CFR part 1065:

(1) In 40 CFR 1065.2 we give an overview of principles for reporting information.

(2) In 40 CFR 1065.10 and 1065.12 we specify information needs for establishing various changes to published test procedures.

(3) In 40 CFR 1065.25 we establish basic guidelines for storing test information.

(4) In 40 CFR 1065.695 we identify data that may be appropriate for collecting during testing of in-use engines using portable analyzers.

(c) We specify the following requirements related to the general compliance provisions in 40 CFR part 1068:

(1) In 40 CFR 1068.5 we establish a process for evaluating good engineering judgment related to testing and certification.

(2) In 40 CFR 1068.25 we describe general provisions related to sending and keeping information.

(3) In 40 CFR 1068.27 we require manufacturers to make engines available for our testing or inspection if we make such a request.

(4) In 40 CFR 1068.105 we require vessel manufacturers to keep certain records related to duplicate labels from engine manufacturers.

(5) In 40 CFR 1068.120 we specify recordkeeping related to rebuilding engines.

(6) In 40 CFR part 1068, subpart C, we identify several reporting and recordkeeping items for making demonstrations and getting approval related to various exemptions.

(7) In 40 CFR part 1068, subpart D, we identify several reporting and recordkeeping items for making demonstrations and getting approval related to importing engines.

(8) In 40 CFR 1068.450 and 1068.455 we specify certain records related to testing production-line engines in a selective enforcement audit.

(9) In 40 CFR 1068.501 we specify certain records related to investigating and reporting emission-related defects.

(10) In 40 CFR 1068.525 and 1068.530 we specify certain records related to recalling nonconforming engines.

Appendix I to Part 1042.—Summary of Previous Emission Standards

The following standards apply to compression-ignition marine engines produced before the model years specified in § 1042.1:

(a) *Engines below 37 kW.* Tier 1 and Tier 2 standards for engines below 37 kW apply as specified in 40 CFR part 89 and summarized in the following table:

TABLE 1 TO APPENDIX I.—EMISSION STANDARDS FOR ENGINES BELOW 37 KW (G/KW-HR)

Rated power (kW)	Tier	Model year	NMHC + NO_X	CO	PM
kW<8	Tier 1	2000	10.5	8.0	1.0
	Tier 2	2005	7.5	8.0	0.80
8≤kW<19	Tier 1	2000	9.5	6.6	0.80
	Tier 2	2005	7.5	6.6	0.80
19≤kW<37	Tier 1	1999	9.5	5.5	0.8
	Tier 2	2004	7.5	5.5	0.6

(b) *Engines at or above 37 kW.* Tier 1 and Tier 2 standards for engines at or above 37 kW apply as specified in 40 CFR part 94 and summarized as follows:

(1) *Tier 1 standards.* NO_X emissions from model year 2004 and later engines with displacement of 2.5 or more liters per cylinder may not exceed the following values:

(i) 17.0 g/kW-hr when maximum test speed is less than 130 rpm.

(ii) $45.0 \times N^{-0.20}$ when maximum test speed is at or above 130 but below 2000 rpm, where N is the maximum test speed of the engine in revolutions per minute. Round the calculated standard to the nearest 0.1 g/kW-hr.

(ii) 9.8 g/kW-hr when maximum test speed is 2000 rpm or more.

(2) *Tier 2 primary standards.* Exhaust emissions may not exceed the values shown in the following table:

TABLE 2 TO APPENDIX I.—PRIMARY TIER 2 EMISSION STANDARDS FOR COMMERCIAL AND RECREATIONAL MARINE ENGINES AT OR ABOVE 37 KW (G/KW-HR)

Engine size liters/cylinder	Maximum engine power	Category	Model year	NO_X + THC g/kW-hr	CO g/kW-hr	PM g/kW-hr
disp. < 0.9	power ≥ 37 kW	Category 1 Commercial	2005	7.5	5.0	0.40
		Category 1 Recreational	2007	7.5	5.0	0.40
0.9 ≤ disp. < 1.2	All	Category 1 Commercial	2004	7.2	5.0	0.30
		Category 1 Recreational	2006	7.2	5.0	0.30
1.2 ≤ disp. < 2.5	All	Category 1 Commercial	2004	7.2	5.0	0.20
		Category 1 Recreational	2006	7.2	5.0	0.20
2.5 ≤ disp. < 5.0	All	Category 1 Commercial	2007	7.2	5.0	0.20
		Category 1 Recreational	2009	7.2	5.0	0.20
5.0 ≤ disp. < 15.0	All	Category 2	2007	7.8	5.0	0.27
15.0 ≤ disp. < 20.0	power < 3300 kW	Category 2	2007	8.7	5.0	0.50
	power ≥ 3300 kW	Category 2	2007	9.8	5.0	0.50
20.0 ≤ disp. < 25.0	All	Category 2	2007	9.8	5.0	0.50
25.0 ≤ disp. < 30.0	All	Category 2	2007	11	5.0	0.5

(3) *Tier 2 supplemental standards.* Not-to-exceed emission standards apply for Tier 2 engines as specified in 40 CFR 94.8(e).

Appendix II to Part 1042—Steady-State Duty Cycles

(a) The following duty cycles apply as specified in § 1042.505(b)(1):

(1) The following duty cycle applies for discrete-mode testing:

E3 mode No.	Engine speed [1]	Percent of maximum test power	Weighting factors
1	Maximum test speed	100	0.2
2	91%	75	0.5
3	80%	50	0.15
4	63%	25	0.15

[1] Speed terms are defined in 40 CFR part 1065. Percent speed values are relative to maximum test speed.

(2) The following duty cycle applies for ramped-modal testing:

RMC mode	Time in mode (seconds)	Engine speed [1, 3]	Power (percent) [2, 3]
1a Steady-state	229	Maximum test speed	100%.
1b Transition	20	Linear transition	Linear transition in torque.
2a Steady-state	166	63%	25%.
2b Transition	20	Linear transition	Linear transition in torque.
3a Steady-state	570	91%	75%.
3b Transition	20	Linear transition	Linear transition in torque.
4a Steady-state	175	80%	50%.

[1] Speed terms are defined in 40 CFR part 1065. Percent speed is relative to maximum test speed.
[2] The percent power is relative to the maximum test power.

[3] Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the torque setting of the current mode to the torque setting of the next mode, and simultaneously command a similar linear progression for engine speed if there is a change in speed setting.

(b) The following duty cycles apply as specified in § 1042.505(b)(2):

(1) The following duty cycle applies for discrete-mode testing:

E5 mode No.	Engine speed [1]	Percent of maximum test power	Weighting factors
1	Maximum test speed	100	0.08
2	91%	75	0.13
3	80%	50	0.17
4	63%	25	0.32
5	Warm idle	0	0.3

[1] Speed terms are defined in 40 CFR part 1065. Percent speed values are relative to maximum test speed.

(2) The following duty cycle applies for ramped-modal testing:

RMC mode	Time in mode (seconds)	Engine speed [1, 3]	Power (percent) [2, 3]
1a Steady-state	167	Warm idle	0.
1b Transition	20	Linear transition	Linear transition in torque.
2a Steady-state	85	Maximum test speed	100%.
2b Transition	20	Linear transition	Linear transition in torque.
3a Steady-state	354	63%	25%.
3b Transition	20	Linear transition	Linear transition in torque.
4a Steady-state	141	91%	75%.
4b Transition	20	Linear transition	Linear transition in torque.
5a Steady-state	182	80%	50%.
5b Transition	20	Linear transition	Linear transition in torque.
6 Steady-state	171	Warm idle	0.

[1] Speed terms are defined in 40 CFR part 1065. Percent speed is relative to maximum test speed.
[2] The percent power is relative to the maximum test power.
[3] Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the torque setting of the current mode to the torque setting of the next mode, and simultaneously command a similar linear progression for engine speed if there is a change in speed setting.

(c) The following duty cycles apply as specified in § 1042.505(b)(3):

(1) The following duty cycle applies for discrete-mode testing:

E2 mode No.	Engine speed [1]	Torque (percent) [2]	Weighting factors
1	Engine Governed	100	0.2
2	Engine Governed	75	0.5
3	Engine Governed	50	0.15
4	Engine Governed	25	0.15

[1] Speed terms are defined in 40 CFR part 1065.
[2] The percent torque is relative to the maximum test torque as defined in 40 CFR part 1065.

(2) The following duty cycle applies for ramped-modal testing:

RMC mode	Time in mode (seconds)	Engine speed	Torque (percent) [1, 2]
1a Steady-state	234	Engine Governed	100%.
1b Transition	20	Engine Governed	Linear transition.
2a Steady-state	571	Engine Governed	25%.
2b Transition	20	Engine Governed	Linear transition.
3a Steady-state	165	Engine Governed	75%.
3b Transition	20	Engine Governed	Linear transition.
4a Steady-state	170	Engine Governed	50%.

[1] The percent torque is relative to the maximum test torque as defined in 40 CFR part 1065.
[2] Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the torque setting of the current mode to the torque setting of the next mode.

Appendix III to Part 1042—Not-to-Exceed Zones

(a) The following definitions apply for this Appendix III:

(1) *Percent power* means the percentage of the maximum power achieved at Maximum Test Speed (or at Maximum Test Torque for constant-speed engines).

(2) *Percent speed* means the percentage of Maximum Test Speed.

(b) Figure 1 of this Appendix illustrates the default NTE zone for commercial marine engines certified using the duty cycle specified in § 1042.505(b)(1), except for variable-speed propulsion marine engines used with controllable-pitch propellers or with electrically coupled propellers, as follows:

(1) Subzone 1 is defined by the following boundaries:

(i) Percent power ≥ 0.7 · (percent speed)$^{2.5}$.

(ii) Percent power ≤ (percent speed/0.9)$^{3.5}$.

(iii) Percent power ≥ 3.0 · (100%—percent speed).

(2) Subzone 2 is defined by the following boundaries:

(i) Percent power ≥ 0.7 · (percent speed)$^{2.5}$.

(ii) Percent power ≤ (percent speed/0.9)$^{3.5}$.

(iii) Percent power < 3.0 · (100% − percent speed).

(iv) Percent speed ≥ 70 percent.

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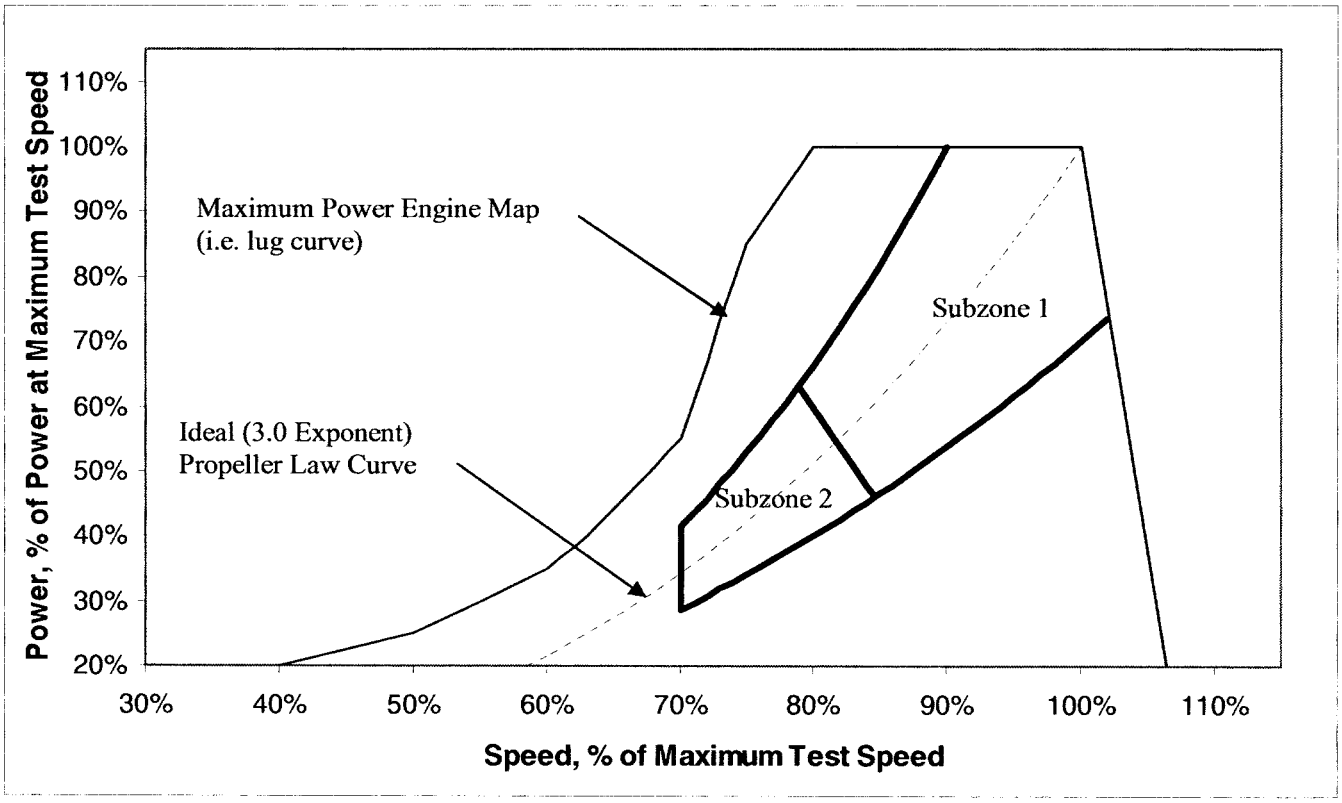
Figure 1 of Appendix III — NTE Zone and Subzones for Propeller-Law Commercial Marine Engines



(c) Figure 2 of this Appendix illustrates the default NTE zone for recreational marine engines certified using the duty cycle specified in § 1042.505(b)(2), except for variable-speed marine engines used with controllable-pitch propellers or with electrically coupled propellers, as follows:

(1) Subzone 1 is defined by the following boundaries:

(i) Percent power ≥ 0.7 · (percent speed)$^{2.5}$.

(ii) Percent power ≤ (percent speed/0.9)$^{3.5}$.

(iii) Percent power ≥ 3.0 · (100% − percent speed).

(iv) Percent power ≤ 95 percent.

(2) Subzone 2 is defined by the following boundaries:

(i) Percent power ≥ 0.7 · (percent speed)$^{2.5}$.

(ii) Percent power ≤ (percent speed/0.9)$^{3.5}$.

(iii) Percent power < 3.0 · (100% − percent speed).

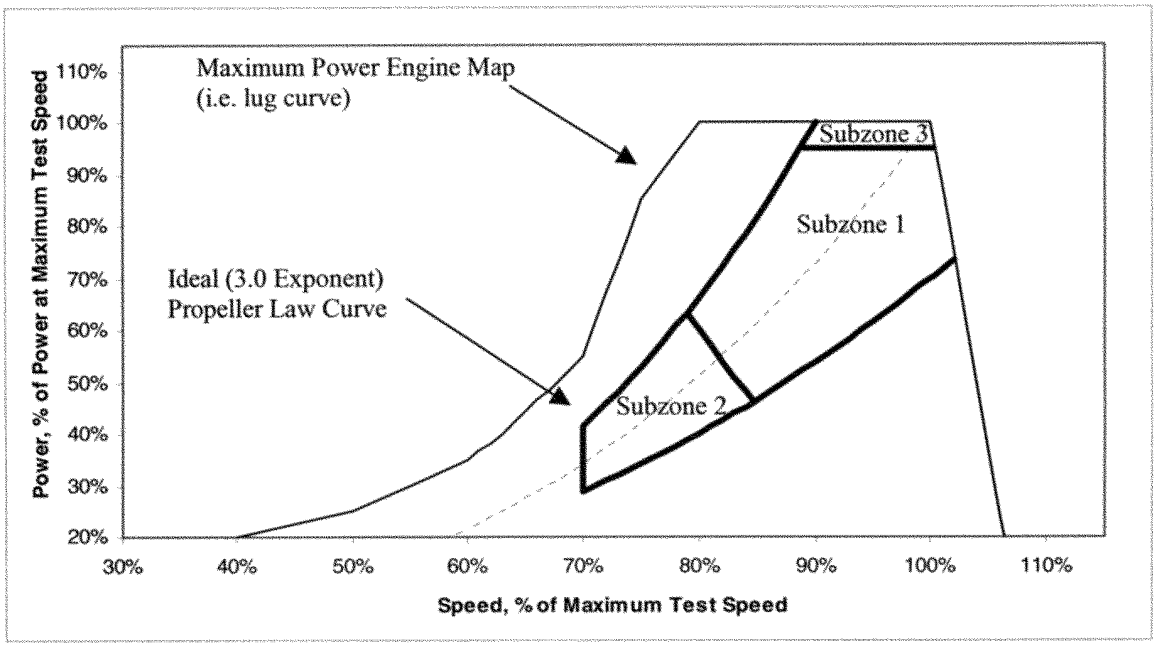
(iv) Percent speed ≥ 70 percent.

(3) Subzone 3 is defined by the following boundaries:

(i) Percent power ≤ (percent speed/0.9)$^{3.5}$.

(ii) Percent power > 95 percent.

Figure 2 of Appendix III — NTE Zone and Subzones for Propeller-Law Recreational Marine Engines



(d) Figure 3 of this Appendix illustrates the default NTE zone for variable-speed marine engines used with controllable-pitch propellers or with electrically coupled propellers that are certified using the duty cycle specified in § 1042.505(b)(1), (2), or (3), as follows:

(1) Subzone 1 is defined by the following boundaries:

(i) Percent power ≥ 0.7 · (percent speed)$^{2.5}$.

(ii) Percent power ≥ 3.0 · (100% − percent speed).

(iii) Percent speed ≥ 78.9 percent.

(2) Subzone 2a is defined by the following boundaries:

(i) Percent power ≥ 0.7 · (percent speed)$^{2.5}$.

(ii) Percent speed ≥ 70 percent.

(iii) Percent speed < 78.9 percent, for Percent power > 63.3 percent.

(iv) Percent power < 3.0 · (100% − percent speed), for Percent speed ≥ 78.9 percent.

(3) Subzone 2b is defined by the following boundaries:

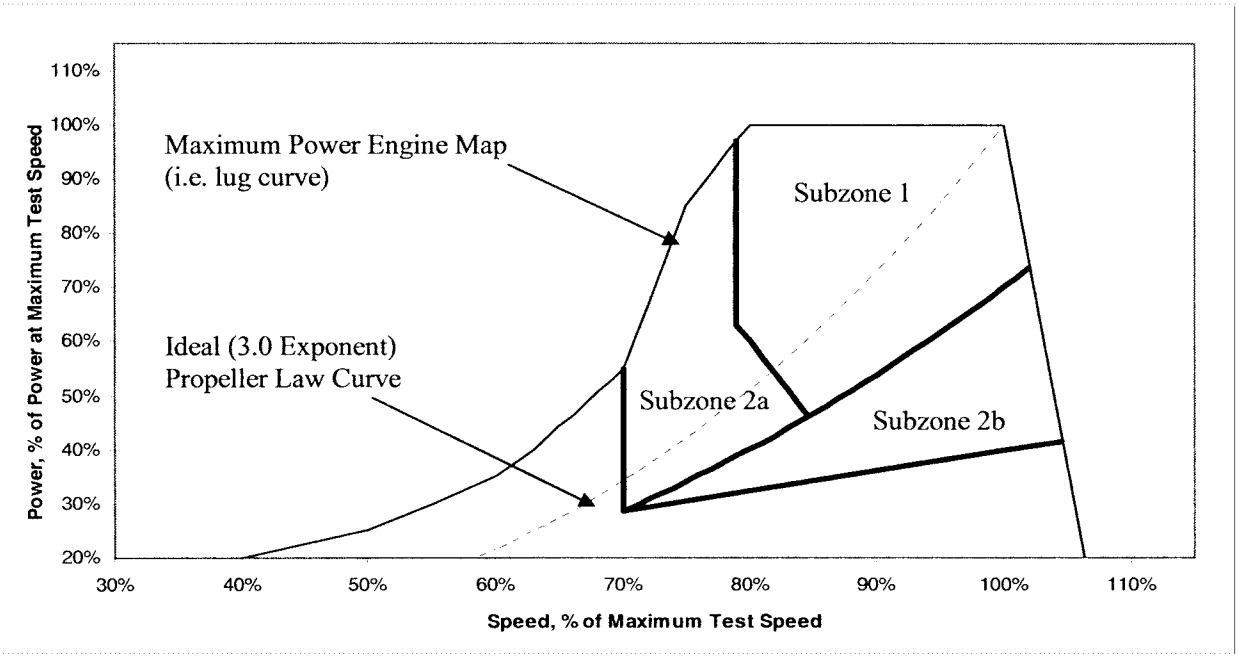
(i) The line formed by connecting the following two points on a plot of speed-vs.-power:

(A) Percent speed = 70 percent; Percent power = 28.7 percent.

(B) Percent speed = 40 percent at governed speed; Percent power = 40 percent.

(ii) Percent power < 0.7 · (percent speed)$^{2.5}$.

Figure 3 of Appendix III — NTE Zone and Subzones for Variable-Pitch or Electronically Coupled Engines*



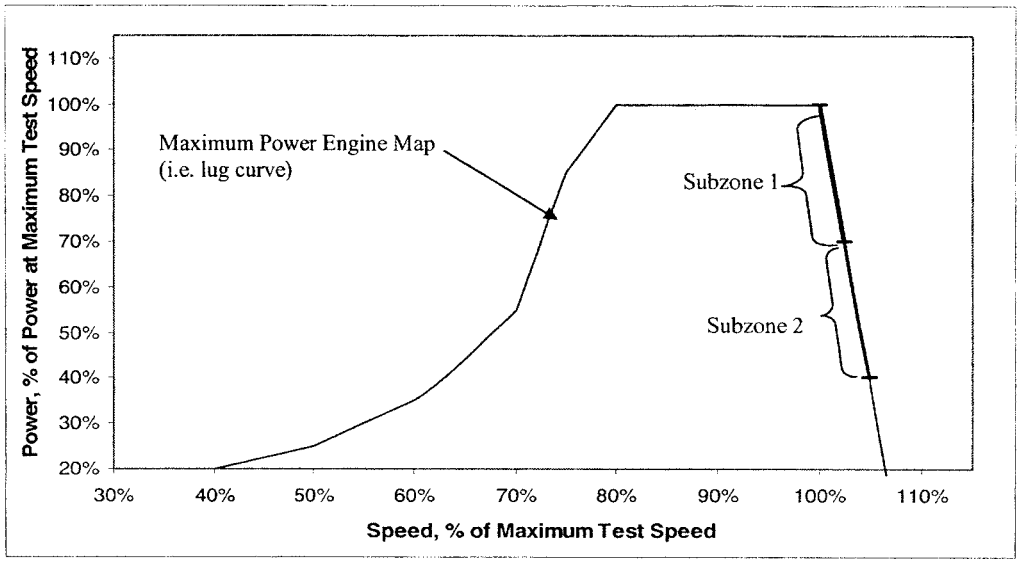
*shown for engines capable of operating on the E3 Duty Cycle

(e) Figure 4 of this Appendix illustrates the default NTE zone for constant-speed engines certified using a duty cycle specified in § 1042.505(b)(3) or (b)(4), as follows:

(1) Subzone 1 is defined by the following boundaries:
(i) Percent power ≥ 70 percent.
(ii) [Reserved]

(2) Subzone 2 is defined by the following boundaries:
(i) Percent power < 70 percent.
(ii) Percent power ≥ 40 percent.

Figure 4 of Appendix III — NTE Zone and Subzones for Constant-Speed Marine Engines



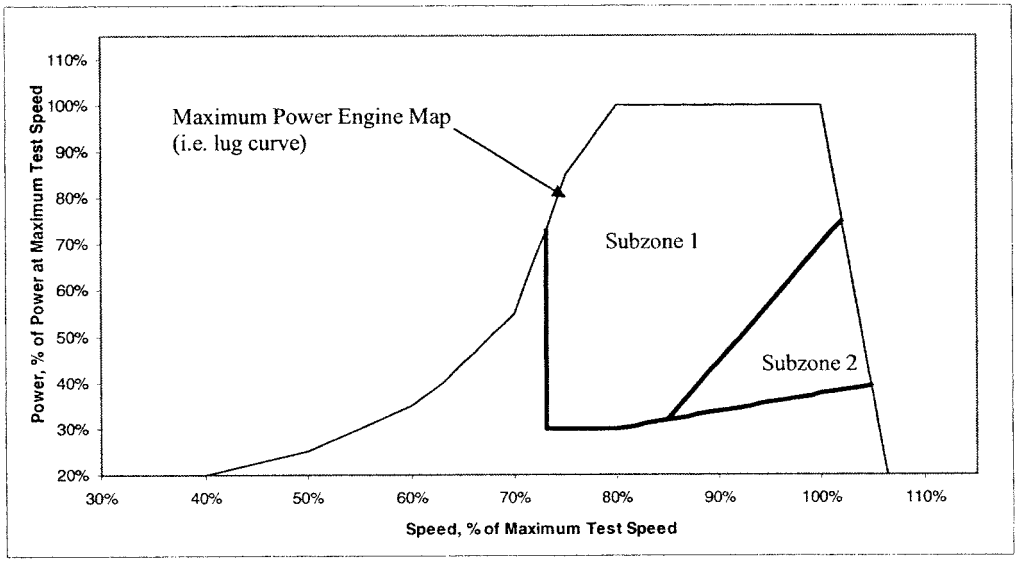
(f) Figure 5 of this Appendix illustrates the default NTE zone for variable-speed auxiliary marine engines certified using the duty cycle specified in § 1042.505(b)(5)(ii) or (iii), as follows:

(1) The default NTE zone is defined by the boundaries specified in 40 CFR 86.1370–2007(b)(1) and (2).

(2) A special PM subzone is defined in 40 CFR 1039.515(b).

Figure 5 of Appendix III — NTE Zone and Subzones for

Variable-Speed Auxiliary Marine Engines (nonpropeller-law)



PART 1065—ENGINE-TESTING PROCEDURES

■ 45. The authority citation for part 1065 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart A—[Amended]

■ 46. Section 1065.1 is revised to read as follows:

§ 1065.1 Applicability.

(a) This part describes the procedures that apply to testing we require for the following engines or for vehicles using the following engines:

(1) Locomotives we regulate under 40 CFR part 1033. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 92 according to § 1065.10.

(2) Model year 2010 and later heavy-duty highway engines we regulate under 40 CFR part 86. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 86, subpart N, according to § 1065.10.

(3) Nonroad diesel engines we regulate under 40 CFR part 1039 and stationary diesel engines that are certified to the standards in 40 CFR part 1039 as specified in 40 CFR part 60, subpart IIII. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 89 according to § 1065.10.

(4) Marine diesel engines we regulate under 40 CFR part 1042. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 94 according to § 1065.10.

(5) [Reserved]

(6) Large nonroad spark-ignition engines we regulate under 40 CFR part 1048, and stationary engines that are certified to the standards in 40 CFR part 1048 or as otherwise specified in 40 CFR part 60, subpart JJJJ.

(7) Vehicles we regulate under 40 CFR part 1051 (such as snowmobiles and off-highway motorcycles) based on engine testing. See 40 CFR part 1051, subpart F, for standards and procedures that are based on vehicle testing.

(8) [Reserved]

(b) The procedures of this part may apply to other types of engines, as described in this part and in the standard-setting part.

(c) The term ''you'' means anyone performing testing under this part other than EPA.

(1) This part is addressed primarily to manufacturers of engines, vehicles, equipment, and vessels, but it applies equally to anyone who does testing under this part for such manufacturers.

(2) This part applies to any manufacturer or supplier of test equipment, instruments, supplies, or any other goods or services related to the procedures, requirements, recommendations, or options in this part.

(d) Paragraph (a) of this section identifies the parts of the CFR that define emission standards and other requirements for particular types of engines. In this part, we refer to each of these other parts generically as the ''standard-setting part.'' For example, 40 CFR part 1051 is always the standard-setting part for snowmobiles and part 86 is the standard-setting part for heavy-duty highway engines.

(e) Unless we specify otherwise, the terms ''procedures'' and ''test procedures'' in this part include all aspects of engine testing, including the equipment specifications, calibrations, calculations, and other protocols and procedural specifications needed to measure emissions.

(f) For vehicles, equipment, or vessels subject to this part and regulated under

vehicle-based, equipment-based, or vessel-based standards, use good engineering judgment to interpret the term ''engine'' in this part to include vehicles, equipment, or vessels, where appropriate.

(g) For additional information regarding these test procedures, visit our Web site at *www.epa.gov*, and in particular *http://www.epa.gov/otaq/testingregs.htm*.

■ 47. Section 1065.2 is revised to read as follows:

§ 1065.2 Submitting information to EPA under this part.

(a) You are responsible for statements and information in your applications for certification, requests for approved procedures, selective enforcement audits, laboratory audits, production-line test reports, field test reports, or any other statements you make to us related to this part 1065.

(b) In the standard-setting part and in 40 CFR 1068.101, we describe your obligation to report truthful and complete information and the consequences of failing to meet this obligation. See also 18 U.S.C. 1001 and 42 U.S.C. 7413(c)(2).

(c) We may void any certificates or approvals associated with a submission of information if we find that you intentionally submitted false, incomplete, or misleading information. For example, if we find that you intentionally submitted incomplete information to mislead EPA when requesting approval to use alternate test procedures, we may void the certificates for all engines families certified based on emission data collected using the alternate procedures. This would also apply if you ignore data from incomplete tests or from repeat tests with higher emission results.

(d) We may require an authorized representative of your company to approve and sign the submission, and to certify that all of the information submitted is accurate and complete. This includes everyone who submits information, including manufacturers and others.

(e) See 40 CFR 1068.10 for provisions related to confidential information. Note however that under 40 CFR 2.301, emission data is generally not eligible for confidential treatment.

(f) Nothing in this part should be interpreted to limit our ability under Clean Air Act section 208 (42 U.S.C. 7542) to verify that engines conform to the regulations.

■ 48. Section 1065.5 is revised to read as follows:

§ 1065.5 Overview of this part 1065 and its relationship to the standard-setting part.

(a) This part specifies procedures that apply generally to testing various categories of engines. See the standard-setting part for directions in applying specific provisions in this part for a particular type of engine. Before using this part's procedures, read the standard-setting part to answer at least the following questions:

(1) What duty cycles must I use for laboratory testing?

(2) Should I warm up the test engine before measuring emissions, or do I need to measure cold-start emissions during a warm-up segment of the duty cycle?

(3) Which exhaust gases do I need to measure?

(4) Do any unique specifications apply for test fuels?

(5) What maintenance steps may I take before or between tests on an emission-data engine?

(6) Do any unique requirements apply to stabilizing emission levels on a new engine?

(7) Do any unique requirements apply to test limits, such as ambient temperatures or pressures?

(8) Is field testing required or allowed, and are there different emission standards or procedures that apply to field testing?

(9) Are there any emission standards specified at particular engine-operating conditions or ambient conditions?

(10) Do any unique requirements apply for durability testing?

(b) The testing specifications in the standard-setting part may differ from the specifications in this part. In cases where it is not possible to comply with both the standard-setting part and this part, you must comply with the specifications in the standard-setting part. The standard-setting part may also allow you to deviate from the procedures of this part for other reasons.

(c) The following table shows how this part divides testing specifications into subparts:

TABLE 1 OF § 1065.5.—DESCRIPTION OF PART 1065 SUBPARTS

This subpart	Describes these specifications or procedures
Subpart A	Applicability and general provisions.
Subpart B	Equipment for testing.
Subpart C	Measurement instruments for testing.
Subpart D	Calibration and performance verifications for measurement systems.
Subpart E	How to prepare engines for testing, including service accumulation.
Subpart F	How to run an emission test over a predetermined duty cycle.
Subpart G	Test procedure calculations.
Subpart H	Fuels, engine fluids, analytical gases, and other calibration standards.
Subpart I	Special procedures related to oxygenated fuels.
Subpart J	How to test with portable emission measurement systems (PEMS).

■ 49. Section 1065.10 is amended by revising paragraphs (c)(1), (c)(2), (c)(6), and (c)(7) introductory text to read as follows:

§ 1065.10 Other procedures.

* * * * *

(c) * * *

(1) The objective of the procedures in this part is to produce emission measurements equivalent to those that would result from measuring emissions during in-use operation using the same engine configuration as installed in a vehicle, equipment, or vessel. However, in unusual circumstances where these procedures may result in measurements that do not represent in-use operation, you must notify us if good engineering judgment indicates that the specified procedures cause unrepresentative emission measurements for your engines. Note that you need not notify us of unrepresentative aspects of the test procedure if measured emissions are equivalent to in-use emissions. This provision does not obligate you to pursue new information regarding the different ways your engine might operate in use, nor does it obligate you to collect any other in-use information to verify whether or not these test procedures are representative of your engine's in-use operation. If you notify us of unrepresentative procedures under this paragraph (c)(1), we will cooperate

with you to establish whether and how the procedures should be appropriately changed to result in more representative measurements. While the provisions of this paragraph (c)(1) allow us to be responsive to issues as they arise, we would generally work toward making these testing changes generally applicable through rulemaking. We will allow reasonable lead time for compliance with any resulting change in procedures. We will consider the following factors in determining the importance of pursuing changes to the procedures:

(i) Whether supplemental emission standards or other requirements in the standard-setting part address the type of operation of concern or otherwise prevent inappropriate design strategies.

(ii) Whether the unrepresentative aspect of the procedures affect your ability to show compliance with the applicable emission standards.

(iii) The extent to which the established procedures require the use of emission-control technologies or strategies that are expected to ensure a comparable degree of emission control under the in-use operation that differs from the specified procedures.

(2) You may request to use special procedures if your engine cannot be tested using the specified procedures. For example, this may apply if your engine cannot operate on the specified duty cycle. In this case, tell us in writing why you cannot satisfactorily test your engine using this part's procedures and ask to use a different approach. We will approve your request if we determine that it would produce emission measurements that represent in-use operation and we determine that it can be used to show compliance with the requirements of the standard-setting part.

* * * * *

(6) During the 12 months following the effective date of any change in the provisions of this part 1065, you may use data collected using procedures specified in the previously applicable version of this part 1065. This paragraph (c)(6) does not restrict the use of carryover certification data otherwise allowed by the standard-setting part.

(7) You may request to use alternate procedures, or procedures that are more accurate or more precise than the allowed procedures. The following provisions apply to requests for alternate procedures:

* * * * *

■ 50. Section 1065.12 is amended by revising paragraphs (a) and (d)(1) to read as follows:

§ 1065.12 Approval of alternate procedures.

(a) To get approval for an alternate procedure under § 1065.10(c), send the Designated Compliance Officer an initial written request describing the alternate procedure and why you believe it is equivalent to the specified procedure. Anyone may request alternate procedure approval. This means that an individual engine manufacturer may request to use an alternate procedure. This also means that an instrument manufacturer may request to have an instrument, equipment, or procedure approved as an alternate procedure to those specified in this part. We may approve your request based on this information alone, or, as described in this section, we may ask you to submit to us in writing supplemental information showing that your alternate procedure is consistently and reliably at least as accurate and repeatable as the specified procedure.

* * * * *

(d) * * *

(1) *Theoretical basis.* Give a brief technical description explaining why you believe the proposed alternate procedure should result in emission measurements equivalent to those using the specified procedure. You may include equations, figures, and references. You should consider the full range of parameters that may affect equivalence. For example, for a request to use a different NO_X measurement procedure, you should theoretically relate the alternate detection principle to the specified detection principle over the expected concentration ranges for NO, NO_2, and interference gases. For a request to use a different PM measurement procedure, you should explain the principles by which the alternate procedure quantifies particulate mass similarly to the specified procedures.

* * * * *

■ 51. Section 1065.15 is amended by revising paragraphs (c)(1) and (e) and adding paragraph (f) to read as follows:

§ 1065.15 Overview of procedures for laboratory and field testing.

* * * * *

(c) * * *

(1) Engine operation. Engine operation is specified over a test interval. A test interval is the time over which an engine's total mass of emissions and its total work are determined. Refer to the standard-setting part for the specific test intervals that apply to each engine. Testing may involve measuring emissions and work in a laboratory-type environment or in the field, as described in paragraph (f) of this section.

* * * * *

(e) The following figure illustrates the allowed measurement configurations described in this part 1065:

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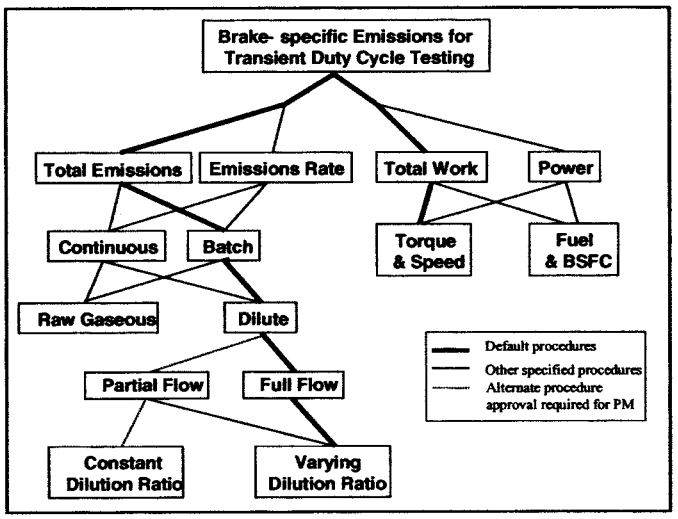
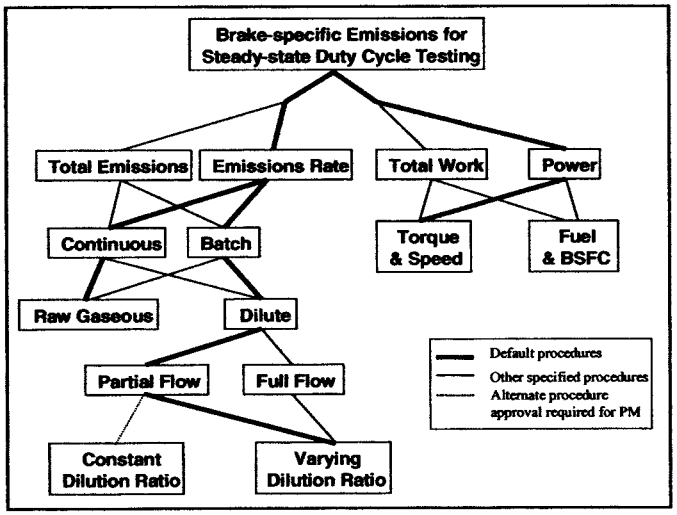
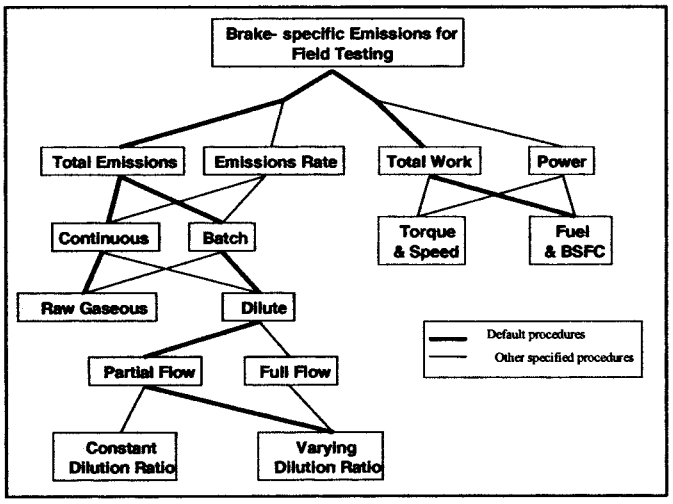
Figure 1 of §1065.15—Default test procedures and other specified procedures.







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(f) This part 1065 describes how to test engines in a laboratory-type environment or in the field.

(1) This affects test intervals and duty cycles as follows:

(i) For laboratory testing, you generally determine brake-specific emissions for duty-cycle testing by using an engine dynamometer in a laboratory or other environment. This typically consists of one or more test intervals, each defined by a duty cycle, which is a sequence of modes, speeds, and/or torques (or powers) that an engine must follow. If the standard-setting part allows it, you may also simulate field testing with an engine dynamometer in a laboratory or other environment.

(ii) Field testing consists of normal in-use engine operation while an engine is installed in a vehicle, equipment, or vessel rather than following a specific engine duty cycle. The standard-setting part specifies how test intervals are defined for field testing.

(2) The type of testing may also affect what test equipment may be used. You may use ''lab-grade'' test equipment for any testing. The term ''lab-grade'' refers to equipment that fully conforms to the applicable specifications of this part. For some testing you may alternatively use ''field-grade'' equipment. The term ''field-grade'' refers to equipment that fully conforms to the applicable specifications of subpart J of this part, but does not fully conform to other specifications of this part. You may use ''field-grade'' equipment for field testing. We also specify in this part and in the standard-setting parts certain cases in which you may use ''field-grade'' equipment for testing in a laboratory-type environment. (**Note:** Although ''field-grade'' equipment is generally more portable than ''lab-grade'' test equipment, portability is not relevant to whether equipment is considered to be ''field-grade'' or ''lab-grade''.)

■ 52. Section 1065.20 is amended by revising paragraphs (a)(2), (b)(2), (f), and (g) to read as follows:

§ 1065.20 Units of measure and overview of calculations.

(a) * * *

(2) We designate brake-specific emissions in grams per kilowatt-hour (g/(kW·hr)), rather than the SI unit of grams per megajoule (g/MJ). In addition, we use the symbol hr to identify hour, rather than the SI convention of using h. This is based on the fact that engines are generally subject to emission standards expressed in g/kW·hr. If we specify engine standards in grams per horsepower·hour (g/(hp·hr)) in the standard-setting part, convert units as specified in paragraph (d) of this section.

* * * * *

(b) * * *

(2) For all substances, cm^3/m^3, formerly ppm (volume).

* * * * *

(f) Interpretation of ranges. Interpret a range as a tolerance unless we explicitly identify it as an accuracy, repeatability, linearity, or noise specification. See § 1065.1001 for the definition of tolerance. In this part, we specify two types of ranges:

(1) Whenever we specify a range by a single value and corresponding limit values above and below that value, target any associated control point to that single value. Examples of this type of range include ''± 10% of maximum pressure'', or ''(30 ± 10) kPa''.

(2) Whenever we specify a range by the interval between two values, you may target any associated control point to any value within that range. An example of this type of range is ''(40 to 50) kPa''.

(g) Scaling of specifications with respect to an applicable standard. Because this part 1065 is applicable to a wide range of engines and emission standards, some of the specifications in this part are scaled with respect to an engine's applicable standard or maximum power. This ensures that the specification will be adequate to determine compliance, but not overly burdensome by requiring unnecessarily high-precision equipment. Many of these specifications are given with respect to a ''flow-weighted mean'' that is expected at the standard or during testing. Flow-weighted mean is the mean of a quantity after it is weighted proportional to a corresponding flow rate. For example, if a gas concentration is measured continuously from the raw exhaust of an engine, its flow-weighted mean concentration is the sum of the products of each recorded concentration times its respective exhaust flow rate, divided by the sum of the recorded flow rates. As another example, the bag concentration from a CVS system is the same as the flow-weighted mean concentration, because the CVS system itself flow-weights the bag concentration. Refer to § 1065.602 for information needed to estimate and calculate flow-weighted means. Wherever a specification is scaled to a value based upon an applicable standard, interpret the standard to be the family emission limit if the engine is certified under an emission credit program in the standard-setting part.

Subpart B—[Amended]

■ 53. Section 1065.101 is amended by revising paragraph (a) and adding paragraph (e) before the figures to read as follows:

§ 1065.101 Overview.

(a) This subpart specifies equipment, other than measurement instruments, related to emission testing. The provisions of this subpart apply for all engine dynamometer testing where engine speeds and loads are controlled to follow a prescribed duty cycle. See subpart J of this part to determine which of the provisions of this subpart apply for field testing. This equipment includes three broad categories-dynamometers, engine fluid systems (such as fuel and intake-air systems), and emission-sampling hardware.

* * * * *

(e) Dynamometer testing involves engine operation over speeds and loads that are controlled to a prescribed duty cycle. Field testing involves measuring emissions over normal in-use operation of a vehicle or piece of equipment. Field testing does not involve operating an engine over a prescribed duty cycle.

* * * * *

■ 54. Section 1065.110 is amended by revising paragraphs (a) introductory text and (e) and adding paragraphs (a)(1)(iv) and (f) to read as follows:

§ 1065.110 Work inputs and outputs, accessory work, and operator demand.

(a) *Work.* Use good engineering judgment to simulate all engine work inputs and outputs as they typically would operate in use. Account for work inputs and outputs during an emission test by measuring them; or, if they are small, you may show by engineering analysis that disregarding them does not affect your ability to determine the net work output by more than ± 0.5% of the net expected work output over the test interval. Use equipment to simulate the specific types of work, as follows:

(1) * * *

(iv) You may use any device that is already installed on a vehicle, equipment, or vessel to absorb work from the engine's output shaft(s). Examples of these types of devices include a vessel's propeller and a locomotive's generator.

* * * * *

(e) *Operator demand for shaft work.* Operator demand is defined in § 1065.1001. Command the operator demand and the dynamometer(s) to follow a prescribed duty cycle with set points for engine speed and torque as specified in § 1065.512. Refer to the

standard-setting part to determine the specifications for your duty cycle(s). Use a mechanical or electronic input to control operator demand such that the engine is able to meet the validation criteria in § 1065.514 over each applicable duty cycle. Record feedback values for engine speed and torque as specified in § 1065.512. Using good engineering judgment, you may improve control of operator demand by altering on-engine speed and torque controls. However, if these changes result in unrepresentative testing, you must notify us and recommend other test procedures under § 1065.10(c)(1).

(f) *Other engine inputs.* If your electronic control module requires specific input signals that are not available during dynamometer testing, such as vehicle speed or transmission signals, you may simulate the signals using good engineering judgment. Keep records that describe what signals you simulate and explain why these signals are necessary for representative testing.

■ 55. Section 1065.120 is amended by revising paragraph (a) to read as follows:

§ 1065.120 Fuel properties and fuel temperature and pressure.

(a) Use fuels as specified in the standard-setting part, or as specified in subpart H of this part if fuels are not specified in the standard-setting part.

* * * * *

■ 56. Section 1065.122 is amended by revising paragraphs (a) introductory text, (a)(1), and (c) to read as follows:

§ 1065.122 Engine cooling and lubrication.

(a) *Engine cooling.* Cool the engine during testing so its intake-air, oil, coolant, block, and head temperatures are within their expected ranges for normal operation. You may use auxiliary coolers and fans.

(1) For air-cooled engines only, if you use auxiliary fans you must account for work input to the fan(s) according to § 1065.110.

* * * * *

(c) *Lubricating oil.* Use lubricating oils specified in § 1065.740. For two-stroke engines that involve a specified mixture of fuel and lubricating oil, mix the lubricating oil with the fuel according to the manufacturer's specifications.

* * * * *

■ 57. Section 1065.125 is amended by revising paragraphs (c) and (d) and adding paragraph (e) to read as follows:

§ 1065.125 Engine intake air.

* * * * *

(c) Unless stated otherwise in the standard-setting part, maintain the temperature of intake air to (25 ± 5) °C, as measured upstream of any engine component.

(d) Use an intake-air restriction that represents production engines. Make sure the intake-air restriction is between the manufacturer's specified maximum for a clean filter and the manufacturer's specified maximum allowed. Measure the static differential pressure of the restriction at the location and at the speed and torque set points specified by the manufacturer. If the manufacturer does not specify a location, measure this pressure upstream of any turbocharger or exhaust gas recirculation system connection to the intake air system. If the manufacturer does not specify speed and torque points, measure this pressure while the engine outputs maximum power. As the manufacturer, you are liable for emission compliance for all values up to the maximum restriction you specify for a particular engine.

(e) This paragraph (e) includes provisions for simulating charge-air cooling in the laboratory. This approach is described in paragraph (e)(1) of this section. Limits on using this approach are described in paragraphs (e)(2) and (3) of this section.

(1) Use a charge-air cooling system with a total intake-air capacity that represents production engines' in-use installation. Design any laboratory charge-air cooling system to minimize accumulation of condensate. Drain any accumulated condensate and completely close all drains before emission testing. Keep the drains closed during the emission test. Maintain coolant conditions as follows:

(i) Maintain a coolant temperature of at least 20 °C at the inlet to the charge-air cooler throughout testing.

(ii) At the engine conditions specified by the manufacturer, set the coolant flow rate to achieve an air temperature within ± 5 °C of the value specified by the manufacturer after the charge-air cooler's outlet. Measure the air-outlet temperature at the location specified by the manufacturer. Use this coolant flow rate set point throughout testing. If the engine manufacturer does not specify engine conditions or the corresponding charge-air cooler air outlet temperature, set the coolant flow rate at maximum engine power to achieve a charge-air cooler air outlet temperature that represents in-use operation.

(iii) If the engine manufacturer specifies pressure-drop limits across the charge-air cooling system, ensure that the pressure drop across the charge-air cooling system at engine conditions specified by the manufacturer is within the manufacturer's specified limit(s). Measure the pressure drop at the manufacturer's specified locations.

(2) The objective of this section is to produce emission results that are representative of in-use operation. If good engineering judgment indicates that the specifications in this section would result in unrepresentative testing (such as overcooling of the intake air), you may use more sophisticated setpoints and controls of charge-air pressure drop, coolant temperature, and flowrate to achieve more representative results.

(3) This approach does not apply for field testing. You may not correct measured emission levels from field testing to account for any differences caused by the simulated cooling in the laboratory.

■ 58. Section 1065.130 is revised to read as follows:

§ 1065.130 Engine exhaust.

(a) *General.* Use the exhaust system installed with the engine or one that represents a typical in-use configuration. This includes any applicable aftertreatment devices.

(b) *Aftertreatment configuration.* If you do not use the exhaust system installed with the engine, configure any aftertreatment devices as follows:

(1) Position any aftertreatment device so its distance from the nearest exhaust manifold flange or turbocharger outlet is within the range specified by the engine manufacturer in the application for certification. If this distance is not specified, position aftertreatment devices to represent typical in-use vehicle configurations.

(2) You may use exhaust tubing that is not from the in-use exhaust system upstream of any aftertreatment device that is of diameter(s) typical of in-use configurations. If you use exhaust tubing that is not from the in-use exhaust system upstream of any aftertreatment device, position each aftertreatment device according to paragraph (b)(1) of this section.

(c) *Sampling system connections.* Connect an engine's exhaust system to any raw sampling location or dilution stage, as follows:

(1) Minimize laboratory exhaust tubing lengths and use a total length of laboratory tubing of no more than 10 m or 50 outside diameters, whichever is greater. The start of laboratory exhaust tubing should be specified as the exit of the exhaust manifold, turbocharger outlet, last aftertreatment device, or the in-use exhaust system, whichever is furthest downstream. The end of laboratory exhaust tubing should be specified as the sample point, or first point of dilution. If laboratory exhaust tubing consists of several different outside tubing diameters, count the

number of diameters of length of each individual diameter, then sum all the diameters to determine the total length of exhaust tubing in diameters. Use the mean outside diameter of any converging or diverging sections of tubing. Use outside hydraulic diameters of any noncircular sections. For multiple stack configurations where all the exhaust stacks are combined, the start of the laboratory exhaust tubing may be taken at the last joint of where all the stacks are combined.

(2) You may install short sections of flexible laboratory exhaust tubing at any location in the engine or laboratory exhaust systems. You may use up to a combined total of 2 m or 10 outside diameters of flexible exhaust tubing.

(3) Insulate any laboratory exhaust tubing downstream of the first 25 outside diameters of length.

(4) Use laboratory exhaust tubing materials that are smooth-walled, electrically conductive, and not reactive with exhaust constituents. Stainless steel is an acceptable material.

(5) We recommend that you use laboratory exhaust tubing that has either a wall thickness of less than 2 mm or is air gap-insulated to minimize temperature differences between the wall and the exhaust.

(6) We recommend that you connect multiple exhaust stacks from a single engine into one stack upstream of any emission sampling. To ensure mixing of the multiple exhaust streams before emission sampling, you may configure the exhaust system with turbulence generators, such as orifice plates or fins, to achieve good mixing. We recommend a minimum Reynolds number, *Re*#, of 4000 for the combined exhaust stream, where *Re*# is based on the inside diameter of the single stack. *Re*# is defined in § 1065.640.

(d) *In-line instruments.* You may insert instruments into the laboratory exhaust tubing, such as an in-line smoke meter. If you do this, you may leave a length of up to 5 outside diameters of laboratory exhaust tubing uninsulated on each side of each instrument, but you must leave a length of no more than 25 outside diameters of laboratory exhaust tubing uninsulated in total, including any lengths adjacent to in-line instruments.

(e) *Leaks.* Minimize leaks sufficiently to ensure your ability to demonstrate compliance with the applicable standards. We recommend performing a chemical balance of fuel, intake air, and exhaust according to § 1065.655 to verify exhaust system integrity.

(f) *Grounding.* Electrically ground the entire exhaust system.

(g) *Forced cooldown.* You may install a forced cooldown system for an exhaust aftertreatment device according to § 1065.530(a)(1)(i).

(h) *Exhaust restriction.* As the manufacturer, you are liable for emission compliance for all values up to the maximum restriction(s) you specify for a particular engine. Measure and set exhaust restriction(s) at the location(s) and at the engine speed and torque values specified by the manufacturer. Also, for variable-restriction aftertreatment devices, measure and set exhaust restriction(s) at the aftertreatment condition (degreening/aging and regeneration/loading level) specified by the manufacturer. If the manufacturer does not specify a location, measure this pressure downstream of any turbocharger. If the manufacturer does not specify speed and torque points, measure pressure while the engine produces maximum power. Use an exhaust-restriction setpoint that represents a typical in-use value, if available. If a typical in-use value for exhaust restriction is not available, set the exhaust restriction at (80 to 100)% of the maximum exhaust restriction specified by the manufacturer, or if the maximum is 5 kPa or less, the set point must be no less than 1.0 kPa from the maximum. For example, if the maximum back pressure is 4.5 kPa, do not use an exhaust restriction set point that is less than 3.5 kPa.

(i) *Open crankcase emissions.* If the standard-setting part requires measuring open crankcase emissions, you may either measure open crankcase emissions separately using a method that we approve in advance, or route open crankcase emissions directly into the exhaust system for emission measurement. If the engine is not already configured to route open crankcase emissions for emission measurement, route open crankcase emissions as follows:

(1) Use laboratory tubing materials that are smooth-walled, electrically conductive, and not reactive with crankcase emissions. Stainless steel is an acceptable material. Minimize tube lengths. We also recommend using heated or thin-walled or air gap-insulated tubing to minimize temperature differences between the wall and the crankcase emission constituents.

(2) Minimize the number of bends in the laboratory crankcase tubing and maximize the radius of any unavoidable bend.

(3) Use laboratory crankcase exhaust tubing that meets the engine manufacturer's specifications for crankcase back pressure.

(4) Connect the crankcase exhaust tubing into the raw exhaust downstream of any aftertreatment system, downstream of any installed exhaust restriction, and sufficiently upstream of any sample probes to ensure complete mixing with the engine's exhaust before sampling. Extend the crankcase exhaust tube into the free stream of exhaust to avoid boundary-layer effects and to promote mixing. You may orient the crankcase exhaust tube's outlet in any direction relative to the raw exhaust flow.

■ 59. Section 1065.140 is revised to read as follows:

§ 1065.140 Dilution for gaseous and PM constituents.

(a) *General.* You may dilute exhaust with ambient air, synthetic air, or nitrogen. For gaseous emission measurement the diluent must be at least 15°C. Note that the composition of the diluent affects some gaseous emission measurement instruments' response to emissions. We recommend diluting exhaust at a location as close as possible to the location where ambient air dilution would occur in use.

(b) *Dilution-air conditions and background concentrations.* Before a diluent is mixed with exhaust, you may precondition it by increasing or decreasing its temperature or humidity. You may also remove constituents to reduce their background concentrations. The following provisions apply to removing constituents or accounting for background concentrations:

(1) You may measure constituent concentrations in the diluent and compensate for background effects on test results. See § 1065.650 for calculations that compensate for background concentrations.

(2) Either measure these background concentrations the same way you measure diluted exhaust constituents, or measure them in a way that does not affect your ability to demonstrate compliance with the applicable standards. For example, you may use the following simplifications for background sampling:

(i) You may disregard any proportional sampling requirements.

(ii) You may use unheated gaseous sampling systems.

(iii) You may use unheated PM sampling systems.

(iv) You may use continuous sampling if you use batch sampling for diluted emissions.

(v) You may use batch sampling if you use continuous sampling for diluted emissions.

(3) For removing background PM, we recommend that you filter all dilution air, including primary full-flow dilution air, with high-efficiency particulate air (HEPA) filters that have an initial minimum collection efficiency specification of 99.97% (see § 1065.1001 for procedures related to HEPA-filtration efficiencies). Ensure that HEPA filters are installed properly so that background PM does not leak past the HEPA filters. If you choose to correct for background PM without using HEPA filtration, demonstrate that the background PM in the dilution air contributes less than 50% to the net PM collected on the sample filter. You may correct net PM without restriction if you use HEPA filtration.

(c) *Full-flow dilution; constant-volume sampling (CVS).* You may dilute the full flow of raw exhaust in a dilution tunnel that maintains a nominally constant volume flow rate, molar flow rate or mass flow rate of diluted exhaust, as follows:

(1) *Construction.* Use a tunnel with inside surfaces of 300 series stainless steel. Electrically ground the entire dilution tunnel. We recommend a thin-walled and insulated dilution tunnel to minimize temperature differences between the wall and the exhaust gases.

(2) *Pressure control.* Maintain static pressure at the location where raw exhaust is introduced into the tunnel within ± 1.2 kPa of atmospheric pressure. You may use a booster blower to control this pressure. If you test an engine using more careful pressure control and you show by engineering analysis or by test data that you require this level of control to demonstrate compliance at the applicable standards, we will maintain the same level of static pressure control when we test that engine.

(3) *Mixing.* Introduce raw exhaust into the tunnel by directing it downstream along the centerline of the tunnel. You may introduce a fraction of dilution air radially from the tunnel's inner surface to minimize exhaust interaction with the tunnel walls. You may configure the system with turbulence generators such as orifice plates or fins to achieve good mixing. We recommend a minimum Reynolds number, *Re#,* of 4000 for the diluted exhaust stream, where Re# is based on the inside diameter of the dilution tunnel. *Re#* is defined in § 1065.640.

(4) *Flow measurement preconditioning.* You may condition the diluted exhaust before measuring its flow rate, as long as this conditioning takes place downstream of any heated HC or PM sample probes, as follows:

(i) You may use flow straighteners, pulsation dampeners, or both of these.

(ii) You may use a filter.

(iii) You may use a heat exchanger to control the temperature upstream of any flow meter, but you must take steps to prevent aqueous condensation as described in paragraph (c)(6) of this section.

(5) *Flow measurement.* Section 1065.240 describes measurement instruments for diluted exhaust flow.

(6) *Aqueous condensation.* To ensure that you measure a flow that corresponds to a measured concentration, you may either prevent aqueous condensation between the sample probe location and the flow meter inlet in the dilution tunnel or you may allow aqueous condensation to occur and then measure humidity at the flow meter inlet. You may heat or insulate the dilution tunnel walls, as well as the bulk stream tubing downstream of the tunnel to prevent aqueous condensation. Calculations in § 1065.645 and § 1065.650 account for either method of addressing humidity in the diluted exhaust. Note that preventing aqueous condensation involves more than keeping pure water in a vapor phase (see § 1065.1001).

(7) *Flow compensation.* Maintain nominally constant molar, volumetric or mass flow of diluted exhaust. You may maintain nominally constant flow by either maintaining the temperature and pressure at the flow meter or by directly controlling the flow of diluted exhaust. You may also directly control the flow of proportional samplers to maintain proportional sampling. For an individual test, validate proportional sampling as described in § 1065.545.

(d) *Partial-flow dilution (PFD).* Except as specified in this paragraph (d), you may dilute a partial flow of raw or previously diluted exhaust before measuring emissions. § 1065.240 describes PFD-related flow measurement instruments. PFD may consist of constant or varying dilution ratios as described in paragraphs (d)(2) and (3) of this section. An example of a constant dilution ratio PFD is a ''secondary dilution PM'' measurement system.

(1) Applicability. (i) You may not use PFD if the standard-setting part prohibits it.

(ii) You may use PFD to extract a proportional raw exhaust sample for any batch or continuous PM emission sampling over any transient duty cycle only if we have explicitly approved it according to § 1065.10 as an alternative procedure to the specified procedure for full-flow CVS.

(iii) You may use PFD to extract a proportional raw exhaust sample for any batch or continuous gaseous emission sampling.

(iv) You may use PFD to extract a proportional raw exhaust sample for any batch or continuous PM emission sampling over any steady-state duty cycle or its ramped-modal cycle (RMC) equivalent.

(v) You may use PFD to extract a proportional raw exhaust sample for any batch or continuous field-testing.

(vi) You may use PFD to extract a proportional diluted exhaust sample from a CVS for any batch or continuous emission sampling.

(vii) You may use PFD to extract a constant raw or diluted exhaust sample for any continuous emission sampling.

(2) Constant dilution-ratio PFD. Do one of the following for constant dilution-ratio PFD:

(i) Dilute an already proportional flow. For example, you may do this as a way of performing secondary dilution from a CVS tunnel to achieve overall dilution ratio for PM sampling.

(ii) Continuously measure constituent concentrations. For example, you might dilute to precondition a sample of raw exhaust to control its temperature, humidity, or constituent concentrations upstream of continuous analyzers. In this case, you must take into account the dilution ratio before multiplying the continuous concentration by the sampled exhaust flow rate.

(iii) Extract a proportional sample from a separate constant dilution ratio PFD system. For example, you might use a variable-flow pump to proportionally fill a gaseous storage medium such as a bag from a PFD system. In this case, the proportional sampling must meet the same specifications as varying dilution ratio PFD in paragraph (d)(3) of this section.

(iv) For each mode of a discrete-mode test (such as a locomotive notch setting or a specific setting for speed and torque), use a constant dilution ratio for any PM sampling. You must change the overall PM sampling system dilution ratio between modes so that the dilution ratio on the mode with the highest exhaust flow rate meets § 1065.140(e)(2) and the dilution ratios on all other modes is higher than this (minimum) dilution ratio by the ratio of the maximum exhaust flow rate to the exhaust flow rate of the corresponding other mode. This is the same dilution ratio requirement for RMC or field transient testing. You must account for this change in dilution ratio in your emission calculations.

(3) Varying dilution-ratio PFD. All the following provisions apply for varying dilution-ratio PFD:

(i) Use a control system with sensors and actuators that can maintain proportional sampling over intervals as short as 200 ms (i.e., 5 Hz control).

(ii) For control input, you may use any sensor output from one or more measurements; for example, intake-air flow, fuel flow, exhaust flow, engine speed, and intake manifold temperature and pressure.

(iii) Account for any emission transit time in the PFD system, as necessary.

(iv) You may use preprogrammed data if they have been determined for the specific test site, duty cycle, and test engine from which you dilute emissions.

(v) We recommend that you run practice cycles to meet the validation criteria in § 1065.545. Note that you must validate every emission test by meeting the validation criteria with the data from that specific test. Data from previously validated practice cycles or other tests may not be used to validate a different emission test.

(vi) You may not use a PFD system that requires preparatory tuning or calibration with a CVS or with the emission results from a CVS. Rather, you must be able to independently calibrate the PFD.

(e) *Dilution air temperature, dilution ratio, residence time, and temperature control of PM samples.* Dilute PM samples at least once upstream of transfer lines. You may dilute PM samples upstream of a transfer line using full-flow dilution, or partial-flow dilution immediately downstream of a PM probe. In the case of partial-flow dilution, you may have up to 26 cm of insulated length between the end of the probe and the dilution stage, but we recommend that the length be as short as practical. Configure dilution systems as follows:

(1) Set the diluent (i.e., dilution air) temperature to (25 ± 5) °C. Use good engineering judgment to select a location to measure this temperature. We recommend that you measure this temperature as close as practical upstream of the point where diluent mixes with raw exhaust.

(2) For any PM dilution system (i.e., CVS or PFD), dilute raw exhaust with diluent such that the minimum overall ratio of diluted exhaust to raw exhaust is within the range of (5:1–7:1) and is at least 2:1 for any primary dilution stage. Base this minimum value on the maximum engine exhaust flow rate for a given test interval. Either measure the maximum exhaust flow during a practice run of the test interval or estimate it based on good engineering judgment (for example, you might rely on manufacturer-published literature).

(3) Configure any PM dilution system to have an overall residence time of (1 to 5) s, as measured from the location of initial diluent introduction to the location where PM is collected on the sample media. Also configure the system to have a residence time of at least 0.5 s, as measured from the location of final diluent introduction to the location where PM is collected on the sample media. When determining residence times within sampling system volumes, use an assumed flow temperature of 25 °C and pressure of 101.325 kPa.

(4) Control sample temperature to a (47 ± 5) °C tolerance, as measured anywhere within 20 cm upstream or downstream of the PM storage media (such as a filter). Measure this temperature with a bare-wire junction thermocouple with wires that are (0.500 ± 0.025) mm diameter, or with another suitable instrument that has equivalent performance. The intent of these specifications is to minimize heat transfer to or from the emissions sample prior to the final stage of dilution. This is accomplished by initially cooling the sample through dilution.

■ 60. Section 1065.145 is revised to read as follows:

§ 1065.145 Gaseous and PM probes, transfer lines, and sampling system components.

(a) *Continuous and batch sampling.* Determine the total mass of each constituent with continuous or batch sampling, as described in § 1065.15(c)(2). Both types of sampling systems have probes, transfer lines, and other sampling system components that are described in this section.

(b) *Gaseous and PM sample probes.* A probe is the first fitting in a sampling system. It protrudes into a raw or diluted exhaust stream to extract a sample, such that its inside and outside surfaces are in contact with the exhaust. A sample is transported out of a probe into a transfer line, as described in paragraph (c) of this section. The following provisions apply to sample probes:

(1) *Probe design and construction.* Use sample probes with inside surfaces of 300 series stainless steel or, for raw exhaust sampling, use any nonreactive material capable of withstanding raw exhaust temperatures. Locate sample probes where constituents are mixed to their mean sample concentration. Take into account the mixing of any crankcase emissions that may be routed into the raw exhaust. Locate each probe to minimize interference with the flow to other probes. We recommend that all probes remain free from influences of boundary layers, wakes, and eddies—especially near the outlet of a raw-exhaust tailpipe where unintended dilution might occur. Make sure that purging or back-flushing of a probe does not influence another probe during testing. You may use a single probe to extract a sample of more than one constituent as long as the probe meets all the specifications for each constituent.

(2) *Probe installation on multi-stack engines.* We recommend combining multiple exhaust streams from multi-stack engines before emission sampling as described in § 1065.130(c)(6). If this is impractical, you may install symmetrical probes and transfer lines in each stack. In this case, each stack must be installed such that similar exhaust velocities are expected at each probe location. Use identical probe and transfer line diameters, lengths, and bends for each stack. Minimize the individual transfer line lengths, and manifold the individual transfer lines into a single transfer line to route the combined exhaust sample to analyzers and/or batch samplers. For PM sampling the manifold design must merge the individual sample streams with a maximum angle of 12.5° relative to the single sample stream's flow. Note that the manifold must meet the same specifications as the transfer line according to paragraph (c) of this section. If you use this probe configuration and you determine your exhaust flow rates with a chemical balance of exhaust gas concentrations and either intake air flow or fuel flow, then show by prior testing that the concentration of O_2 in each stack remains within 5% of the mean O_2 concentration throughout the entire duty cycle.

(3) *Gaseous sample probes.* Use either single-port or multi-port probes for sampling gaseous emissions. You may orient these probes in any direction relative to the raw or diluted exhaust flow. For some probes, you must control sample temperatures, as follows:

(i) For probes that extract NO_X from diluted exhaust, control the probe's wall temperature to prevent aqueous condensation.

(ii) For probes that extract hydrocarbons for THC or NMHC analysis from the diluted exhaust of compression-ignition engines, 2-stroke spark-ignition engines, or 4-stroke spark-ignition engines below 19 kW, we recommend heating the probe to minimize hydrocarbon contamination consistent with good engineering

judgment. If you routinely fail the contamination check in the 1065.520 pretest check, we recommend heating the probe section to approximately 190 °C to minimize contamination.

(4) *PM sample probes.* Use PM probes with a single opening at the end. Orient PM probes to face directly upstream. If you shield a PM probe's opening with a PM pre-classifier such as a hat, you may not use the preclassifier we specify in paragraph (e)(1) of this section. We recommend sizing the inside diameter of PM probes to approximate isokinetic sampling at the expected mean flow rate.

(c) *Transfer lines.* You may use transfer lines to transport an extracted sample from a probe to an analyzer, storage medium, or dilution system, noting certain restrictions for PM sampling in § 1065.140(e). Minimize the length of all transfer lines by locating analyzers, storage media, and dilution systems as close to probes as practical. We recommend that you minimize the number of bends in transfer lines and that you maximize the radius of any unavoidable bend. Avoid using 90° elbows, tees, and cross-fittings in transfer lines. Where such connections and fittings are necessary, take steps, using good engineering judgment, to ensure that you meet the temperature tolerances in this paragraph (c). This may involve measuring temperature at various locations within transfer lines and fittings. You may use a single transfer line to transport a sample of more than one constituent, as long as the transfer line meets all the specifications for each constituent. The following construction and temperature tolerances apply to transfer lines:

(1) *Gaseous samples.* Use transfer lines with inside surfaces of 300 series stainless steel, PTFE, Viton™, or any other material that you demonstrate has better properties for emission sampling. For raw exhaust sampling, use a non-reactive material capable of withstanding raw exhaust temperatures. You may use in-line filters if they do not react with exhaust constituents and if the filter and its housing meet the same temperature requirements as the transfer lines, as follows:

(i) For NO_X transfer lines upstream of either an NO_2-to-NO converter that meets the specifications of § 1065.378 or a chiller that meets the specifications of § 1065.376, maintain a sample temperature that prevents aqueous condensation.

(ii) For THC transfer lines for testing compression-ignition engines, 2-stroke spark-ignition engines, or 4-stroke spark-ignition engines below 19 kW, maintain a wall temperature tolerance throughout the entire line of (191 ±11) °C. If you sample from raw exhaust, you may connect an unheated, insulated transfer line directly to a probe. Design the length and insulation of the transfer line to cool the highest expected raw exhaust temperature to no lower than 191 °C, as measured at the transfer line's outlet. For dilute sampling, you may use a transition zone between the probe and transfer line of up to 92 cm to allow your wall temperature to transition to (191 ±11) °C.

(2) *PM samples.* We recommend heated transfer lines or a heated enclosure to minimize temperature differences between transfer lines and exhaust constituents. Use transfer lines that are inert with respect to PM and are electrically conductive on the inside surfaces. We recommend using PM transfer lines made of 300 series stainless steel. Electrically ground the inside surface of PM transfer lines.

(d) *Optional sample-conditioning components for gaseous sampling.* You may use the following sample-conditioning components to prepare gaseous samples for analysis, as long as you do not install or use them in a way that adversely affects your ability to show that your engines comply with all applicable gaseous emission standards.

(1) *NO_2-to-NO converter.* You may use an NO_2-to-NO converter that meets the efficiency-performance check specified in § 1065.378 at any point upstream of a NO_X analyzer, sample bag, or other storage medium.

(2) *Sample dryer.* You may use either type of sample dryer described in this paragraph (d)(2) to decrease the effects of water on gaseous emission measurements. You may not use a chemical dryer, or use dryers upstream of PM sample filters.

(i) *Osmotic-membrane.* You may use an osmotic-membrane dryer upstream of any gaseous analyzer or storage medium, as long as it meets the temperature specifications in paragraph (c)(1) of this section. Because osmotic-membrane dryers may deteriorate after prolonged exposure to certain exhaust constituents, consult with the membrane manufacturer regarding your application before incorporating an osmotic-membrane dryer. Monitor the dewpoint, T_{dew}, and absolute pressure, p_{total}, downstream of an osmotic-membrane dryer. You may use continuously recorded values of T_{dew} and p_{total} in the amount of water calculations specified in § 1065.645. If you do not continuously record these values, you may use their peak values observed during a test or their alarm setpoints as constant values in the calculations specified in § 1065.645. You may also use a nominal p_{total}, which you may estimate as the dryer's lowest absolute pressure expected during testing.

(ii) *Thermal chiller.* You may use a thermal chiller upstream of some gas analyzers and storage media. You may not use a thermal chiller upstream of a THC measurement system for compression-ignition engines, 2-stroke spark-ignition engines, or 4-stroke spark-ignition engines below 19 kW. If you use a thermal chiller upstream of an NO_2-to-NO converter or in a sampling system without an NO_2-to-NO converter, the chiller must meet the NO_2 loss-performance check specified in § 1065.376. Monitor the dewpoint, T_{dew}, and absolute pressure, p_{total}, downstream of a thermal chiller. You may use continuously recorded values of T_{dew} and p_{total} in the emission calculations specified in § 1065.650. If you do not continuously record these values, you may use the maximum temperature and minimum pressure values observed during a test or the high alarm temperature setpoint and the low alarm pressure setpoint as constant values in the amount of water calculations specified in § 1065.645. You may also use a nominal p_{total}, which you may estimate as the dryer's lowest absolute pressure expected during testing. If it is valid to assume the degree of saturation in the thermal chiller, you may calculate T_{dew} based on the known chiller performance and continuous monitoring of chiller temperature, $T_{chiller}$. If you do not continuously record values of $T_{chiller}$, you may use its peak value observed during a test, or its alarm setpoint, as a constant value to determine a constant amount of water according to § 1065.645. If it is valid to assume that $T_{chiller}$ is equal to T_{dew}, you may use $T_{chiller}$ in lieu of T_{dew} according to § 1065.645. If it is valid to assume a constant temperature offset between $T_{chiller}$ and T_{dew}, due to a known and fixed amount of sample reheat between the chiller outlet and the temperature measurement location, you may factor in this assumed temperature offset value into emission calculations. If we ask for it, you must show by engineering analysis or by data the validity of any assumptions allowed by this paragraph (d)(2)(ii).

(3) *Sample pumps.* You may use sample pumps upstream of an analyzer or storage medium for any gas. Use sample pumps with inside surfaces of 300 series stainless steel, PTFE, or any other material that you demonstrate has better properties for emission sampling. For some sample pumps, you must control temperatures, as follows:

(i) If you use a NO_X sample pump upstream of either an NO_2-to-NO converter that meets § 1065.378 or a chiller that meets § 1065.376, it must be heated to prevent aqueous condensation.

(ii) For testing compression-ignition engines, 2-stroke spark-ignition engines, or 4-stroke spark-ignition engines below 19 kW, if you use a THC sample pump upstream of a THC analyzer or storage medium, its inner surfaces must be heated to a tolerance of (191 ±11) °C.

(4) *Ammonia Scrubber.* You may use ammonia scrubbers for any or all gaseous sampling systems to prevent interference with NH_3, poisoning of the NO_2-to-NO converter, and deposits in the sampling system or analyzers. Follow the ammonia scrubber manufacturer's recommendations or use good engineering judgment in applying ammonia scrubbers.

(e) *Optional sample-conditioning components for PM sampling.* You may use the following sample-conditioning components to prepare PM samples for analysis, as long as you do not install or use them in a way that adversely affects your ability to show that your engines comply with the applicable PM emission standards. You may condition PM samples to minimize positive and negative biases to PM results, as follows:

(1) *PM preclassifier.* You may use a PM preclassifier to remove large-diameter particles. The PM preclassifier may be either an inertial impactor or a cyclonic separator. It must be constructed of 300 series stainless steel. The preclassifier must be rated to remove at least 50% of PM at an aerodynamic diameter of 10 μm and no more than 1% of PM at an aerodynamic diameter of 1 μm over the range of flow rates for which you use it. Follow the preclassifier manufacturer's instructions for any periodic servicing that may be necessary to prevent a buildup of PM. Install the preclassifier in the dilution system downstream of the last dilution stage. Configure the preclassifier outlet with a means of bypassing any PM sample media so the preclassifier flow may be stabilized before starting a test. Locate PM sample media within 75 cm downstream of the preclassifier's exit. You may not use this preclassifier if you use a PM probe that already has a preclassifier. For example, if you use a hat-shaped preclassifier that is located immediately upstream of the probe in such a way that it forces the sample flow to change direction before entering the probe, you may not use any other preclassifier in your PM sampling system.

(2) *Other components.* You may request to use other PM conditioning components upstream of a PM preclassifier, such as components that condition humidity or remove gaseous-phase hydrocarbons from the diluted exhaust stream. You may use such components only if we approve them under § 1065.10.

■ 61. Section 1065.170 is amended by revising the introductory text and paragraphs (a) and (c)(1) to read as follows:

§ 1065.170 Batch sampling for gaseous and PM constituents.

Batch sampling involves collecting and storing emissions for later analysis. Examples of batch sampling include collecting and storing gaseous emissions in a bag or collecting and storing PM on a filter. You may use batch sampling to store emissions that have been diluted at least once in some way, such as with CVS, PFD, or BMD. You may use batch-sampling to store undiluted emissions.

(a) *Sampling methods.* If you extract from a constant-volume flow rate, sample at a constant-volume flow rate as follows:

(1) Validate proportional sampling after an emission test as described in § 1065.545. Use good engineering judgment to select storage media that will not significantly change measured emission levels (either up or down). For example, do not use sample bags for storing emissions if the bags are permeable with respect to emissions or if they offgas emissions to the extent that it affects your ability to demonstrate compliance with the applicable gaseous emission standards. As another example, do not use PM filters that irreversibly absorb or adsorb gases to the extent that it affects your ability to demonstrate compliance with the applicable PM emission standard.

(2) You must follow the requirements in § 1065.140(e)(2) related to PM dilution ratios. For each filter, if you expect the net PM mass on the filter to exceed 400 μg, assuming a 38 mm diameter filter stain area, you may take the following actions in sequence:

(i) First, reduce filter face velocity as needed to target a filter loading of 400 μg, down to 50 cm/s or less.

(ii) Then, for discrete-mode testing only, you may reduce sample time as needed to target a filter loading of 400 μg, but not below the minimum sample time specified in the standard-setting part.

(iii) Then, increase overall dilution ratio above the values specified in § 1065.140(e)(2) to target a filter loading of 400 μg.

* * * * *

(c) * * *

(1) If you use filter-based sampling media to extract and store PM for measurement, your procedure must meet the following specifications:

(i) If you expect that a filter's total surface concentration of PM will exceed 400 μg, assuming a 38 mm diameter filter stain area, for a given test interval, you may use filter media with a minimum initial collection efficiency of 98%; otherwise you must use a filter media with a minimum initial collection efficiency of 99.7%. Collection efficiency must be measured as described in ASTM D2986–95a (incorporated by reference in § 1065.1010), though you may rely on the sample-media manufacturer's measurements reflected in their product ratings to show that you meet this requirement.

(ii) The filter must be circular, with an overall diameter of 46.50 ± 0.6 mm and an exposed diameter of at least 38 mm. See the cassette specifications in paragraph (c)(1)(vii) of this section.

(iii) We highly recommend that you use a pure PTFE filter material that does not have any flow-through support bonded to the back and has an overall thickness of 40 ± 20 μm. An inert polymer ring may be bonded to the periphery of the filter material for support and for sealing between the filter cassette parts. We consider Polymethylpentene (PMP) and PTFE inert materials for a support ring, but other inert materials may be used. See the cassette specifications in paragraph (c)(1)(vii) of this section. We allow the use of PTFE-coated glass fiber filter material, as long as this filter media selection does not affect your ability to demonstrate compliance with the applicable standards, which we base on a pure PTFE filter material. Note that we will use pure PTFE filter material for compliance testing, and we may require you to use pure PTFE filter material for any compliance testing we require, such as for selective enforcement audits.

(iv) You may request to use other filter materials or sizes under the provisions of § 1065.10.

(v) To minimize turbulent deposition and to deposit PM evenly on a filter, use a 12.5° (from center) divergent cone angle to transition from the transfer-line inside diameter to the exposed diameter of the filter face. Use 300 series stainless steel for this transition.

(vi) Maintain a filter face velocity near 100 cm/s with less than 5% of the recorded flow values exceeding 100 cm/s, unless you expect either the net PM mass on the filter to exceed 400 μg, assuming a 38 mm diameter filter stain area. Measure face velocity as the volumetric flow rate of the sample at the

pressure upstream of the filter and temperature of the filter face as measured in § 1065.140(e), divided by the filter's exposed area. You may use the exhaust stack or CVS tunnel pressure for the upstream pressure if the pressure drop through the PM sampler up to the filter is less than 2 kPa.

(vii) Use a clean cassette designed to the specifications of Figure 1 of § 1065.170 and made of any of the following materials: Delrin™, 300 series stainless steel, polycarbonate, acrylonitrile-butadiene-styrene (ABS) resin, or conductive polypropylene. We recommend that you keep filter cassettes clean by periodically washing or wiping them with a compatible solvent applied using a lint-free cloth. Depending upon your cassette material, ethanol (C_2H_5OH) might be an acceptable solvent. Your cleaning frequency will depend on your engine's PM and HC emissions.

(viii) If you store filters in cassettes in an automatic PM sampler, cover or seal individual filter cassettes after sampling to prevent communication of semi-volatile matter from one filter to another.

* * * * *

■ 62. Section 1065.190 is amended by revising paragraphs (c), (e), (f) and (g) to read as follows:

§ 1065.190 PM-stabilization and weighing environments for gravimetric analysis.

* * * * *

(c) Verify the cleanliness of the PM-stabilization environment using reference filters, as described in § 1065.390(d).

* * * * *

(e) Verify the following ambient conditions using measurement instruments that meet the specifications in subpart C of this part:

(1) Continuously measure dewpoint and ambient temperature. Use these values to determine if the stabilization and weighing environments have remained within the tolerances specified in paragraph (d) of this section for at least 60 min. before weighing sample media (e.g., filters). We recommend that you use an interlock that automatically prevents the balance from reporting values if either of the environments have not been within the applicable tolerances for the past 60 min.

(2) Continuously measure atmospheric pressure within the weighing environment. An acceptable alternative is to use a barometer that measures atmospheric pressure outside the weighing environment, as long as you can ensure that atmospheric pressure at the balance is always within ±100 Pa of that outside environment during weighing operations. Record atmospheric pressure as you weigh filters, and use these pressure values to perform the buoyancy correction in § 1065.690.

(f) We recommend that you install a balance as follows:

(1) Install the balance on a vibration-isolation platform to isolate it from external noise and vibration.

(2) Shield the balance from convective airflow with a static-dissipating draft shield that is electrically grounded.

(3) Follow the balance manufacturer's specifications for all preventive maintenance.

(4) Operate the balance manually or as part of an automated weighing system.

(g) Minimize static electric charge in the balance environment, as follows:

(1) Electrically ground the balance.

(2) Use 300 series stainless steel tweezers if PM sample media (e.g., filters) must be handled manually.

(3) Ground tweezers with a grounding strap, or provide a grounding strap for the operator such that the grounding strap shares a common ground with the balance. Make sure grounding straps have an appropriate resistor to protect operators from accidental shock.

(4) Provide a static-electricity neutralizer that is electrically grounded in common with the balance to remove static charge from PM sample media (e.g., filters), as follows:

(i) You may use radioactive neutralizers such as a Polonium (^{210}Po) source. Replace radioactive sources at the intervals recommended by the neutralizer manufacturer.

(ii) You may use other neutralizers, such as corona-discharge ionizers. If you use a corona-discharge ionizer, we recommend that you monitor it for neutral net charge according to the ionizer manufacturer's recommendations.

(5) We recommend that you use a device to monitor the static charge of PM sample media (e.g., filter) surface.

(6) We recommend that you neutralize PM sample media (e.g., filters) to within ±2.0 V of neutral. Measure static voltages as follows:

(i) Measure static voltage of PM sample media (e.g., filters) according to the electrostatic voltmeter manufacturer's instructions.

(ii) Measure static voltage of PM sample media (e.g., filters) while the media is at least 15 cm away from any grounded surfaces to avoid mirror image charge interference.

■ 63. Section 1065.195 is amended by revising paragraphs (a) and (c)(4) to read as follows:

§ 1065.195 PM-stabilization environment for in-situ analyzers.

(a) This section describes the environment required to determine PM in-situ. For in-situ analyzers, such as an inertial balance, this is the environment within a PM sampling system that surrounds the PM sample media (e.g., filters). This is typically a very small volume.

* * * * *

(c) * * *

(4) *Absolute pressure.* Use good engineering judgment to maintain a tolerance of absolute pressure if your PM measurement instrument requires it.

* * * * *

Subpart C—[Amended]

■ 64. Section 1065.201 is amended by revising paragraphs (a) and (b) and adding paragraph (h) to read as follows:

§ 1065.201 Overview and general provisions.

(a) *Scope.* This subpart specifies measurement instruments and associated system requirements related to emission testing in a laboratory or similar environment and in the field. This includes laboratory instruments and portable emission measurement systems (PEMS) for measuring engine parameters, ambient conditions, flow-related parameters, and emission concentrations.

(b) *Instrument types.* You may use any of the specified instruments as described in this subpart to perform emission tests. If you want to use one of these instruments in a way that is not specified in this subpart, or if you want to use a different instrument, you must first get us to approve your alternate procedure under § 1065.10. Where we specify more than one instrument for a particular measurement, we may identify which instrument serves as the reference for comparing with an alternate procedure.

* * * * *

(h) *Recommended practices.* This subpart identifies a variety of recommended but not required practices for proper measurements. We believe in most cases it is necessary to follow these recommended practices for accurate and repeatable measurements and we intend to follow them as much as possible for our testing. However, we do not specifically require you to follow these recommended practices to perform a valid test, as long as you meet the required calibrations and verifications of measurement systems specified in subpart D of this part.

■ 65. Section 1065.210 is amended by revising paragraph (a) before the figure to read as follows:

§ 1065.210 Work input and output sensors.

(a) *Application.* Use instruments as specified in this section to measure work inputs and outputs during engine operation. We recommend that you use sensors, transducers, and meters that meet the specifications in Table 1 of § 1065.205. Note that your overall systems for measuring work inputs and outputs must meet the linearity verifications in § 1065.307. We recommend that you measure work inputs and outputs where they cross the system boundary as shown in Figure 1 of § 1065.210. The system boundary is different for air-cooled engines than for liquid-cooled engines. If you choose to measure work before or after a work conversion, relative to the system boundary, use good engineering judgment to estimate any work-conversion losses in a way that avoids overestimation of total work. For example, if it is impractical to instrument the shaft of an exhaust turbine generating electrical work, you may decide to measure its converted electrical work. As another example, you may decide to measure the tractive (i.e., electrical output) power of a locomotive, rather than the brake power of the locomotive engine. In these cases, divide the electrical work by accurate values of electrical generator efficiency ($\eta<1$), or assume an efficiency of 1 ($\eta=1$), which would over-estimate brake-specific emissions. For the example of using locomotive tractive power with a generator efficiency of 1 ($\eta=1$), this means using the tractive power as the brake power in emission calculations. Do not underestimate any work conversion efficiencies for any components outside the system boundary that do not return work into the system boundary. And do not overestimate any work conversion efficiencies for components outside the system boundary that do return work into the system boundary. In all cases, ensure that you are able to accurately demonstrate compliance with the applicable standards.

* * * * *

■ 66. Section 1065.215 is amended by revising paragraph (e) to read as follows:

§ 1065.215 Pressure transducers, temperature sensors, and dewpoint sensors.

* * * * *

(e) *Dewpoint.* For PM-stabilization environments, we recommend chilled-surface hygrometers, which include chilled mirror detectors and chilled surface acoustic wave (SAW) detectors. For other applications, we recommend thin-film capacitance sensors. You may use other dewpoint sensors, such as a wet-bulb/dry-bulb psychrometer, where appropriate.

■ 67. Section 1065.220 is amended by revising paragraph (d) to read as follows:

§ 1065.220 Fuel flow meter.

* * * * *

(d) *Flow conditioning.* For any type of fuel flow meter, condition the flow as needed to prevent wakes, eddies, circulating flows, or flow pulsations from affecting the accuracy or repeatability of the meter. You may accomplish this by using a sufficient length of straight tubing (such as a length equal to at least 10 pipe diameters) or by using specially designed tubing bends, straightening fins, or pneumatic pulsation dampeners to establish a steady and predictable velocity profile upstream of the meter. Condition the flow as needed to prevent any gas bubbles in the fuel from affecting the fuel meter.

■ 68. Section 1065.265 is amended by revising paragraph (c) to read as follows:

§ 1065.265 Nonmethane cutter.

* * * * *

(c) *Configuration.* Configure the nonmethane cutter with a bypass line if it is needed for the verification described in § 1065.365.

* * * * *

■ 69. Section 1065.270 is amended by revising paragraphs (c) and (d) introductory text to read as follows:

§ 1065.270 Chemiluminescent detector.

* * * * *

(c) *NO_2-to-NO converter.* Place upstream of the CLD an internal or external NO_2-to-NO converter that meets the verification in § 1065.378. Configure the converter with a bypass line if it is needed to facilitate this verification.

(d) *Humidity effects.* You must maintain all CLD temperatures to prevent aqueous condensation. If you remove humidity from a sample upstream of a CLD, use one of the following configurations:

* * * * *

■ 70. Section 1065.280 is revised to read as follows:

§ 1065.280 Paramagnetic and magnetopneumatic O_2 detection analyzers.

(a) *Application.* You may use a paramagnetic detection (PMD) or magnetopneumatic detection (MPD) analyzer to measure O_2 concentration in raw or diluted exhaust for batch or continuous sampling. You may use O_2 measurements with intake air or fuel flow measurements to calculate exhaust flow rate according to § 1065.650.

(b) *Component requirements.* We recommend that you use a PMD or MPD analyzer that meets the specifications in Table 1 of § 1065.205. Note that it must meet the linearity verification in § 1065.307. You may use a PMD or MPD that has compensation algorithms that are functions of other gaseous measurements and the engine's known or assumed fuel properties. The target value for any compensation algorithm is 0.0% (that is, no bias high and no bias low), regardless of the uncompensated signal's bias.

■ 71. Section 1065.290 is amended by revising paragraph (c)(1) to read as follows:

§ 1065.290 PM gravimetric balance.

* * * * *

(c) * * *

(1) Use a pan that centers the PM sample media (such as a filter) on the weighing pan. For example, use a pan in the shape of a cross that has upswept tips that center the PM sample media on the pan.

* * * * *

Subpart D—[Amended]

■ 72. Section 1065.303 is revised to read as follows:

§ 1065.303 Summary of required calibration and verifications.

The following table summarizes the required and recommended calibrations and verifications described in this subpart and indicates when these have to be performed:

TABLE 1 OF § 1065.303.—SUMMARY OF REQUIRED CALIBRATION AND VERIFICATIONS

Type of calibration or verification	Minimum frequency [a]
§ 1065.305: Accuracy, repeatability and noise ...	Accuracy: Not required, but recommended for initial installation. Repeatability: Not required, but recommended for initial installation. Noise: Not required, but recommended for initial installation.

TABLE 1 OF § 1065.303.—SUMMARY OF REQUIRED CALIBRATION AND VERIFICATIONS—Continued

Type of calibration or verification	Minimum frequency [a]
§ 1065.307: Linearity	Speed: Upon initial installation, within 370 days before testing and after major maintenance. Torque: Upon initial installation, within 370 days before testing and after major maintenance. Electrical power: Upon initial installation, within 370 days before testing and after major maintenance. Clean gas and diluted exhaust flows: Upon initial installation, within 370 days before testing and after major maintenance, unless flow is verified by propane check or by carbon or oxygen balance. Raw exhaust flow: Upon initial installation, within 185 days before testing and after major maintenance, unless flow is verified by propane check or by carbon or oxygen balance. Gas analyzers: Upon initial installation, within 35 days before testing and after major maintenance. PM balance: Upon initial installation, within 370 days before testing and after major maintenance. Stand-alone pressure and temperature: Upon initial installation, within 370 days before testing and after major maintenance.
§ 1065.308: Continuous analyzer system response and recording.	Upon initial installation, after system reconfiguration, and after major maintenance.
§ 1065.309: Continuous analyzer uniform response.	Upon initial installation, after system reconfiguration, and after major maintenance.
§ 1065.310: Torque	Upon initial installation and after major maintenance.
§ 1065.315: Pressure, temperature, dewpoint	Upon initial installation and after major maintenance.
§ 1065.320: Fuel flow	Upon initial installation and after major maintenance.
§ 1065.325: Intake flow	Upon initial installation and after major maintenance.
§ 1065.330: Exhaust flow	Upon initial installation and after major maintenance.
§ 1065.340: Diluted exhaust flow (CVS)	Upon initial installation and after major maintenance.
§ 1065.341: CVS and batch sampler verification [b].	Upon initial installation, within 35 days before testing, and after major maintenance.
§ 1065.345: Vacuum leak	Before each laboratory test according to subpart F of this part and before each field test according to subpart J of this part.
§ 1065.350: CO_2 NDIR H_2O interference	Upon initial installation and after major maintenance.
§ 1065.355: CO NDIR CO_2 and H_2O interference.	Upon initial installation and after major maintenance.
§ 1065.360: FID calibration THC FID optimization, and THC FID verification.	Calibrate all FID analyzers: Upon initial installation and after major maintenance. Optimize and determine CH_4 response for THC FID analyzers: upon initial installation and after major maintenance. Verify CH_4 response for THC FID analyzers: Upon initial installation, within 185 days before testing, and after major maintenance.
§ 1065.362: Raw exhaust FID O_2 interference	For all FID analyzers: Upon initial installation, and after major maintenance. For THC FID analyzers: Upon initial installation, after major maintenance, and after FID optimization according to § 1065.360.
§ 1065.365: Nonmethane cutter penetration	Upon initial installation, within 185 days before testing, and after major maintenance.
§ 1065.370: CLD CO_2 and H_2O quench	Upon initial installation and after major maintenance.
§ 1065.372: NDUV HC and H_2O interference	Upon initial installation and after major maintenance.
§ 1065.376: Chiller NO_2 penetration	Upon initial installation and after major maintenance.
§ 1065.378: NO_2-to-NO converter conversion	Upon initial installation, within 35 days before testing, and after major maintenance.
§ 1065.390: PM balance and weighing	Independent verification: Upon initial installation, within 370 days before testing, and after major maintenance. Zero, span, and reference sample verifications: Within 12 hours of weighing, and after major maintenance.
§ 1065.395: Inertial PM balance and weighing	Independent verification: Upon initial installation, within 370 days before testing, and after major maintenance. Other verifications: Upon initial installation and after major maintenance.

[a] Perform calibrations and verifications more frequently, according to measurement system manufacturer instructions and good engineering judgment.

[b] The CVS verification described in § 1065.341 is not required for systems that agree within ± 2% based on a chemical balance of carbon or oxygen of the intake air, fuel, and diluted exhaust.

■ 73. Section 1065.305 is amended by revising paragraphs (d)(4), (d)(8), and (d)(9)(iii) to read as follows:

§ 1065.305 Verifications for accuracy, repeatability, and noise.

* * * * *

(d) * * *

(4) Use the instrument to quantify a NIST-traceable reference quantity, y_{ref}. For gas analyzers the reference gas must meet the specifications of § 1065.750. Select a reference quantity near the mean value expected during testing. For all gas analyzers, use a quantity near the flow-weighted mean concentration expected at the standard or expected during testing, whichever is greater. For noise verification, use the same zero gas from paragraph (e) of this section as the reference quantity. In all cases, allow time for the instrument to stabilize while it measures the reference quantity. Stabilization time may include time to purge an instrument and time to account for its response.

* * * * *

(8) Repeat the steps specified in paragraphs (d)(2) through (7) of this section until you have ten arithmetic means ($\bar{y}_1$, $\bar{y}_2$, $\bar{y}_i$,...$\bar{y}_{10}$), ten standard deviations, (σ_1, σ_2, σ_i,...σ_{10}), and ten errors (ε_1, ε_2, ε_i,...ε_{10}).

(9) * * *

(iii) *Noise.* Noise is two times the root-mean-square of the ten standard

deviations (that is, noise = $2 \cdot rms_\sigma$) when the reference signal is a zero-quantity signal. Refer to the example of a root-mean-square calculation in § 1065.602. We recommend that instrument noise be within the specifications in Table 1 of § 1065.205.

* * * * *

■ 74. Section 1065.307 is amended by revising paragraphs (b), (c)(6), (c)(13), and Table 1 and adding paragraphs (d)(8) and (e) before the newly revised table to read as follows:

§ 1065.307 Linearity verification.

* * * * *

(b) *Performance requirements.* If a measurement system does not meet the applicable linearity criteria in Table 1 of this section, correct the deficiency by re-calibrating, servicing, or replacing components as needed. Repeat the linearity verification after correcting the deficiency to ensure that the measurement system meets the linearity criteria. Before you may use a measurement system that does not meet linearity criteria, you must demonstrate to us that the deficiency does not adversely affect your ability to demonstrate compliance with the applicable standards.

(c) * * *

(6) For all measured quantities, use instrument manufacturer recommendations and good engineering judgment to select reference values, y_{refi}, that cover a range of values that you expect would prevent extrapolation beyond these values during emission testing. We recommend selecting a zero reference signal as one of the reference values of the linearity verification. For stand-alone pressure and temperature linearity verifications, we recommend at least three reference values. For all other linearity verifications select at least ten reference values.

* * * * *

(13) Use the arithmetic means, $\bar{y}_i$, and reference values, $\bar{y}_{refi}$, to calculate least-squares linear regression parameters and statistical values to compare to the minimum performance criteria specified in Table 1 of this section. Use the calculations described in § 1065.602. Using good engineering judgment, you may weight the results of individual data pairs (i.e., (y_{refi}, $\bar{y}_i$)), in the linear regression calculations.

(d) * * *

(8) *Temperature.* You may perform the linearity verification for temperature measurement systems with thermocouples, RTDs, and thermistors by removing the sensor from the system and using a simulator in its place. Use a NIST-traceable simulator that is independently calibrated and, as appropriate, cold-junction compensated. The simulator uncertainty scaled to temperature must be less than 0.5% of T_{max}. If you use this option, you must use sensors that the supplier states are accurate to better than 0.5% of T_{max} compared with their standard calibration curve.

(e) *Measurement systems that require linearity verification.* Table 1 of this section indicates measurement systems that require linearity verifications, subject to the following provisions:

(1) Perform a linearity verification more frequently based on the instrument manufacturer's recommendation or good engineering judgment.

(2) The expression ''min'' refers to the minimum reference value used during the linearity verification. Note that this value may be zero or a negative value depending on the signal.

(3) The expression ''max'' generally refers to the maximum reference value used during the linearity verification. For example for gas dividers, x_{max} is the undivided, undiluted, span gas concentration. The following are special cases where ''max'' refers to a different value:

(i) For linearity verification with a PM balance, m_{max} refers to the typical mass of a PM filter.

(ii) For linearity verification of torque, T_{max} refers to the manufacturer's specified engine torque peak value of the lowest torque engine to be tested.

(4) The specified ranges are inclusive. For example, a specified range of 0.98–1.02 for a_1 means $0.98 \leq a_1 \leq 1.02$.

(5) These linearity verifications are optional for systems that pass the flow-rate verification for diluted exhaust as described in § 1065.341 (the propane check) or for systems that agree within ±2% based on a chemical balance of carbon or oxygen of the intake air, fuel, and exhaust.

(6) You must meet the a_1 criteria for these quantities only if the absolute value of the quantity is required, as opposed to a signal that is only linearly proportional to the actual value.

(7) The following provisions apply for stand-alone temperature measurements:

(i) The following temperature linearity checks are required:

(A) Air intake.

(B) Aftertreatment bed(s), for engines tested with aftertreatment devices subject to cold-start testing.

(C) Dilution air for PM sampling, including CVS, double-dilution, and partial-flow systems.

(D) PM sample, if applicable.

(E) Chiller sample, for gaseous sampling systems that use chillers to dry samples.

(ii) The following temperature linearity checks are required only if specified by the engine manufacturer:

(A) Fuel inlet.

(B) Air outlet to the test cell's charge air cooler air outlet, for engines tested with a laboratory heat exchanger that simulates an installed charge air cooler.

(C) Coolant inlet to the test cell's charge air cooler, for engines tested with a laboratory heat exchanger that simulates an installed charge air cooler.

(D) Oil in the sump/pan.

(E) Coolant before the thermostat, for liquid-cooled engines.

(8) The following provisions apply for stand-alone pressure measurements:

(i) The following pressure linearity checks are required:

(A) Air intake restriction.

(B) Exhaust back pressure.

(C) Barometer.

(D) CVS inlet gage pressure.

(E) Chiller sample, for gaseous sampling systems that use chillers to dry samples.

(ii) The following pressure linearity checks are required only if specified by the engine manufacturer:

(A) The test cell's charge air cooler and interconnecting pipe pressure drop, for turbo-charged engines tested with a laboratory heat exchanger that simulates an installed charge air cooler.

(B) Fuel outlet.

TABLE 1 OF § 1065.307.—MEASUREMENT SYSTEMS THAT REQUIRE LINEARITY VERIFICATIONS

Measurement system	Quantity	Minimum verification frequency	Linearity criteria			
			$\lvert x_{min}(a_1-1)+a_0 \rvert$	a_1	*SEE*	r^2
Engine speed	f_n	Within 370 days before testing	≤0.05 % f_{nmax}	0.98–1.02	≤2 % · f_{nmax}	≥0.990
Engine torque	T	Within 370 days before testing	≤1 % · T_{max}	0.98–1.02	≤2 % · T_{max}	≥0.990
Electrical work	W	Within 370 days before testing	≤1 % · T_{max}	0.98–1.02	≤2 % · T_{max}	≥0.990
Fuel flow rate	$\dot{m}$	Within 370 days before testing[d]	≤1 % · $\dot{m}_{max}$	0.98–1.02	≤2 % · $\dot{m}_{max}$	≥0.990

TABLE 1 OF § 1065.307.—MEASUREMENT SYSTEMS THAT REQUIRE LINEARITY VERIFICATIONS—Continued

Measurement system	Quantity	Minimum verification frequency	Linearity criteria			
			$\lvert x_{min}(a_1-1)+a_0 \rvert$	a_1	*SEE*	r^2
Intake-air flow rate	$\dot{n}$	Within 370 days before testing	≤1 % · $\dot{n}_{max}$	0.98–1.02	≤2 % · $\dot{n}_{max}$	≥0.990
Dilution air flow rate	$\dot{n}$	Within 370 days before testing	≤1 % · $\dot{n}_{max}$	0.98–1.02	≤2 % · $\dot{n}_{max}$	≥0.990
Diluted exhaust flow rate	$\dot{n}$	Within 370 days before testing	≤1 % · $\dot{n}_{max}$	0.98–1.02	≤2 % · $\dot{n}_{max}$	≥0.990
Raw exhaust flow rate	$\dot{n}$	Within 185 days before testing	≤1 % · $\dot{n}_{max}$	0.98–1.02	≤2 % · $\dot{n}_{max}$	≥0.990
Batch sampler flow rates	$\dot{n}$	Within 370 days before testing	≤1 % · $\dot{n}_{max}$	0.98–1.02	≤2 % · $\dot{n}_{max}$	≥0.990
Gas dividers	x/x_{span}	Within 370 days before testing	≤0.5 % · x_{max}	0.98–1.02	≤2 % · x_{max}	≥0.990
Gas analyzers for laboratory testing.	x	Within 35 days before testing	≤0.5 % · x_{max}	0.99–1.01	≤1 % · x_{max}	≥0.998
Gas analyzers for field testing	x	Within 35 days before testing	≤1 % · x_{max}	0.99–1.01	≤1 % · x_{max}	≥0.998
PM balance	m	Within 370 days before testing	≤1 % · m_{max}	0.99–1.01	≤1 % · m_{max}	≥0.998
Stand-alone pressures	p	Within 370 days before testing	≤1 % · p_{max}	0.99–1.01	≤1 % · p_{max}	≥0.998
Analog-to-digital conversion of stand-alone temperature signals.	T	Within 370 days before testing	≤1 % · T_{max}	0.99–1.01	≤1 % · T_{max}	≥0.998

■ 75. Section 1065.308 is revised to read as follows:

§ 1065.308 Continuous gas analyzer system-response and updating-recording verification—general.

This section describes a general verification procedure for continuous gas analyzer system response and update recording. See § 1065.309 for verification procedures that apply for systems or components involving H_2O correction.

(a) *Scope and frequency.* Perform this verification after installing or replacing a gas analyzer that you use for continuous sampling. Also perform this verification if you reconfigure your system in a way that would change system response. For example, perform this verification if you add a significant volume to the transfer lines by increasing their length or adding a filter; or if you reduce the frequency at which you sample and record gas-analyzer concentrations. You do not have to perform this verification for gas analyzer systems used only for discrete-mode testing.

(b) *Measurement principles.* This test verifies that the updating and recording frequencies match the overall system response to a rapid change in the value of concentrations at the sample probe. Gas analyzer systems must be optimized such that their overall response to a rapid change in concentration is updated and recorded at an appropriate frequency to prevent loss of information. This test also verifies that continuous gas analyzer systems meet a minimum response time.

(c) *System requirements.* To demonstrate acceptable updating and recording with respect to the system's overall response, use good engineering judgment to select one of the following criteria that your system must meet:

(1) The product of the mean rise time and the frequency at which the system records an updated concentration must be at least 5, and the product of the mean fall time and the frequency at which the system records an updated concentration must be at least 5. This criterion makes no assumption regarding the frequency content of changes in emission concentrations during emission testing; therefore, it is valid for any testing. In any case the mean rise time and the mean fall time must be no more than 10 seconds.

(2) The frequency at which the system records an updated concentration must be at least 5 Hz. This criterion assumes that the frequency content of significant changes in emission concentrations during emission testing do not exceed 1 Hz. In any case the mean rise time and the mean fall time must be no more than 10 seconds.

(3) You may use other criteria if we approve the criteria in advance.

(4) You may meet the overall PEMS verification in § 1065.920 instead of the verification in this section for field testing with PEMS.

(d) *Procedure.* Use the following procedure to verify the response of a continuous gas analyzer system:

(1) *Instrument setup.* Follow the analyzer system manufacturer's start-up and operating instructions. Adjust the system as needed to optimize performance.

(2) *Equipment setup.* We recommend using minimal lengths of gas transfer lines between all connections and fast-acting three-way valves (2 inlets, 1 outlet) to control the flow of zero and blended span gases to the analyzers. You may use a gas mixing or blending device to equally blend an NO-CO-CO_2-C_3H_8-CH_4, balance N_2 span gas with a span gas of NO_2, balance purified synthetic air. Standard binary span gases may also be used, where applicable, in place of blended NO-CO-CO_2-C_3H_8-CH_4, balance N_2 span gas, but separate response tests must then be run for each analyzer. In designing your experimental setup, avoid pressure pulsations due to stopping the flow through the gas-blending device. Note that you may omit any of these gas constituents if they are not relevant to your analyzers for this verification.

(3) *Data collection.* (i) Start the flow of zero gas.

(ii) Allow for stabilization, accounting for transport delays and the slowest instrument's full response.

(iii) Start recording data at the frequency used during emission testing. Each recorded value must be a unique updated concentration measured by the analyzer; you may not use interpolation to increase the number of recorded values.

(iv) Switch the flow to allow the blended span gases to flow to the analyzer.

(v) Allow for transport delays and the slowest instrument's full response.

(vi) Repeat the steps in paragraphs (d)(3)(i) through (v) of this section to record seven full cycles, ending with zero gas flowing to the analyzers.

(vii) Stop recording.

(e) *Performance evaluation.* (1) If you chose to demonstrate compliance with paragraph (c)(1) of this section, use the data from paragraph (d)(3) of this section to calculate the mean rise time, t_{10-90}, and mean fall time, t_{10-90}, for each of the analyzers. Multiply these times (in seconds) by their respective recording frequencies in Hertz (1/second). The value for each result must be at least 5. If the value is less than 5, increase the recording frequency or adjust the flows or design of the sampling system to increase the rise time and fall time as needed. You may

also configure digital filters to increase rise and fall times. The mean rise time and mean fall time must be no greater than 10 seconds.

(2) If a measurement system fails the criterion in paragraph (e)(1) of this section, ensure that signals from the system are updated and recorded at a frequency of at least 5 Hz. In any case, the mean rise time and mean fall time must be no greater than 10 seconds.

(3) If a measurement system fails the criteria in paragraphs (e)(1) and (2) of this section, you may use the continuous analyzer system only if the deficiency does not adversely affect your ability to show compliance with the applicable standards.

■ 76. Section 1065.309 is revised to read as follows:

§ 1065.309 Continuous gas analyzer system-response and updating-recording verification—with humidified-response verification.

This section describes a verification procedure for continuous gas analyzer system response and update recording for systems or components involving H_2O correction. See § 1065.308 for verification procedures that apply for systems not involving humidification.

(a) *Scope and frequency.* Perform this verification to determine a continuous gas analyzer's response, where one analyzer's response is compensated by another's to quantify a gaseous emission. For this check we consider water vapor a gaseous constituent. You do not have to perform this verification for batch gas analyzer systems or for continuous analyzer systems that are only used for discrete-mode testing. Perform this verification after initial installation (i.e. test cell commissioning). The verification in this section is required for initial installation of systems or components involving H_2O correction. For later verifications, you may use the procedures specified in § 1065.308, as long as your system includes no replacement components involving H_2O correction that have never been verified using the procedures in this section.

(b) *Measurement principles.* This procedure verifies the time-alignment and uniform response of continuously combined gas measurements. For this procedure, ensure that all compensation algorithms and humidity corrections are turned on.

(c) *System requirements.* Demonstrate that continuously combined concentration measurements have a uniform rise and fall during a system response to a rapid change in multiple gas concentrations. You must meet one of the following criteria:

(1) The product of the mean rise time and the frequency at which the system records an updated concentration must be at least 5, and the product of the mean fall time and the frequency at which the system records an updated concentration must be at least 5. This criterion makes no assumption regarding the frequency content of changes in emission concentrations during emission testing; therefore, it is valid for any testing. In no case may the mean rise time or the mean fall time be more than 10 seconds.

(2) The frequency at which the system records an updated concentration must be at least 5 Hz. This criterion assumes that the frequency content of significant changes in emission concentrations during emission testing do not exceed 1 Hz. In no case may the mean rise time or the mean fall time be more than 10 seconds.

(3) You may use other criteria if we approve them in advance.

(4) You may meet the overall PEMS verification in § 1065.920 instead of the verification in this section for field testing with PEMS.

(d) *Procedure.* Use the following procedure to verify the response of a continuous gas analyzer system:

(1) *Instrument setup.* Follow the analyzer system manufacturer's start-up and operating instructions. Adjust the system as needed to optimize performance.

(2) *Equipment setup.* We recommend using minimal lengths of gas transfer lines between all connections and fast-acting three-way valves (2 inlets, 1 outlet) to control the flow of zero and blended span gases to the analyzers. You may use a gas blending or mixing device to equally blend a span gas of NO-CO-CO_2-C_3H_8-CH_4, balance N_2, with a span gas of NO_2, balance purified synthetic air. Standard binary span gases may be used, where applicable, in place of blended NO-CO-CO_2-C_3H_8-CH_4, balance N_2 span gas, but separate response tests must then be run for each analyzer. In designing your experimental setup, avoid pressure pulsations due to stopping the flow through the gas blending device. Span gases must be humidified before entering the analyzer; however, you may not humidify NO_2 span gas by passing it through a sealed humidification vessel that contains water. We recommend humidifying your NO-CO-CO_2-C_3H_8-CH_4, balance N_2 blended gas by flowing the gas mixture through a sealed vessel that humidifies the gas by bubbling it through distilled water and then mixing the gas with dry NO_2 gas, balance purified synthetic air. If your system does not use a sample dryer to remove water from the sample gas, you must humidify your span gas by flowing the gas mixture through a sealed vessel that humidifies the gas to the highest sample dewpoint that you estimate during emission sampling by bubbling it through distilled water. If your system uses a sample dryer during testing that has passed the sample dryer verification check in § 1065.342, you may introduce the humidified gas mixture downstream of the sample dryer by bubbling it through distilled water in a sealed vessel at (25 ± 10) °C, or a temperature greater than the dewpoint determined in § 1065.145(d)(2). In all cases, maintain the humidified gas temperature downstream of the vessel at least 5 °C above its local dewpoint in the line. We recommend that you heat all gas transfer lines and valves located downstream of the vessel as needed to avoid condensation. Note that you may omit any of these gas constituents if they are not relevant to your analyzers for this verification. If any of your gas constituents are not susceptible to water compensation, you may perform the response check for these analyzers without humidification.

(3) *Data collection.* (i) Start the flow of zero gas.

(ii) Allow for stabilization, accounting for transport delays and the slowest instrument's full response.

(iii) Start recording data at the frequency used during emission testing. Each recorded value must be a unique updated concentration measured by the analyzer; you may not use interpolation to increase the number of recorded values.

(iv) Switch the flow to allow the blended span gases to flow to the analyzers.

(v) Allow for transport delays and the slowest instrument's full response.

(vi) Repeat the steps in paragraphs (d)(3)(i) through (v) of this section to record seven full cycles, ending with zero gas flowing to the analyzers.

(vii) Stop recording.

(e) *Performance evaluations.* (1) If you chose to demonstrate compliance with paragraph (c)(1) of this section, use the data from paragraph (d)(3) of this section to calculate the mean rise time, $t_{10-90,}$ and mean fall time, t_{S90-10}, for each of the analyzers. Multiply these times (in seconds) by their respective recording frequencies in Hz (1/second). The value for each result must be at least 5. If the value is less than 5, increase the recording frequency or adjust the flows or design of the sampling system to increase the rise time and fall time as needed. You may also configure digital filters to increase rise and fall times. In no case may the

mean rise time or mean fall time be greater than 10 seconds.

(2) If a measurement system fails the criterion in paragraph (e)(1) of this section, ensure that signals from the system are updated and recorded at a frequency of at least 5 Hz. In no case may the mean rise time or mean fall time be greater than 10 seconds.

(3) If a measurement system fails the criteria in paragraphs (e)(1) and (2) of this section, you may use the continuous analyzer system only if the deficiency does not adversely affect your ability to show compliance with the applicable standards.

■ 77. Section 1065.310 is amended by revising paragraph (d) to read as follows:

§ 1065.310 Torque calibration.

* * * * *

(d) *Strain gage or proving ring calibration.* This technique applies force either by hanging weights on a lever arm (these weights and their lever arm length are not used as part of the reference torque determination) or by operating the dynamometer at different torques. Apply at least six force combinations for each applicable torque-measuring range, spacing the force quantities about equally over the range. Oscillate or rotate the dynamometer during calibration to reduce frictional static hysteresis. In this case, the reference torque is determined by multiplying the force output from the reference meter (such as a strain gage or proving ring) by its effective lever-arm length, which you measure from the point where the force measurement is made to the dynamometer's rotational axis. Make sure you measure this length perpendicular to the reference meter's measurement axis and perpendicular to the dynamometer's rotational axis.

■ 78. Section 1065.315 is amended by revising paragraph (a)(2) to read as follows:

§ 1065.315 Pressure, temperature, and dewpoint calibration.

(a) * * *

(2) *Temperature.* We recommend digital dry-block or stirred-liquid temperature calibrators, with data logging capabilities to minimize transcription errors. We recommend using calibration reference quantities that are NIST-traceable within 0.5% uncertainty. You may perform the linearity verification for temperature measurement systems with thermocouples, RTDs, and thermistors by removing the sensor from the system and using a simulator in its place. Use a NIST-traceable simulator that is independently calibrated and, as appropriate, cold-junction compensated. The simulator uncertainty scaled to temperature must be less than 0.5% of $T_{max.}$ If you use this option, you must use sensors that the supplier states are accurate to better than 0.5% of T_{max} compared with their standard calibration curve.

* * * * *

■ 79. Section 1065.340 is amended by revising paragraphs (f)(5), (f)(6)(ii), (f)(7), (f)(9), (f)(10), (g)(6)(i), and Figure 1 to read as follows:

§ 1065.340 Diluted exhaust flow (CVS) calibration.

* * * * *

(f) * * *

(5) Set the variable restrictor to its wide-open position. Instead of a variable restrictor, you may alternately vary the pressure downstream of the CFV by varying blower speed or by introducing a controlled leak. Note that some blowers have limitations on nonloaded conditions.

(6) * * *

(ii) The mean dewpoint of the calibration air, $\bar{T}_{dew}$. See § 1065.640 for permissible assumptions during emission measurements.

* * * * *

(7) Incrementally close the restrictor valve or decrease the downstream pressure to decrease the differential pressure across the CFV, $\Delta\bar{p}_{CFV}$.

* * * * *

(9) Determine C_d and the lowest allowable pressure ratio, r, according to § 1065.640.

(10) Use C_d to determine CFV flow during an emission test. Do not use the CFV below the lowest allowed r, as determined in § 1065.640.

* * * * *

(g) * * *

(6) * * *

(i) The mean flow rate of the reference flow meter, $\bar{\dot{n}}_{ref}$. This may include several measurements of different quantities, such as reference meter pressures and temperatures, for calculating $\bar{\dot{n}}_{ref}$.

* * * * *

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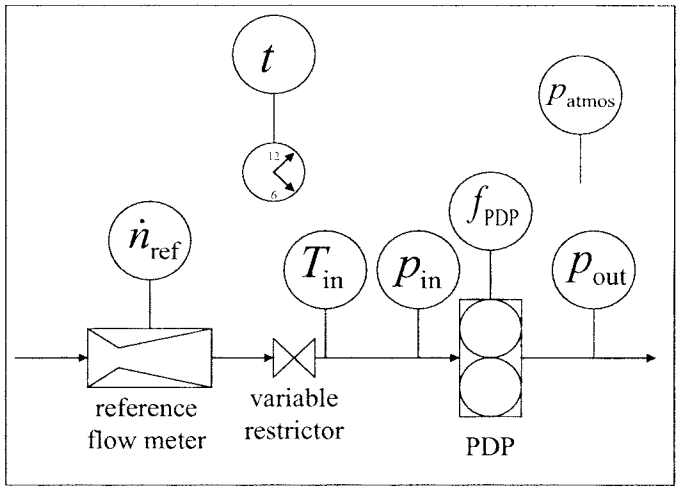
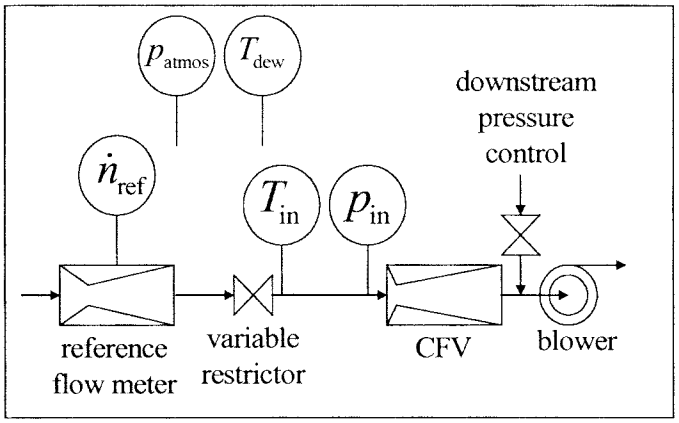
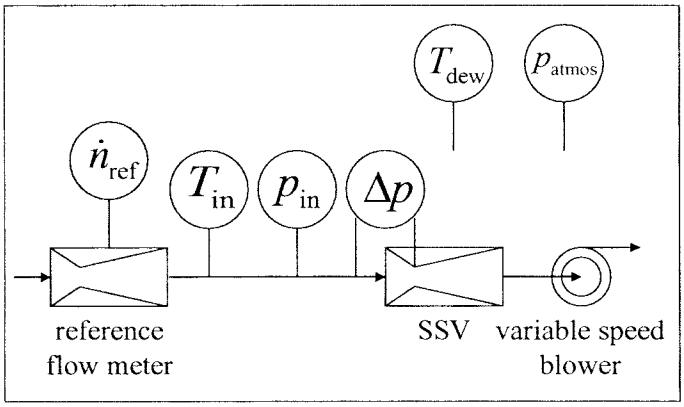
Figure 1 of 1065.340 CVS calibration configurations.







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■ 80. Section 1065.341 is amended by revising paragraphs (d) introductory text, (d)(7), and (g) introductory text to read as follows:

§ 1065.341 CVS and batch sampler verification (propane check).

* * * * *

(d) If you performed the vacuum-side leak verification of the HC sampling system as described in paragraph (c)(8) of this section, you may use the HC contamination procedure in § 1065.520(g) to verify HC contamination. Otherwise, zero, span, and verify contamination of the HC sampling system, as follows:

* * * * *

(7) When the overflow HC concentration does not exceed 2 μmol/mol, record this value as $x_{THCinit}$ and use it to correct for HC contamination as described in § 1065.660.

* * * * *

(g) You may repeat the propane check to verify a batch sampler, such as a PM secondary dilution system.

* * * * *

■ 81. A new § 1065.342 is added to read as follows:

§ 1065.342 Sample dryer verification.

(a) *Scope and frequency.* If you use a sample dryer as allowed in § 1065.145(d)(2) to remove water from the sample gas, verify the performance upon installation, after major maintenance, for thermal chiller. For osmotic membrane dryers, verify the performance upon installation, after major maintenance, and within 35 days of testing.

(b) *Measurement principles.* Water can inhibit an analyzer's ability to properly measure the exhaust component of interest and thus is sometimes removed before the sample gas reaches the analyzer. For example water can negatively interfere with a CLD's NO_X response through collisional quenching and can positively interfere with an NDIR analyzer by causing a response similar to CO.

(c) *System requirements.* The sample dryer must meet the specifications as determined in § 1065.145(d)(2) for dewpoint, T_{dew}, and absolute pressure, p_{total}, downstream of the osmotic-membrane dryer or thermal chiller.

(d) *Sample dryer verification procedure.* Use the following method to determine sample dryer performance, or use good engineering judgment to develop a different protocol:

(1) Use PTFE or stainless steel tubing to make necessary connections.

(2) Humidify N_2 or purified air by bubbling it through distilled water in a sealed vessel that humidifies the gas to the highest sample dewpoint that you estimate during emission sampling.

(3) Introduce the humidified gas upstream of the sample dryer.

(4) Downstream of the vessel, maintain the humidified gas temperature at least 5 °C above its dewpoint.

(5) Measure the humidified gas dewpoint, T_{dew}, and pressure, p_{total}, as close as possible to the inlet of the sample dryer to verify the dewpoint is the highest that you estimated during emission sampling.

(6) Measure the humidified gas dewpoint, T_{dew}, and pressure, p_{total}, as close as possible to the outlet of the sample dryer.

(7) The sample dryer meets the verification if the results of paragraph (d)(6) of this section are less than the dew point corresponding to the sample dryer specifications as determined in § 1065.145(d)(2) plus 2 °C or if the mole fraction from (d)(6) is less than the corresponding sample dryer specifications plus 0.002 mol/mol.

(e) *Alternate sample dryer verification procedure.* The following method may be used in place of the sample dryer verification procedure in (d) of this section. If you use a humidity sensor for continuous monitoring of dewpoint at the sample dryer outlet you may skip the performance check in § 1065.342(d), but you must make sure that the dryer outlet humidity is below the minimum values used for quench, interference, and compensation checks.

■ 82. Section 1065.345 is revised to read as follows:

§ 1065.345 Vacuum-side leak verification.

(a) *Scope and frequency.* Verify that there are no significant vacuum-side leaks using one of the leak tests described in this section upon initial sampling system installation, after maintenance such as pre-filter changes, and within eight hours before each duty-cycle sequence. This verification does not apply to any full-flow portion of a CVS dilution system.

(b) *Measurement principles.* A leak may be detected either by measuring a small amount of flow when there should be zero flow, or by detecting the dilution of a known concentration of span gas when it flows through the vacuum side of a sampling system.

(c) *Low-flow leak test.* Test a sampling system for low-flow leaks as follows:

(1) Seal the probe end of the system by taking one of the following steps:

(i) Cap or plug the end of the sample probe.

(ii) Disconnect the transfer line at the probe and cap or plug the transfer line.

(iii) Close a leak-tight valve located in the sample transfer line within 92 cm of the probe.

(2) Operate all vacuum pumps. After stabilizing, verify that the flow through the vacuum-side of the sampling system is less than 0.5% of the system's normal in-use flow rate. You may estimate typical analyzer and bypass flows as an approximation of the system's normal in-use flow rate.

(d) *Dilution-of-span-gas leak test.* You may use any gas analyzer for this test. If you use a FID for this test, correct for any HC contamination in the sampling system according to § 1065.660. To avoid misleading results from this test, we recommend using only analyzers that have a repeatability of 0.5% or better at the span gas concentration used for this test. Perform a vacuum-side leak test as follows:

(1) Prepare a gas analyzer as you would for emission testing.

(2) Supply span gas to the analyzer port and verify that it measures the span gas concentration within its expected measurement accuracy and repeatability.

(3) Route overflow span gas to one of the following locations in the sampling system:

(i) The end of the sample probe.

(ii) Disconnect the transfer line at the probe connection, and overflow the span gas at the open end of the transfer line.

(iii) A three-way valve installed in-line between a probe and its transfer line, such as a system overflow zero and span port.

(4) Verify that the measured overflow span gas concentration is within ± 0.5% of the span gas concentration. A measured value lower than expected indicates a leak, but a value higher than expected may indicate a problem with the span gas or the analyzer itself. A measured value higher than expected does not indicate a leak.

(e) *Vacuum-decay leak test.* To perform this test you must apply a vacuum to the vacuum-side volume of your sampling system and then observe the leak rate of your system as a decay in the applied vacuum. To perform this test you must know the vacuum-side volume of your sampling system to within ± 10% of its true volume. For this test you must also use measurement instruments that meet the specifications of subpart C of this part and of this subpart D. Perform a vacuum-decay leak test as follows:

(1) Seal the probe end of the system as close to the probe opening as possible by taking one of the following steps:

(i) Cap or plug the end of the sample probe.

(ii) Disconnect the transfer line at the probe and cap or plug the transfer line.

(iii) Close a leak-tight valve in-line between a probe and transfer line.

(2) Operate all vacuum pumps. Draw a vacuum that is representative of normal operating conditions. In the case of sample bags, we recommend that you repeat your normal sample bag pump-down procedure twice to minimize any trapped volumes.

(3) Turn off the sample pumps and seal the system. Measure and record the absolute pressure of the trapped gas and optionally the system absolute temperature. Wait long enough for any transients to settle and long enough for a leak at 0.5% to have caused a pressure change of at least 10 times the resolution of the pressure transducer, then again record the pressure and optionally temperature.

(4) Calculate the leak flow rate based on an assumed value of zero for pumped-down bag volumes and based on known values for the sample system volume, the initial and final pressures, optional temperatures, and elapsed time. Using the calculations specified in 1065.644, verify that the vacuum-decay leak flow rate is less than 0.5% of the system's normal in-use flow rate.

■ 83. Section 1065.350 is amended by revising paragraphs (c) and (d) to read as follows:

§ 1065.350 H_2O interference verification for CO_2 NDIR analyzers.

* * * * *

(c) *System requirements.* A CO_2 NDIR analyzer must have an H_2O interference that is within (0.0 ±0.4) mmol/mol, though we strongly recommend a lower interference that is within (0.0 ±0.2) mmol/mol.

(d) *Procedure.* Perform the interference verification as follows:

(1) Start, operate, zero, and span the CO_2 NDIR analyzer as you would before an emission test.

(2) Create a humidified test gas by bubbling zero air that meets the specifications in § 1065.750 through distilled water in a sealed vessel. If the sample is not passed through a dryer, control the vessel temperature to generate an H_2O level at least as high as the maximum expected during testing. If the sample is passed through a dryer during testing, control the vessel temperature to generate an H_2O level at least as high as the level determined in § 1065.145(d)(2).

(3) Introduce the humidified test gas into the sample system. You may introduce it downstream of any sample dryer, if one is used during testing.

(4) Measure the humidified test gas dewpoint, T_{dew}, and pressure, p_{total}, as close as possible to the inlet of the analyzer.

(5) Downstream of the vessel, maintain the humidified test gas temperature at least 5 °C above its dewpoint.

(6) Allow time for the analyzer response to stabilize. Stabilization time may include time to purge the transfer line and to account for analyzer response.

(7) While the analyzer measures the sample's concentration, record 30 seconds of sampled data. Calculate the arithmetic mean of this data. The analyzer meets the interference verification if this value is within (0 ±0.4) mmol/mol.

* * * * *

■ 84. Section 1065.355 is amended by revising paragraph (d) to read as follows:

§ 1065.355 H_2O and CO_2 interference verification for CO NDIR analyzers.

* * * * *

(d) *Procedure.* Perform the interference verification as follows:

(1) Start, operate, zero, and span the CO NDIR analyzer as you would before an emission test.

(2) Create a humidified CO_2 test gas by bubbling a CO_2 span gas through distilled water in a sealed vessel. If the sample is not passed through a dryer, control the vessel temperature to generate an H_2O level at least as high as the maximum expected during testing. If the sample is passed through a dryer during testing, control the vessel temperature to generate an H_2O level at least as high as the level determined in § 1065.145(d)(2). Use a CO_2 span gas concentration at least as high as the maximum expected during testing.

(3) Introduce the humidified CO_2 test gas into the sample system. You may introduce it downstream of any sample dryer, if one is used during testing.

(4) Measure the humidified CO_2 test gas dewpoint, T_{dew}, and pressure, p_{total}, as close as possible to the inlet of the analyzer.

(5) Downstream of the vessel, maintain the humidified gas temperature at least 5 °C above its dewpoint.

(6) Allow time for the analyzer response to stabilize. Stabilization time may include time to purge the transfer line and to account for analyzer response.

(7) While the analyzer measures the sample's concentration, record its output for 30 seconds. Calculate the arithmetic mean of this data.

(8) The analyzer meets the interference verification if the result of paragraph (d)(7) of this section meets the tolerance in paragraph (c) of this section.

(9) You may also run interference procedures for CO_2 and H_2O separately. If the CO_2 and H_2O levels used are higher than the maximum levels expected during testing, you may scale down each observed interference value by multiplying the observed interference by the ratio of the maximum expected concentration value to the actual value used during this procedure. You may run the separate interference procedures concentrations of H_2O (down to 0.025 mol/mol H_2O content) that are lower than the maximum levels expected during testing, but you must scale up the observed H_2O interference by multiplying the observed interference by the ratio of the maximum expected H_2O concentration value to the actual value used during this procedure. The sum of the two scaled interference values must meet the tolerance in paragraph (c) of this section.

* * * * *

■ 85. Section 1065.360 is revised to read as follows:

§ 1065.360 FID optimization and verification.

(a) *Scope and frequency.* For all FID analyzers, calibrate the FID upon initial installation. Repeat the calibration as needed using good engineering judgment. For a FID that measures THC, perform the following steps:

(1) Optimize the response to various hydrocarbons after initial analyzer installation and after major maintenance as described in paragraph (c) of this section.

(2) Determine the methane (CH_4) response factor after initial analyzer installation and after major maintenance as described in paragraph (d) of this section.

(3) Verify the methane (CH_4) response within 185 days before testing as described in paragraph (e) of this section.

(b) *Calibration.* Use good engineering judgment to develop a calibration procedure, such as one based on the FID-analyzer manufacturer's instructions and recommended frequency for calibrating the FID. Alternately, you may remove system components for off-site calibration. For a FID that measures THC, calibrate using C_3H_8 calibration gases that meet the specifications of § 1065.750. For a FID that measures CH_4, calibrate using CH_4 calibration gases that meet the specifications of § 1065.750. We recommend FID analyzer zero and span gases that contain approximately the flow-weighted mean concentration of O_2

expected during testing. If you use a FID to measure methane (CH_4) downstream of a nonmethane cutter, you may calibrate that FID using CH_4 calibration gases with the cutter. Regardless of the calibration gas composition, calibrate on a carbon number basis of one (C_1). For example, if you use a C_3H_8 span gas of concentration 200 μmol/mol, span the FID to respond with a value of 600 μmol/mol. As another example, if you use a CH_4 span gas with a concentration of 200 μmol/mol, span the FID to respond with a value of 200 μmol/mol.

(c) *THC FID response optimization.* This procedure is only for FID analyzers that measure THC. Use good engineering judgment for initial instrument start-up and basic operating adjustment using FID fuel and zero air. Heated FIDs must be within their required operating temperature ranges. Optimize FID response at the most common analyzer range expected during emission testing. Optimization involves adjusting flows and pressures of FID fuel, burner air, and sample to minimize response variations to various hydrocarbon species in the exhaust. Use good engineering judgment to trade off peak FID response to propane calibration gases to achieve minimal response variations to different hydrocarbon species. For an example of trading off response to propane for relative responses to other hydrocarbon species, see SAE 770141 (incorporated by reference in § 1065.1010). Determine the optimum flow rates and/or pressures for FID fuel, burner air, and sample and record them for future reference.

(d) *THC FID CH_4 response factor determination.* This procedure is only for FID analyzers that measure THC. Since FID analyzers generally have a different response to CH_4 versus C_3H_8, determine each THC FID analyzer's CH_4 response factor, $RF_{CH4[THC–FID]}$, after FID optimization. Use the most recent $RF_{CH4[THC–FID]}$ measured according to this section in the calculations for HC determination described in § 1065.660 to compensate for CH_4 response. Determine $RF_{CH4[THC–FID]}$ as follows, noting that you do not determine $RF_{CH4[THC–FID]}$ for FIDs that are calibrated and spanned using CH_4 with a nonmethane cutter:

(1) Select a C_3H_8 span gas concentration that you use to span your analyzers before emission testing. Use only span gases that meet the specifications of § 1065.750. Record the C_3H_8 concentration of the gas.

(2) Select a CH_4 span gas concentration that you use to span your analyzers before emission testing. Use only span gases that meet the specifications of § 1065.750. Record the CH_4 concentration of the gas.

(3) Start and operate the FID analyzer according to the manufacturer's instructions.

(4) Confirm that the FID analyzer has been calibrated using C_3H_8. Calibrate on a carbon number basis of one (C_1). For example, if you use a C_3H_8 span gas of concentration 200 μmol/mol, span the FID to respond with a value of 600 μmol/mol.

(5) Zero the FID with a zero gas that you use for emission testing.

(6) Span the FID with the C_3H_8 span gas that you selected under paragraph (d)(1) of this section.

(7) Introduce at the sample port of the FID analyzer, the CH_4 span gas that you selected under paragraph (d)(2) of this section.

(8) Allow time for the analyzer response to stabilize. Stabilization time may include time to purge the analyzer and to account for its response.

(9) While the analyzer measures the CH_4 concentration, record 30 seconds of sampled data. Calculate the arithmetic mean of these values.

(10) Divide the mean measured concentration by the recorded span concentration of the CH_4 calibration gas. The result is the FID analyzer's response factor for CH_4, $RF_{CH4[THC–FID]}$.

(e) *THC FID methane (CH_4) response verification.* This procedure is only for FID analyzers that measure THC. If the value of $RF_{CH4[THC–FID]}$ from paragraph (d) of this section is within ±5.0% of its most recent previously determined value, the THC FID passes the methane response verification. For example, if the most recent previous value for $RF_{CH4[THC–FID]}$ was 1.05 and it changed by ±0.05 to become 1.10 or it changed by −0.05 to become 1.00, either case would be acceptable because ±4.8% is less than ±5.0%. Verify $RF_{CH4[THC–FID]}$ as follows:

(1) First verify that the flow rates and/or pressures of FID fuel, burner air, and sample are each within ±0.5% of their most recent previously recorded values, as described in paragraph (c) of this section. You may adjust these flow rates as necessary. Then determine the $RF_{CH4[THC–FID]}$ as described in paragraph (d) of this section and verify that it is within the tolerance specified in this paragraph (e).

(2) If $RF_{CH4[THC–FID]}$ is is not within the tolerance specified in this paragraph (e), re-optimize the FID response as described in paragraph (c) of this section.

(3) Determine a new $RF_{CH4[THC–FID]}$ as described in paragraph (d) of this section. Use this new value of $RF_{CH4[THC–FID]}$ in the calculations for HC determination, as described in § 1065.660.

■ 86. Section 1065.362 is amended by revising paragraph (d) to read as follows:

§ 1065.362 Non-stoichiometric raw exhaust FID O_2 interference verification.

* * * * *

(d) *Procedure.* Determine FID O_2 interference as follows, noting that you may use one or more gas dividers to create the reference gas concentrations that are required to perform this verification:

(1) Select three span reference gases that contain a C_3H_8 concentration that you use to span your analyzers before emission testing. Use only span gases that meet the specifications of § 1065.750. You may use CH_4 span reference gases for FIDs calibrated on CH_4 with a nonmethane cutter. Select the three balance gas concentrations such that the concentrations of O_2 and N_2 represent the minimum, maximum, and average O_2 concentrations expected during testing. The requirement for using the average O_2 concentration can be removed if you choose to calibrate the FID with span gas balanced with the average expected oxygen concentration.

(2) Confirm that the FID analyzer meets all the specifications of § 1065.360.

(3) Start and operate the FID analyzer as you would before an emission test. Regardless of the FID burner's air source during testing, use zero air as the FID burner's air source for this verification.

(4) Zero the FID analyzer using the zero gas used during emission testing.

(5) Span the FID analyzer using a span gas that you use during emission testing.

(6) Check the zero response of the FID analyzer using the zero gas used during emission testing. If the mean zero response of 30 seconds of sampled data is within ±0.5% of the span reference value used in paragraph (d)(5) of this section, then proceed to the next step; otherwise restart the procedure at paragraph (d)(4) of this section.

(7) Check the analyzer response using the span gas that has the minimum concentration of O_2 expected during testing. Record the mean response of 30 seconds of stabilized sample data as $x_{O2minHC}$.

(8) Check the zero response of the FID analyzer using the zero gas used during emission testing. If the mean zero response of 30 seconds of stabilized sample data is within ±0.5% of the span reference value used in paragraph (d)(5) of this section, then proceed to the next step; otherwise restart the procedure at paragraph (d)(4) of this section.

(9) Check the analyzer response using the span gas that has the average concentration of O_2 expected during testing. Record the mean response of 30 seconds of stabilized sample data as $x_{O2avgHC}$.

(10) Check the zero response of the FID analyzer using the zero gas used during emission testing. If the mean zero response of 30 seconds of stabilized sample data is within ±0.5% of the span reference value used in paragraph (d)(5) of this section, proceed to the next step; otherwise restart the procedure at paragraph (d)(4) of this section.

(11) Check the analyzer response using the span gas that has the maximum concentration of O_2 expected during testing. Record the mean response of 30 seconds of stabilized sample data as $x_{O2maxHC.}$

(12) Check the zero response of the FID analyzer using the zero gas used during emission testing. If the mean zero response of 30 seconds of stabilized sample data is within ±0.5% of the span reference value used in paragraph (d)(5) of this section, then proceed to the next step; otherwise restart the procedure at paragraph (d)(4) of this section.

(13) Calculate the percent difference between $x_{O2maxHC}$ and its reference gas concentration. Calculate the percent difference between $x_{O2avgHC}$ and its reference gas concentration. Calculate the percent difference between $x_{O2minHC}$ and its reference gas concentration. Determine the maximum percent difference of the three. This is the O_2 interference.

(14) If the O_2 interference is within ±2%, the FID passes the O_2 interference verification; otherwise perform one or more of the following to address the deficiency:

(i) Repeat the verification to determine if a mistake was made during the procedure.

(ii) Select zero and span gases for emission testing that contain higher or lower O_2 concentrations and repeat the verification.

(iii) Adjust FID burner air, fuel, and sample flow rates. Note that if you adjust these flow rates on a THC FID to meet the O_2 interference verification, you have reset RF_{CH4} for the next RF_{CH4} verification according to § 1065.360. Repeat the O_2 interference verification after adjustment and determine RF_{CH4}.

(iv) Repair or replace the FID and repeat the O_2 interference verification.

(v) Demonstrate that the deficiency does not adversely affect your ability to demonstrate compliance with the applicable emission standards.

■ 87. Section 1065.365 is revised to read as follows:

§ 1065.365 Nonmethane cutter penetration fractions.

(a) *Scope and frequency.* If you use a FID analyzer and a nonmethane cutter (NMC) to measure methane (CH_4), determine the nonmethane cutter's penetration fractions of methane, PF_{CH4}, and ethane, PF_{C2H6}. As detailed in this section, these penetration fractions may be determined as a combination of NMC penetration fractions and FID analyzer response factors, depending on your particular NMC and FID analyzer configuration. Perform this verification after installing the nonmethane cutter. Repeat this verification within 185 days of testing to verify that the catalytic activity of the cutter has not deteriorated. Note that because nonmethane cutters can deteriorate rapidly and without warning if they are operated outside of certain ranges of gas concentrations and outside of certain temperature ranges, good engineering judgment may dictate that you determine a nonmethane cutter's penetration fractions more frequently.

(b) *Measurement principles.* A nonmethane cutter is a heated catalyst that removes nonmethane hydrocarbons from an exhaust sample stream before the FID analyzer measures the remaining hydrocarbon concentration. An ideal nonmethane cutter would have a methane penetration fraction, PF_{CH4}, of 1.000, and the penetration fraction for all other nonmethane hydrocarbons would be 0.000, as represented by PF_{C2H6}. The emission calculations in § 1065.660 use the measured values from this verification to account for less than ideal NMC performance.

(c) *System requirements.* We do not limit NMC penetration fractions to a certain range. However, we recommend that you optimize a nonmethane cutter by adjusting its temperature to achieve a $PF_{CH4} > 0.85$ and a $PF_{C2H6} < 0.02$, as determined by paragraphs (d), (e), or (f) of this section, as applicable. If we use a nonmethane cutter for testing, it will meet this recommendation. If adjusting NMC temperature does not result in achieving both of these specifications simultaneously, we recommend that you replace the catalyst material. Use the most recently determined penetration values from this section to calculate HC emissions according to § 1065.660 and § 1065.665 as applicable.

(d) *Procedure for a FID calibrated with the NMC.* The method described in this paragraph (d) is recommended over the procedures specified in paragraphs (e) and (f) of this section. If your FID arrangement is such that a FID is always calibrated to measure CH_4 with the NMC, then span that FID with the NMC using a CH_4 span gas, set the product of that FID's CH_4 response factor and CH_4 penetration fraction, $RFPF_{CH4[NMC–FID]}$, equal to 1.0 for all emission calculations, and determine its combined ethane (C_2H_6) response factor and penetration fraction, $RFPF_{C2H6[NMC–FID]}$ as follows:

(1) Select a CH_4 gas mixture and a C_2H_6 analytical gas mixture and ensure that both mixtures meet the specifications of § 1065.750. Select a CH_4 concentration that you would use for spanning the FID during emission testing and select a C_2H_6 concentration that is typical of the peak NMHC concentration expected at the hydrocarbon standard or equal to THC analyzer's span value.

(2) Start, operate, and optimize the nonmethane cutter according to the manufacturer's instructions, including any temperature optimization.

(3) Confirm that the FID analyzer meets all the specifications of § 1065.360.

(4) Start and operate the FID analyzer according to the manufacturer's instructions.

(5) Zero and span the FID with the cutter and use CH_4 span gas to span the FID with the cutter. Note that you must span the FID on a C_1 basis. For example, if your span gas has a CH_4 reference value of 100 μmol/mol, the correct FID response to that span gas is 100 μmol/mol because there is one carbon atom per CH_4 molecule.

(6) Introduce the C_2H_6 analytical gas mixture upstream of the nonmethane cutter.

(7) Allow time for the analyzer response to stabilize. Stabilization time may include time to purge the nonmethane cutter and to account for the analyzer's response.

(8) While the analyzer measures a stable concentration, record 30 seconds of sampled data. Calculate the arithmetic mean of these data points.

(9) Divide the mean by the reference value of C_2H_6, converted to a C_1 basis. The result is the C_2H_6 combined response factor and penetration fraction, $RFPF_{C2H6[NMC–FID]}$. Use this combined response factor and penetration fraction and the product of the CH_4 response factor and CH_4 penetration fraction, $RFPF_{CH4[NMC–FID]}$, set to 1.0 in emission calculations according to § 1065.660(b)(2)(i) or § 1065.665, as applicable.

(e) *Procedure for a FID calibrated with propane, bypassing the NMC.* If you use a FID with an NMC that is calibrated with propane, C_3H_8, by bypassing the NMC, determine its penetration fractions, $PF_{C2H6[NMC–FID]}$ and $PF_{CH4[NMC–FID]}$, as follows:

(1) Select CH_4 and C_2H_6 analytical gas mixtures that meet the specifications of § 1065.750 with the CH_4 concentration typical of its peak concentration expected at the hydrocarbon standard and the C_2H_6 concentration typical of the peak total hydrocarbon (THC) concentration expected at the hydrocarbon standard or the THC analyzer span value.

(2) Start and operate the nonmethane cutter according to the manufacturer's instructions, including any temperature optimization.

(3) Confirm that the FID analyzer meets all the specifications of § 1065.360.

(4) Start and operate the FID analyzer according to the manufacturer's instructions.

(5) Zero and span the FID as you would during emission testing. Span the FID by bypassing the cutter and by using C_3H_8 span gas to span the FID. Note that you must span the FID on a C_1 basis. For example, if your span gas has a propane reference value of 100 μmol/mol, the correct FID response to that span gas is 300 μmol/mol because there are three carbon atoms per C_3H_8 molecule.

(6) Introduce the C_2H_6 analytical gas mixture upstream of the nonmethane cutter at the same point the zero gas was introduced.

(7) Allow time for the analyzer response to stabilize. Stabilization time may include time to purge the nonmethane cutter and to account for the analyzer's response.

(8) While the analyzer measures a stable concentration, record 30 seconds of sampled data. Calculate the arithmetic mean of these data points.

(9) Reroute the flow path to bypass the nonmethane cutter, introduce the C_2H_6 analytical gas mixture to the bypass, and repeat the steps in paragraphs (e)(7) through (8) of this section.

(10) Divide the mean C_2H_6 concentration measured through the nonmethane cutter by the mean concentration measured after bypassing the nonmethane cutter. The result is the C_2H_6 penetration fraction, $PF_{C2H6[NMC–FID]}$. Use this penetration fraction according to § 1065.660(b)(2)(ii) or § 1065.665, as applicable.

(11) Repeat the steps in paragraphs (e)(6) through (10) of this section, but with the CH_4 analytical gas mixture instead of C_2H_6. The result will be the CH_4 penetration fraction, $PF_{CH4[NMC–FID]}$. Use this penetration fraction according to § 1065.660(b)(2)(ii) or § 1065.665, as applicable.

(f) *Procedure for a FID calibrated with methane, bypassing the NMC.* If you use a FID with an NMC that is calibrated with methane, CH_4, by bypassing the NMC, determine its combined ethane (C_2H_6) response factor and penetration fraction, $RFPF_{C2H6[NMC–FID]}$, as well as its CH_4 penetration fraction, $PF_{CH4[NMC–FID]}$, as follows:

(1) Select CH_4 and C_2H_6 analytical gas mixtures that meet the specifications of § 1065.750, with the CH_4 concentration typical of its peak concentration expected at the hydrocarbon standard and the C_2H_6 concentration typical of the peak total hydrocarbon (THC) concentration expected at the hydrocarbon standard or the THC analyzer span value.

(2) Start and operate the nonmethane cutter according to the manufacturer's instructions, including any temperature optimization.

(3) Confirm that the FID analyzer meets all the specifications of § 1065.360.

(4) Start and operate the FID analyzer according to the manufacturer's instructions.

(5) Zero and span the FID as you would during emission testing. Span the FID with CH_4 span gas by bypassing the cutter. Note that you must span the FID on a C_1 basis. For example, if your span gas has a methane reference value of 100 μmol/mol, the correct FID response to that span gas is 100 μmol/mol because there is one carbon atom per CH_4 molecule.

(6) Introduce the C_2H_6 analytical gas mixture upstream of the nonmethane cutter at the same point the zero gas was introduced.

(7) Allow time for the analyzer response to stabilize. Stabilization time may include time to purge the nonmethane cutter and to account for the analyzer's response.

(8) While the analyzer measures a stable concentration, record 30 seconds of sampled data. Calculate the arithmetic mean of these data points.

(9) Reroute the flow path to bypass the nonmethane cutter, introduce the C_2H_6 analytical gas mixture to the bypass, and repeat the steps in paragraphs (e)(7) and (8) of this section.

(10) Divide the mean C_2H_6 concentration measured through the nonmethane cutter by the mean concentration measured after bypassing the nonmethane cutter. The result is the C_2H_6 combined response factor and penetration fraction, $RFPF_{C2H6[NMC–FID]}$. Use this combined response factor and penetration fraction according to § 1065.660(b)(2)(iii) or § 1065.665, as applicable.

(11) Repeat the steps in paragraphs (e)(6) through (10) of this section, but with the CH_4 analytical gas mixture instead of C_2H_6. The result will be the CH_4 penetration fraction, $PF_{CH4[NMC–FID]}$. Use this penetration fraction according to § 1065.660(b)(2)(iii) or § 1065.665, as applicable.

■ 88. Section 1065.370 is amended by revising paragraphs (d), (e), and (g)(1) to read as follows:

§ 1065.370 CLD CO_2 and H_2O quench verification.

* * * * *

(d) *CO_2 quench verification procedure.* Use the following method to determine CO_2 quench, or use good engineering judgment to develop a different protocol:

(1) Use PTFE or stainless steel tubing to make necessary connections.

(2) Connect a pressure-regulated CO_2 span gas to the port of a gas divider that meets the specifications in § 1065.248 at the appropriate time. Use a CO_2 span gas that meets the specifications of § 1065.750 and attempt to use a concentration that is approximately twice the maximum CO_2 concentration expected to enter the CLD sample port during testing, if available.

(3) Connect a pressure-regulated purified N_2 gas to the port of a gas divider that meets the specifications in § 1065.248 at the appropriate time. Use a purified N_2 gas that meets the specifications of § 1065.750.

(4) Connect a pressure-regulated NO span gas to the port of the gas divider that meets the specifications in § 1065.248. Use an NO span gas that meets the specifications of § 1065.750. Attempt to use an NO concentration that is approximately twice the maximum NO concentration expected during testing, if available.

(5) Configure the gas divider such that nearly equal amounts of the span gas and balance gas are blended with each other. Apply viscosity corrections as necessary to appropriately ensure correct gas division.

(6) While flowing NO and CO_2 through the gas divider, stabilize the CO_2 concentration downstream of the gas divider and measure the CO_2 concentration with an NDIR analyzer that has been prepared for emission testing. You may alternatively determine the CO_2 concentration from the gas divider cut-point, applying viscosity correction as necessary to ensure accurate gas division. Record this concentration, $x_{CO2meas}$, and use it in the quench verification calculations in § 1065.675.

(7) Measure the NO concentration downstream of the gas divider. If the CLD has an operating mode in which it detects NO-only, as opposed to total NO_x, operate the CLD in the NO-only

operating mode. Record this concentration, $x_{NO,CO2}$, and use it in the quench verification calculations in § 1065.675.

(8) Switch the flow of CO_2 off and start the flow of 100% purified N_2 to the inlet port of the gas divider. Monitor the CO_2 at the gas divider's outlet until its concentration stabilizes at zero.

(9) Measure NO concentration at the gas divider's outlet. Record this value, $x_{NO,N2}$, and use it in the quench verification calculations in § 1065.675.

(10) Use the values recorded according to this paragraph (d) of this section and paragraph (e) of this section to calculate quench as described in § 1065.675.

(e) *H_2O quench verification procedure*. Use the following method to determine H_2O quench, or use good engineering judgment to develop a different protocol:

(1) Use PTFE or stainless steel tubing to make necessary connections.

(2) If the CLD has an operating mode in which it detects NO-only, as opposed to total NO_X, operate the CLD in the NO-only operating mode.

(3) Measure an NO calibration span gas that meets the specifications of § 1065.750 and is near the maximum concentration expected during testing. Record this concentration, x_{NOdry}.

(4) Humidify the NO span gas by bubbling it through distilled water in a sealed vessel. If the sample is not passed through a dryer, control the vessel temperature to generate an H_2O level at least as high as the maximum expected during testing. If the sample is passed through a dryer during testing, control the vessel temperature to generate an H_2O level at least as high as the level determined in § 1065.145(d)(2). We recommend that you humidify the gas to the highest sample dewpoint that you estimate at the CLD inlet during emission sampling. Regardless of the humidity during this test, the quench verification calculations in § 1065.675 scale the recorded quench to the highest dewpoint expected for flow entering the CLD sample port during emission sampling.

(5) Introduce the humidified NO test gas into the sample system. You may introduce it downstream of any sample dryer, if one is used during testing.

(6) Measure the humidified gas dewpoint, T_{dew}, and pressure, p_{total}, as close as possible to the analyzer inlet.

(7) Downstream of the vessel, maintain the humidified NO test gas temperature at least 5 °C above its dewpoint.

(8) Allow time for the analyzer response to stabilize. Stabilization time may include time to purge the transfer line and to account for analyzer response.

(9) While the analyzer measures the sample's concentration, record the analyzer's output for 30 seconds. Calculate the arithmetic mean of these data. This mean is x_{NOmeas}.

(10) Set x_{NOwet} equal to x_{NOmeas} from paragraph (e)(9) of this section.

(11) Use x_{NOwet} to calculate the quench according to § 1065.675.

* * * * *

(g) * * *

(1) You may omit this verification if you can show by engineering analysis that for your NO_X sampling system and your emission calculations procedures, the combined CO_2 and H_2O interference for your NO_X CLD analyzer always affects your brake-specific NO_X emission results within no more than ±1.0% of the applicable NO_X standard.

* * * * *

■ 89. Section 1065.372 is amended by revising paragraphs (d)(7) and (e)(1) to read as follows:

§ 1065.372 NDUV analyzer HC and H_2O interference verification.

* * * * *

(d) * * *

(7) Multiply this difference by the ratio of the flow-weighted mean HC concentration expected at the standard to the HC concentration measured during the verification. The analyzer meets the interference verification of this section if this result is within ±2% of the NO_X concentration expected at the standard.

(e) * * *

(1) You may omit this verification if you can show by engineering analysis that for your NO_X sampling system and your emission calculations procedures, the combined HC and H_2O interference for your NO_X NDUV analyzer always affects your brake-specific NO_X emission results by less than 0.5% of the applicable NO_X standard.

* * * * *

■ 90. Section 1065.376 is revised to read as follows:

§ 1065.376 Chiller NO_2 penetration.

(a) *Scope and frequency.* If you use a chiller to dry a sample upstream of a NO_X measurement instrument, but you don't use an NO_2-to-NO converter upstream of the chiller, you must perform this verification for chiller NO_2 penetration. Perform this verification after initial installation and after major maintenance.

(b) *Measurement principles.* A chiller removes water, which can otherwise interfere with a NO_X measurement. However, liquid water remaining in an improperly designed chiller can remove NO_2 from the sample. If a chiller is used without an NO_2-to-NO converter upstream, it could remove NO_2 from the sample prior NO_X measurement.

(c) *System requirements.* A chiller must allow for measuring at least 95% of the total NO_2 at the maximum expected concentration of NO_2.

(d) *Procedure.* Use the following procedure to verify chiller performance:

(1) *Instrument setup.* Follow the analyzer and chiller manufacturers' start-up and operating instructions. Adjust the analyzer and chiller as needed to optimize performance.

(2) *Equipment setup and data collection.* (i) Zero and span the total NO_X gas analyzer(s) as you would before emission testing.

(ii) Select an NO_2 calibration gas, balance gas of dry air, that has an NO_2 concentration within ±5% of the maximum NO_2 concentration expected during testing.

(iii) Overflow this calibration gas at the gas sampling system's probe or overflow fitting. Allow for stabilization of the total NO_X response, accounting only for transport delays and instrument response.

(iv) Calculate the mean of 30 seconds of recorded total NO_X data and record this value as $x_{NOXref.}$

(v) Stop flowing the NO_2 calibration gas.

(vi) Next saturate the sampling system by overflowing a dewpoint generator's output, set at a dewpoint of 50 °C, to the gas sampling system's probe or overflow fitting. Sample the dewpoint generator's output through the sampling system and chiller for at least 10 minutes until the chiller is expected to be removing a constant rate of water.

(vii) Immediately switch back to overflowing the NO_2 calibration gas used to establish $x_{NOXref.}$ Allow for stabilization of the total NO_X response, accounting only for transport delays and instrument response. Calculate the mean of 30 seconds of recorded total NO_X data and record this value as $x_{NOxmeas}$.

(viii) Correct $x_{NOxmeas}$ to x_{NOxdry} based upon the residual water vapor that passed through the chiller at the chiller's outlet temperature and pressure.

(3) *Performance evaluation.* If x_{NOxdry} is less than 95% of x_{NOxref}, repair or replace the chiller.

(e) *Exceptions.* The following exceptions apply:

(1) You may omit this verification if you can show by engineering analysis that for your NO_X sampling system and your emission calculations procedures, the chiller always affects your brake-

specific NO_X emission results by less than 0.5% of the applicable NO_X standard.

(2) You may use a chiller that you determine does not meet this verification, as long as you try to correct the problem and the measurement deficiency does not adversely affect your ability to show that engines comply with all applicable emission standards.

■ 91. Section 1065.378 is amended by revising paragraphs (d) and (e)(1) to read as follows:

§ 1065.378 NO_2-to-NO converter conversion verification.

* * * * *

(d) *Procedure.* Use the following procedure to verify the performance of a NO_2-to-NO converter:

(1) *Instrument setup.* Follow the analyzer and NO_2-to-NO converter manufacturers' start-up and operating instructions. Adjust the analyzer and converter as needed to optimize performance.

(2) *Equipment setup.* Connect an ozonator's inlet to a zero-air or oxygen source and connect its outlet to one port of a three-way tee fitting. Connect an NO span gas to another port, and connect the NO_2-to-NO converter inlet to the last port.

(3) *Adjustments and data collection.* Perform this check as follows:

(i) Set ozonator air off, turn ozonator power off, and set the analyzer to NO mode. Allow for stabilization, accounting only for transport delays and instrument response.

(ii) Use an NO concentration that is representative of the peak total NO_X concentration expected during testing. The NO_2 content of the gas mixture shall be less than 5% of the NO concentration. Record the concentration of NO by calculating the mean of 30 seconds of sampled data from the analyzer and record this value as x_{NOref}.

(iii) Turn on the ozonator O_2 supply and adjust the O_2 flow rate so the NO indicated by the analyzer is about 10 percent less than x_{NOref}. Record the concentration of NO by calculating the mean of 30 seconds of sampled data from the analyzer and record this value as $x_{NO+O2mix}$.

(iv) Switch the ozonator on and adjust the ozone generation rate so the NO measured by the analyzer is 20 percent of x_{NOref}, while maintaining at least 10 percent unreacted NO. Record the concentration of NO by calculating the mean of 30 seconds of sampled data from the analyzer and record this value as x_{NOmeas}.

(v) Switch the NO_X analyzer to NO_X mode and measure total NO_X. Record the concentration of NO_X by calculating the mean of 30 seconds of sampled data from the analyzer and record this value as $x_{NOxmeas}$.

(vi) Switch off the ozonator but maintain gas flow through the system. The NO_X analyzer will indicate the NO_X in the NO + O_2 mixture. Record the concentration of NO_X by calculating the mean of 30 seconds of sampled data from the analyzer and record this value as $x_{NOx+O2mix}$.

(vii) Turn off the ozonator O_2 supply. The NO_X analyzer will indicate the NO_X in the original NO-in-N_2 mixture. Record the concentration of NO_X by calculating the mean of 30 seconds of sampled data from the analyzer and record this value as x_{NOxref}. This value should be no more than 5 percent above the x_{NOref} value.

(4) *Performance evaluation.* Calculate the efficiency of the NO_X converter efficiency by substituting the concentrations obtained into the following equation:

$$Efficiency\ (\%) = \left(1 + \frac{x_{NOxmeas} - x_{NOx+O2mix}}{x_{NO+O2mix} - x_{NOmeas}}\right) \times 100$$

(5) If the result is less than 95%, repair or replace the NO_2-to-NO converter.

(e) * * *

(1) You may omit this verification if you can show by engineering analysis that for your NO_X sampling system and your emission calculations procedures, the converter always affects your brake-specific NO_X emission results by less than 0.5% of the applicable NO_X standard.

* * * * *

■ 92. Section 1065.390 is revised to read as follows:

§ 1065.390 PM balance verifications and weighing process verification.

(a) *Scope and frequency.* This section describes three verifications.

(1) Independent verification of PM balance performance within 370 days before weighing any filter.

(2) Zero and span the balance within 12 h before weighing any filter.

(3) Verify that the mass determination of reference filters before and after a filter weighing session are less than a specified tolerance.

(b) *Independent verification.* Have the balance manufacturer (or a representative approved by the balance manufacturer) verify the balance performance within 370 days of testing.

(c) *Zeroing and spanning.* You must verify balance performance by zeroing and spanning it with at least one calibration weight, and any weights you use must that meet the specifications in § 1065.790 to perform this verification.

(1) Use a manual procedure in which you zero the balance and span the balance with at least one calibration weight. If you normally use mean values by repeating the weighing process to improve the accuracy and precision of PM measurements, use the same process to verify balance performance.

(2) You may use an automated procedure to verify balance performance. For example many balances have internal calibration weights that are used automatically to verify balance performance. Note that if you use internal balance weights, the weights must meet the specifications in § 1065.790 to perform this verification.

(d) *Reference sample weighing.* Verify all mass readings during a weighing session by weighing reference PM sample media (e.g., filters) before and after a weighing session. A weighing session may be as short as desired, but no longer than 80 hours, and may include both pre-test and post-test mass readings. We recommend that weighing sessions be eight hours or less. Successive mass determinations of each reference PM sample media (e.g., filter) must return the same value within ±10 μg or ±10% of the net PM mass expected at the standard (if known), whichever is higher. If successive reference PM sample media (e.g., filter) weighing events fail this criterion, invalidate all individual test media (e.g., filter) mass readings occurring between the successive reference media (e.g., filter) mass determinations. You may reweigh these media (e.g., filter) in another weighing session. If you invalidate a pre-test media (e.g., filter) mass determination, that test interval is void. Perform this verification as follows:

(1) Keep at least two samples of unused PM sample media (e.g., filters) in the PM-stabilization environment. Use these as references. If you collect

PM with filters, select unused filters of the same material and size for use as references. You may periodically replace references, using good engineering judgment.

(2) Stabilize references in the PM stabilization environment. Consider references stabilized if they have been in the PM-stabilization environment for a minimum of 30 min, and the PM-stabilization environment has been within the specifications of § 1065.190(d) for at least the preceding 60 min.

(3) Exercise the balance several times with a reference sample. We recommend weighing ten samples without recording the values.

(4) Zero and span the balance. Using good engineering judgment, place a test mass such as a calibration weight on the balance, then remove it. After spanning, confirm that the balance returns to a zero reading within the normal stabilization time.

(5) Weigh each of the reference media (e.g., filters) and record their masses. We recommend using substitution weighing as described in § 1065.590(j). If you normally use mean values by repeating the weighing process to improve the accuracy and precision of the reference media (e.g., filter) mass, you must use mean values of sample media (e.g., filter) masses.

(6) Record the balance environment dewpoint, ambient temperature, and atmospheric pressure.

(7) Use the recorded ambient conditions to correct results for buoyancy as described in § 1065.690. Record the buoyancy-corrected mass of each of the references.

(8) Subtract each reference media's (e.g., filter's) buoyancy-corrected reference mass from its previously measured and recorded buoyancy-corrected mass.

(9) If any of the reference filters' observed mass changes by more than that allowed under this paragraph, you must invalidate all PM mass determinations made since the last successful reference media (e.g., filter) mass validation. You may discard reference PM media (e.g., filters) if only one one of the filter's mass changes by more than the allowable amount and you can positively identify a special cause for that filter's mass change that would not have affected other in-process filters. Thus, the validation can be considered a success. In this case, you do not have to include the contaminated reference media when determining compliance with paragraph (d)(10) of this section, but the affected reference filter must be immediately discarded and replaced prior to the next weighing session.

(10) If any of the reference masses change by more than that allowed under this paragraph (d), invalidate all PM results that were determined between the two times that the reference masses were determined. If you discarded reference PM sample media according to paragraph (d)(9) of this section, you must still have at least one reference mass difference that meets the criteria in this paragraph (d). Otherwise, you must invalidate all PM results that were determined between the two times that the reference media (e.g., filters) masses were determined.

Subpart E—[Amended]

■ 93. Section 1065.405 is revised to read as follows:

§ 1065.405 Test engine preparation and maintenance.

This part 1065 describes how to test engines for a variety of purposes, including certification testing, production-line testing, and in-use testing. Depending on which type of testing is being conducted, different preparation and maintenance requirements apply for the test engine.

(a) If you are testing an emission-data engine for certification, make sure it is built to represent production engines. This includes governors that you normally install on production engines. Production engines should also be tested with their installed governors. If you do not install governors on production engines, simulate a governor that is representative of a governor that others will install on your production engines.

(b) Testing generally occurs only after the test engine has undergone a stabilization step (or in-use operation). If the engine has not already been stabilized, run the test engine, with all emission control systems operating, long enough to stabilize emission levels. Note that you must generally use the same stabilization procedures for emission-data engines for which you apply the same deterioration factors so low-hour emission-data engines are consistent with the low-hour engine used to develop the deterioration factor.

(1) Unless otherwise specified in the standard-setting part, you may consider emission levels stable without measurement after 50 h of operation. If the engine needs less operation to stabilize emission levels, record your reasons and the methods for doing this, and give us these records if we ask for them. If the engine will be tested for certification as a low-hour engine, see the standard-setting part for limits on testing engines to establish low-hour emission levels.

(2) You may stabilize emissions from a catalytic exhaust aftertreatment device by operating it on a different engine, consistent with good engineering judgment. Note that good engineering judgment requires that you consider both the purpose of the test and how your stabilization method will affect the development and application of deterioration factors. For example, this method of stabilization is generally not appropriate for production engines. We may also allow you to stabilize emissions from a catalytic exhaust aftertreatment device by operating it on an engine-exhaust simulator.

(c) Record any maintenance, modifications, parts changes, diagnostic or emissions testing and document the need for each event. You must provide this information if we request it.

(d) For accumulating operating hours on your test engines, select engine operation that represents normal in-use operation for the engine family.

(e) If your engine will be used in a vehicle equipped with a canister for storing evaporative hydrocarbons for eventual combustion in the engine and the test sequence involves a cold-start or hot-start duty cycle, attach a canister to the engine before running an emission test. You may omit using an evaporative canister for any hot-stabilized duty cycles. You may request to omit using an evaporative canister during testing if you can show that it would not affect your ability to show compliance with the applicable emission standards. You may operate the engine without an installed canister for service accumulation. Prior to an emission test, use the following steps to attach a canister to your engine:

(1) Use a canister and plumbing arrangement that represents the in-use configuration of the largest capacity canister in all expected applications.

(2) Use a canister that is fully loaded with fuel vapors.

(3) Connect the canister's purge port to the engine.

(4) Plug the canister port that is normally connected to the fuel tank.

■ 94. Section 1065.410 is amended by revising paragraphs (c) and (d) to read as follows:

§ 1065.410 Maintenance limits for stabilized test engines.

* * * * *

(c) Keep a record of the inspection and update your application to document any changes as a result of the inspection. You may use equipment, instruments, or engineering grade tools

to identify bad engine components. Any equipment, instruments, or tools used for scheduled maintenance on emission data engines must be representative of what is planned to be available to dealerships and other service outlets.

(d) If we determine that a part failure, system malfunction, or associated repairs have made the engine's emission controls unrepresentative of production engines, you may no longer use it as an emission-data engine. Also, if your test engine has a major mechanical failure that requires you to take it apart, you may no longer use it as an emission-data engine.

* * * * *

■ 95. Section 1065.415 is amended by revising the introductory text and removing paragraph (a)(3) to read as follows:

§ 1065.415 Durability demonstration.

If the standard-setting part requires durability testing, you must accumulate service in a way that represents how you expect the engine to operate in use. You may accumulate service hours using an accelerated schedule, such as through continuous operation or by using duty cycles that are more aggressive than in-use operation, subject to any pre-approval requirements established in the applicable standard-setting part.

* * * * *

■ 96. The heading to subpart F of part 1065 is revised to read as follows:

Subpart F—Performing an Emission Test Over Specified Duty Cycles

97. Section 1065.501 is amended by revising paragraphs (a) introductory text, (a)(1), and (b) to read as follows:

§ 1065.501 Overview.

(a) Use the procedures detailed in this subpart to measure engine emissions over a specified duty cycle. Refer to subpart J of this part for field test procedures that describe how to measure emissions during in-use engine operation. This section describes how to:

(1) Map your engine, if applicable, by recording specified speed and torque data, as measured from the engine's primary output shaft.

* * * * *

(b) An emission test generally consists of measuring emissions and other parameters while an engine follows one or more duty cycles that are specified in the standard-setting part. There are two general types of duty cycles:

(1) *Transient cycles.* Transient duty cycles are typically specified in the standard-setting part as a second-by-second sequence of speed commands and normalized torque (or power) commands. Operate an engine over a transient cycle such that the speed and torque of the engine's primary output shaft follows the target values. Proportionally sample emissions and other parameters and use the calculations in subpart G of this part to calculate emissions. Start a transient test according to the standard-setting part, as follows:

(i) A cold-start transient cycle where you start to measure emissions just before starting an engine that has not been warmed up.

(ii) A hot-start transient cycle where you start to measure emissions just before starting a warmed-up engine.

(iii) A hot running transient cycle where you start to measure emissions after an engine is started, warmed up, and running.

(2) *Steady-state cycles.* Steady-state duty cycles are typically specified in the standard-setting part as a list of discrete operating points (modes or notches), where each operating point has one value of a normalized speed command and one value of a normalized torque (or power) command. Ramped-modal cycles for steady-state testing also list test times for each mode and transition times between modes where speed and torque are linearly ramped between modes, even for cycles with % power. Start a steady-state cycle as a hot running test, where you start to measure emissions after an engine is started, warmed up and running. You may run a steady-state duty cycle as a discrete-mode cycle or a ramped-modal cycle, as follows:

(i) *Discrete-mode cycles.* Before emission sampling, stabilize an engine at the first discrete mode. Sample emissions and other parameters for that mode and then stop emission sampling. Record mean values for that mode, and then stabilize the engine at the next mode. Continue to sample each mode discretely and calculate weighted emission results according to the standard-setting part.

(ii) *Ramped-modal cycles.* Perform ramped-modal cycles similar to the way you would perform transient cycles, except that ramped-modal cycles involve mostly steady-state engine operation. Generate a ramped-modal duty cycle as a sequence of second-by-second (1 Hz) reference speed and torque points. Run the ramped-modal duty cycle in the same manner as a transient cycle and use the 1 Hz reference speed and torque values to validate the cycle, even for cycles with % power. Proportionally sample emissions and other parameters during the cycle and use the calculations in subpart G of this part to calculate emissions.

* * * * *

■ 98. Section 1065.510 is revised to read as follows:

§ 1065.510 Engine mapping.

(a) *Applicability, scope, and frequency.* An engine map is a data set that consists of a series of paired data points that represent the maximum brake torque versus engine speed, measured at the engine's primary output shaft. Map your engine if the standard-setting part requires engine mapping to generate a duty cycle for your engine configuration. Map your engine while it is connected to a dynamometer or other device that can absorb work output from the engine's primary output shaft according to § 1065.110. Configure any auxiliary work inputs and outputs such as hybrid, turbo-compounding, or thermoelectric systems to represent their in-use configurations, and use the same configuration for emission testing. See Figure 1 of § 1065.210. This may involve configuring initial states of charge and rates and times of auxiliary-work inputs and outputs. We recommend that you contact the Designated Compliance Officer before testing to determine how you should configure any auxiliary-work inputs and outputs. Use the most recent engine map to transform a normalized duty cycle from the standard-setting part to a reference duty cycle specific to your engine. Normalized duty cycles are specified in the standard-setting part. You may update an engine map at any time by repeating the engine-mapping procedure. You must map or re-map an engine before a test if any of the following apply:

(1) If you have not performed an initial engine map.

(2) If the atmospheric pressure near the engine's air inlet is not within ± 5 kPa of the atmospheric pressure recorded at the time of the last engine map.

(3) If the engine or emission-control system has undergone changes that might affect maximum torque performance. This includes changing the configuration of auxiliary work inputs and outputs.

(4) If you capture an incomplete map on your first attempt or you do not complete a map within the specified time tolerance. You may repeat mapping as often as necessary to capture a complete map within the specified time.

(b) *Mapping variable-speed engines.* Map variable-speed engines as follows:

(1) Record the atmospheric pressure.

(2) Warm up the engine by operating it. We recommend operating the engine at any speed and at approximately 75% of its expected maximum power. Continue the warm-up until the engine coolant, block, or head absolute temperature is within ± 2% of its mean value for at least 2 min or until the engine thermostat controls engine temperature.

(3) Operate the engine at its warm idle speed.

(i) For engines with a low-speed governor, set the operator demand to minimum, use the dynamometer or other loading device to target a torque of zero on the engine's primary output shaft, and allow the engine to govern the speed. Measure this warm idle speed; we recommend recording at least 30 values of speed and using the mean of those values.

(ii) For engines without a low-speed governor, set the dynamometer to target a torque of zero on the engine's primary output shaft, and manipulate the operator demand to control the speed to target the manufacturer-declared value for the lowest engine speed possible with minimum load (also known as manufacturer-declared warm idle speed).

(iii) For all variable-speed engines (with or without a low-speed governor), if a nonzero idle torque is representative of in-use operation, you may target the manufacturer-declared idle torque. If you measure the warm idle speed with the manufacturer-declared torque at this step, you may omit the speed measurement in paragraph (b)(6) of this section.

(4) Set operator demand to maximum and control engine speed at (95 ± 1) % of its warm idle speed determined above for at least 15 seconds. For engines with reference duty cycles whose lowest speed is greater than warm idle speed, you may start the map at (95 ± 1) % of the lowest reference speed.

(5) Perform one of the following:

(i) For any engine subject only to steady-state duty cycles (i.e., discrete-mode or ramped-modal), you may perform an engine map by using discrete speeds. Select at least 20 evenly spaced setpoints between warm idle and the highest speed above maximum mapped power at which (50 to 75)% of maximum power occurs. If this highest speed is unsafe or unrepresentative (e.g., for ungoverned engines), use good engineering judgment to map up to the maximum safe speed or the maximum representative speed. At each setpoint, stabilize speed and allow torque to stabilize. Record the mean speed and torque at each setpoint. We recommend that you stabilize an engine for at least 15 seconds at each setpoint and record the mean feedback speed and torque of the last (4 to 6) seconds. Use linear interpolation to determine intermediate speeds and torques. Use this series of speeds and torques to generate the power map as described in paragraph (e) of this section.

(ii) For any variable-speed engine, you may perform an engine map by using a continuous sweep of speed by continuing to record the mean feedback speed and torque at 1 Hz or more frequently and increasing speed at a constant rate such that it takes (4 to 6) min to sweep from 95% of warm idle to the highest speed above maximum power at which (50 to 75)% of maximum power occurs. If this highest speed is unsafe or unrepresentative (e.g., for ungoverned engines), use good engineering judgment to map up to the maximum safe speed or the maximum representative speed. Stop recording after you complete the sweep. From the series of mean speed and maximum torque values, use linear interpolation to determine intermediate values. Use this series of speeds and torques to generate the power map as described in paragraph (e) of this section.

(6) For engines with a low-speed governor, if a nonzero idle torque is representative of in-use operation, operate the engine at warm idle with the manufacturer-declared idle torque. Set the operator demand to minimum, use the dynamometer to target the declared idle torque, and allow the engine to govern the speed. Measure this speed and use it as the warm idle speed for cycle generation in § 1065.512. We recommend recording at least 30 values of speed and using the mean of those values. You may map the idle governor at multiple load levels and use this map to determine the measured warm idle speed at the declared idle torque.

(c) *Negative torque mapping.* If your engine is subject to a reference duty cycle that specifies negative torque values (i.e., engine motoring), generate a motoring map by any of the following procedures:

(1) Multiply the positive torques from your map by −40%. Use linear interpolation to determine intermediate values.

(2) Map the amount of negative torque required to motor the engine by repeating paragraph (b) of this section with minimum operator demand.

(3) Determine the amount of negative torque required to motor the engine at the following two points near the ends of the engine's speed range. Operate the engine at these two points at minimum operator demand. Use linear interpolation to determine intermediate values.

(i) *Low-speed point.* For engines without a low-speed governor, determine the amount of negative torque at warm idle speed. For engines with a low-speed governor, motor the engine above warm idle speed so the governor is inactive and determine the amount of negative torque at that speed.

(ii) *High-speed point.* For engines without a high-speed governor, determine the amount of negative torque at the maximum safe speed or the maximum representative speed. For engines with a high-speed governor, determine the amount of negative torque at a speed at or above n_{hi} per § 1065.610(c)(2).

(d) *Mapping constant-speed engines.* For constant-speed engines, generate a map as follows:

(1) Record the atmospheric pressure.

(2) Warm up the engine by operating it. We recommend operating the engine at approximately 75% of the engine's expected maximum power. Continue the warm-up until the engine coolant, block, or head absolute temperature is within ±2% of its mean value for at least 2 min or until the engine thermostat controls engine temperature.

(3) You may operate the engine with a production constant-speed governor or simulate a constant-speed governor by controlling engine speed with an operator demand control system described in § 1065.110. Use either isochronous or speed-droop governor operation, as appropriate.

(4) With the governor or simulated governor controlling speed using operator demand, operate the engine at no-load governed speed (at high speed, not low idle) for at least 15 seconds.

(5) Record at 1 Hz the mean of feedback speed and torque. Use the dynamometer to increase torque at a constant rate. Unless the standard-setting part specifies otherwise, complete the map such that it takes (2 to 4) min to sweep from no-load governed speed to the lowest speed below maximum mapped power at which the engine develops (85–95)% of maximum mapped power. You may map your engine to lower speeds. Stop recording after you complete the sweep. Use this series of speeds and torques to generate the power map as described in paragraph (e) of this section.

(e) *Power mapping.* For all engines, create a power-versus-speed map by transforming torque and speed values to corresponding power values. Use the mean values from the recorded map data. Do not use any interpolated values. Multiply each torque by its corresponding speed and apply the

appropriate conversion factors to arrive at units of power (kW). Interpolate intermediate power values between these power values, which were calculated from the recorded map data.

(f) *Measured and declared test speeds and torques.* You must select test speeds and torques for cycle generation as required in this paragraph (f). ''Measured'' values are either directly measured during the engine mapping process or they are determined from the engine map. ''Declared'' values are specified by the manufacturer. When both measured and declared values are available, you may use declared test speeds and torques instead of measured speeds and torques if they meet the criteria in this paragraph (f). Otherwise, you must use measured speeds and torques derived from the engine map.

(1) *Measured speeds and torques.* Determine the applicable speeds and torques for the duty cycles you will run:

(i) Measured maximum test speed for variable-speed engines according to § 1065.610.

(ii) Measured maximum test torque for constant-speed engines according to § 1065.610.

(iii) Measured ''A'', ''B'', and ''C'' speeds for variable-speed engines according to § 1065.610.

(iv) Measured intermediate speed for variable-speed engines according to § 1065.610.

(v) For variable-speed engines with a low-speed governor, measure warm idle speed according to § 1065.510(b) and use this speed for cycle generation in § 1065.512. For engines with no low-speed governor, instead use the manufacturer-declared warm idle speed.

(2) *Required declared speeds.* You must declare the lowest engine speed possible with minimum load (i.e., manufacturer-declared warm idle speed). This is applicable only to variable-speed engines with no low-speed governor. For engines with no low-speed governor, the declared warm idle speed is used for cycle generation in § 1065.512. Declare this speed in a way that is representative of in-use operation. For example, if your engine is typically connected to an automatic transmission or a hydrostatic transmission, declare this speed at the idle speed at which your engine operates when the transmission is engaged.

(3) *Optional declared speeds.* You may use declared speeds instead of measured speeds as follows:

(i) You may use a declared value for maximum test speed for variable-speed engines if it is within (97.5 to 102.5)% of the corresponding measured value. You may use a higher declared speed if the length of the ''vector'' at the declared speed is within 2.0% of the length of the ''vector'' at the measured value. The term vector refers to the square root of the sum of normalized engine speed squared and the normalized full-load power (at that speed) squared, consistent with the calculations in § 1065.610.

(ii) You may use a declared value for intermediate, ''A'', ''B'', or ''C'' speeds for steady-state tests if the declared value is within (97.5 to 102.5)% of the corresponding measured value.

(4) *Required declared torques.* If a nonzero idle or minimum torque is representative of in-use operation, you must declare the appropriate torque as follows:

(i) For variable-speed engines, declare a warm idle torque that is representative of in-use operation. For example, if your engine is typically connected to an automatic transmission or a hydrostatic transmission, declare the torque that occurs at the idle speed at which your engine operates when the transmission is engaged. Use this value for cycle generation. You may use multiple warm idle torques and associated idle speeds in cycle generation for representative testing. For example, for cycles that start the engine and begin with idle, you may start a cycle in idle with the transmission in neutral with zero torque and later switch to a different idle with the transmission in drive with the Curb-Idle Transmission Torque (CITT). For variable-speed engines intended primarily for propulsion of a vehicle with an automatic transmission where that engine is subject to a transient duty cycle with idle operation, you must declare a CITT. You must specify a CITT based on typical applications at the mean of the range of idle speeds you specify at stabilized temperature conditions.

(ii) For constant-speed engines, declare a warm minimum torque that is representative of in-use operation. For example, if your engine is typically connected to a machine that does not operate below a certain minimum torque, declare this torque and use it for cycle generation.

(5) *Optional declared torques.* For constant-speed engines you may declare a maximum test torque. You may use the declared value for cycle generation if it is within (95 to 100)% of the measured value.

(g) *Other mapping procedures.* You may use other mapping procedures if you believe the procedures specified in this section are unsafe or unrepresentative for your engine. Any alternate techniques you use must satisfy the intent of the specified mapping procedures, which is to determine the maximum available torque at all engine speeds that occur during a duty cycle. Identify any deviations from this section's mapping procedures when you submit data to us.

■ 99. Section 1065.512 is revised to read as follows:

§ 1065.512 Duty cycle generation.

(a) Generate duty cycles according to this section if the standard-setting part requires engine mapping to generate a duty cycle for your engine configuration. The standard-setting part generally defines applicable duty cycles in a normalized format. A normalized duty cycle consists of a sequence of paired values for speed and torque or for speed and power.

(b) Transform normalized values of speed, torque, and power using the following conventions:

(1) *Engine speed for variable-speed engines.* For variable-speed engines, normalized speed may be expressed as a percentage between warm idle speed, f_{nidle}, and maximum test speed, f_{ntest}, or speed may be expressed by referring to a defined speed by name, such as ''warm idle,'' ''intermediate speed,'' or ''A,'' ''B,'' or ''C'' speed. Section 1065.610 describes how to transform these normalized values into a sequence of reference speeds, f_{nref}. Running duty cycles with negative or small normalized speed values near warm idle speed may cause low-speed idle governors to activate and the engine torque to exceed the reference torque even though the operator demand is at a minimum. In such cases, we recommend controlling the dynamometer so it gives priority to follow the reference torque instead of the reference speed and let the engine govern the speed. Note that the cycle-validation criteria in § 1065.514 allow an engine to govern itself. This allowance permits you to test engines with enhanced-idle devices and to simulate the effects of transmissions such as automatic transmissions. For example, an enhanced-idle device might be an idle speed value that is normally commanded only under cold-start conditions to quickly warm up the engine and aftertreatment devices. In this case, negative and very low normalized speeds will generate reference speeds below this higher enhanced idle speed and we recommend controlling the dynamometer so it gives priority to follow the reference torque, controlling the operator demand so it gives priority to follow reference speed and let the engine govern the speed when the operator demand is at minimum.

(2) *Engine torque for variable-speed engines.* For variable-speed engines, normalized torque is expressed as a percentage of the mapped torque at the corresponding reference speed. Section 1065.610 describes how to transform normalized torques into a sequence of reference torques, T_{ref}. Section 1065.610 also describes special requirements for modifying transient duty cycles for variable-speed engines intended primarily for propulsion of a vehicle with an automatic transmission. Section 1065.610 also describes under what conditions you may command T_{ref} greater than the reference torque you calculated from a normalized duty cycle. This provision permits you to command T_{ref} values that are limited by a declared minimum torque. For any negative torque commands, command minimum operator demand and use the dynamometer to control engine speed to the reference speed, but if reference speed is so low that the idle governor activates, we recommend using the dynamometer to control torque to zero, CITT, or a declared minimum torque as appropriate. Note that you may omit power and torque points during motoring from the cycle-validation criteria in § 1065.514. Also, use the maximum mapped torque at the minimum mapped speed as the maximum torque for any reference speed at or below the minimum mapped speed.

(3) *Engine torque for constant-speed engines.* For constant-speed engines, normalized torque is expressed as a percentage of maximum test torque, T_{test}. Section 1065.610 describes how to transform normalized torques into a sequence of reference torques, T_{ref}. Section 1065.610 also describes under what conditions you may command T_{ref} greater than the reference torque you calculated from the normalized duty cycle. This provision permits you to command T_{ref} values that are limited by a declared minimum torque.

(4) *Engine power.* For all engines, normalized power is expressed as a percentage of mapped power at maximum test speed, f_{ntest}, unless otherwise specified by the standard-setting part. Section 1065.610 describes how to transform these normalized values into a sequence of reference powers, P_{ref}. Convert these reference powers to corresponding torques for operator demand and dynamometer control. Use the reference speed associated with each reference power point for this conversion. As with cycles specified with % torque, issue torque commands more frequently and linearly interpolate between these reference torque values generated from cycles with % power.

(5) *Ramped-modal cycles.* For ramped modal cycles, generate reference speed and torque values at 1 Hz and use this sequence of points to run the cycle and validate it in the same manner as with a transient cycle. During the transition between modes, linearly ramp the denormalized reference speed and torque values between modes to generate reference points at 1 Hz. Do not linearly ramp the normalized reference torque values between modes and then denormalize them. Do not linearly ramp normalized or denormalized reference power points. These cases will produce nonlinear torque ramps in the denormalized reference torques. If the speed and torque ramp runs through a point above the engine's torque curve, continue to command the reference torques and allow the operator demand to go to maximum. Note that you may omit power and either torque or speed points from the cycle-validation criteria under these conditions as specified in § 1065.514.

(c) For variable-speed engines, command reference speeds and torques sequentially to perform a duty cycle. Issue speed and torque commands at a frequency of at least 5 Hz for transient cycles and at least 1 Hz for steady-state cycles (i.e., discrete-mode and ramped-modal). Linearly interpolate between the 1 Hz reference values specified in the standard-setting part to determine more frequently issued reference speeds and torques. During an emission test, record the feedback speeds and torques at a frequency of at least 5 Hz for transient cycles and at least 1 Hz for steady-state cycles. For transient cycles, you may record the feedback speeds and torques at lower frequencies (as low as 1 Hz) if you record the average value over the time interval between recorded values. Calculate the average values based on feedback values updated at a frequency of at least 5 Hz. Use these recorded values to calculate cycle-validation statistics and total work.

(d) For constant-speed engines, operate the engine with the same production governor you used to map the engine in § 1065.510 or simulate the in-use operation of a governor the same way you simulated it to map the engine in § 1065.510. Command reference torque values sequentially to perform a duty cycle. Issue torque commands at a frequency of at least 5 Hz for transient cycles and at least 1 Hz for steady-state cycles (i.e., discrete-mode, ramped-modal). Linearly interpolate between the 1 Hz reference values specified in the standard-setting part to determine more frequently issued reference torque values. During an emission test, record the feedback speeds and torques at a frequency of at least 5 Hz for transient cycles and at least 1 Hz for steady-state cycles. For transient cycles, you may record the feedback speeds and torques at lower frequencies (as low as 1 Hz) if you record the average value over the time interval between recorded values. Calculate the average values based on feedback values updated at a frequency of at least 5 Hz. Use these recorded values to calculate cycle-validation statistics and total work.

(e) You may perform practice duty cycles with the test engine to optimize operator demand and dynamometer controls to meet the cycle-validation criteria specified in § 1065.514.

■ 100. Section 1065.514 is revised to read as follows:

§ 1065.514 Cycle-validation criteria for operation over specified duty cycles.

Validate the execution of your duty cycle according to this section unless the standard-setting part specifies otherwise. This section describes how to determine if the engine's operation during the test adequately matched the reference duty cycle. This section applies only to speed, torque, and power from the engine's primary output shaft. Other work inputs and outputs are not subject to cycle-validation criteria. You must compare the original reference duty cycle points generated as described in § 1065.512 to the corresponding feedback values recorded during the test. You may compare reference duty cycle points recorded during the test to the corresponding feedback values recorded during the test as long as the recorded reference values match the original points generated in § 1065.512. The number of points in the validation regression are based on the number of points in the original reference duty cycle generated in § 1065.512. For example if the original cycle has 1199 reference points at 1 Hz, then the regression will have up to 1199 pairs of reference and feedback values at the corresponding moments in the test. The feedback speed and torque signals may be filtered—either in real-time while the test is run or afterward in the analysis program. Any filtering that is used on the feedback signals used for cycle validation must also be used for calculating work. Feedback signals for control loops may use different filtering.

(a) *Testing performed by EPA.* Our tests must meet the specifications of paragraph (f) of this section, unless we determine that failing to meet the specifications is related to engine performance rather than to

shortcomings of the dynamometer or other laboratory equipment.

(b) *Testing performed by manufacturers.* Emission tests that meet the specifications of paragraph (f) of this section satisfy the standard-setting part's requirements for duty cycles. You may ask to use a dynamometer or other laboratory equipment that cannot meet those specifications. We will approve your request as long as using the alternate equipment does not adversely affect your ability to show compliance with the applicable emission standards.

(c) *Time-alignment.* Because time lag between feedback values and the reference values may bias cycle-validation results, you may advance or delay the entire sequence of feedback engine speed and torque pairs to synchronize them with the reference sequence. If you advance or delay feedback signals for cycle validation, you must make the same adjustment for calculating work. You may use linear interpolation between successive recorded feedback signals to time shift an amount that is a fraction of the recording period.

(d) *Omitting additional points.* Besides engine cranking, you may omit additional points from cycle-validation statistics as described in the following table:

TABLE 1 OF § 1065.514.—PERMISSIBLE CRITERIA FOR OMITTING POINTS FROM DUTY-CYCLE REGRESSION STATISTICS

When operator demand is at its . . .	you may omit . . .	if . . .
For reference duty cycles that are specified in terms of speed and torque (f_{nref}, T_{ref}):		
minimum	power and torque	T_{ref} < 0% (motoring).
minimum	power and speed	f_{nref} = 0% (idle speed) and T_{ref} = 0% (idle torque) and $T_{ref} - (2\% \cdot T_{max\ mapped}) < T < T_{ref} + (2\% \cdot T_{max\ mapped})$.
minimum	power and either torque or speed.	$f_n > f_{nref}$ or $T > T_{ref}$ but not if $f_n > (f_{nref} \cdot 102\%)$ and $T > T_{ref} + (2\% \cdot T_{max,\ mapped})$.
maximum	power and either torque or speed.	$f_n < f_{nref}$ or $T < T_{ref}$ but not if $f_n < (f_{nref} \cdot 98\%)$ and $T < T_{ref} - (2\% \cdot T_{max,\ mapped})$.
For reference duty cycles that are specified in terms of speed and power (f_{nref}, P_{ref}):		
minimum	power and torque	< P_{ref} < 0% (motoring).
minimum	power and speed	f_{nref} = 0% (idle speed) and P_{ref} = 0% (idle power) and $P_{ref} - (2\% \cdot P_{max\ mapped}) < P < P_{ref} + (2\% \cdot P_{max\ mapped})$.
minimum	power and either torque or speed.	$f_n > f_{nref}$ or $P > P_{ref}$ but not if $f_n > (f_{nref} \cdot 102\%)$ and $P > P_{ref} + (2\% \cdot P_{max\ mapped})$.
maximum	power and either torque or speed.	$f_n < f_{nref}$ or $P < P_{ref}$ but not if $f_n < (f_{nref} \cdot 98\%)$ and $P < P_{ref} - (2\% \cdot P_{max\ mapped})$.

(e) *Statistical parameters.* Use the remaining points to calculate regression statistics described in § 1065.602. Round calculated regression statistics to the same number of significant digits as the criteria to which they are compared. Refer to Table 2 of § 1065.514 for the default criteria and refer to the standard-setting part to determine if there are other criteria for your engine. Calculate the following regression statistics:

(1) Slopes for feedback speed, a_{1fn}, feedback torque, a_{1T}, and feedback power a_{1P}.

(2) Intercepts for feedback speed, a_{0fn}, feedback torque, a_{0T}, and feedback power a_{0P}.

(3) Standard estimates of error for feedback speed, SEE_{fn}, feedback torque, SEE_T, and feedback power SEE_P.

(4) Coefficients of determination for feedback speed, r^2_{fn}, feedback torque, r^2_T, and feedback power r^2_P.

(f) *Cycle-validation criteria.* Unless the standard-setting part specifies otherwise, use the following criteria to validate a duty cycle:

(1) For variable-speed engines, apply all the statistical criteria in Table 2 of this section.

(2) For constant-speed engines, apply only the statistical criteria for torque in Table 2 of this section.

(3) For discrete-mode steady-state testing, apply cycle-validation criteria using one of the following approaches:

(i) Treat the sampling periods from the series of test modes as a continuous sampling period, analogous to ramped-modal testing and apply statistical criteria as described in paragraph (f)(1) or (2) of this section.

(ii) Evaluate each mode separately to validate the duty cycle. For variable-speed engines, all speed values measured during the sampling period for each mode would need to stay within a tolerance of 2 percent of the reference value, and all load values would need to stay within a tolerance of 2 percent or ± 0.27 N·m of the reference value, whichever is greater. Also, the mean speed value during the sampling period for each mode would need to be within 1 percent of the reference value, and the mean load value would need to stay within 1 percent or ± 0.12 N·m of the reference value, whichever is greater. The same torque criteria apply for constant-speed engines but the speed criteria do not apply.

TABLE 2 OF § 1065.514.—DEFAULT STATISTICAL CRITERIA FOR VALIDATING DUTY CYCLES

Parameter	Speed	Torque	Power
Slope, a_1	$0.950 \le a_1 \le 1.030$	$0.830 \le a_1 \le 1.030$	$0.830 \le a_1 \le 1.030$.
Absolute value of intercept, $\lvert a_0 \rvert$	≤ 10% of warm idle	≤ 2.0% of maximum mapped torque.	≤ 2.0% of maximum mapped power.
Standard error of estimate, *SEE*	≤ 5.0% of maximum test speed	≤ 10% of maximum mapped torque.	≤ 10% of maximum mapped power.
Coefficient of determination, r^2	≥ 0.970	≥ 0.850	≥ 0.910.

■ 101. Section 1065.520 is revised to read as follows:

§ 1065.520 Pre-test verification procedures and pre-test data collection.

(a) If your engine must comply with a PM standard, follow the procedures for PM sample preconditioning and tare weighing according to § 1065.590.

(b) Unless the standard-setting part specifies different tolerances, verify that ambient conditions are within the following tolerances before the test:

(1) Ambient temperature of (20 to 30) °C.

(2) Atmospheric pressure of (80.000 to 103.325) kPa and within ± 5 kPa of the value recorded at the time of the last engine map.

(3) Dilution air conditions as specified in § 1065.140, except in cases where you preheat your CVS before a cold start test.

(c) You may test engines at any intake-air humidity, and we may test engines at any intake-air humidity.

(d) Verify that auxiliary-work inputs and outputs are configured as they were during engine mapping, as described in§ 1065.510(a).

(e) You may perform a final calibration of the speed, torque, and proportional-flow control systems, which may include performing practice duty cycles.

(f) You may perform the following recommended procedure to precondition sampling systems:

(1) Start the engine and use good engineering judgment to bring it to one of the following:

(i) 100% torque at any speed above its peak-torque speed.

(ii) 100% operator demand.

(2) Operate any dilution systems at their expected flow rates. Prevent aqueous condensation in the dilution systems.

(3) Operate any PM sampling systems at their expected flow rates.

(4) Sample PM for at least 10 min using any sample media. You may change sample media during preconditioning. You may discard preconditioning samples without weighing them.

(5) You may purge any gaseous sampling systems during preconditioning.

(6) You may conduct calibrations or verifications on any idle equipment or analyzers during preconditioning.

(7) Proceed with the test sequence described in § 1065.530(a)(1).

(g) Verify the amount of nonmethane contamination in the exhaust and background HC sampling systems within eight hours of starting each duty-cycle sequence for laboratory tests. You may verify the contamination of a background HC sampling system by reading the last bag fill and purge using zero gas. For any NMHC measurement system that involves separately measuring methane and subtracting it from a THC measurement, verify the amount of THC contamination using only the THC analyzer response. There is no need to operate any separate methane analyzer for this verification, however you may measure and correct for THC contamination in the CH_4 sample train for the cases where NMHC is determined by subtracting CH_4 from THC, using an NMC as configured in § 1065.365(d), (e), and (f); and the calculations in § 1065.660(b)(2). Perform this verification as follows:

(1) Select the HC analyzer range for measuring the flow-weighted mean concentration expected at the HC standard.

(2) Zero the HC analyzer at the analyzer zero or sample port. Note that FID zero and span balance gases may be any combination of purified air or purified nitrogen that meets the specifications of § 1065.750. We recommend FID analyzer zero and span gases that contain approximately the flow-weighted mean concentration of O_2 expected during testing.

(3) Span the HC analyzer using span gas introduced at the analyzer span or sample port. Span on a carbon number basis of one (C_1). For example, if you use a C_3H_8 span gas of concentration 200 μmol/mol, span the FID to respond with a value of 600 μmol/mol.

(4) Overflow zero gas at the HC probe or into a fitting between the HC probe and its transfer line.

(5) Measure the THC concentration in the sampling and background systems as follows:

(i) For continuous sampling, record the mean THC concentration as overflow zero air flows.

(ii) For batch sampling, fill the sample medium (*e.g.*, filter) and record its mean THC concentration.

(iii) For the background system, record the mean THC concentration of the last fill and purge.

(6) Record this value as the initial THC concentration, $x_{THC[THC-FID]init}$, and use it to correct measured values as described in § 1065.660.

(7) If any of the $x_{THC[THC-FID]init}$ values exceed the greatest of the following values, determine the source of the contamination and take corrective action, such as purging the system during an additional preconditioning cycle or replacing contaminated portions:

(i) 2% of the flow-weighted mean wet, net concentration expected at the HC (THC or NMHC) standard.

(ii) 2% of the flow-weighted mean wet, net concentration of HC (THC or NMHC) measured during testing.

(iii) 2 μmol/mol.

(8) If corrective action does not resolve the deficiency, you may request to use the contaminated system as an alternate procedure under § 1065.10.

■ 102. Section 1065.525 is revised to read as follows:

§ 1065.525 Engine starting, restarting, shutdown, and optional repeating of void discrete modes.

(a) Start the engine using one of the following methods:

(1) Start the engine as recommended in the owners manual using a production starter motor or air-start system and either an adequately charged battery, a suitable power supply, or a suitable compressed air source.

(2) Use the dynamometer to start the engine. To do this, motor the engine within ±25% of its typical in-use cranking speed. Stop cranking within 1 second of starting the engine.

(b) If the engine does not start after 15 seconds of cranking, stop cranking and determine why the engine failed to start, unless the owners manual or the service-repair manual describes the longer cranking time as normal.

(c) Respond to engine stalling with the following steps:

(1) If the engine stalls during warm-up before emission sampling begins, restart the engine and continue warm-up.

(2) If the engine stalls during preconditioning before emission sampling begins, restart the engine and restart the preconditioning sequence.

(3) If the engine stalls at any time after emission sampling begins for a transient test or ramped-modal cycle test, the test is void.

(4) Except as described in paragraph (d) of this section, void the test if the engine stalls at any time after emission sampling begins.

(d) If emission sampling is interrupted during one of the modes of a discrete-mode test, you may void the results only for that individual mode and perform the following steps to continue the test:

(1) If the engine has stalled, restart the engine.

(2) Use good engineering judgment to restart the test sequence using the appropriate steps in § 1065.530(b).

(3) Precondition the engine by operating at the previous mode for approximately the same amount of time it operated at that mode for the last emission measurement.

(4) Advance to the mode at which the engine stalled and continue with the duty cycle as specified in the standard-setting part.

(5) Complete the remainder of the test according to the requirements in this subpart.

(e) Shut down the engine according to the manufacturer's specifications.

■ 103. Section 1065.530 is revised to read as follows:

§ 1065.530 Emission test sequence.

(a) Time the start of testing as follows:

(1) Perform one of the following if you precondition sampling systems as described in § 1065.520(f):

(i) For cold-start duty cycles, shut down the engine. Unless the standard-setting part specifies that you may only perform a natural engine cooldown, you may perform a forced engine cooldown. Use good engineering judgment to set up systems to send cooling air across the engine, to send cool oil through the engine lubrication system, to remove heat from coolant through the engine cooling system, and to remove heat from any exhaust aftertreatment systems. In the case of a forced aftertreatment cooldown, good engineering judgment would indicate that you not start flowing cooling air until the aftertreatment system has cooled below its catalytic activation temperature. For platinum-group metal catalysts, this temperature is about 200 °C. Once the aftertreatment system has naturally cooled below its catalytic activation temperature, good engineering judgment would indicate that you use clean air with a temperature of at least 15 °C, and direct the air through the aftertreatment system in the normal direction of exhaust flow. Do not use any cooling procedure that results in unrepresentative emissions (see § 1065.10(c)(1)). You may start a cold-start duty cycle when the temperatures of an engine's lubricant, coolant, and aftertreatment systems are all between (20 and 30) °C.

(ii) For hot-start emission measurements, shut down the engine. Start the hot-start duty cycle as specified in the standard-setting part.

(iii) For testing that involves hot-stabilized emission measurements, such as any steady-state testing, you may continue to operate the engine at maximum test speed and 100% torque if that is the first operating point. Otherwise, operate the engine at warm idle or the first operating point of the duty cycle. In any case, start the emission test within 10 min after you complete the preconditioning procedure.

(2) If you do not precondition sampling systems, perform one of the following:

(i) For cold-start duty cycles, prepare the engine according to paragraph (a)(1)(i) of this section.

(ii) For hot-start emission measurements, first operate the engine at any speed above peak-torque speed and at (65 to 85)% of maximum mapped power until either the engine coolant, block, or head absolute temperature is within ±2% of its mean value for at least 2 min or until the engine thermostat controls engine temperature. Shut down the engine. Start the duty cycle within 20 min of engine shutdown.

(iii) For testing that involves hot-stabilized emission measurements, bring the engine either to warm idle or the first operating point of the duty cycle. Start the test within 10 min of achieving temperature stability. Determine temperature stability either as the point at which the engine coolant, block, or head absolute temperature is within ±2% of its mean value for at least 2 min, or as the point at which the engine thermostat controls engine temperature.

(b) Take the following steps before emission sampling begins:

(1) For batch sampling, connect clean storage media, such as evacuated bags or tare-weighed filters.

(2) Start all measurement instruments according to the instrument manufacturer's instructions and using good engineering judgment.

(3) Start dilution systems, sample pumps, cooling fans, and the data-collection system.

(4) Pre-heat or pre-cool heat exchangers in the sampling system to within their operating temperature tolerances for a test.

(5) Allow heated or cooled components such as sample lines, filters, chillers, and pumps to stabilize at their operating temperatures.

(6) Verify that there are no significant vacuum-side leaks according to § 1065.345.

(7) Adjust the sample flow rates to desired levels, using bypass flow, if desired.

(8) Zero or re-zero any electronic integrating devices, before the start of any test interval.

(9) Select gas analyzer ranges. You may automatically or manually switch gas analyzer ranges during a test only if switching is performed by changing the span over which the digital resolution of the instrument is applied. During a test you may not switch the gains of an analyzer's analog operational amplifier(s).

(10) Zero and span all continuous analyzers using NIST-traceable gases that meet the specifications of § 1065.750. Span FID analyzers on a carbon number basis of one (1), C_1. For example, if you use a C_3H_8 span gas of concentration 200 μmol/mol, span the FID to respond with a value of 600 μmol/mol. Span FID analyzers consistent with the determination of their respective response factors, *RF*, and penetration fractions, *PF*, according to § 1065.365.

(11) We recommend that you verify gas analyzer responses after zeroing and spanning by sampling a calibration gas that has a concentration near one-half of the span gas concentration. Based on the results and good engineering judgment, you may decide whether or not to re-zero, re-span, or re-calibrate a gas analyzer before starting a test.

(12) If you correct for dilution air background concentrations of engine exhaust constituents, start measuring and recording background concentrations.

(13) Drain any condensate from the intake air system and close any intake air condensate drains that are not normally open during in-use operation.

(c) Start testing as follows:

(1) If an engine is already running and warmed up, and starting is not part of the duty cycle, perform the following for the various duty cycles:

(i) Transient and steady-state ramped-modal cycles. Simultaneously start running the duty cycle, sampling exhaust gases, recording data, and integrating measured values.

(ii) Steady-state discrete-mode cycles. Control the engine operation to match the first mode in the test cycle. This will require controlling engine speed and load, engine load, or other operator demand settings, as specified in the standard-setting part. Follow the instructions in the standard-setting part to determine how long to stabilize engine operation at each mode, how long to sample emissions at each mode, and how to transition between modes.

(2) If engine starting is part of the duty cycle, initiate data logging, sampling of exhaust gases, and integrating measured values before attempting to start the engine. Initiate the duty cycle when the engine starts.

(d) At the end of each test interval, continue to operate all sampling and dilution systems to allow the sampling system's response time to elapse. Then stop all sampling and recording, including the recording of background samples. Finally, stop any integrating devices and indicate the end of the duty cycle in the recorded data.

(e) Shut down the engine if you have completed testing or if it is part of the duty cycle.

(f) If testing involves another duty cycle after a soak period with the engine off, start a timer when the engine shuts down, and repeat the steps in paragraphs (b) through (e) of this section as needed.

(g) Take the following steps after emission sampling is complete:

(1) For any proportional batch sample, such as a bag sample or PM sample, verify that proportional sampling was maintained according to § 1065.545. Void any samples that did not maintain proportional sampling according to § 1065.545.

(2) Place any used PM samples into covered or sealed containers and return them to the PM-stabilization environment. Follow the PM sample post-conditioning and total weighing procedures in § 1065.595.

(3) As soon as practical after the duty cycle is complete, or during the soak period if practical, perform the following:

(i) Zero and span all batch gas analyzers no later than 30 minutes after the duty cycle is complete, or during the soak period if practical.

(ii) Analyze any conventional gaseous batch samples no later than 30 minutes after the duty cycle is complete, or during the soak period if practical.

(iii) Analyze background samples no later than 60 minutes after the duty cycle is complete.

(iv) Analyze non-conventional gaseous batch samples, such as ethanol (NMCHE) as soon as practical using good engineering judgment.

(4) After quantifying exhaust gases, verify drift as follows:

(i) For batch and continuous gas anlyzers, record the mean analyzer value after stabilizing a zero gas to the analyzer. Stabilization may include time to purge the analyzer of any sample gas, plus any additional time to account for analyzer response.

(ii) Record the mean analyzer value after stabilizing the span gas to the analyzer. Stabilization may include time to purge the analyzer of any sample gas, plus any additional time to account for analyzer response.

(iii) Use these data to validate and correct for drift as described in § 1065.550.

(h) Unless the standard-setting part specifies otherwise, determine whether or not the test meets the cycle-validation criteria in § 1065.514.

(1) If the criteria void the test, you may retest using the same denormalized duty cycle, or you may re-map the engine, denormalize the reference duty cycle based on the new map and retest the engine using the new denormalized duty cycle.

(2) If the criteria void the test for a constant-speed engine only during commands of maximum test torque, you may do the following:

(i) Determine the first and last feedback speeds at which maximum test torque was commanded.

(ii) If the last speed is greater than or equal to 90% of the first speed, the test is void. You may retest using the same denormalized duty cycle, or you may re-map the engine, denormalize the reference duty cycle based on the new map and retest the engine using the new denormalized duty cycle.

(iii) If the last speed is less than 90% of the first speed, reduce maximum test torque by 5%, and proceed as follows:

(A) Denormalize the entire duty cycle based on the reduced maximum test torque according to § 1065.512.

(B) Retest the engine using the denormalized test cycle that is based on the reduced maximum test torque.

(C) If your engine still fails the cycle criteria, reduce the maximum test torque by another 5% of the original maximum test torque.

(D) If your engine fails after repeating this procedure four times, such that your engine still fails after you have reduced the maximum test torque by 20% of the original maximum test torque, notify us and we will consider specifying a more appropriate duty cycle for your engine under the provisions of § 1065.10(c).

(i) [Reserved]

(j) Measure and record ambient temperature, pressure, and humidity, as appropriate.

■ 104. Section 1065.545 is revised to read as follows:

§ 1065.545 Validation of proportional flow control for batch sampling and minimum dilution ratio for PM batch sampling.

For any proportional batch sample such as a bag or PM filter, demonstrate that proportional sampling was maintained using one of the following, noting that you may omit up to 5% of the total number of data points as outliers:

(a) For any pair of flow meters, use recorded sample and total flow rates, where total flow rate means the raw exhaust flow rate for raw exhaust sampling and the dilute exhaust flow rate for CVS sampling, or their 1 Hz means with the statistical calculations in § 1065.602. Determine the standard error of the estimate, *SEE*, of the sample flow rate versus the total flow rate. For each test interval, demonstrate that *SEE* was less than or equal to 3.5% of the mean sample flow rate.

(b) For any pair of flow meters, use recorded sample and total flow rates, where total flow rate means the raw exhaust flow rate for raw exhaust sampling and the dilute exhaust flow rate for CVS sampling, or their 1 Hz means to demonstrate that each flow rate was constant within ±2.5% of its respective mean or target flow rate. You may use the following options instead of recording the respective flow rate of each type of meter:

(1) *Critical-flow venturi option.* For critical-flow venturis, you may use recorded venturi-inlet conditions or their 1 Hz means. Demonstrate that the flow density at the venturi inlet was constant within ±2.5% of the mean or target density over each test interval. For a CVS critical-flow venturi, you may demonstrate this by showing that the absolute temperature at the venturi inlet was constant within ±4% of the mean or target absolute temperature over each test interval.

(2) *Positive-displacement pump option.* You may use recorded pump-inlet conditions or their 1 Hz means. Demonstrate that the flow density at the pump inlet was constant within ±2.5% of the mean or target density over each test interval. For a CVS pump, you may demonstrate this by showing that the absolute temperature at the pump inlet was constant within ±2% of the mean or target absolute temperature over each test interval.

(c) Using good engineering judgment, demonstrate with an engineering analysis that the proportional-flow control system inherently ensures proportional sampling under all circumstances expected during testing. For example, you might use CFVs for both sample flow and total flow and demonstrate that they always have the same inlet pressures and temperatures and that they always operate under critical-flow conditions.

(d) Use measured or calculated flows and/or tracer gas concentrations (e.g., CO_2) to determine the minimum dilution ratio for PM batch sampling over the test interval.

■ 105. Section 1065.550 is revised to read as follows:

§ 1065.550 Gas analyzer range validation, drift validation, and drift correction.

(a) *Range validation.* If an analyzer operated above 100% of its range at any time during the test, perform the following steps:

(1) For batch sampling, re-analyze the sample using the lowest analyzer range that results in a maximum instrument response below 100%. Report the result from the lowest range from which the analyzer operates below 100% of its range.

(2) For continuous sampling, repeat the entire test using the next higher analyzer range. If the analyzer again operates above 100% of its range, repeat the test using the next higher range. Continue to repeat the test until the analyzer always operates at less than 100% of its range.

(b) *Drift validation and drift correction.* Calculate two sets of brake-specific emission results. Calculate one set using the data before drift correction and calculate the other set after correcting all the data for drift according to § 1065.672. Use the two sets of brake-specific emission results as follows:

(1) This test is validated for drift if, for each regulated pollutant, the difference between the uncorrected and the corrected brake-specific emission values is within ±4% of the uncorrected results or applicable standard, whichever is greater. If not, the entire test is void.

(2) If the test is validated for drift, you must use only the drift-corrected emission results when reporting emissions, unless you demonstrate to us that using the drift-corrected results adversely affects your ability to demonstrate that your engine complies with the applicable standards.

■ 106. Section 1065.590 is revised to read as follows:

§ 1065.590 PM sampling media (e.g., filters) preconditioning and tare weighing.

Before an emission test, take the following steps to prepare PM sampling media (e.g., filters) and equipment for PM measurements:

(a) Make sure the balance and PM-stabilization environments meet the periodic verifications in § 1065.390.

(b) Visually inspect unused sample media (e.g., filters) for defects and discard defective media.

(c) To handle PM sampling media (e.g., filters), use electrically grounded tweezers or a grounding strap, as described in § 1065.190.

(d) Place unused sample media (e.g., filters) in one or more containers that are open to the PM-stabilization environment. If you are using filters, you may place them in the bottom half of a filter cassette.

(e) Stabilize sample media (e.g., filters) in the PM-stabilization environment. Consider an unused sample medium stabilized as long as it has been in the PM-stabilization environment for a minimum of 30 min, during which the PM-stabilization environment has been within the specifications of § 1065.190.

(f) Weigh the sample media (e.g., filters) automatically or manually, as follows:

(1) For automatic weighing, follow the automation system manufacturer's instructions to prepare samples for weighing. This may include placing the samples in a special container.

(2) For manual weighing, use good engineering judgment to determine if substitution weighing is necessary to show that an engine meets the applicable standard. You may follow the substitution weighing procedure in paragraph (j) of this section, or you may develop your own procedure.

(g) Correct the measured mass of each sample medium (e.g., filter) for buoyancy as described in § 1065.690. These buoyancy-corrected values are subsequently subtracted from the post-test mass of the corresponding sample media (e.g., filters) and collected PM to determine the mass of PM emitted during the test.

(h) You may repeat measurements to determine the mean mass of each sample medium (e.g., filter). Use good engineering judgment to exclude outliers from the calculation of mean mass values.

(i) If you use filters as sample media, load unused filters that have been tare-weighed into clean filter cassettes and place the loaded cassettes in a clean, covered or sealed container before removing them from the stabilization environment for transport to the test site for sampling. We recommend that you keep filter cassettes clean by periodically washing or wiping them with a compatible solvent applied using a lint-free cloth. Depending upon your cassette material, ethanol (C_2H_5OH) might be an acceptable solvent. Your cleaning frequency will depend on your engine's level of PM and HC emissions.

(j) Substitution weighing involves measurement of a reference weight before and after each weighing of PM sampling media (e.g., filters). While substitution weighing requires more measurements, it corrects for a balance's zero-drift and it relies on balance linearity only over a small range. This is most advantageous when quantifying net PM masses that are less than 0.1% of the sample medium's mass. However, it may not be advantageous when net PM masses exceed 1% of the sample medium's mass. If you utilize substitution weighing, it must be used for both pre-test and post-test weighing. The same substitution weight must be used for both pre-test and post-test weighing. Correct the mass of the substitution weight for buoyancy if the density of the substitution weight is less than 2.0 g/cm^3. The following steps are an example of substitution weighing:

(1) Use electrically grounded tweezers or a grounding strap, as described in § 1065.190.

(2) Use a static neutralizer as described in § 1065.190 to minimize static electric charge on any object before it is placed on the balance pan.

(3) Select a substitution weight that meets the requirements for calibration weights found in § 1065.790. The substitution weight must also have the same density as the weight you use to span the microbalance, and be similar in mass to an unused sample medium (e.g., filter). A 47 mm PTFE membrane filter will typically have a mass in the range of 80 to 100 mg.

(4) Record the stable balance reading, then remove the calibration weight.

(5) Weigh an unused sample medium (e.g., a new filter), record the stable balance reading and record the balance environment's dewpoint, ambient temperature, and atmospheric pressure.

(6) Reweigh the calibration weight and record the stable balance reading.

(7) Calculate the arithmetic mean of the two calibration-weight readings that you recorded immediately before and after weighing the unused sample. Subtract that mean value from the unused sample reading, then add the true mass of the calibration weight as stated on the calibration-weight certificate. Record this result. This is the unused sample's tare weight without correcting for buoyancy.

(8) Repeat these substitution-weighing steps for the remainder of your unused sample media.

(9) Once weighing is completed, follow the instructions given in paragraphs (g) through (i) of this section.

■ 107. Section 1065.595 is revised to read as follows:

§ 1065.595 PM sample post-conditioning and total weighing.

After testing is complete, return the sample media (e.g., filters) to the weighing and PM-stabilization environments.

(a) Make sure the weighing and PM-stabilization environments meet the ambient condition specifications in § 1065.190(e)(1). If those specifications are not met, leave the test sample media (e.g., filters) covered until proper conditions have been met.

(b) In the PM-stabilization environment, remove PM samples from sealed containers. If you use filters, you may remove them from their cassettes before or after stabilization. We recommend always removing the top portion of the cassette before stabilization. When you remove a filter from a cassette, separate the top half of

the cassette from the bottom half using a cassette separator designed for this purpose.

(c) To handle PM samples, use electrically grounded tweezers or a grounding strap, as described in § 1065.190.

(d) Visually inspect the sampling media (e.g., filters) and collected particulate. If either the sample media (e.g., filters) or particulate sample appear to have been compromised, or the particulate matter contacts any surface other than the filter, the sample may not be used to determine particulate emissions. In the case of contact with another surface, clean the affected surface before continuing.

(e) To stabilize PM samples, place them in one or more containers that are open to the PM-stabilization environment, as described in § 1065.190. If you expect that a sample medium's (e.g., filter's) total surface concentration of PM will be less than 400 μg, assuming a 38 mm diameter filter stain area, expose the filter to a PM-stabilization environment meeting the specifications of § 1065.190 for at least 30 minutes before weighing. If you expect a higher PM concentration or do not know what PM concentration to expect, expose the filter to the stabilization environment for at least 60 minutes before weighing. Note that 400 μg on sample media (e.g., filters) is an approximate net mass of 0.07 g/kW·hr for a hot-start test with compression-ignition engines tested according to 40 CFR part 86, subpart N, or 50 mg/mile for light-duty vehicles tested according to 40 CFR part 86, subpart B.

(f) Repeat the procedures in § 1065.590(f) through (i) to determine post-test mass of the sample media (e.g., filters).

(g) Subtract each buoyancy-corrected tare mass of the sample medium (e.g., filter) from its respective buoyancy-corrected mass. The result is the net PM mass, m_{PM}. Use m_{PM} in emission calculations in § 1065.650.

Subpart G—[Amended]

■ 108. Section 1065.601 is amended by revising paragraph (c)(1) to read as follows:

§ 1065.601 Overview.

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(c) * * *

(1) Mass-based emission calculations prescribed by the International Organization for Standardization (ISO), according to ISO 8178, except the following:

(i) ISO 8178–1 Section 14.4, NO_X Correction for Humidity and Temperature. See § 1065.670 for approved methods for humidity corrections.

(ii) ISO 8178–1 Section 15.1, Particulate Correction Factor for Humidity.

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■ 109. Section 1065.602 is amended by revising paragraphs (f)(3) before the table and (l) introductory text to read as follows:

§ 1065.602 Statistics.

* * * * *

(f) * * *

(3) Use Table 1 of this section to compare t to the t_{crit} values tabulated versus the number of degrees of freedom. If t is less than t_{crit}, then t passes the t-test. The Microsoft Excel software package contains a TINV function that returns results equivalent to § 1065.602 Table 1 and may be used in place of Table 1.

* * * * *

(l) *Flow-weighted mean concentration.* In some sections of this part, you may need to calculate a flow-weighted mean concentration to determine the applicability of certain provisions. A flow-weighted mean is the mean of a quantity after it is weighted proportional to a corresponding flow rate. For example, if a gas concentration is measured continuously from the raw exhaust of an engine, its flow-weighted mean concentration is the sum of the products of each recorded concentration times its respective exhaust molar flow rate, divided by the sum of the recorded flow rate values. As another example, the bag concentration from a CVS system is the same as the flow-weighted mean concentration because the CVS system itself flow-weights the bag concentration. You might already expect a certain flow-weighted mean concentration of an emission at its standard based on previous testing with similar engines or testing with similar equipment and instruments. If you need to estimate your expected flow-weighted mean concentration of an emission at its standard, we recommend using the following examples as a guide for how to estimate the flow-weighted mean concentration expected at the standard. Note that these examples are not exact and that they contain assumptions that are not always valid. Use good engineering judgment to determine if you can use similar assumptions.

* * * * *

■ 110. Section 1065.610 is revised to read as follows:

§ 1065.610 Duty cycle generation.

This section describes how to generate duty cycles that are specific to your engine, based on the normalized duty cycles in the standard-setting part. During an emission test, use a duty cycle that is specific to your engine to command engine speed, torque, and power, as applicable, using an engine dynamometer and an engine operator demand. Paragraph (a) of this section describes how to ''normalize'' your engine's map to determine the maximum test speed and torque for your engine. The rest of this section describes how to use these values to ''denormalize'' the duty cycles in the standard-setting parts, which are all published on a normalized basis. Thus, the term ''normalized'' in paragraph (a) of this section refers to different values than it does in the rest of the section.

(a) *Maximum test speed, f_{ntest}.* This section generally applies to duty cycles for variable-speed engines. For constant-speed engines subject to duty cycles that specify normalized speed commands, use the no-load governed speed as the measured f_{ntest}. This is the highest engine speed where an engine outputs zero torque. For variable-speed engines, determine the measured f_{ntest} from the power-versus-speed map, generated according to § 1065.510, as follows:

(1) Based on the map, determine maximum power, P_{max}, and the speed at which maximum power occurred, f_{nPmax}. Divide every recorded power by P_{max} and divide every recorded speed by f_{nPmax}. The result is a normalized power-versus-speed map. Your measured f_{ntest} is the speed at which the sum of the squares of normalized speed and power is maximum, as follows:

$$f_{ntest} = f_{ni} \text{ at the maximum of } (f_{nnormi}^2 + P_{normi}^2)$$

Eq. 1065.610–1

Where:

f_{ntest} = maximum test speed.
i = an indexing variable that represents one recorded value of an engine map.
f_{nnormi} = an engine speed normalized by dividing it by f_{nPmax}.
P_{normi} = an engine power normalized by dividing it by P_{max}.

Example:

(f_{nnorm1} = 1.002, P_{norm1} = 0.978, f_{n1} = 2359.71)
(f_{nnorm2} = 1.004, P_{norm2} = 0.977, f_{n2} = 2364.42)
(f_{nnorm3} = 1.006, P_{norm3} = 0.974, f_{n3} = 2369.13)
($f_{nnorm12} + P_{norm1}^2$) = ($1.002^2 + 0.978^2$) = 1.960
($f_{nnorm2}^2 + P_{norm2}^2$) = ($1.004^2 + 0.977^2$) = 1.963
($f_{nnorm3}^2 + P_{norm3}^2$) = ($1.006^2 + 0.974^2$) = 1.961
maximum = 1.963 at i = 2
f_{ntest} = 2364.42 rev/min

(2) For variable-speed engines, transform normalized speeds to reference speeds according to paragraph (c) of this section by using the measured maximum test speed determined according to paragraph (a)(1) of this section—or use your declared maximum test speed, as allowed in § 1065.510.

(3) For constant-speed engines, transform normalized speeds to reference speeds according to paragraph (c) of this section by using the measured no-load governed speed—or use your declared maximum test speed, as allowed in § 1065.510.

(b) *Maximum test torque,* T_{test}. For constant-speed engines, determine the measured T_{test} from the power-versus-speed map, generated according to § 1065.510, as follows:

(1) Based on the map, determine maximum power, P_{max}, and the speed at which maximum power occurs, f_{nPmax}. Divide every recorded power by P_{max} and divide every recorded speed by f_{nPmax}. The result is a normalized power-versus-speed map. Your measured T_{test} is the torque at which the sum of the squares of normalized speed and power is maximum, as follows:

$T_{test} = T_i$ at the maximum of $(f_{nnormi}^2 + P_{normi}^2)$

Eq. 1065.610–2

Where:

T_{test} = maximum test torque.

Example:

(f_{nnorm1} = 1.002, P_{norm1} = 0.978, T_1 = 722.62 N·m)
(f_{nnorm2} = 1.004, P_{norm2} = 0.977, T_2 = 720.44 N·m)
(f_{nnorm3} = 1.006, P_{norm3} = 0.974, T_3 = 716.80 N·m)
$(f_{nnorm1}^2 + P_{norm1}^2) = (1.002^2 + 0.978^2) = 1.960$
$(f_{nnorm1}^2 + P_{norm1}^2) = (1.004^2 + 0.977^2) = 1.963$
$(f_{nnorm1}^2 + P_{norm1}^2) = (1.006^2 + 0.974^2) = 1.961$
maximum = 1.963 at i = 2
T_{test} = 720.44 N·m

(2) Transform normalized torques to reference torques according to paragraph (d) of this section by using the measured maximum test torque determined according to paragraph (b)(1) of this section—or use your declared maximum test torque, as allowed in § 1065.510.

(c) *Generating reference speed values from normalized duty cycle speeds.* Transform normalized speed values to reference values as follows:

(1) *% speed.* If your normalized duty cycle specifies % speed values, use your warm idle speed and your maximum test speed to transform the duty cycle, as follows:

$f_{nref} = \%\ speed \cdot (f_{ntest} - f_{nidle}) + f_{nidle}$

Eq. 1065.610–3

Example:

% speed = 85%
f_{ntest} = 2364 rev/min
f_{nidle} = 650 rev/min
$f_{nref} = 85\% \cdot (2364 - 650) + 650$
f_{nref} = 2107 rev/min

(2) *A, B, and C speeds.* If your normalized duty cycle specifies speeds as A, B, or C values, use your power-versus-speed curve to determine the lowest speed below maximum power at which 50% of maximum power occurs. Denote this value as n_{lo}. Take n_{lo} to be warm idle speed if all power points at speeds below the maximum power speed are higher than 50% of maximum power. Also determine the highest speed above maximum power at which 70% of maximum power occurs. Denote this value as n_{hi}. If all power points at speeds above the maximum power speed are higher than 70% of maximum power, take n_{hi} to be the declared maximum safe engine speed or the declared maximum representative engine speed, whichever is lower. Use n_{hi} and n_{lo} to calculate reference values for A, B, or C speeds as follows:

$f_{nrefA} = 0.25 \cdot (n_{hi} - n_{lo}) + n_{lo}$

Eq. 1065.610–4

$f_{nrefB} = 0.50 \cdot (n_{hi} - nn_{lo}) + n_{lo}$

Eq. 1065.610–5

$f_{nrefC} = 0.75 \cdot (n_{hi} - n_{lo}) + n_{lo}$

Eq. 1065.610–6

Example:

n_{lo} = 1005 rev/min
n_{hi} = 2385 rev/min
$f_{nrefA} = 0.25 \cdot (2385 - 1005) + 1005$
$f_{nrefB} = 0.50 \cdot (2385 - 1005) + 1005$
$f_{nrefC} = 0.75 \cdot (2385 - 1005) + 1005$
f_{nrefA} = 1350 rev/min
f_{nrefB} = 1695 rev/min
f_{nrefC} = 2040 rev/min

(3) *Intermediate speed.* If your normalized duty cycle specifies a speed as ''intermediate speed,'' use your torque-versus-speed curve to determine the speed at which maximum torque occurs. This is peak torque speed. Identify your reference intermediate speed as one of the following values:

(i) Peak torque speed if it is between (60 and 75)% of maximum test speed.

(ii) 60% of maximum test speed if peak torque speed is less than 60% of maximum test speed.

(iii) 75% of maximum test speed if peak torque speed is greater than 75% of maximum test speed.

(d) *Generating reference torques from normalized duty-cycle torques.* Transform normalized torques to reference torques using your map of maximum torque versus speed.

(1) *Reference torque for variable-speed engines.* For a given speed point, multiply the corresponding % torque by the maximum torque at that speed, according to your map. If your engine is subject to a reference duty cycle that specifies negative torque values (i.e., engine motoring), use negative torque for those motoring points (i.e., the motoring torque). If you map negative torque as allowed under § 1065.510 (c)(2) and the low-speed governor activates, resulting in positive torques, you may replace those positive motoring mapped torques with negative values between zero and the largest negative motoring torque. For both maximum and motoring torque maps, linearly interpolate mapped torque values to determine torque between mapped speeds. If the reference speed is below the minimum mapped speed (i.e., 95% of idle speed or 95% of lowest required speed, whichever is higher), use the mapped torque at the minimum mapped speed as the reference torque. The result is the reference torque for each speed point.

(2) *Reference torque for constant-speed engines.* Multiply a % torque value by your maximum test torque. The result is the reference torque for each point.

(3) *Required deviations.* We require the following deviations for variable-speed engines intended primarily for propulsion of a vehicle with an automatic transmission where that engine is subject to a transient duty cycle with idle operation. These deviations are intended to produce a more representative transient duty cycle for these applications. For steady-state duty cycles or transient duty cycles with no idle operation, these requirements do not apply. Idle points for steady state duty cycles of such engines are to be run at conditions simulating neutral or park on the transmission.

(i) Zero-percent speed is the warm idle speed measured according to § 1065.510(b)(6) with CITT applied, i.e., measured warm idle speed in drive.

(ii) If the cycle begins with a set of contiguous idle points (zero-percent speed, and zero-percent torque), leave the reference torques set to zero for this initial contiguous idle segment. This is to represent free idle operation with the transmission in neutral or park at the start of the transient duty cycle, after the engine is started. If the initial idle segment is longer than 24 s, change the reference torques for the remaining idle points in the initial contiguous idle segment to CITT (i.e., change idle points corresponding to 25 s to the end of the initial idle segment to CITT). This is to represent shifting the transmission to drive.

(iii) For all other idle points, change the reference torque to CITT. This is to represent the transmission operating in drive.

(iv) If the engine is intended primarily for automatic transmissions with a Neutral-When-Stationary feature that automatically shifts the transmission to neutral after the vehicle is stopped for a designated time and automatically shifts back to drive when the operator increases demand (i.e., pushes the

accelerator pedal), change the reference torque back to zero for idle points in drive after the designated time.

(v) For all points with normalized speed at or below zero percent and reference torque from zero to CITT, set the reference torque to CITT. This is to provide smoother torque references below idle speed.

(vi) For motoring points, make no changes.

(vii) For consecutive points with reference torques from zero to CITT that immediately follow idle points, change their reference torques to CITT. This is to provide smooth torque transition out of idle operation. This does not apply if the Neutral-When-Stationary feature is used and the transmission has shifted to neutral.

(viii) For consecutive points with reference torque from zero to CITT that immediately precede idle points, change their reference torques to CITT. This is to provide smooth torque transition into idle operation.

(4) *Permissible deviations for any engine.* If your engine does not operate below a certain minimum torque under normal in-use conditions, you may use a declared minimum torque as the reference value instead of any value denormalized to be less than the declared value. For example, if your engine is connected to a hydrostatic transmission and it has a minimum torque even when all the driven hydraulic actuators and motors are stationary and the engine is at idle, then you may use this declared minimum torque as a reference torque value instead of any reference torque value generated under paragraph (d)(1) or (2) of this section that is between zero and this declared minimum torque.

(e) *Generating reference power values from normalized duty cycle powers.* Transform normalized power values to reference speed and power values using your map of maximum power versus speed.

(1) First transform normalized speed values into reference speed values. For a given speed point, multiply the corresponding % power by the mapped power at maximum test speed, f_{ntest}, unless specified otherwise by the standard-setting part. The result is the reference power for each speed point, P_{ref}. Convert these reference powers to corresponding torques for operator demand and dynamometer control and for duty cycle validation per 1065.514. Use the reference speed associated with each reference power point for this conversion. As with cycles specified with % torque, linearly interpolate between these reference torque values generated from cycles with % power.

(2) Permissible deviations for any engine. If your engine does not operate below a certain power under normal in-use conditions, you may use a declared minimum power as the reference value instead of any value denormalized to be less than the declared value. For example, if your engine is directly connected to a propeller, it may have a minimum power called idle power. In this case, you may use this declared minimum power as a reference power value instead of any reference power value generated per paragraph (e)(1) of this section that is from zero to this declared minimum power.

■ 111. Section 1065.640 is amended by revising paragraphs (a) and (e) and redesignating the second ''Table 3'' as ''Table 4'' to read as follows:

§ 1065.640 Flow meter calibration calculations.

* * * * *

(a) *Reference meter conversions.* The calibration equations in this section use molar flow rate, $\dot{n}_{ref}$, as a reference quantity. If your reference meter outputs a flow rate in a different quantity, such as standard volume rate, $\dot{V}_{stdref}$, actual volume rate, $\dot{V}_{actref}$, or mass rate, $\dot{m}_{ref}$, convert your reference meter output to a molar flow rate using the following equations, noting that while values for volume rate, mass rate, pressure, temperature, and molar mass may change during an emission test, you should ensure that they are as constant as practical for each individual set point during a flow meter calibration:

$$\dot{n}_{ref} = \frac{\dot{V}_{stdref} \cdot p_{std}}{T_{std} \cdot R} = \frac{\dot{V}_{actref} \cdot p_{act}}{T_{act} \cdot R} = \frac{\dot{m}_{ref}}{M_{mix}} \qquad \text{Eq. 1065.640-1}$$

Where:

$\dot{N}_{ref}$ = reference molar flow rate.

$\dot{V}_{stdref}$ = reference volume flow rate, corrected to a standard pressure and a standard temperature.

$\dot{V}_{actref}$ = reference volume flow rate at the actual pressure and temperature of the flow rate.

$\dot{N}_{ref}$ = reference mass flow.

p_{std} = standard pressure.

p_{act} = actual pressure of the flow rate.

T_{std} = standard temperature.

T_{act} = actual temperature of the flow rate.

R = molar gas constant.

M_{mix} = molar mass of the flow rate.

Example 1:

$\dot{V}_{stdref}$ = 1000.00 ft^3/min = 0.471948 m^3/s

p = 29.9213 in Hg @ 32 °F = 101325 Pa

T = 68.0 °F = 293.15 K

R = 8.314472 J/(mol · K)

$$\dot{n}_{ref} = \frac{0.471948 \cdot 101325}{293.15 \cdot 8.314472}$$

$\dot{N}_{ref}$ = 19.169 mol/s

Example 2:

$\dot{M}_{ref}$ = 17.2683 kg/min = 287.805 g/s

M_{mix} = 28.7805 g/mol

$$\dot{n}_{ref} = \frac{287.05}{28.7805}$$

$\dot{n}_{ref}$ = 10.0000 mol/s

(e) *CFV calibration.* Some CFV flow meters consist of a single venturi and some consist of multiple venturis, where different combinations of venturis are used to meter different flow rates. For CFV flow meters that consist of multiple venturis, either calibrate each venturi independently to determine a separate discharge coefficient, C_d, for each venturi, or calibrate each combination of venturis as one venturi. In the case where you calibrate a combination of venturis, use the sum of the active venturi throat areas as A_t, the square root of the sum of the squares of the active venturi throat diameters as d_t, and the ratio of the venturi throat to inlet diameters as the ratio of the square root of the sum of the active venturi throat diameters (d_t) to the diameter of the common entrance to all of the venturis (D). To determine the C_d for a single venturi or a single combination of venturis, perform the following steps:

(1) Use the data collected at each calibration set point to calculate an individual C_d for each point using Eq. 1065.640–4.

(2) Calculate the mean and standard deviation of all the C_d values according to Eqs. 1065.602–1 and 1065.602–2.

(3) If the standard deviation of all the C_d values is less than or equal to 0.3% of the mean C_d, use the mean C_d in Eq. 1065.642–6, and use the CFV only down to the lowest r measured during calibration using the following equation:

$$r = 1 - \frac{\Delta p}{p_{in}} \qquad \text{Eq.1065.640-13}$$

(4) If the standard deviation of all the C_d values exceeds 0.3% of the mean C_d,

omit the C_d values corresponding to the data point collected at the lowest r measured during calibration.

(5) If the number of remaining data points is less than seven, take corrective action by checking your calibration data or repeating the calibration process. If you repeat the calibration process, we recommend checking for leaks, applying tighter tolerances to measurements and allowing more time for flows to stabilize.

(6) If the number of remaining C_d values is seven or greater, recalculate the mean and standard deviation of the remaining C_d values.

(7) If the standard deviation of the remaining C_d values is less than or equal to 0.3% of the mean of the remaining C_d, use that mean C_d in Eq. 1065.642–6, and use the CFV values only down to the lowest r associated with the remaining C_d.

(8) If the standard deviation of the remaining C_d still exceeds 0.3% of the mean of the remaining C_d values, repeat the steps in paragraph (e)(4) through (8) of this section.

■ 112. Section 1065.642 is amended by revising paragraph (b) to read as follows:

§ 1065.642 SSV, CFV, and PDP molar flow rate calculations.

* * * * *

(b) *SSV molar flow rate.* Based on the C_d versus $Re^{\#}$ equation you determined according to § 1065.640, calculate SSV molar flow rate, $\dot{n}$ during an emission test as follows:

$$\dot{n} = C_d \cdot C_f \cdot \frac{A_t \cdot p_{in}}{\sqrt{Z \cdot M_{mix} \cdot R \cdot T_{in}}} \qquad \text{Eq. 1065.642-3}$$

Example:
A_t = 0.01824 m²
p_{in} = 99132 Pa
Z = 1
M_{mix} = 28.7805 g/mol = 0.0287805 kg/mol
R = 8.314472 J/(mol·K)
T_{in} = 298.15 K
$Re^{\#}$ = 7.232·10
y = 1.399
β = 0.8
Δp = 2.312 kPa
Using Eq. 1065.640–7,
r_{ssv} = 0.997
Using Eq. 1065.640–6,
C_f = 0.274
Using Eq. 1065.640–5,
C_d = 0.990

$$\dot{n} = 0.990 \cdot 0.274 \cdot \frac{0.01824 \cdot 99132}{\sqrt{1 \cdot 0.0287805 \cdot 8.314472 \cdot 298.15}}$$

$\dot{n}$= 58.173 mol/s

* * * * *

■ 113. A new § 1065.644 is added to read as follows:

§ 1065.644 Vacuum-decay leak rate.

This section describes how to calculate the leak rate of a vacuum-decay leak verification, which is described in § 1065.345(e). Use Eq. 1065.644–1 to calculate the leak rate, $\dot{n}_{leak}$, and compare it to the criterion specified in § 1065.345(e).

$$\dot{n}_{leak} = \frac{V_{vac}}{R} \cdot \frac{\left(\frac{p_2}{T_2} - \frac{p_1}{T_1}\right)}{(t_2 - t_1)} \qquad \text{Eq. 1065.644-1}$$

Where:
V_{vac} = geometric volume of the vacuum-side of the sampling system.
R = molar gas constant.
p_2 = Vacuum-side absolute pressure at time t_2.
T_2 = Vacuum-side absolute temperature at time t_2.
p_1 = Vacuum-side absolute pressure at time t^1.
T_1 = Vacuum-side absolute temperature at time t_1.
t_2 = time at completion of vacuum-decay leak verification test.
t_1 = time at start of vacuum-decay leak verification test.

Example:
V_{vac} = 2.0000 L = 0.00200 m³
R = 8.314472 J/(mol·K)
p_2 = 50.600 kPa = 50600 Pa
T_2 = 293.15 K
p_1 = 25.300 kPa = 25300 Pa
T_1 = 293.15 K
t_2 = 10:57:35 AM
t_1 = 10:56:25 AM

$$\dot{n}_{leak} = \frac{0.0002}{8.314472} \cdot \frac{\left(\frac{50600}{293.15} - \frac{25300}{293.15}\right)}{(10:57:35 - 10:56:25)}$$

$$\dot{n}_{leak} = \frac{0.00200}{8.314472} \cdot \frac{86.304}{70}$$

$$\dot{n}_{leak} = 0.00030 \text{ mol/s}$$

■ 114. Section 1065.645 is revised to read as follows:

§ 1065.645 Amount of water in an ideal gas.

This section describes how to determine the amount of water in an ideal gas, which you need for various performance verifications and emission calculations. Use the equation for the vapor pressure of water in paragraph (a) of this section or another appropriate equation and, depending on whether you measure dewpoint or relative humidity, perform one of the

calculations in paragraph (b) or (c) of this section.

(a) *Vapor pressure of water.* Calculate the vapor pressure of water for a given saturation temperature condition, T_{sat}, as follows, or use good engineering judgment to use a different relationship of the vapor pressure of water to a given saturation temperature condition:

(1) For humidity measurements made at ambient temperatures from (0 to 100) °C, or for humidity measurements made over super-cooled water at ambient temperatures from (−50 to 0) °C, use the following equation:

$$-\log_{10}(p_{H2O}) = 10.79574 \cdot \left(\frac{273.16}{T_{sat}} - 1\right) + 5.02800 \cdot \log_{10}\left(\frac{T_{sat}}{273.16}\right) + 1.50475 \cdot 10^{-4} \cdot \left(10^{-8.2969 \cdot \left(\frac{T_{sat}}{273.16} - 1\right)} - 1\right)$$

$$+0.42873 \cdot 10^{-3} \cdot \left(1 - 10^{-4.76955\left(1 - \frac{273.16}{T_{sat}}\right)}\right) + 0.21386 \qquad \text{Eq. 1065.645-1}$$

Where:

p_{H20} = vapor pressure of water at saturation temperature condition, kPa.

T_{sat} = saturation temperature of water at measured conditions, K.

Example:

T_{sat} = 9.5 °C

T_{dsat}= 9.5 + 273.15 = 282.65 K

$$-\log_{10}(p_{H2O}) = 10.79574 \cdot \left(\frac{273.16}{282.65} - 1\right) + 5.02800 \cdot \log_{10}\left(\frac{282.65}{273.16}\right) + 1.50475 \cdot 10^{-4} \cdot \left(10^{-8.2969 \cdot \left(\frac{282.65}{273.16} - 1\right)} - 1\right)$$

$$+0.42873 \cdot 10^{-3} \cdot \left(1 - 10^{-4.76955\left(1 - \frac{273.16}{282.65}\right)}\right) + 0.21386$$

$-\log_{10}(p_{H20}) = -0.073974$

$p_{H20} = 10^{0.073974} = 1.18569$ kPa

(2) For humidity measurements over ice at ambient temperatures from (−100 to 0) °C, use the following equation:

$$-\log_{10}(p_{sat}) = 9.09685 \cdot \left(\frac{273.16}{T_{sat}} - 1\right) + 3.56654 \cdot \log_{10}\left(\frac{273.16}{T_{sat}}\right) + 0.87682 \cdot \left(\frac{T_{sat}}{273.16} - 1\right) + 0.21386 \qquad \text{Eq. 1065.645-2}$$

Example:

T_{ice} = −15.4 °C

T_{ice} = −15.4 + 273.15 = 257.75 K

$$-\log_{10}(p_{sat}) = 9.09685 \cdot \left(\frac{273.16}{257.75} - 1\right) +$$

$$3.56654 \cdot \log_{10}\left(\frac{273.16}{257.75}\right) +$$

$$0.87682 \cdot \left(\frac{257.75}{273.16} - 1\right) + 0.21386$$

$-\log_{10}(p_{H2O}) = -0.79821$

$p_{H2O} = 10^{0.79821} = 0.15914$ kPa

(b) *Dewpoint.* If you measure humidity as a dewpoint, determine the amount of water in an ideal gas, x_{H2O}, as follows:

$$x_{H2O} = \frac{p_{H2O}}{p_{abs}} \qquad \text{Eq. 1065.645-3}$$

Where:

x_{H2O} = amount of water in an ideal gas.

p_{H2O} = water vapor pressure at the measured dewpoint, $T_{sat} = T_{dew}$.

p_{abs} = wet static absolute pressure at the location of your dewpoint measurement.

Example:

p_{abs} = 99.980 kPa

$T_{sat} = T_{dew}$ = 9.5 °C

Using Eq. 1065.645–2,

p_{H2O} = 1.18489 kPa

x_{H2O} = 1.18489/99.980

x_{H2O} = 0.011851 mol/mol

(c) *Relative humidity.* If you measure humidity as a relative humidity, RH %, determine the amount of water in an ideal gas, x_{H2O}, as follows:

$$x_{H2O} = \frac{RH\% \cdot p_{H2O}}{p_{abs}} \qquad \text{Eq. 1065.645-4}$$

Where:

x_{H2O} = amount of water in an ideal gas.

RH % = relative humidity.

p_{H2O} = water vapor pressure at 100% relative humidity at the location of your relative humidity measurement, $T_{sat} = T_{amb}$.

p_{abs} = wet static absolute pressure at the location of your relative humidity measurement.

Example:

RH % = 50.77%

p_{abs} = 99.980 kPa

$T_{sat} = T_{amb}$ = 20 °C

Using Eq. 1065.645–2,

p_{H2O} = 2.3371 kPa

x_{H2O} = (50.77% ·2.3371)/99.980

x_{H2O} = 0.011868 mol/mol

■ 115. Section 1065.650 is revised to read as follows:

§ 1065.650 Emission calculations.

(a) *General.* Calculate brake-specific emissions over each test interval in a duty cycle. Refer to the standard-setting part for any calculations you might need to determine a composite result, such as a calculation that weights and sums the

results of individual test intervals in a duty cycle. For summations of continuous signals, each indexed value (i.e., ''*i*'') represents (or approximates) the mean value of the parameter for its respective time interval, delta-t.

(b) We specify three alternative ways to calculate brake-specific emissions, as follows:

(1) For any testing, you may calculate the total mass of emissions, as described in paragraph (c) of this section, and divide it by the total work generated over the test interval, as described in paragraph (d) of this section, using the following equation:

$$e = \frac{m}{W} \qquad \text{Eq. 1065.650-1}$$

Example:
m_{NOx} = 64.975 g
W = 25.783 kW·hr
e_{NOx} = 64.975/25.783
e_{NOx} = 2.520 g/(kW·hr)

(2) For discrete-mode steady-state testing, you may calculate the ratio of emission mass rate to power, as described in paragraph (e) of this section, using the following equation:

$$e = \frac{\overline{\dot{m}}}{\overline{P}} \qquad \text{Eq. 1065.650-2}$$

(3) For field testing, you may calculate the ratio of total mass to total work, where these individual values are determined as described in paragraph (f) of this section. You may also use this approach for laboratory testing, consistent with good engineering judgment. This is a special case in which you use a signal linearly proportional to raw exhaust molar flow rate to determine a value proportional to total emissions. You then use the same linearly proportional signal to determine total work using a chemical balance of fuel, intake air, and exhaust as described in § 1065.655, plus information about your engine's brake-specific fuel consumption. Under this method, flow meters need not meet accuracy specifications, but they must meet the applicable linearity and repeatability specifications in subpart D or subpart J of this part. The result is a brake-specific emission value calculated as follows:

$$e = \frac{\tilde{m}}{\tilde{W}} \qquad \text{Eq. 1065.650-3}$$

Example:
$\tilde{m}$ = 805.5 ~g
$\tilde{W}$ = 52.102 ~kW·hr
e_{CO} = 805.5/52.102
e_{CO} = 2.520 g/(kW·hr)

(c) *Total mass of emissions.* To calculate the total mass of an emission, multiply a concentration by its respective flow. For all systems, make preliminary calculations as described in paragraph (c)(1) of this section, then use the method in paragraphs (c)(2) through (4) of this section that is appropriate for your system. Calculate the total mass of emissions as follows:

(1) *Concentration corrections.* Perform the following sequence of preliminary calculations on recorded concentrations:

(i) Correct all THC and CH_4 concentrations, including continuous readings, sample bags readings, and dilution air background readings, for initial contamination, as described in § 1065.660(a).

(ii) Correct all concentrations measured on a ''dry'' basis to a ''wet'' basis, including dilution air background concentrations, as described in § 1065.659.

(iii) Calculate all THC and NMHC concentrations, including dilution air background concentrations, as described in § 1065.660.

(iv) For emission testing with an oxygenated fuel, calculate any HC concentrations, including dilution air background concentrations, as described in § 1065.665. See subpart I of this part for testing with oxygenated fuels.

(v) Correct all the NO_X concentrations, including dilution air background concentrations, for intake-air humidity as described in § 1065.670.

(vi) Compare the background corrected mass of NMHC to background corrected mass of THC. If the background corrected mass of NMHC is greater than 0.98 times the background corrected mass of THC, take the background corrected mass of NMHC to be 0.98 times the background corrected mass of THC. If you omit the NMHC calculations as described in § 1065.660(b)(1), take the background corrected mass of NMHC to be 0.98 times the background corrected mass of THC.

(vii) Calculate brake-specific emissions before and after correcting for drift, including dilution air background concentrations, according to § 1065.672.

(2) *Continuous sampling.* For continuous sampling, you must frequently record a continuously updated concentration signal. You may measure this concentration from a changing flow rate or a constant flow rate (including discrete-mode steady-state testing), as follows:

(i) *Varying flow rate.* If you continuously sample from a changing exhaust flow rate, time align and then multiply concentration measurements by the flow rate from which you extracted it. Use good engineering judgment to time align flow and concentration data to match t_{50} rise or fall times to within ±1 s. We consider the following to be examples of changing flows that require a continuous multiplication of concentration times molar flow rate: raw exhaust, exhaust diluted with a constant flow rate of dilution air, and CVS dilution with a CVS flowmeter that does not have an upstream heat exchanger or electronic flow control. This multiplication results in the flow rate of the emission itself. Integrate the emission flow rate over a test interval to determine the total emission. If the total emission is a molar quantity, convert this quantity to a mass by multiplying it by its molar mass, *M*. The result is the mass of the emission, *m*. Calculate *m* for continuous sampling with variable flow using the following equations:

$$m = M \cdot \sum_{i=1}^{N} x_i \cdot \dot{n}_i \cdot \Delta t \qquad \text{Eq. 1065.650-4}$$

Where:

$$\Delta t = 1/f_{record} \qquad \text{Eq. 1065.650-5}$$

Example:
M_{NMHC} = 13.875389 g/mol
N = 1200
x_{NMHC1} = 84.5 μmol/mol = 84.5 · 10^{-6} mol/mol
x_{NMHC2} = 86.0 μmol/mol = 86.0 · 10^{-6} mol/mol
$\dot{n}_{exh1}$ = 2.876 mol/s
$\dot{n}_{exh2}$ = 2.224 mol/s
f_{record} = 1 Hz
Using Eq. 1065.650–5,
Δt = 1/1 =1 s
m_{NMHC} = 13.875389 · (84.5 · 10^{-6} · 2.876 + 86.0 · 10^{-6} · 2.224 + ... + $x_{NMHC1200} \cdot \dot{n}_{exh}$) · 1
m_{NMHC} = 25.53 g

(ii) *Constant flow rate.* If you continuously sample from a constant exhaust flow rate, use the same emission calculations described in paragraph (c)(2)(i) of this section or calculate the mean or flow-weighted concentration recorded over the test interval and treat the mean as a batch sample, as described in paragraph (c)(3)(ii) of this section. We consider the following to be examples of constant exhaust flows: CVS diluted exhaust with a CVS flowmeter that has either an upstream heat exchanger, electronic flow control, or both.

(3) *Batch sampling.* For batch sampling, the concentration is a single value from a proportionally extracted batch sample (such as a bag, filter, impinger, or cartridge). In this case, multiply the mean concentration of the batch sample by the total flow from which the sample was extracted. You may calculate total flow by integrating a changing flow rate or by determining

the mean of a constant flow rate, as follows:

(i) *Varying flow rate.* If you collect a batch sample from a changing exhaust flow rate, extract a sample proportional to the changing exhaust flow rate. We consider the following to be examples of changing flows that require proportional sampling: Raw exhaust, exhaust diluted with a constant flow rate of dilution air, and CVS dilution with a CVS flowmeter that does not have an upstream heat exchanger or electronic flow control. Integrate the flow rate over a test interval to determine the total flow from which you extracted the proportional sample. Multiply the mean concentration of the batch sample by the total flow from which the sample was extracted. If the total emission is a molar quantity, convert this quantity to a mass by multiplying it by its molar mass, M. The result is the mass of the emission, m. In the case of PM emissions, where the mean PM concentration is already in units of mass per mole of sample, $\bar{M}_{PM}$, simply multiply it by the total flow. The result is the total mass of PM, m_{PM}. Calculate m for batch sampling with variable flow using the following equation:

$$m = M \cdot \bar{x} \cdot \sum_{i=1}^{N} \dot{n}_i \cdot \Delta t \qquad \text{Eq. 1065.650-6}$$

Example:

M_{NOx} = 46.0055 g/mol
N = 9000
$\bar{x}_{NOx}$ = 85.6 µmol/mol = 85.6 · 10^{-6} mol/mol
$\dot{n}_{dexh1}$ = 25.534 mol/s
$\dot{n}_{dexh2}$ = 26.950 mol/s
f_{record} = 5 Hz
Using Eq. 1065.650–5,
Δt = 1/5 = 0.2
m_{NOx} = 46.0055 · 85.6 · 10^{-6} · (25.534 + 26.950 + ... + $\dot{n}_{exh9000}$) · 0.2
m_{NOx} = 4.201 g

(ii) *Constant flow rate.* If you batch sample from a constant exhaust flow rate, extract a sample at a proportional or constant flow rate. We consider the following to be examples of constant exhaust flows: CVS diluted exhaust with a CVS flow meter that has either an upstream heat exchanger, electronic flow control, or both. Determine the mean molar flow rate from which you extracted the constant flow rate sample. Multiply the mean concentration of the batch sample by the mean molar flow rate of the exhaust from which the sample was extracted, and multiply the result by the time of the test interval. If the total emission is a molar quantity, convert this quantity to a mass by multiplying it by its molar mass, M. The result is the mass of the emission, m. In the case of PM emissions, where the mean PM concentration is already in units of mass per mole of sample, $\bar{M}_{PM}$, simply multiply it by the total flow, and the result is the total mass of PM, m_{PM}. Calculate m for sampling with constant flow using the following equations:

$$m = M \cdot \bar{x} \cdot \bar{\dot{n}} \cdot \Delta t \qquad \text{Eq. 1065.650-7}$$

and for PM or any other analysis of a batch sample that yields a mass per mole of sample,

$$\bar{M} = M \cdot \bar{x} \qquad \text{Eq. 1065.650-8}$$

Example:

$\bar{M}_{PM}$ = 144.0 µg/mol = 144.0 · 10^{-6} g/mol
$\bar{\dot{n}}_{dexh}$ = 57.692 mol/s
Δt = 1200 s
m_{PM} = 144.0 · 10^{-6} · 57.692 · 1200
m_{PM} = 9.9692 g

(4) *Additional provisions for diluted exhaust sampling; continuous or batch.* The following additional provisions apply for sampling emissions from diluted exhaust:

(i) For sampling with a constant dilution ratio (DR) of diluted exhaust versus exhaust flow (e.g., secondary dilution for PM sampling), calculate m using the following equation:

$$m = m_{dil} \cdot (DR) \qquad \text{Eq. 1065.650-9}$$

Example:

m_{PMdil} = 6.853 g
DR = 6:1
m_{PM} = 6.853 · (6)
m_{PM} = 41.118 g

(ii) For continuous or batch sampling, you may measure background emissions in the dilution air. You may then subtract the measured background emissions, as described in § 1065.667.

(d) *Total work.* To calculate total work from the engine's primary output shaft, numerically integrate feedback power over a test interval. Before integrating, adjust the speed and torque data for the time alignment used in § 1065.514(c). Any advance or delay used on the feedback signals for cycle validation must also be used for calculating work. Account for work of accessories according to § 1065.110. Exclude any work during cranking and starting. Exclude work during actual motoring operation (negative feedback torques), unless the engine was connected to one or more energy storage devices. Examples of such energy storage devices include hybrid powertrain batteries and hydraulic accumulators, like the ones illustrated in Figure 1 of § 1065.210. Exclude any work during reference zero-load idle periods (0% speed or idle speed with 0 N·m reference torque). Note, that there must be two consecutive reference zero load idle points to establish a period where this applies. Include work during idle points with simulated minimum torque such as Curb Idle Transmissions Torque (CITT) for automatic transmissions in ''drive''. The work calculation method described in paragraphs (b)(1) though (7) of this section meets these requirements using rectangular integration. You may use other logic that gives equivalent results. For example, you may use a trapezoidal integration method as described in paragraph (b)(8) of this section.

(1) Time align the recorded feedback speed and torque values by the amount used in § 1065.514(c).

(2) Calculate shaft power at each point during the test interval by multiplying all the recorded feedback engine speeds by their respective feedback torques.

(3) Adjust (reduce) the shaft power values for accessories according to § 1065.110.

(4) Set all power values during any cranking or starting period to zero. See § 1065.525 for more information about engine cranking.

(5) Set all negative power values to zero, unless the engine was connected to one or more energy storage devices. If the engine was tested with an energy storage device, leave negative power values unaltered.

(6) Set all power values to zero during idle periods with a corresponding reference torque of 0 N·m.

(7) Integrate the resulting values for power over the test interval. Calculate total work as follows:

$$W = \sum_{i=1}^{N} P_i \cdot \Delta t \qquad \text{Eq. 1065.650-10}$$

$$P_i = f_{ni} \cdot T_i \qquad \text{Eq. 1065.650-11}$$

Example:

N = 9000
f_{n1} = 1800.2 rev/min
f_{n2} = 1805.8 rev/min
T_1 = 177.23 N·m
T_2 = 175.00 N·m
C_{rev} = 2 · π rad/rev
C_{t1} = 60 s/min
C_p = 1000 (N·m·rad/s)/kW
f_{record} = 5 Hz
C_{t2} = 3600 s/hr

$$P_1 = \frac{1800.2 \cdot 177.23 \cdot 2 \cdot 3.14159}{60 \cdot 1000}$$

P_1 = 33.41 kW
P_2 = 33.09 kW
Using Eq. 1065.650–5,
Δt = 1/5 = 0.2 s

$$W = \frac{(33.41 + 33.09 + ... + P_{9000}) \cdot 0.2}{3600}$$

W = 16.875 kW·hr

(8) You may use a trapezoidal integration method instead of the

rectangular integration described in this paragraph (b). To do this, you must integrate the fraction of work between points where the torque is positive. You may assume that speed and torque are linear between data points. You may not set negative values to zero before running the integration.

(e) *Steady-state mass rate divided by power.* To determine steady-state brake-specific emissions for a test interval as described in paragraph (b)(2) of this section, calculate the mean steady-state mass rate of the emission, $\overline{\dot{m}}$, and the mean steady-state power, $\bar{P}$ as follows:

(1) To calculate $\overline{\dot{m}}$, multiply its mean concentration, $\bar{x}$, by its corresponding mean molar flow rate, $\overline{\dot{n}}$. If the result is a molar flow rate, convert this quantity to a mass rate by multiplying it by its molar mass, M. The result is the mean mass rate of the emission, $\overline{\dot{m}}$. In the case of PM emissions, where the mean PM concentration is already in units of mass per mole of sample, $\bar{M}_{PM}$, simply multiply it by the mean molar flow rate, $\overline{\dot{n}}$. The result is the mass rate of PM, $\dot{m}_{PM}$. Calculate $\overline{\dot{m}}$ using the following equation:

$$\overline{\dot{m}} = M \cdot \bar{x} \cdot \overline{\dot{n}} \qquad \text{Eq. 1065.650-12}$$

(2) Calculate $\bar{P}$ using the following equation:

$$\bar{P} = \bar{f}_n \cdot \bar{T} \qquad \text{Eq. 1065.650-13}$$

(3) Divide emission mass rate by power to calculate a brake-specific emission result as described in paragraph (b)(2) of this section.

(4) The following example shows how to calculate mass of emissions using mean mass rate and mean power:

M_{CO} = 28.0101 g/mol
$\bar{x}_{CO}$ = 12.00 mmol/mol = 0.01200 mol/mol
$\overline{\dot{n}}$ = 1.530 mol/s
$\bar{f}_n$ = 3584.5 rev/min = 375.37 rad/s
$\bar{T}$ = 121.50 N·m
$\bar{\dot{m}} = 28.0101 \cdot 0.01200 \cdot 1.530$
$\bar{\dot{m}}$ = 0.514 g/s = 1850.4 g/hr
$\bar{P} = 121.5 \cdot 375.37$
$\bar{P}$ = 45607
W = 45.607 kW
$e_{CO} = 1850.4/45.61$
e_{CO} = 40.57 g/(kW·hr)

(f) *Ratio of total mass of emissions to total work.* To determine brake-specific emissions for a test interval as described in paragraph (b)(3) of this section, calculate a value proportional to the total mass of each emission. Divide each proportional value by a value that is similarly proportional to total work.

(1) *Total mass.* To determine a value proportional to the total mass of an emission, determine total mass as described in paragraph (c) of this section, except substitute for the molar flow rate, $\dot{n}$, or the total flow, n, with a signal that is linearly proportional to molar flow rate, $\tilde{\dot{n}}$, or linearly proportional to total flow, $\tilde{n}$ as follows:

$$\tilde{\dot{m}}_{fueli} = \frac{1}{w_{fuel}} \cdot \frac{M_C \cdot \tilde{\dot{n}}_i \cdot x_{Ccombdryi}}{1 + x_{H2Oexhdryi}} \qquad \text{Eq. 1065.650-14}$$

(2) *Total work.* To calculate a value proportional to total work over a test interval, integrate a value that is proportional to power. Use information about the brake-specific fuel consumption of your engine, e_{fuel}, to convert a signal proportional to fuel flow rate to a signal proportional to power. To determine a signal proportional to fuel flow rate, divide a signal that is proportional to the mass rate of carbon products by the fraction of carbon in your fuel, w_c. For your fuel, you may use a measured w_c or you may use the default values in Table 1 of § 1065.655. Calculate the mass rate of carbon from the amount of carbon and water in the exhaust, which you determine with a chemical balance of fuel, intake air, and exhaust as described in § 1065.655. In the chemical balance, you must use concentrations from the flow that generated the signal proportional to molar flow rate, $\tilde{\dot{n}}$, in paragraph (e)(1) of this section. Calculate a value proportional to total work as follows:

$$\tilde{W} = \sum_{i=1}^{N} \tilde{P}_i \cdot \Delta t \qquad \text{Eq. 1065.650-15}$$

Where:

$$\tilde{P}_i = \frac{\tilde{\dot{m}}_{fueli}}{e_{fuel}} \qquad \text{Eq. 1065.650-16}$$

(3) *Brake-specific emissions.* Divide the value proportional to total mass by the value proportional to total work to determine brake-specific emissions, as described in paragraph (b)(3) of this section.

(4) *Example.* The following example shows how to calculate mass of emissions using proportional values:

N = 3000
f_{record} = 5 Hz
e_{fuel} = 285 g/(kW·hr)
w_{fuel} = 0.869 g/g
M_c = 12.0107 g/mol
$\dot{n}_1$ = 3.922 ~mol/s = 14119.2 mol/hr
$x_{Ccombdry1}$ = 91.634 mmol/mol = 0.091634 mol/mol
$x_{H2Oexh1}$ = 27.21 mmol/mol = 0.02721 mol/mol
Using Eq. 1065.650–5,
Δt = 0.2 s

$$\tilde{W} = \frac{12.0107\left[\frac{3.922 \cdot 0.091634}{1 + 0.02721} + \frac{\tilde{\dot{n}}_2 \cdot x_{Ccombdry2}}{1 + x_{H2Oexh2}} + \ldots + \frac{\tilde{\dot{n}}_{3000} \cdot x_{Ccombdry3000}}{1 + x_{H2Oexh3000}}\right] \cdot 0.2}{285 \cdot 0.869}$$

$\tilde{W}$ = 5.09 ~(kW·hr)

(g) *Rounding.* Round emission values only after all calculations are complete and the result is in g/(kW·hr) or units equivalent to the units of the standard, such as g/(hp·hr). See the definition of ''Round'' in § 1065.1001.

■ 116. Section 1065.655 is revised to read as follows:

§ 1065.655 Chemical balances of fuel, intake air, and exhaust.

(a) *General.* Chemical balances of fuel, intake air, and exhaust may be used to calculate flows, the amount of water in their flows, and the wet concentration of constituents in their flows. With one flow rate of either fuel, intake air, or exhaust, you may use chemical balances to determine the flows of the other two. For example, you may use chemical balances along with either intake air or fuel flow to determine raw exhaust flow.

(b) *Procedures that require chemical balances.* We require chemical balances when you determine the following:

(1) A value proportional to total work, $\tilde{W}$, when you choose to determine brake-specific emissions as described in § 1065.650(e).

(2) The amount of water in a raw or diluted exhaust flow, x_{H2Oexh}, when you do not measure the amount of water to correct for the amount of water removed by a sampling system. Correct for removed water according to § 1065.659(c)(2).

(3) The flow-weighted mean fraction of dilution air in diluted exhaust, $x_{dil/exh}$, when you do not measure dilution air flow to correct for background emissions as described in § 1065.667(c). Note that if you use chemical balances for this purpose, you are assuming that your exhaust is stoichiometric, even if it is not.

(c) *Chemical balance procedure.* The calculations for a chemical balance involve a system of equations that require iteration. We recommend using a computer to solve this system of equations. You must guess the initial values of up to three quantities: The amount of water in the measured flow, x_{H2Oexh}, fraction of dilution air in diluted exhaust, $x_{dil/exh}$, and the amount of products on a C_1 basis per dry mole of dry measured flow, $x_{Ccombdry}$. You may use time-weighted mean values of combustion air humidity and dilution air humidity in the chemical balance; as long as your combustion air and dilution air humidities remain within tolerances of ± 0.0025 mol/mol of their respective mean values over the test interval. For each emission concentration, x, and amount of water, x_{H2Oexh}, you must determine their completely dry concentrations, x_{dry} and $x_{H2Oexhdry}$. You must also use your fuel's atomic hydrogen-to-carbon ratio, α, and oxygen-to-carbon ratio, β. For your fuel, you may measure α and β or you may use the default values in Table 1 of § 1065.650. Use the following steps to complete a chemical balance:

(1) Convert your measured concentrations such as, $x_{CO2meas}$, x_{NOmeas}, and x_{H2Oint}, to dry concentrations by dividing them by one minus the amount of water present during their respective measurements; for example: $x_{H2OxCO2meas}$, $x_{H2OxNOmeas}$, and x_{H2Oint}. If the amount of water present during a ''wet'' measurement is the same as the unknown amount of water in the exhaust flow, x_{H2Oexh}, iteratively solve for that value in the system of equations. If you measure only total NO_X and not NO and NO_2 separately, use good engineering judgment to estimate a split in your total NO_X concentration between NO and NO_2 for the chemical balances. For example, if you measure emissions from a stoichiometric spark-ignition engine, you may assume all NO_X is NO. For a compression-ignition engine, you may assume that your molar concentration of NO_X, x_{NOx}, is 75% NO and 25% NO_2. For NO_2 storage aftertreatment systems, you may assume x_{NOx} is 25% NO and 75% NO_2. Note that for calculating the mass of NO_X emissions, you must use the molar mass of NO_2 for the effective molar mass of all NO_X species, regardless of the actual NO_2 fraction of NO_X.

(2) Enter the equations in paragraph (c)(4) of this section into a computer program to iteratively solve for x_{H2Oexh}, $x_{Ccombdry}$, and $x_{dil/exh}$. Use good engineering judgment to guess initial values for x_{H2Oexh}, $x_{Ccombdry}$, and $x_{dil/exh}$. We recommend guessing an initial amount of water that is about twice the amount of water in your intake or dilution air. We recommend guessing an initial value of $x_{Ccombdry}$ as the sum of your measured CO_2, CO, and THC values. We also recommend guessing an initial $x_{dil/exh}$ between 0.75 and 0.95, such as 0.8. Iterate values in the system of equations until the most recently updated guesses are all within ± 1% of their respective most recently calculated values.

(3) Use the following symbols and subscripts in the equations for this paragraph (c):

$x_{dil/exh}$ = Amount of dilution gas or excess air per mole of exhaust.
x_{H2Oexh} = Amount of water in exhaust per mole of exhaust.
$x_{Ccombdry}$ = Amount of carbon from fuel in the exhaust per mole of dry exhaust.
$x_{H2Oexhdry}$ = Amount of water in exhaust per dry mole of dry exhaust.
$x_{prod/intdry}$ = Amount of dry stoichiometric products per dry mole of intake air.
$x_{dil/exhdry}$ = Amount of dilution gas and/or excess air per mole of dry exhaust.
$x_{int/exhdry}$ = Amount of intake air required to produce actual combustion products per mole of dry (raw or diluted) exhaust.
$x_{raw/exhdry}$ = Amount of undiluted exhaust, without excess air, per mole of dry (raw or diluted) exhaust.
x_{O2int} = Amount of intake air O_2 per mole of intake air.
$x_{CO2intdry}$ = Amount of intake air CO_2 per mole of dry intake air. You may use $x_{CO2intdry}$ = 375 μmol/mol, but we recommend measuring the actual concentration in the intake air.
$x_{H2Ointdry}$ = Amount of intake air H_2O per mole of dry intake air.
x_{CO2int} = Amount of intake air CO_2 per mole of intake air.
x_{CO2dil} = Amount of dilution gas CO_2 per mole of dilution gas.
$x_{CO2dildry}$ = Amount of dilution gas CO_2 per mole of dry dilution gas. If you use air as diluent, you may use $x_{CO2dildry}$ = 375 μmol/mol, but we recommend measuring the actual concentration in the intake air.
$x_{H2Odildry}$ = Amount of dilution gas H_2O per mole of dry dilution gas.
x_{H2Odil} = Amount of dilution gas H_2O per mole of dilution gas.
$x_{[emission]meas}$ = Amount of measured emission in the sample at the respective gas analyzer.
$x_{[emission]dry}$ = Amount of emission per dry mole of dry sample.
$x_{H2O[emission]meas}$ = Amount of water in sample at emission-detection location. Measure or estimate these values according to § 1065.145(d)(2).
x_{H2Oint} = Amount of water in the intake air, based on a humidity measurement of intake air.
α = Atomic hydrogen-to-carbon ratio in fuel.
β = Atomic oxygen-to-carbon ratio in fuel.

(4) Use the following equations to iteratively solve for $x_{dil/exh}$, x_{H2Oexh}, and $x_{Ccombdry}$:

$$x_{dil/exh} = 1 - \frac{x_{raw/exhdry}}{1 + x_{H2Oexhdry}} \quad \text{Eq. 1065.655-1}$$

$$x_{H2Oexh} = \frac{x_{H2Oexhdry}}{1 + x_{H2Oexhdry}} \quad \text{Eq. 1065.655-2}$$

$$x_{Ccombdry} = x_{CO2dry} + x_{COdry} + x_{THCdry} - x_{CO2dil} \cdot x_{dil/exhdry} - x_{CO2int} \cdot x_{int/exhdry} \quad \text{Eq. 1065.655-3}$$

$$x_{H2Oexhdry} = \frac{\alpha}{2}\left(x_{Ccombdry} - x_{THCdry}\right) + x_{H2Odil} \cdot x_{dil/exhdry} + x_{H2Oint} \cdot x_{int/exhdry} \quad \text{Eq. 1065.655-4}$$

$$x_{dil/exhdry} = \frac{x_{dil/exh}}{1 - x_{H2Oexh}} \quad \text{Eq. 1065.655-5}$$

$$x_{int/exhdry} = \frac{1}{2 \cdot x_{O2int}} \left(\left(\frac{\alpha}{2} - \beta + 2 \right) \cdot \left(x_{Ccombdry} - x_{THCdry} \right) - \left(x_{COdry} - x_{NOdry} - 2x_{NO2dry} \right) \right) \quad \text{Eq. 1065.655-6}$$

$$x_{raw/exhdry} = \frac{1}{2} \left(\left(\frac{\alpha}{2} + \beta \right) \cdot \left(x_{Ccombdry} - x_{THCdry} \right) + \left(2x_{THCdry} + x_{COdry} - x_{NO2dry} \right) \right) + x_{int/exhdry} \quad \text{Eq. 1065.655-7}$$

$$x_{O2int} = \frac{0.209820 - x_{CO2intdry}}{1 + x_{H2Ointdry}} \quad \text{Eq. 1065.655-8}$$

$$x_{CO2int} = \frac{x_{CO2intdry}}{1 + x_{H2Ointdry}} \quad \text{Eq. 1065.655-9}$$

$$x_{H2Ointdry} = \frac{x_{H2Oint}}{1 - x_{H2Oint}} \quad \text{Eq. 1065.655-10}$$

$$x_{CO2dil} = \frac{x_{CO2dildry}}{1 + x_{H2Odildry}} \quad \text{Eq. 1065.655-11}$$

$$x_{H2Odildry} = \frac{x_{H2Odil}}{1 - x_{H2Odil}} \quad \text{Eq. 1065.655-12}$$

$$x_{COdry} = \frac{x_{COmeas}}{1 - x_{H2OCOmeas}} \quad \text{Eq. 1065.655-13}$$

$$x_{CO2dry} = \frac{x_{CO2meas}}{1 - x_{H2OCO2meas}} \quad \text{Eq. 1065.655-14}$$

$$x_{NOdry} = \frac{x_{NOmeas}}{1 - x_{H2ONOmeas}} \quad \text{Eq. 1065.655-15}$$

$$x_{NO2dry} = \frac{x_{NO2meas}}{1 - x_{H2ONO2meas}} \quad \text{Eq. 1065.655-16}$$

$$x_{THCdry} = \frac{x_{THCmeas}}{1 - x_{H2OTHCmeas}} \quad \text{Eq. 1065.655-17}$$

(5) The following example is a solution for $x_{dil/exh}$, x_{H2Oexh}, and $x_{Ccombdry}$ using the equations in paragraph (c)(4) of this section:

$$x_{dil/exh} = 1 - \frac{0.182}{1 + \frac{35.18}{1000}} = 0.824 mol/mol \qquad x_{H2Oexh} = \frac{35.18}{1 + \frac{35.18}{1000}} = 33.98 mmol/mol$$

$$x_{Ccombdry} = 0.025 + \frac{29.3}{1000000} + \frac{47.6}{1000000} - \frac{0.371}{1000} \cdot 0.853 - \frac{0.369}{1000} \cdot 0.171 = 0.0247 mol/mol$$

$$x_{H2Oexhdry} = \frac{1.8}{2}\left(0.0247 - \frac{47.6}{1000000}\right) + 0.012 \cdot 0.853 + 0.017 \cdot 0.171 = 0.035 mol/mol$$

$$x_{dil/exhdry} = \frac{0.824}{1 - 0.034} = 0.853 mol/mol$$

$$x_{int/exhdry} = \frac{1}{2 \cdot 0.206}\left(\begin{array}{l}\left(\left(\frac{1.8}{2} - 0.050 + 2\right) \cdot \left(0.0247 - \frac{47.6}{1000000}\right) - \\ \left(\frac{29.3}{1000000} - \frac{50.4}{1000000} - 2 \cdot \frac{12.1}{1000000}\right)\end{array}\right) = 0.171 mol/mol$$

$$x_{raw/exhdry} = \frac{1}{2}\left(\begin{array}{l}\left(\left(\frac{1.8}{2} + 0.050\right) \cdot \left(0.0247 - \frac{47.6}{1000000}\right) + \\ \left(2 \cdot \frac{47.6}{1000000} + \frac{29.3}{1000000} - \frac{12.1}{1000000}\right)\end{array}\right) + 0.171 = 0.182 mol/mol$$

$$x_{O2int} = \frac{0.209820 - 0.000375}{1 + \frac{17.22}{1000}} = 0.206 mol/mol$$

$$x_{CO2int} = \frac{0.000375 \times 1000}{1 + \frac{17.22}{1000}} = 0.371 mmol/mol$$

$$x_{H2Ointdry} = \frac{16.93}{1 - \frac{16.93}{1000}} = 17.22 mmol/mol \qquad x_{COdry} = \frac{29.0}{1 - \frac{8.601}{1000}} = 29.3 mmol/mol \qquad x_{NO2dry} = \frac{12.0}{1 - \frac{8.601}{1000}} = 12.1 mmol/mol$$

$$x_{CO2dil} = \frac{0.375}{1 + \frac{12.01}{1000}} = 0.37 mmol/mol \qquad x_{CO2dry} = \frac{24.98}{1 - \frac{8.601}{1000}} = 25.2 mmol/mol \qquad x_{THCdry} = \frac{46}{1 - \frac{33.98}{1000}} = 47.6 mmol/mol$$

$\alpha = 1.8$
$\beta = 0.05$

$$x_{H2Odildry} = \frac{11.87}{1 - \frac{11.87}{1000}} = 12.01 mmol/mol \qquad x_{NOdry} = \frac{50.0}{1 - \frac{8.601}{1000}} = 50.4 mmol/mol$$

TABLE 1 OF § 1065.655.—DEFAULT VALUES OF ATOMIC HYDROGEN-TO-CARBON RATIO, α, ATOMIC OXYGEN-TO-CARBON RATIO, β, AND CARBON MASS FRACTION OF FUEL, w_C, FOR VARIOUS FUELS

Fuel	Atomic hydrogen and oxygen-to-carbon ratios $CH\alpha O\beta$	Carbon mass concentration, w_C g/g
Gasoline	$CH_{1.85}O_0$	0.866
#2 Diesel	$CH_{1.80}O_0$	0.869
#1 Diesel	$CH_{1.93}O_0$	0.861
Liquified Petroleum Gas	$CH_{2.64}O_0$	0.819
Natural gas	$CH_{3.78}O_{0.016}$	0.747
Ethanol	$CH_3O_{0.5}$	0.521
Methanol	CH_4O_1	0.375

(d) *Calculated raw exhaust molar flow rate from measured intake air molar flow rate or fuel mass flow rate.* You may calculate the raw exhaust molar flow rate from which you sampled emissions, $\dot{n}_{exh}$, based on the measured intake air molar flow rate, $\dot{n}_{int}$, or the measured fuel mass flow rate, $\dot{n}_{fuel}$, and the values calculated using the chemical balance in paragraph (c) of this section. Note that the chemical balance must be based on raw exhaust gas concentrations. Solve for the chemical balance in paragraph (c) of this section at the same frequency that you update and record $\dot{n}_{int}$or $\dot{n}_{fuel}$.

(1) *Crankcase flow rate.* If engines are not subject to crankcase controls under the standard-setting part, you may calculate raw exhaust flow based on $\dot{n}_{int}$or $\dot{n}_{fuel}$ using one of the following:

(i) You may measure flow rate through the crankcase vent and subtract it from the calculated exhaust flow.

(ii) You may estimate flow rate through the crankcase vent by engineering analysis as long as the uncertainty in your calculation does not adversely affect your ability to show that your engines comply with applicable emission standards.

(iii) You may assume your crankcase vent flow rate is zero.

(2) *Intake air molar flow rate calculation.* Based on $\dot{n}_{int}$, calculate $\dot{n}_{exh}$ as follows:

$$\dot{n}_{exh} = \frac{\dot{n}_{int}}{\left(1 + \frac{\left(x_{int/exhdry} - x_{raw/exhdry}\right)}{\left(1 + x_{H2Oexhdry}\right)}\right)} \qquad \text{Eq. 1065.655-18}$$

Where:

$\dot{n}_{exh}$ = raw exhaust molar flow rate from which you measured emissions.

$\dot{n}_{int}$ = intake air molar flow rate including humidity in intake air.

Example:

$\dot{n}_{int}$ = 3.780 mol/s

$x_{int/exhdry}$ = 0.69021 mol/mol

$x_{raw/exhdry}$ = 1.10764 mol/mol

$x_{H2Oexhdry}$ = 107.64 mmol/mol = 0.10764 mol/mol

$$\dot{n}_{exh} = \frac{3.780}{\left(1 + \frac{(0.69021 - 1.10764)}{(1 + 0.10764)}\right)}$$

$\dot{n}_{exh}$ = 6.066 mol/s

(3) *Fuel mass flow rate calculation.* Based on m_{fuel}, calculate $\dot{n}_{exh}$ as follows:

$$\dot{n}_{exh} = \frac{\dot{m}_{fuel} \cdot w_c \cdot \left(1 + x_{H2Oexhdry}\right)}{M_c \cdot x_{Ccombdry}} \qquad \text{Eq. 1065.655-19}$$

Where:

$\dot{n}_{exh}$ = raw exhaust molar flow rate from which you measured emissions.

$\dot{m}_{fuel}$ = fuel flow rate including humidity in intake air.

Example:

$\dot{m}_{fuel}$ = 7.559 g/s

w_C = 0.869 g/g

M_C = 12.0107 g/mol

$x_{Ccombdry}$ = 99.87 mmol/mol = 0.09987 mol/mol

$x_{H2Oexhdry}$ = 107.64 mmol/mol = 0.10764 mol/mol

$$\dot{n}_{exh} = \frac{7.559 \cdot 0.869 \cdot (1 + 0.10764)}{12.0107 \cdot 0.09987}$$

$\dot{n}_{exh}$ = 6.066 mol/s

■ 117. Section 1065.659 is revised to read as follows:

§ 1065.659 Removed water correction.

(a) If you remove water upstream of a concentration measurement, *x*, or upstream of a flow measurement, *n*, correct for the removed water. Perform this correction based on the amount of water at the concentration measurement, $x_{H2O[emission]meas}$, and at the flow meter, x_{H2Oexh}, whose flow is used to determine the concentration's total mass over a test interval.

(b) When using continuous analyzers downstream of a sample dryer for transient and ramped-modal testing, you must correct for removed water using signals from other continuous analyzers. When using batch analyzers downstream of a sample dryer, you must correct for removed water by using signals either from other batch analyzers or from the flow-weighted average concentrations from continuous analyzers. Downstream of where you removed water, you may determine the

amount of water remaining by any of the following:

(1) Measure the dewpoint and absolute pressure downstream of the water removal location and calculate the amount of water remaining as described in § 1065.645.

(2) When saturated water vapor conditions exist at a given location, you may use the measured temperature at that location as the dewpoint for the downstream flow. If we ask, you must demonstrate how you know that saturated water vapor conditions exist. Use good engineering judgment to measure the temperature at the appropriate location to accurately reflect the dewpoint of the flow. Note that if you use this option and the water correction in paragraph (d) of this section results in a corrected value that is greater than the measured value, your saturation assumption is invalid and you must determine the water content according to paragraph (b)(1) of this section.

(3) You may also use a nominal value of absolute pressure based on an alarm set point, a pressure regulator set point, or good engineering judgment.

(4) Set $x_{H2O[emission]meas}$ equal to that of the measured upstream humidity condition if it is lower than the dryer saturation conditions.

(c) For a corresponding concentration or flow measurement where you did not remove water, you may determine the amount of initial water by any of the following:

(1) Use any of the techniques described in paragraph (b) of this section.

(2) If the measurement comes from raw exhaust, you may determine the amount of water based on intake-air humidity, plus a chemical balance of fuel, intake air and exhaust as described in § 1065.655.

(3) If the measurement comes from diluted exhaust, you may determine the amount of water based on intake-air humidity, dilution air humidity, and a chemical balance of fuel, intake air, and exhaust as described in § 1065.655.

(d) Perform a removed water correction to the concentration measurement using the following equation:

$$x = x_{[emission]meas} \cdot \left[\frac{1 - x_{H2Oexh}}{1 - x_{H2O[emission]meas}} \right] \quad \text{Eq. 1065.659-1}$$

Example:

x_{COmeas} = 29.0 μmol/mol
$x_{H2OCOmeas}$ = 8.601 mmol/mol = 0.008601 mol/mol
x_{H2Oexh} = 34.04 mmol/mol = 0.03404 mol/mol

$$x_{CO} = 29.0 \cdot \left[\frac{1 - 0.03404}{1 - 0.008601} \right]$$

x_{CO} = 28.3 μmol/mol

■ 118. Section 1065.660 is revised to read as follows:

§ 1065.660 THC and NMHC determination.

(a) *THC determination and THC/CH_4 initial contamination corrections.* (1) If we require you to determine THC emissions, calculate $x_{THC[THC–FID]}$ using the initial THC contamination concentration $x_{THC[THC–FID]init}$ from § 1065.520 as follows:

$$x_{THC[THC\text{-}FID]cor} = x_{THC[THC\text{-}FID]uncor} - x_{THC[THC\text{-}FID]init} \quad \text{Eq. 1065.660-1}$$

Example:

$x_{THCuncor}$ = 150.3 μmol/mol
$x_{THCinit}$ = 1.1 μmol/mol
x_{THCcor} = 150.3 − 1.1
x_{THCcor} = 149.2 μmol/mol

(2) For the NMHC determination described in paragraph (b) of this section, correct $x_{THC[THC–FID]}$ for initial HC contamination using Eq. 1065.660–1. You may correct for initial contamination of the CH_4 sample train using Eq. 1065.660–1, substituting in CH_4 concentrations for THC.

(b) *NMHC determination.* Use one of the following to determine NMHC concentration, x_{NMHC}:

(1) If you do not measure CH_4, you may determine NMHC concentrations as described in § 1065.650(c)(1)(vi).

(2) For nonmethane cutters, calculate x_{NMHC} using the nonmethane cutter's penetration fractions (PF) of CH_4 and C_2H_6 from § 1065.365, and using the HC contamination and wet-to-dry corrected THC concentration $x_{THC[THC–FID]cor}$ as determined in paragraph (a) of this section.

(i) Use the following equation for penetration fractions determined using an NMC configuration as outlined in § 1065.365(d):

$$x_{NMHC} = \frac{x_{THC[THC\text{-}FID]cor} - x_{THC[NMC\text{-}FID]} \cdot RF_{CH4[THC\text{-}FID]}}{1 - RFPF_{C2H6[NMC\text{-}FID]} \cdot RF_{CH4[THC\text{-}FID]}} \quad \text{Eq. 1065.660-2}$$

Where:

x_{NMHC} = concentration of NMHC.
$x_{THC[THC–FID]cor}$ = concentration of THC, HC contamination and dry-to-wet corrected, as measured by the THC FID during sampling while bypassing the NMC.
$x_{THC[NMC–FID]}$ = concentration of THC, HC contamination (optional) and dry-to-wet corrected, as measured by the THC FID during sampling through the NMC.
$RF_{CH4[THC–FID]}$ = response factor of THC FID to CH_4, according to § 1065.360(d).
$RFPF_{C2H6[NMC–FID]}$ = nonmethane cutter combined ethane response factor and penetration fraction, according to § 1065.365(d).

Example:

$x_{THC[THC–FID]cor}$ = 150.3 μmol/mol
$x_{THC[NMC–FID]}$ = 20.5 μmol/mol
$RFPF_{C2H6[NMC–FID]}$ = 0.019
$RF_{CH4[THC–FID]}$ = 1.05

$$x_{NMHC} = \frac{150.3 - 20.5 \cdot 1.05}{1 - 0.019 \cdot 1.05}$$

x_{NMHC} = 130.4 μmol/mol

(ii) For penetration fractions determined using an NMC configuration as outlined in § 1065.365(e), use the following equation:

$$x_{NMHC} = \frac{x_{THC[THC\text{-}FID]cor} \cdot PF_{CH4[NMC\text{-}FID]} - x_{THC[NMC\text{-}FID]}}{PF_{CH4[NMC\text{-}FID]} - PF_{C2H6[NMC\text{-}FID]}} \quad \text{Eq. 1065.660-3}$$

Where:

x_{NMHC} = concentration of NMHC.

$x_{THC[THC–FID]cor}$ = concentration of THC, HC contamination and dry-to-wet corrected, as measured by the THC FID during sampling while bypassing the NMC.

$PF_{CH4[NMC–FID]}$ = nonmethane cutter CH_4 penetration fraction, according to § 1065.365(e).

$x_{THC[NMC–FID]}$ = concentration of THC, HC contamination (optional) and dry-to-wet corrected, as measured by the THC FID during sampling through the NMC.

$PF_{C2H6[NMC–FID]}$ = nonmethane cutter ethane penetration fraction, according to § 1065.365(e).

Example:

$x_{THC[THC–FID]cor}$ = 150.3 µmol/mol
$PF_{CH4[NMC–FID]}$ = 0.990
$x_{THC[NMC–FID]}$ = 20.5 µmol/mol
$PF_{C2H6[NMC–FID]}$ = 0.020

$$x_{NMHC} = \frac{150.3 \cdot 0.990 - 20.5}{0.990 - 0.020}$$

x_{NMHC} = 132.3 µmol/mol

(iii) For penetration fractions determined using an NMC configuration as outlined in § 1065.365(f), use the following equation:

$$x_{NMHC} = \frac{x_{THC[THC\text{-}FID]cor} \cdot PF_{CH4[NMC\text{-}FID]} - x_{THC[NMC\text{-}FID]} \cdot RF_{CH4[THC\text{-}FID]}}{PF_{CH4[NMC\text{-}FID]} - RFPF_{C2H6[NMC\text{-}FID]} \cdot RF_{CH4[THC\text{-}FID]}} \quad \text{Eq. 1065.660-4}$$

Where:

x_{NMHC} = concentration of NMHC.

$x_{THC[THC-FID]cor}$ = concentration of THC, HC contamination and dry-to-wet corrected, as measured by the THC FID during sampling while bypassing the NMC.

$PF_{CH4[NMC-FID]}$ = nonmethane cutter CH_4 penetration fraction, according to § 1065.365(f).

$x_{THC[NMC-FID]}$ = concentration of THC, HC contamination (optional) and dry-to-wet corrected, as measured by the THC FID during sampling through the NMC.

$RFPF_{C2H6[NMC-FID]}$ = nonmethane cutter CH_4 combined ethane response factor and penetration fraction, according to § 1065.365(f).

$RF_{CH4[THC-FID]}$ = response factor of THC FID to CH_4, according to § 1065.360(d).

Example:

$x_{THC[THC-FID]cor}$ = 150.3 µmol/mol
$PF_{CH4[NMC-FID]}$ = 0.990
$x_{THC[NMC-FID]}$ = 20.5 µmol/mol
$RFPF_{C2H6[NMC-FID]}$ = 0.019
$RF_{CH4[THC-FID]}$ = 0.980

$$x_{NMHC} = \frac{150.3 \cdot 0.990 - 20.5 \cdot 0.980}{0.990 - 0.019 \cdot 0.980}$$

x_{NMHC} = 132.5 µmol/mol

(3) For a gas chromatograph, calculate x_{NMHC} using the THC analyzer's response factor (*RF*) for CH_4, from § 1065.360, and the HC contamination and wet-to-dry corrected initial THC concentration $x_{THC[THC-FID]cor}$ as determined in section (a) above as follows:

$$x_{NMHC} = x_{THC[THC\text{-}FID]cor} - RF_{CH4[THC\text{-}FID]} \cdot x_{CH4} \quad \text{Eq. 1065.660-5}$$

Where:

x_{NMHC} = concentration of NMHC.

$x_{THC[THC-FID]cor}$ = concentration of THC, HC contamination and dry-to-wet corrected, as measured by the THC FID.

x_{CH4} = concentration of CH_4, HC contamination (optional) and dry-to-wet corrected, as measured by the gas chromatograph FID.

$RF_{CH4[THC-FID]}$ = response factor of THC-FID to CH_4.

Example:

$x_{THC[THC-FID][cor}$ = 145.6 µmol/mol
$RF_{CH4[THC-FID]}$ = 0.970
x_{CH4} = 18.9 µmol/mol
x_{NMHC} = 145.6 − 0.970 · 18.9
x_{NMHC} = 127.3 µmol/mol

■ 119. Section 1065.665 is revised to read as follows:

§ 1065.665 THCE and NMHCE determination.

(a) If you measured an oxygenated hydrocarbon's mass concentration, first calculate its molar concentration in the exhaust sample stream from which the sample was taken (raw or diluted exhaust), and convert this into a C_1-equivalent molar concentration. Add these C_1-equivalent molar concentrations to the molar concentration of NOTHC. The result is the molar concentration of THCE. Calculate THCE concentration using the following equations, noting that equation 1065.665–3 is only required if you need to convert your OHC concentration from mass to moles:

$$x_{THCE} = x_{NOTHC} + \sum_{i=1}^{N} \left(x_{OHCi} - x_{OHCi\text{-}init} \right) \quad \text{Eq. 1065.665-1}$$

$$x_{NOTHC} = x_{THC[THC\text{-}FID]cor} - \sum_{i=1}^{N} \left(x_{OHCi} \cdot RF_{OHCi[THC\text{-}FID]} \right) \quad \text{Eq. 1065.665-2}$$

$$x_{OHCi} = \frac{\frac{m_{dexhOHCi}}{M_{OHCi}}}{\frac{m_{dexh}}{M_{dexh}}} = \frac{n_{dexhOHCi}}{n_{dexh}} \qquad \text{Eq. 1065.665-3}$$

Where:

x_{THCE} = The C_1-equivalent sum of the concentration of carbon mass contributions of non-oxygenated hydrocarbons, alcohols, and aldehydes.

x_{NOTHC} = The C_1-equivalent sum of the concentration of nonoxygenated THC.

x_{OHCi} = The C_1-equivalent concentration of oxygenated species *i* in diluted exhaust, not corrected for initial contamination.

$x_{OHCi\text{-init}}$ = The C_1-equivalent concentration of the initial system contamination (optional) of oxygenated species *i*, dry-to-wet corrected.

$x_{THC[THC\text{-}FID]cor}$ = The C_1-equivalent response to NOTHC and all OHC in diluted exhaust, HC contamination and dry-to-wet corrected, as measured by the THC-FID.

$RF_{OHCi[THC\text{-}FID]}$ = The response factor of the FID to species *i* relative to propane on a C_1-equivalent basis.

$C^{\#}$ = The mean number of carbon atoms in the particular compound.

M_{dexh} = The molar mass of diluted exhaust as determined in § 1065.340.

$m_{dexhOHCi}$ = The mass of oxygenated species *i* in dilute exhaust.

M_{OHCi} = The C_1-equivalent molecular weight of oxygenated species *i*.

m_{dexh} = The mass of diluted exhaust.

$n_{dexhOHCi}$ = The number of moles of oxygenated species *i* in total diluted exhaust flow.

n_{dexh} = The total diluted exhaust flow.

(b) If we require you to determine NMHCE, use the following equation:

$$x_{NMHCE} = x_{THCE} - RF_{CH4[THC\text{-}FID]} \cdot x_{CH4} \qquad \text{Eq. 1065.665-4}$$

Where:

x_{NMHCE} = The C_1-equivalent sum of the concentration of carbon mass contributions of non-oxygenated NMHC, alcohols, and aldehydes.

$RF_{CH4[THC–FID]}$ = response factor of THC–FID to CH_4.

x_{CH4} = concentration of CH_4, HC contamination (optional) and dry-to-wet corrected, as measured by the gas chromatograph FID.

(c) The following example shows how to determine NMHCE emissions based on ethanol (C_2H_5OH), methanol (CH_3OH), acetaldehyde (C_2H_4O), and formaldehyde (HCHO) as C_1-equivalent molar concentrations:

$x_{THC[THC–FID]cor}$ = 145.6 μmol/mol
x_{CH4} = 18.9 μmol/mol
x_{C2H5OH} = 100.8 μmol/mol
x_{CH3OH} = 1.1 μmol/mol
x_{C2H4O} = 19.1 μmol/mol
x_{HCHO} = 1.3 μmol/mol
$RF_{CH4[THC–FID]}$ = 1.07
$RF_{C2H5OH[THC–FID]}$ = 0.76
$RF_{CH3OH[THC–FID]}$ = 0.74
$RF_{H2H4O[THC–FID]}$ = 0.50
$RF_{HCHO[THC–FID]}$ = 0.0
$x_{NMHCE} = x_{THC[THC–FID]cor} - (x_{C2H5OH} \cdot RF_{C2H5OH[THC–FID]} + x_{CH3OH} \cdot RF_{CH3OH[THC–FID]} + x_{C2H4O} \cdot RF_{C2H4O[THC–FID]} + x_{HCHO} \cdot RF_{HCHO[THC–FID]} + x_{C2H5OH} + x_{CH3OH} + x_{C2H4O} + x_{HCHO} - (RF_{CH4[THC\text{-}FID]} \cdot x_{CH4})$
$x_{NMHCE} = 145.6 - (100.8 \cdot 0.76 + 1.1 \cdot 0.74 + 19.1 \cdot 0.50 + 1.3 \cdot 0) + 100.8 + 1.1 + 19.1 + 1.3 - (1.07 \cdot 18.9)$
x_{NMHCE} = 160.71 μmol/mol

■ 120. Section 1065.667 is amended by revising paragraph (b) to read as follows:

§ 1065.667 Dilution air background emission correction.

* * * * *

(b) You may determine the total flow of dilution air by a direct flow measurement. In this case, calculate the total mass of background as described in § 1065.650(b), using the dilution air flow, n_{dil}. Subtract the background mass from the total mass. Use the result in brake-specific emission calculations.

* * * * *

■ 121. Section 1065.670 is amended by revising the introductory text to read as follows:

§ 1065.670 NO_X intake-air humidity and temperature corrections.

See the standard-setting part to determine if you may correct NO_X emissions for the effects of intake-air humidity or temperature. Use the NO_X intake-air humidity and temperature corrections specified in the standard-setting part instead of the NO_X intake-air humidity correction specified in this part 1065. If the standard-setting part does not prohibit correcting NO_X emissions for intake-air humidity according to this part 1065, first apply any NO_X corrections for background emissions and water removal from the exhaust sample, then correct NO_X concentrations for intake-air humidity. You may use a time-weighted mean combustion air humidity to calculate this correction if your combustion air humidity remains within a tolerance of ± 0.0025 mol/mol of the mean value over the test interval. For intake-air humidity correction, use one of the following approaches:

* * * * *

■ 122. Section 1065.675 is revised to read as follows:

§ 1065.675 CLD quench verification calculations.

Perform CLD quench-check calculations as follows:

(a) Calculate the amount of water in the span gas, $x_{H2Ospan}$, assuming complete saturation at the span-gas temperature.

(b) Estimate the expected amount of water and CO_2 in the exhaust you sample, x_{H2Oexp} and x_{CO2exp}, respectively, by considering the maximum expected amounts of water in combustion air, fuel combustion products, and dilution air concentrations (if applicable).

(c) Set x_{H2Oexp} equal to $x_{H2Omeas}$ if you are using a sample dryer that passes the sample dryer verification check in § 1065.342.

(d) Calculate water quench as follows:

$$quench = \left(\frac{\frac{x_{NOwet}}{1 - x_{H2Omeas}}}{x_{NOdry}} - 1 \right) \cdot \frac{x_{H2Oexp}}{x_{H2Omeas}} + \frac{x_{NO,CO2} - x_{NO,N2}}{x_{NO,N2}} \cdot \frac{x_{CO2exp}}{x_{CO2meas}} \qquad \text{Eq. 1065.675-1}$$

Where:

quench = amount of CLD quench.

x_{NOdry} = measured concentration of NO upstream of a bubbler, according to § 1065.370.

x_{NOwet} = measured concentration of NO downstream of a bubbler, according to § 1065.370.

x_{H2Oexp} = expected maximum amount of water entering the CLD sample port during emission testing.

$x_{H2Omeas}$ = measured amount of water entering the CLD sample port during the quench verification specified in § 1065.370.

$x_{NO,CO2}$ = measured concentration of NO when NO span gas is blended with CO_2 span gas, according to § 1065.370.

$x_{NO,N2}$ = measured concentration of NO when NO span gas is blended with N_2 span gas, according to § 1065.370.

x_{CO2exp} = expected maximum amount of CO_2 entering the CLD sample port during emission testing.

$x_{CO2meas}$ = measured amount of CO_2 entering the CLD sample port during the quench verification specified in § 1065.370.

Example:

x_{NOdry} = 1800.0 μmol/mol
x_{NOwet} = 1760.5 μmol/mol
x_{H2Oexp} = 0.030 mol/mol
$x_{H2Omeas}$ = 0.017 mol/mol
$x_{NO,CO2}$ = 1480.2 μmol/mol
$x_{NO,N2}$ = 1500.8 μmol/mol
x_{CO2exp} = 2.00%
$x_{CO2meas}$ = 3.00%

$$quench = \left(\frac{\frac{1760.5}{1 - 0.017}}{1800.0} - 1 \right) \cdot \frac{0.030}{0.017} + \frac{1480.2 - 1500.8}{1500.8} \cdot \frac{2.00}{3.00}$$

quench = −0.00888 − 0.00915 = −1.80%

■ 123. Section 1065.690 is amended by revising paragraph (e) to read as follows:

§ 1065.690 Buoyancy correction for PM sample media.

* * * * *

(e) *Correction calculation.* Correct the PM sample media for buoyancy using the following equations:

$$m_{cor} = m_{uncor} \cdot \left[\frac{1 - \frac{\rho_{air}}{\rho_{weight}}}{1 - \frac{\rho_{air}}{\rho_{media}}} \right] \qquad \text{Eq. 1065.690-1}$$

Where:

m_{cor} = PM mass corrected for buoyancy.

m_{uncor} = PM mass uncorrected for buoyancy.

ρ_{air} = density of air in balance environment.

ρ_{weight} = density of calibration weight used to span balance.

ρ_{media} = density of PM sample media, such as a filter.

$$\rho_{air} = \frac{p_{abs} \cdot M_{mix}}{R \cdot T_{amb}} \qquad \text{Eq.1065.690-2}$$

Where:

p_{abs} = absolute pressure in balance environment.

M_{mix} = molar mass of air in balance environment.

R = molar gas constant.

T_{amb} = absolute ambient temperature of balance environment.

Example:

p_{abs} = 99.980 kPa
$T_{sat} = T_{dew}$ = 9.5 °C
Using Eq. 1065.645–2,
p_{H20} = 1.1866 kPa
Using Eq. 1065.645–3,
x_{H2O} = 0.011868 mol/mol
Using Eq. 1065.640–9,
M_{mix} = 28.83563 g/mol
R = 8.314472 J/(mol · K)
T_{amb} = 20 °C

$$\rho_{air} = \frac{99.980 \cdot 28.83563}{8.314472 \cdot 293.15}$$

ρ_{air} = 1.18282 kg/m^3
m_{uncorr} = 100.0000 mg
ρ_{weight} = 8000 kg/m^3
ρ_{media} = 920 kg/m^3

$$m_{cor} = 100.0000 \cdot \left[\frac{1 - \frac{1.18282}{8000}}{1 - \frac{1.18282}{920}} \right]$$

m_{cor} 100.1139 mg

■ 124. Section 1065.695 is amended by revising paragraph (c)(7)(ix) to read as follows:

§ 1065.695 Data requirements.

* * * * *

(c) * * *

(7) * * *

(ix) Warm-idle speed value.

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Subpart H—[Amended]

■ 125. Section 1065.701 is amended by revising paragraphs (b), (c), and (e) to read as follows:

§ 1065.701 General requirements for test fuels.

* * * * *

(b) *Fuels meeting alternate specifications.* We may allow you to use a different test fuel (such as California Phase 2 gasoline) if it does not affect your ability to show that your engines would comply with all applicable emission standards using the fuel specified in this subpart.

(c) *Fuels not specified in this subpart.* If you produce engines that run on a type of fuel (or mixture of fuels) that we do not specify in this subpart, you must get our written approval to establish the appropriate test fuel. See the standard-setting part for provisions related to

fuels and fuel mixtures not specified in this subpart.

(1) For engines designed to operate on a single fuel, we will generally allow you to use the fuel if you show us all the following things are true:

(i) Show that your engines will use only the designated fuel in service.

(ii) Show that this type of fuel is commercially available.

(iii) Show that operating the engines on the fuel we specify would be inappropriate, as in the following examples:

(A) The engine will not run on the specified fuel.

(B) The engine or emission controls will not be durable or work properly when operating with the specified fuel.

(C) The measured emission results would otherwise be substantially unrepresentative of in-use emissions.

(2) For engines that are designed to operate on different fuel types, the provisions of paragraphs (c)(1)(ii) and (iii) of this section apply with respect to each fuel type.

(3) For engines that are designed to operate on different fuel types as well as continuous mixtures of those fuels, we may require you to test with either the worst-case fuel mixture or the most representative fuel mixture, unless the standard-setting part specifies otherwise.

* * * * *

(e) *Service accumulation and field testing fuels.* If we do not specify a service-accumulation or field-testing fuel in the standard-setting part, use an appropriate commercially available fuel such as those meeting minimum specifications from the following table:

TABLE 1 OF § 1065.701.—EXAMPLES OF SERVICE-ACCUMULATION AND FIELD-TESTING FUELS

Fuel category	Subcategory	Reference procedure [1]
Diesel	Light distillate and light blends with residual	ASTM D975–07b.
	Middle distillate	ASTM D6751–07b.
	Biodiesel (B100)	ASTM D6985–04a.
Intermediate and residual fuel	All	See § 1065.705.
Gasoline	Motor vehicle gasoline	ASTM D4814–07a.
	Minor oxygenated gasoline blends	ASTM D4814–07a.
Alcohol	Ethanol (Ed75–85)	ASTM D5798–07.
	Methanol (M70–M85)	ASTM D5797–07.
Aviation fuel	Aviation gasoline	ASTM D910–07.
	Gas turbine	ASTM D1655–07e01.
	Jet B wide cut	ASTM D6615–06.
Gas turbine fuel	General	ASTM D2880–03.

[1] ASTM specifications are incorporated by reference in § 1065.1010.

■ 126. Section 1065.703 is amended by revising Table 1 to read as follows:

§ 1065.703 Distillate diesel fuel.

* * * * *

TABLE 1 OF § 1065.703.—TEST FUEL SPECIFICATIONS FOR DISTILLATE DIESEL FUEL

Item	Units	Ultra low sulfur	Low sulfur	High sulfur	Reference procedure [1]
Cetane Number		40–50	40–50	40–50	ASTM D613–05.
Distillation range	°C				
Initial boiling point		171–204	171–204	171–204	ASTM D86–07a.
10 pct. point		204–238	204–238	204–238	
50 pct. point		243–282	243–282	243–282	
90 pct. point		293–332	293–332	293–332	
Endpoint		321–366	321–366	321–366	
Gravity	° API	32–37	32–37	32–37	ASTM D4052–96e01.
Total sulfur	mg/kg	7–15	300–500	2000–4000	ASTM D2622–07.
Aromatics, min. (Remainder shall be paraffins, naphthalenes, and olefins).	g/kg	100	100	100	ASTM D5186–03.
Flashpoint, min.	°C	54	54	54	ASTM D93–07.
Kinematic Viscosity	cSt	2.0–3.2	2.0–3.2	2.0–3.2	ASTM D445–06.

[1] ASTM procedures are incorporated by reference in § 1065.1010. See § 1065.701(d) for other allowed procedures.

■ 127. A new § 1065.705 is added to read as follows:

§ 1065.705 Residual and intermediate residual fuel.

This section describes the specifications for fuels meeting the definition of residual fuel in 40 CFR 80.2, including fuels marketed as intermediate fuel. Residual fuels for service accumulation and any testing must meet the following specifications:

(a) The fuel must be a commercially available fuel that is representative of the fuel that will be used by the engine in actual use.

(b) The fuel must meet the specifications for one of the categories in the following table:

TABLE 1 OF § 1065.705.—SERVICE ACCUMULATION AND TEST FUEL SPECIFICATIONS FOR RESIDUAL FUEL

Characteristic	Unit	Category ISO–F–										Test method reference [1]
		RMA 30	RMB 30	RMD 80	RME 180	RMF 180	RMG 380	RMH 380	RMK 380	RMH 700	RMK 700	
Density at 15 °C, max.	kg/m^3	960.0	975.0	980.0	991.0		991.0		1010.0	991.0	1010.0	ISO 3675 or ISO 12185: 1996/Cor 1:2001 (see also ISO 8217:2005(E) 7.1).
Kinematic viscosity at 50 °C, max.	cSt	30.0		80.0	180.0		380.0		700.0			ISO 3104:1994/Cor 1:1997.
Flash point, min	°C	60		60	60		60		60			ISO 2719 (see also ISO 8217:2005(E) 7.2).
Pour point (upper):												
Winter quality, max.	°C	0	24	30	30		30		30			ISO 3016.
Summer quality, max.		6	24	30	30		30		30			ISO 3016.
Carbon residue, max.	(kg/kg)%	10		14	15	20	18	22	22			ISO 10370:1993/Cor 1:1996.
Ash, max.	(kg/kg)%	0.10		0.10	0.10	0.15	0.15		0.15			ISO 6245.
Water, max	(m^3/m^3)%	0.5		0.5	0.5		0.5		0.5			ISO 3733.
Sulfur, max	(kg/kg)%	3.50		4.00	4.50		4.50		4.50			ISO 8754 or ISO 14596: 1998/Cor 1:1999 (see also ISO 8217:2005(E) 7.3).
Vanadium, max	mg/kg	150		350	200	500	300	600	600			ISO 14597 or IP 501 or IP 470 (see also ISO 8217:2005(E) 7.8).
Total sediment potential, max.	(kg/kg)%	0.10		0.10	0.10		0.10		0.10			ISO 10307–2 (see also ISO 8217:2005(E) 7.6).
Aluminium plus silicon, max.	mg/kg	80		80	80		80		80			ISO 10478 or IP 501 or IP 470 (see also ISO 8217:2005(E) 7.9).
Used lubricating oil (ULO), max.		Fuel shall be free of ULO. We consider a fuel to be free of ULO if one or more of the elements zinc, phosphorus, or calcium is at or below the specified limits. We consider a fuel to contain ULO if all three elements exceed the specified limits.										IP 501 or IP 470 (see ISO 8217:2005(E) 7.7). IP 501 or IP 500 (see ISO 8217:2005(E) 7.7). IP 501 or IP 470 (see ISO 8217:2005(E) 7.7).
	mg/kg	15										
Zinc		15										
Phosphorus		15										
Calcium		30										

[1] ISO procedures are incorporated by reference in § 1065.1010. See § 1065.701(d) for other allowed procedures.

■ 128. Section 1065.710 is amended by revising Table 1 to read as follows:

§ 1065.710 Gasoline.

* * * * *

TABLE 1 OF § 1065.710.—TEST FUEL SPECIFICATIONS FOR GASOLINE

Item	Units	General testing	Low-temperature testing	Reference procedure [1]
Distillation Range:				
Initial boiling point	°C	24–35 [2]	24–36.	
10% point	°C	49–57	37–48	ASTM D86–07a.
50% point	°C	93–110	82–101.	
90% point	°C	149–163	158–174.	
End point	°C	Maximum, 213	Maximum, 212.	
Hydrocarbon composition:				
Olefins	m^3/m^3	Maximum, 0.10	Maximum, 0.175	ASTM D1319–03.
Aromatics		Maximum, 0.35	Maximum, 0.304.	
Saturates		Remainder	Remainder.	
Lead (organic)	g/liter	Maximum, 0.013	Maximum, 0.013	ASTM D3237–06e01.
Phosphorous	g/liter	Maximum, 0.0013	Maximum, 0.005	ASTM D3231–07.
Total sulfur	mg/kg	Maximum, 80	Maximum, 80	ASTM D2622–07.

TABLE 1 OF § 1065.710.—TEST FUEL SPECIFICATIONS FOR GASOLINE

Item	Units	General testing	Low-temperature testing	Reference procedure [1]
Volatility (Reid Vapor Pressure)	kPa	60.0–63.4 [2,3]	77.2–81.4	ASTM D5191–07.

[1] ASTM procedures are incorporated by reference in § 1065.1010. See § 1065.701(d) for other allowed procedures.
[2] For testing at altitudes above 1,219 m, the specified volatility range is (52.0 to 55.2) kPa and the specified initial boiling point range is (23.9 to 40.6) °C.
[3] For testing unrelated to evaporative emissions, the specified range is (55.2 to 63.4) kPa.

■ 129. Section 1065.715 is revised to read as follows:

§ 1065.715 Natural gas.

(a) Except as specified in paragraph (b) of this section, natural gas for testing must meet the specifications in the following table:

TABLE 1 OF § 1065.715.—TEST FUEL SPECIFICATIONS FOR NATURAL GAS

Item	Value [1]
Methane, CH_4	Minimum, 0.87 mol/mol.
Ethane, C_2H_6	Maximum, 0.055 mol/mol.
Propane, C_3H_8	Maximum, 0.012 mol/mol.
Butane, C_4H_{10}	Maximum, 0.0035 mol/mol.
Pentane, C_5H_{12}	Maximum, 0.0013 mol/mol.
C_6 and higher	Maximum, 0.001 mol/mol.
Oxygen	Maximum, 0.001 mol/mol.
Inert gases (sum of CO_2 and N_2)	Maximum, 0.051 mol/mol.

[1] All parameters are based on the reference procedures in ASTM D1945–03 (incorporated by reference in § 1065.1010). See § 1065.701(d) for other allowed procedures.

(b) In certain cases you may use test fuel not meeting the specifications in paragraph (a) of this section, as follows:

(1) You may use fuel that your in-use engines normally use, such as pipeline natural gas.

(2) You may use fuel meeting alternate specifications if the standard-setting part allows it.

(3) You may ask for approval to use fuel that does not meet the specifications in paragraph (a) of this section, but only if using the fuel would not adversely affect your ability to demonstrate compliance with the applicable standards.

(c) When we conduct testing using natural gas, we will use fuel that meets the specifications in paragraph (a) of this section.

(d) At ambient conditions, natural gas must have a distinctive odor detectable down to a concentration in air not more than one-fifth the lower flammable limit.

■ 130. Section 1065.720 is revised to read as follows:

§ 1065.720 Liquefied petroleum gas.

(a) Except as specified in paragraph (b) of this section, liquefied petroleum gas for testing must meet the specifications in the following table:

TABLE 1 OF § 1065.720.—TEST FUEL SPECIFICATIONS FOR LIQUEFIED PETROLEUM GAS

Item	Value	Reference procedure [1]
Propane, C_3H_8	Minimum, 0.85 m^3/m^3	ASTM D2163–05.
Vapor pressure at 38 °C	Maximum, 1400 kPa	ASTM D1267–02 or 2598–02[2].
Volatility residue (evaporated temperature, 35 °C)	Maximum, −38 °C	ASTM D1837–02a.
Butanes	Maximum, 0.05 m^3/m^3	ASTM D2163–05.
Butenes	Maximum, 0.02 m^3/m^3	ASTM D2163–05.
Pentenes and heavier	Maximum, 0.005 m^3/m^3	ASTM D2163–05.
Propene	Maximum, 0.1 m^3/m^3	ASTM D2163–05.
Residual matter (residue on evap. of 100 ml oil stain observ.)	Maximum, 0.05 ml pass[3]	ASTM D2158–05.
Corrosion, copper strip	Maximum, No. 1	ASTM D1838–07.
Sulfur	Maximum, 80 mg/kg	ASTM D2784–06.
Moisture content	pass	ASTM D2713–91.

[1] ASTM procedures are incorporated by reference in § 1065.1010. See § 1065.701(d) for other allowed procedures.
[2] If these two test methods yield different results, use the results from ASTM D1267–02.
[3] The test fuel must not yield a persistent oil ring when you add 0.3 ml of solvent residue mixture to a filter paper in 0.1 ml increments and examine it in daylight after two minutes.

(b) In certain cases you may use test fuel not meeting the specifications in paragraph (a) of this section, as follows:

(1) You may use fuel that your in-use engines normally use, such as commercial-quality liquefied petroleum gas.

(2) You may use fuel meeting alternate specifications if the standard-setting part allows it.

(3) You may ask for approval to use fuel that does not meet the specifications in paragraph (a) of this section, but only if using the fuel would not adversely affect your ability to demonstrate compliance with the applicable standards.

(c) When we conduct testing using liquefied petroleum gas, we will use fuel that meets the specifications in paragraph (a) of this section.

(d) At ambient conditions, liquefied petroleum gas must have a distinctive odor detectable down to a concentration in air not more than one-fifth the lower flammable limit.

■ 131. Section 1065.750 is amended by revising paragraph (a) to read as follows:

§ 1065.750 Analytical Gases.

* * * * *

(a) Subparts C, D, F, and J of this part refer to the following gas specifications:

(1) Use purified gases to zero measurement instruments and to blend with calibration gases. Use gases with contamination no higher than the highest of the following values in the gas cylinder or at the outlet of a zero-gas generator:

(i) 2% contamination, measured relative to the flow-weighted mean concentration expected at the standard. For example, if you would expect a flow-weighted CO concentration of 100.0 μmol/mol, then you would be allowed to use a zero gas with CO contamination less than or equal to 2.000 μmol/mol.

(ii) Contamination as specified in the following table:

TABLE 1 OF § 1065.750.—GENERAL SPECIFICATIONS FOR PURIFIED GASES

Constituent	Purified synthetic air [1]	Purified N_2 [1]
THC (C_1 equivalent)	< 0.05 μmol/mol	< 0.05 μmol/mol.
CO	< 1 μmol/mol	< 1 μmol/mol.
CO_2	< 10 μmol/mol	< 10 μmol/mol.
O_2	0.205 to 0.215 mol/mol	< 2 μmol/mol.
NO_X	< 0.02 μmol/mol	< 0.02 μmol/mol.

[1] We do not require these levels of purity to be NIST-traceable.

(2) Use the following gases with a FID analyzer:

(i) *FID fuel.* Use FID fuel with a stated H_2 concentration of (0.39 to 0.41) mol/mol, balance He, and a stated total hydrocarbon concentration of 0.05 μmol/mol or less.

(ii) *FID burner air.* Use FID burner air that meets the specifications of purified air in paragraph (a)(1) of this section. For field testing, you may use ambient air.

(iii) *FID zero gas.* Zero flame-ionization detectors with purified gas that meets the specifications in paragraph (a)(1) of this section, except that the purified gas O_2 concentration may be any value. Note that FID zero balance gases may be any combination of purified air and purified nitrogen. We recommend FID analyzer zero gases that contain approximately the expected flow-weighted mean concentration of O_2 in the exhaust sample during testing.

(iv) *FID propane span gas.* Span and calibrate THC FID with span concentrations of propane, C_3H_8. Calibrate on a carbon number basis of one (C_1). For example, if you use a C_3H_8 span gas of concentration 200 μmol/mol, span a FID to respond with a value of 600 μmol/mol. Note that FID span balance gases may be any combination of purified air and purified nitrogen. We recommend FID analyzer span gases that contain approximately the flow-weighted mean concentration of O_2 expected during testing. If the expected O_2 concentration in the exhaust sample is zero, we recommend using a balance gas of purified nitrogen.

(v) *FID methane span gas.* If you always span and calibrate a CH_4 FID with a nonmethane cutter, then span and calibrate the FID with span concentrations of methane, CH_4. Calibrate on a carbon number basis of one (C_1). For example, if you use a CH_4 span gas of concentration 200 μmol/mol, span a FID to respond with a value of 200 μmol/mol. Note that FID span balance gases may be any combination of purified air and purified nitrogen. We recommend FID analyzer span gases that contain approximately the expected flow-weighted mean concentration of O_2 in the exhaust sample during testing. If the expected O_2 concentration in the exhaust sample is zero, we recommend using a balance gas of purified nitrogen.

(3) Use the following gas mixtures, with gases traceable within ± 1.0% of the NIST-accepted value or other gas standards we approve:

(i) CH_4, balance purified synthetic air and/or N_2 (as applicable).

(ii) C_2H_6, balance purified synthetic air and/or N_2 (as applicable).

(iii) C_3H_8, balance purified synthetic air and/or N_2 (as applicable).

(iv) CO, balance purified N_2.

(v) CO_2, balance purified N_2.

(vi) NO, balance purified N_2.

(vii) NO_2, balance purified synthetic air.

(viii) O_2, balance purified N_2.

(ix) C_3H_8, CO, CO_2, NO, balance purified N_2.

(x) C_3H_8, CH_4, CO, CO_2, NO, balance purified N_2.

(4) You may use gases for species other than those listed in paragraph (a)(3) of this section (such as methanol in air, which you may use to determine response factors), as long as they are traceable to within ± 3.0% of the NIST-accepted value or other similar standards we approve, and meet the stability requirements of paragraph (b) of this section.

(5) You may generate your own calibration gases using a precision blending device, such as a gas divider, to dilute gases with purified N_2 or purified synthetic air. If your gas dividers meet the specifications in § 1065.248, and the gases being blended meet the requirements of paragraphs (a)(1) and (3) of this section, the resulting blends are considered to meet the requirements of this paragraph (a).

* * * * *

Subpart I—[Amended]

■ 132. Section 1065.805 is amended by revising paragraphs (a), (b), and (c) to read as follows:

§ 1065.805 Sampling system.

(a) Dilute engine exhaust, and use batch sampling to collect proportional flow-weighted dilute samples of the applicable alcohols and carbonyls. You may not use raw sampling for alcohols and carbonyls.

(b) You may collect background samples for correcting dilution air for background concentrations of alcohols and carbonyls.

(c) Maintain sample temperatures within the dilution tunnel, probes, and sample lines high enough to prevent aqueous condensation up to the point where a sample is collected to prevent loss of the alcohols and carbonyls by dissolution in condensed water. Use good engineering judgment to ensure that surface reactions of alcohols and carbonyls do not occur, as surface decomposition of methanol has been shown to occur at temperatures greater than 120 °C in exhaust from methanol-fueled engines.

* * * * *

■ 133. Section 1065.845 is amended by revising the introductory text to read as follows:

§ 1065.845 Response factor determination.

Since FID analyzers generally have an incomplete response to alcohols and carbonyls, determine each FID analyzer's alcohol/carbonyl response factor (such as RF_{MeOH}) after FID optimization to subtract those responses from the FID reading. You are not required to determine the response factor for a compound unless you will subtract its response to compensate for a response. Formaldehyde response is assumed to be zero and does not need to be determined. Use the most recent alcohol/carbonyl response factors to compensate for alcohol/carbonyl response.

* * * * *

Subpart J—[Amended]

■ 134. Section 1065.901 is amended by revising paragraphs (b) introductory text and (b)(2) to read as follows:

§ 1065.901 Applicability.

* * * * *

(b) *Laboratory testing.* You may use PEMS for any testing in a laboratory or similar environment without restriction or prior approval if the PEMS meets all applicable specifications for laboratory testing. You may also use PEMS for any testing in a laboratory or similar environment if we approve it in advance, subject to the following provisions: * * *

(2) Do not apply any PEMS-related field-testing adjustments or measurement allowances to laboratory emission results or standards.

* * * * *

■ 135. Section 1065.905 is amended by revising paragraphs (c)(14) and (e) introductory text to read as follows:

§ 1065.905 General provisions.

* * * * *

(c) * * *

(14) Does any special measurement allowance apply to field-test emission results or standards, based on using PEMS for field-testing versus using laboratory equipment and instruments for laboratory testing?

* * * * *

(e) *Laboratory testing using PEMS.* You may use PEMS for testing in a laboratory as described in § 1065.901(b). Use the following procedures and specifications when using PEMS for laboratory testing:

* * * * *

■ 136. Section 1065.910 is revised to read as follows:

§ 1065.910 PEMS auxiliary equipment for field testing.

For field testing you may use various types of auxiliary equipment to attach PEMS to a vehicle or engine and to power PEMS.

(a) When you use PEMS, you may route engine intake air or exhaust through a flow meter. Route the engine intake air or exhaust as follows:

(1) *Flexible connections.* Use short flexible connectors where necessary.

(i) You may use flexible connectors to enlarge or reduce the pipe diameters to match that of your test equipment.

(ii) We recommend that you use flexible connectors that do not exceed a length of three times their largest inside diameter.

(iii) We recommend that you use four-ply silicone-fiberglass fabric with a temperature rating of at least 315 °C for flexible connectors. You may use connectors with a spring-steel wire helix for support and you may use Nomex™ coverings or linings for durability. You may also use any other nonreactive material with equivalent permeation-resistance and durability, as long as it seals tightly.

(iv) Use stainless-steel hose clamps to seal flexible connectors, or use clamps that seal equivalently.

(v) You may use additional flexible connectors to connect to flow meters.

(2) *Tubing.* Use rigid 300 series stainless steel tubing to connect between flexible connectors. Tubing may be straight or bent to accommodate vehicle geometry. You may use ''T'' or ''Y'' fittings made of 300 series stainless steel tubing to join multiple connections, or you may cap or plug redundant flow paths if the engine manufacturer recommends it.

(3) *Flow restriction.* Use flowmeters, connectors, and tubing that do not increase flow restriction so much that it exceeds the manufacturer's maximum specified value. You may verify this at the maximum exhaust flow rate by measuring pressure at the manufacturer-specified location with your system connected. You may also perform an engineering analysis to verify an acceptable configuration, taking into account the maximum exhaust flow rate expected, the field test system's flexible connectors, and the tubing's characteristics for pressure drops versus flow.

(b) For vehicles or other motive equipment, we recommend installing PEMS in the same location where a passenger might sit. Follow PEMS manufacturer instructions for installing PEMS in cargo spaces, engine spaces, or externally such that PEMS is directly exposed to the outside environment. We recommend locating PEMS where it will be subject to minimal sources of the following parameters:

(1) Ambient temperature changes.

(2) Ambient pressure changes.

(3) Electromagnetic radiation.

(4) Mechanical shock and vibration.

(5) Ambient hydrocarbons—if using a FID analyzer that uses ambient air as FID burner air.

(c) Use mounting hardware as required for securing flexible connectors, ambient sensors, and other equipment. Use structurally sound mounting points such as vehicle frames, trailer hitch receivers, walkspaces, and payload tie-down fittings. We recommend mounting hardware such as clamps, suction cups, and magnets that are specifically designed for your application. We also recommend considering mounting hardware such as commercially available bicycle racks, trailer hitches, and luggage racks where applicable.

(d) Field testing may require portable electrical power to run your test equipment. Power your equipment, as follows:

(1) You may use electrical power from the vehicle, equipment, or vessel, up to the highest power level, such that all the following are true:

(i) The power system is capable of safely supplying power, such that the power demand for testing does not overload the power system.

(ii) The engine emissions do not change significantly as a result of the power demand for testing.

(iii) The power demand for testing does not increase output from the engine by more than 1% of its maximum power.

(2) You may install your own portable power supply. For example, you may use batteries, fuel cells, a portable generator, or any other power supply to supplement or replace your use of vehicle power. You may connect an external power source directly to the vehicle's, vessel's, or equipment's power system; however, during a test interval (such as an NTE event) you must not supply power to the vehicle's power system in excess of 1% of the engine's maximum power.

■ 137. Section 1065.915 is amended by revising paragraph (a) before the table and paragraphs (c), (d)(1), and (d)(5)(iii)(B) to read as follows:

§ 1065.915 PEMS instruments.

(a) *Instrument specifications.* We recommend that you use PEMS that meet the specifications of subpart C of this part. For unrestricted use of PEMS in a laboratory or similar environment, use a PEMS that meets the same

specifications as each lab instrument it replaces. For field testing or for testing with PEMS in a laboratory or similar environment, under the provisions of § 1065.905(b), the specifications in the following table apply instead of the specifications in Table 1 of § 1065.205.

* * * * *

(c) *Field-testing ambient effects on PEMS.* We recommend that you use PEMS that are only minimally affected by ambient conditions such as temperature, pressure, humidity, physical orientation, mechanical shock and vibration, electromagnetic radiation, and ambient hydrocarbons. Follow the PEMS manufacturer's instructions for proper installation to isolate PEMS from ambient conditions that affect their performance. If a PEMS is inherently affected by ambient conditions that you cannot control, you may monitor those conditions and adjust the PEMS signals to compensate for the ambient effect. The standard-setting part may also specify the use of one or more field-testing adjustments or measurement allowances that you apply to results or standards to account for ambient effects on PEMS.

(d) * * *

(1) *Recording ECM signals.* If your ECM updates a broadcast signal more or less frequently than 1 Hz, process data as follows:

(i) If your ECM updates a broadcast signal more frequently than 1 Hz, use PEMS to sample and record the signal's value more frequently. Calculate and record the 1 Hz mean of the more frequently updated data.

(ii) If your ECM updates a broadcast signal less frequently than 1 Hz, use PEMS to sample and record the signal's value at the most frequent rate. Linearly interpolate between recorded values and record the interpolated values at 1 Hz.

(iii) Optionally, you may use PEMS to electronically filter the ECM signals to meet the rise time and fall time specifications in Table 1 of this section. Record the filtered signal at 1 Hz.

* * * * *

(5) * * *

(iii) * * *

(B) Use a single BSFC value that approximates the BSFC value over a test interval (as defined in subpart K of this part). This value may be a nominal BSFC value for all engine operation determined over one or more laboratory duty cycles, or it may be any other BSFC that you determine. If you use a nominal BSFC, we recommend that you select a value based on the BSFC measured over laboratory duty cycles that best represent the range of engine operation that defines a test interval for field-testing. You may use the methods of this paragraph (d)(5)(iii)(B) only if it does not adversely affect your ability to demonstrate compliance with applicable standards.

* * * * *

■ 138. Section 1065.920 is amended by revising paragraphs (a), (b)(4)(iii), and (b)(7) introductory text to read as follows:

§ 1065.920 PEMS calibrations and verifications.

(a) *Subsystem calibrations and verifications.* Use all the applicable calibrations and verifications in subpart D of this part, including the linearity verifications in § 1065.307, to calibrate and verify PEMS. Note that a PEMS does not have to meet the system-response specifications of § 1065.308 if it meets the overall verification described in paragraph (b) of this section. This section does not apply to ECM signals.

(b) * * *

(4) * * *

(iii) If the standard-setting part specifies the use of a measurement allowance for field testing, also apply the measurement allowance during calibration using good engineering judgment. If the measurement allowance is normally added to the standard, this means you must subtract the measurement allowance from the measured PEMS brake-specific emission result.

* * * * *

(7) The PEMS passes this verification if any one of the following are true for each constituent:

* * * * *

■ 139. Section 1065.925 is amended by revising paragraph (h) to read as follows:

§ 1065.925 PEMS preparation for field testing.

* * * * *

(h) Verify the amount of contamination in the PEMS HC sampling system as follows:

(1) Select the HC analyzers' ranges for measuring the maximum concentration expected at the HC standard.

(2) Zero the HC analyzers using a zero gas or ambient air introduced at the analyzer port. When zeroing the FIDs, use the FIDs' burner air that would be used for in-use measurements (generally either ambient air or a portable source of burner air).

(3) Span the HC analyzers using span gas introduced at the analyzer port. When spanning the FIDs, use the FIDs' burner air that would be used in-use (for example, use ambient air or a portable source of burner air).

(4) Overflow zero or ambient air at the HC probe or into a fitting between the HC probe and the transfer line.

(5) Measure the HC concentration in the sampling system:

(i) For continuous sampling, record the mean HC concentration as overflow zero air flows.

(ii) For batch sampling, fill the sample medium and record its mean concentration.

(6) Record this value as the initial HC concentration, $x_{THCinit}$, and use it to correct measured values as described in § 1065.660.

(7) If the initial HC concentration exceeds the greater of the following values, determine the source of the contamination and take corrective action, such as purging the system or replacing contaminated portions:

(i) 2% of the flow-weighted mean concentration expected at the standard or measured during testing.

(ii) 2 μmol/mol.

(8) If corrective action does not resolve the deficiency, you may use a contaminated HC system if it does not prevent you from demonstrating compliance with the applicable emission standards.

■ 140. Section 1065.935 is amended by revising paragraphs (e)(1) and (g)(5) to read as follows:

§ 1065.935 Emission test sequence for field testing.

* * * * *

(e) * * *

(1) Continue sampling as needed to get an appropriate amount of emission measurement, according to the standard setting part. If the standard-setting part does not describe when to stop sampling, develop a written protocol before you start testing to establish how you will stop sampling. You may not determine when to stop testing based on emission results.

* * * * *

(g) * * *

(5) Invalidate any test intervals that do not meet the drift criterion in § 1065.550. For NMHC, invalidate any test intervals if the difference between the uncorrected and the corrected brake-specific NMHC emission values are within ±10% of the uncorrected results or the applicable standard, whichever is greater. For test intervals that do meet the drift criterion, correct those test intervals for drift according to § 1065.672 and use the drift corrected results in emissions calculations.

* * * * *

Subpart K—[Amended]

■ 141. Section 1065.1001 is amended by revising the definitions for ''Designated Compliance Officer'', ''Regression statistics'' and ''Tolerance'' and adding definitions in alphabetical order for ''Dilution ratio'', ''Measurement allowance'', ''Mode'', ''NIST-accepted'', ''Recommend'', ''Uncertainty'', and ''Work'' to read as follows:

§ 1065.1001 Definitions.

* * * * *

Designated Compliance Officer means the Director, Compliance and Innovative Strategies Division (6405–J), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

* * * * *

Dilution ratio (DR) means the amount of diluted exhaust per amount of undiluted exhaust.

* * * * *

Measurement allowance means a specified adjustment in the applicable emission standard or a measured emission value to reflect the relative quality of the measurement. See the standard-setting part to determine whether any measurement allowances apply for your testing. Measurement allowances generally apply only for field testing and are intended to account for reduced accuracy or precision that result from using field-grade measurement systems.

Mode means one of the following:

(1) A distinct combination of engine speed and load for steady-state testing.

(2) A continuous combination of speeds and loads specifying a transition during a ramped-modal test.

(3) A distinct operator demand setting, such as would occur when testing locomotives or constant-speed engines.

NIST-accepted means relating to a value that has been assigned or named by NIST.

* * * * *

Recommend has the meaning given in § 1065.201.

Regression statistics means any of the regression statistics specified in § 1065.602.

* * * * *

Tolerance means the interval in which at least 95% of a set of recorded values of a certain quantity must lie. Use the specified recording frequencies and time intervals to determine if a quantity is within the applicable tolerance. The concept of tolerance is intended to address random variability. You may not take advantage of the tolerance specification to incorporate a bias into a measurement.

* * * * *

Uncertainty means uncertainty with respect to NIST-traceability. See the definition of NIST-traceable in this section.

* * * * *

Work has the meaning given in § 1065.110.

* * * * *

■ 142. Section 1065.1005 is amended by revising paragraphs (a) and (g) to read as follows:

§ 1065.1005 Symbols, abbreviations, acronyms, and units of measure.

* * * * *

(a) *Symbols for quantities.* This part uses the following symbols and units of measure for various quantities:

Symbol	Quantity	Unit	Unit symbol	Base SI units
%	percent	0.01	%	10^{-2}
α	atomic hydrogen to carbon ratio	mole per mole	mol/mol	1
A	area	square meter	m2	m2
A_0	intercept of least squares regression			
A_1	slope of least squares regression			
β	ratio of diameters	meter per meter	m/m	1
β	atomic oxygen to carbon ratio	mole per mole	mol/mol	1
$C^{\#}$	number of carbon atoms in a molecule			
d	Diameter	meter	m	m
DR	dilution ratio	mole per mol	mol/mol	1
ε	error between a quantity and its reference			
e	brake-specific basis	gram per kilowatt hour	g/(kW · h)	$g \cdot 3.6^{-1} \cdot 10^{6} \cdot m^{-2} \cdot kg \cdot s^{2}$
F	F-test statistic			
f	frequency	hertz	Hz	s^{-1}
f_n	rotational frequency (shaft)	revolutions per minute	rev/min	$2 \cdot pi \cdot 60^{-1} \cdot s^{-1}$
γ	ratio of specific heats	(joule per kilogram kelvin) per (joule per kilogram kelvin).	(J/(kg · K))/(J/(kg · K)).	1
K	correction factor			1
l	length	meter	m	m
μ	viscosity, dynamic	pascal second	Pa·s	$m^{-1} \cdot kg \cdot s^{-1}$
M	molar mass[1]	gram per mole	g/mol	$10^{-3} \cdot kg \cdot mol^{-1}$
m	mass	kilogram	kg	kg
$\dot{m}$	mass rate	kilogram per second	kg/s	$kg \cdot s^{-1}$
ν	viscosity, kinematic	meter squared per second	m^2/s	$m^2 \cdot s^{-1}$
N	total number in series			
n	amount of substance	mole	mol	mol
$\dot{n}$	amount of substance rate	mole per second	mol/s	$mol \cdot s^{-1}$
P	power	kilowatt	kW	$10^{3} \cdot m^{2} \cdot kg \cdot s^{-3}$
PF	penetration fraction			
p	pressure	pascal	Pa	$m^{-1} \cdot kg \cdot s^{-2}$
ρ	mass density	kilogram per cubic meter	kg/m3	$kg \cdot m^{-3}$
r	ratio of pressures	pascal per pascal	Pa/Pa	1
R^2	coefficient of determination			
Ra	average surface roughness	micrometer	μm	m^{-6}
$Re^{\#}$	Reynolds number			
RF	response factor			
RH%	relative humidity	0.01	%	10^{-2}
σ	non-biased standard deviation			
S	Sutherland constant	kelvin	K	K

Symbol	Quantity	Unit	Unit symbol	Base SI units
SEE	standard estimate of error			
T	absolute temperature	kelvin	K	K
T	Celsius temperature	degree Celsius	°C	K–273.15
T	torque (moment of force)	newton meter	N · m	$m^2 \cdot kg \cdot s^{-2}$
t	time	second	s	s
Δt	time interval, period, 1/frequency	second	s	s
V	volume	cubic meter	m^3	m^3
$\dot{V}$	volume rate	cubic meter per second	m^3/s	$m^3 \cdot s^{-1}$
W	work	kilowatt hour	kW · h	$3.6 \cdot 10^{-6} \cdot m^2 \cdot kg \cdot s^{-2}$
w_c	carbon mass concentration	gram per gram	g/g	1
x	amount of substance mole fraction[2]	mole per mole	mol/mol	([1])
$\overline{x}$	flow-weighted mean concentration	mole per mole	mol/mol	1
y	generic variable			

[1] See paragraph (f)(2) of this section for the values to use for molar masses. Note that in the cases of NO_X and HC, the regulations specify effective molar masses based on assumed speciation rather than actual speciation.
[2] Note that mole fractions for THC, THCE, NMHC, NMHCE, and NOTHC are expressed on a C1 equivalent basis.

* * * * *

(g) *Other acronyms and abbreviations.* This part uses the following additional abbreviations and acronyms:

ASTM American Society for Testing and Materials
BMD bag mini-diluter
BSFC brake-specific fuel consumption
CARB California Air Resources Board
CFR Code of Federal Regulations
CFV critical-flow venturi
CI compression-ignition
CITT Curb Idle Transmission Torque
CLD chemiluminescent detector
CVS constant-volume sampler
DF deterioration factor
ECM electronic control module
EFC electronic flow control
EGR exhaust gas recirculation
EPA Environmental Protection Agency
FEL Family Emission Limit
FID flame-ionization detector
IBP initial boiling point
ISO International Organization for Standardization
LPG liquefied petroleum gas
NDIR nondispersive infrared
NDUV nondispersive ultraviolet
NIST National Institute for Standards and Technology
PDP positive-displacement pump
PEMS portable emission measurement system
PFD partial-flow dilution
PMP Polymethylpentene
pt. a single point at the mean value expected at the standard
PTFE polytetrafluoroethylene (commonly known as Teflon™)
RE rounding error
RMC ramped-modal cycle
RMS root-mean square
RTD resistive temperature detector
SSV subsonic venturi
SI spark-ignition
UCL upper confidence limit
UFM ultrasonic flow meter
U.S.C. United States Code

■ 143. Section 1065.1010 is revised to read as follows:

§ 1065.1010 Reference materials.

Documents listed in this section have been incorporated by reference into this part. The Director of the Federal Register approved the incorporation by reference as prescribed in 5 U.S.C. 552(a) and 1 CFR part 51. Anyone may inspect copies at the U.S. EPA, Air and Radiation Docket and Information Center, 1301 Constitution Ave., NW., Room B102, EPA West Building, Washington, DC 20460 or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(a) *ASTM material.* Table 1 of this section lists material from the American Society for Testing and Materials that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the sections of this part where we reference it. Anyone may purchase copies of these materials from the American Society for Testing and Materials, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428 or *www.astm.com.* Table 1 follows:

TABLE 1 OF § 1065.1010.–ASTM MATERIALS

Document No. and name	Part 1065 reference
ASTM D86–07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure	1065.703, 1065.710
ASTM D93–07, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester	1065.703
ASTM D445–06, Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)	1065.703
ASTM D613–05, Standard Test Method for Cetane Number of Diesel Fuel Oil	1065.703
ASTM D910–07, Standard Specification for Aviation Gasolines	1065.701
ASTM D975–07b, Standard Specification for Diesel Fuel Oils	1065.701
ASTM D1267–02 (Reapproved 2007), Standard Test Method for Gage Vapor Pressure of Liquefied Petroleum (LP) Gases (LP-Gas Method)	1065.720
ASTM D1319–03, Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption	1065.710
ASTM D1655–07e01, Standard Specification for Aviation Turbine Fuels	1065.701
ASTM D1837–02a (Reapproved 2007), Standard Test Method for Volatility of Liquefied Petroleum (LP) Gases	1065.720
ASTM D1838–07, Standard Test Method for Copper Strip Corrosion by Liquefied Petroleum (LP) Gases	1065.720
ASTM D1945–03, Standard Test Method for Analysis of Natural Gas by Gas Chromatography	1065.715
ASTM D2158–05, Standard Test Method for Residues in Liquefied Petroleum (LP) Gases	1065.720

TABLE 1 OF § 1065.1010.–ASTM MATERIALS—Continued

Document No. and name	Part 1065 reference
ASTM D2163–05, Standard Test Method for Analysis of Liquefied Petroleum (LP) Gases and Propene Concentrates by Gas Chromatography	1065.720
ASTM D2598–02 (Reapproved 2007), Standard Practice for Calculation of Certain Physical Properties of Liquefied Petroleum (LP) Gases from Compositional Analysis	1065.720
ASTM D2622–07, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry	1065.703, 1065.710
ASTM D2713–91 (Reapproved 2001), Standard Test Method for Dryness of Propane (Valve Freeze Method)	1065.720
ASTM D2784–06, Standard Test Method for Sulfur in Liquefied Petroleum Gases (Oxy-Hydrogen Burner or Lamp)	1065.720
ASTM D2880–03, Standard Specification for Gas Turbine Fuel Oils	1065.701
ASTM D2986–95a (Reapproved 1999), Standard Practice for Evaluation of Air Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test	1065.170
ASTM D3231–07, Standard Test Method for Phosphorus in Gasoline	1065.710
ASTM D3237–06e01, Standard Test Method for Lead in Gasoline By Atomic Absorption Spectroscopy	1065.710
ASTM D4052–96e01 (Reapproved 2002), Standard Test Method for Density and Relative Density of Liquids by Digital Density Meter	1065.703
ASTM D4814–07a, Standard Specification for Automotive Spark-Ignition Engine Fuel	1065.701
ASTM D5186–03, Standard Test Method for Determination of the Aromatic Content and Polynuclear Aromatic Content of Diesel Fuels and Aviation Turbine Fuels By Supercritical Fluid Chromatography	1065.703
ASTM D5191–07, Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method)	1065.710
ASTM D5797–07, Standard Specification for Fuel Methanol (M70–M85) for Automotive Spark-Ignition Engines	1065.701
ASTM D5798–07, Standard Specification for Fuel Ethanol (Ed75–Ed85) for Automotive Spark-Ignition Engines	1065.701
ASTM D6615–06, Standard Specification for Jet B Wide-Cut Aviation Turbine Fuel	1065.701
ASTM D6751–07b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels	1065.701
ASTM D6985–04a, Standard Specification for Middle Distillate Fuel Oil—Military Marine Applications	1065.701
ASTM F1471–93 (Reapproved 2001), Standard Test Method for Air Cleaning Performance of a High-Efficiency Particulate Air Filter System	1065.1001

(b) *ISO material.* Table 2 of this section lists material from the International Organization for Standardization that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the section of this part where we reference it. Anyone may purchase copies of these materials from the International Organization for Standardization, Case Postale 56, CH–1211 Geneva 20, Switzerland or *www.iso.org*. Table 2 follows:

TABLE 2 OF § 1065.1010.—ISO MATERIALS

Document No. and name	Part 1065 reference
ISO 2719:2002, Determination of flash point—Pensky-Martens closed cup method	1065.705
ISO 3016:1994, Petroleum products—Determination of pour point	1065.705
ISO 3104:1994/Cor 1:1997, Petroleum products—Transparent and opaque liquids—Determination of kinematic viscosity and calculation of dynamic viscosity	1065.705
ISO 3675:1998, Crude petroleum and liquid petroleum products—Laboratory determination of density—Hydrometer method	1065.705
ISO 3733:1999, Petroleum products and bituminous materials—Determination of water—Distillation method	1065.705
ISO 6245:2001, Petroleum products—Determination of ash	1065.705
ISO 8217:2005, Petroleum products—Fuels (class F)—Specifications of marine fuels	1065.705
ISO 8754:2003, Petroleum products—Determination of sulfur content—Energy-dispersive X-ray fluorescence spectrometry	1065.705
ISO 10307–2:1993, Petroleum products—Total sediment in residual fuel oils—Part 2: Determination using standard procedures for ageing	1065.705
ISO 10370:1993/Cor 1:1996, Petroleum products—Determination of carbon residue—Micro method	1065.705
ISO 10478:1994, Petroleum products—Determination of aluminium and silicon in fuel oils—Inductively coupled plasma emission and atomic absorption spectroscopy methods	1065.705
ISO 12185:1996/Cor 1:2001, Crude petroleum and petroleum products—Determination of density—Oscillating U-tube method	1065.705
ISO 14596:2007, Petroleum products—Determination of sulfur content—Wavelength-dispersive X-ray fluorescence spectrometry	1065.705
ISO 14597:1997, Petroleum products—Determination of vanadium and nickel content—Wavelength-dispersive X-ray fluorescence spectrometry	1065.705
ISO 14644–1:1999, Cleanrooms and associated controlled environments	1065.190

(c) *NIST* material. Table 3 of this section lists material from the National Institute of Standards and Technology that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the section of this part where we reference it. Anyone may purchase copies of these materials from the Government Printing Office, Washington, DC 20402 or download them free from the Internet at *www.nist.gov*. Table 3 follows:

TABLE 3 OF § 1065.1010.—NIST MATERIALS

Document No. and name	Part 1065 reference
ISONIST Special Publication 811, 1995 Edition, Guide for the Use of the International System of Units (SI), Barry N. Taylor, Physics Laboratory.	1065.20, 1065.1001, 1065.1005
NIST Technical Note 1297, 1994 Edition, Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results, Barry N. Taylor and Chris E. Kuyatt.	1065.1001

(d) *SAE material.* Table 4 of this section lists material from the Society of Automotive Engineering that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the sections of this part where we reference it. Anyone may purchase copies of these materials from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096 or *www.sae.org.* Table 4 follows:

TABLE 4 OF § 1065.1010.—SAE MATERIALS

Document No. and name	Part 1065 reference
''Optimization of Flame Ionization Detector for Determination of Hydrocarbon in Diluted Automotive Exhausts,'' Reschke Glen D., SAE 770141	1065.360
''Relationships Between Instantaneous and Measured Emissions in Heavy Duty Applications,'' Ganesan B. and Clark N. N., West Virginia University, SAE 2001–01–3536	1065.309

(e) *California Air Resources Board material.* Table 5 of this section lists material from the California Air Resources Board that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the sections of this part where we reference it. Anyone may get copies of these materials from the California Air Resources Board, 9528 Telstar Ave., El Monte, California 91731. Table 5 follows:

TABLE 5 OF § 1065.1010.—CALIFORNIA AIR RESOURCES BOARD MATERIALS

Document No. and name	Part 1065 reference
''California Non-Methane Organic Gas Test Procedures,'' Amended July 30, 2002, Mobile Source Division, California Air Resources Board	1065.805

(f) *Institute of Petroleum material.* Table 6 of this section lists the Institute of Petroleum standard test methods material from the Energy Institute that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the section of this part where we reference it. Anyone may purchase copies of these materials from the Energy Institute, 61 New Cavendish Street , London, W1G 7AR, UK , +44 (0)20 7467 7100 or *www.energyinst.org.uk.* Table 6 follows:

TABLE 6 OF § 1065.1010.—INSTITUTE OF PETROLEUM MATERIALS

Document No. and name	Part 1065 reference
IP–470, Determination of aluminum, silicon, vanadium, nickel, iron, calcium, zinc, and sodium in residual fuels by atomic absorption spectrometry	1065.705
IP–500, Determination of the phosphorus content of residual fuels by ultra-violet spectrometry	1065.705
IP–501, Determination of aluminum, silicon, vanadium, nickel, iron, sodium, calcium, zinc and phosphorus in residual fuel oil by ashing, fusion and inductively coupled plasma emission spectrometry	1065.705

PART 1068—GENERAL COMPLIANCE PROVISIONS FOR NONROAD PROGRAMS

■ 144. The authority citation for part 1068 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart A—[Amended]

■ 145. Section 1068.1 is revised by adding paragraphs (a)(6) and (a)(7) and revising paragraphs (b)(4) and (b)(6) to read as follows:

§ 1068.1 Does this part apply to me?

(a) * * *

(6) Locomotives and locomotive engines we regulate under 40 CFR part 1033.

(7) Marine compression-ignition engines we regulate under 40 CFR part 1042.

(b) * * *

(4) Locomotives and locomotive engines we regulate under 40 CFR part 92.

* * * * *

(6) Marine diesel engines we regulate under 40 CFR part 89 or 94.

* * * * *

[FR Doc. E8–7999 Filed 5–5–08; 8:45 am]

Editorial Note: FR Doc. E8–7999 was originally published at pages 25098 to 25352 in the issue of Tuesday, May 6, 2008. This document included numerous typographical and other errors that were inadvertently introduced in the printing process. Because of the number of errors, this document is being republished in its entirety. This republication does not change the effective date of the original document.

[FR Doc. R8–7999 Filed 6–27–08; 8:45 am]

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Vol. 73, No. 126

Monday, June 30, 2008

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FEDERAL REGISTER PAGES AND DATE, JUNE

31351–31604 2
31605–31748 3
31749–31928 4
31929–32234 5
32235–32426 6
32427–32634 9
32635–32982 10
32983–33290 11
33291–33660 12
33661–33874 13
33875–34174 16
34175–34604 17
34605–34842 18
34843–35058 19
35059–35336 20
35337–35578 23
35579–35882 24
35883–36256 25
36257–36406 26
36407–36788 27
36789–37350 30

CFR PARTS AFFECTED DURING JUNE

At the end of each month, the Office of the Federal Register publishes separately a List of CFR Sections Affected (LSA), which lists parts and sections affected by documents published since the revision date of each title.

2 CFR

Proposed Rules:
33 32417

3 CFR

Proclamations:
2914 (See 8271) 36785
8262 31745
8263 31747
8264 31921
8265 31923
8266 31925
8267 31927
8268 32233
8269 32983
8270 34603
8271 36785

Executive Orders:
12989 (Amended by EO 13465) 33285
13159 (See Notice of June 18, 2008) 35335
13219 (See Notice of June 24, 2008) 36257
13304 (See Notice of June 24, 2008) 36257
13405 (See Notice of June 6, 2008) 32981
13465 33285
13466 36787

Administrative Orders:
Presidential Determinations:
No. 2007-32 of September 13, 2007 (Rescinded by Proclamation 8271) 36785
No. 08–20 of June 4, 2008 33289
No. 08–21 of June 20, 2008 36403
No. 08–22 of June 20, 2008 36405

Notices:
Notice of June 6, 2008 32981
Notice of June 18, 2008 35335
Notice of June 24, 2008 36257

4 CFR

21 32427
22 ..... 36257, 36789

5 CFR

250 34605
2637 36168
2641 36168
Ch. LXVIII 33661

Proposed Rules:
295 35354
731 35358

6 CFR

Proposed Rules:
5 ..... 32657, 33928

7 CFR

301 ..... 31929, 32431
305 ..... 32431, 35212
402 36407
407 36407
650 35883
762 32635
955 31605
956 35886
982 35888
1170 34175
1944 36267

Proposed Rules:
301 33333
305 34202
318 34202
319 33333
1000 35306

8 CFR

217 32440
1003 33875

Proposed Rules:
1003 34654

9 CFR

93 31930

Proposed Rules:
130 31771

10 CFR

40 32453
50 31607
72 ..... 32453, 33291
73 32453
74 32453
150 32453
170 32386
171 32386
905 35059
1017 32637

Proposed Rules:
71 31946
430 32243
431 34094

11 CFR

Proposed Rules:
Ch. II 36807

12 CFR

202 33662
303 35337
652 31937
1750 35893

Proposed Rules:
535 31648

REMINDERS

The items in this list were editorially compiled as an aid to Federal Register users. Inclusion or exclusion from this list has no legal significance.

RULES GOING INTO EFFECT JUNE 30, 2008

HEALTH AND HUMAN SERVICES DEPARTMENT

Centers for Medicare & Medicaid Services

Medicare Program; Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities for FY 2009; published 5-7-08

HEALTH AND HUMAN SERVICES DEPARTMENT

Food and Drug Administration

General and Plastic Surgery Devices:

Reclassification of the Tissue Adhesive for Topical Approximation of Skin Device; published 5-30-08

LABOR DEPARTMENT

Mine Safety and Health Administration

OMB Control Numbers under the Paperwork Reduction Act; published 6-30-08

PERSONNEL MANAGEMENT OFFICE

Nonforeign Area Cost-of-Living Allowance Rates; Puerto Rico and Hawaii County, HI; published 5-29-08

COMMENTS DUE NEXT WEEK

AGRICULTURE DEPARTMENT

Minimum Age Requirements for the Transport of Animals; comments due by 7-8-08; published 5-9-08 [FR E8-10400]

COMMERCE DEPARTMENT

National Oceanic and Atmospheric Administration

Receipt Of Application and Proposed Incidental Take Authorization:

Taking Marine Mammals Incidental to Specified Activities; Offshore Exploratory Drilling in Beaufort Sea off AK; comments due by 7-7-08; published 6-4-08 [FR E8-12513]

Taking of Marine Mammals Incidental to Commercial Fishing Operations:

Atlantic Large Whale Take Reduction Plan Regulations; comments due by 7-7-08; published 6-6-08 [FR 08-01326]

DEFENSE DEPARTMENT

Engineers Corps

Restricted Area:

Blount Island Command and Marine Corps Support Facility-Blount Island, Jacksonville, FL; comments due by 7-10-08; published 6-10-08 [FR E8-12988]

ENERGY DEPARTMENT

Energy Efficiency Program for Consumer Products:

Residential Central Air Conditioners and Heat Pumps; Public Meeting and Availability of the Framework Document; comments due by 7-7-08; published 6-6-08 [FR E8-12753]

ENVIRONMENTAL PROTECTION AGENCY

Approval and Promulgation of Air Quality Implementation Plans:

Schuylkill County Area, PA; comments due by 7-7-08; published 6-5-08 [FR E8-12601]

Environmental Statements; Notice of Intent:

Coastal Nonpoint Pollution Control Programs; States and Territories—

Florida and South Carolina; Open for comments until further notice; published 2-11-08 [FR 08-00596]

Exemption from the Requirement of a Tolerance:

Bacillus Firmus Isolate (1582); comments due by 7-7-08; published 5-7-08 [FR E8-10121]

National Primary Drinking Water Regulations:

Aircraft Public Water Systems; comments due by 7-8-08; published 4-9-08 [FR E8-07035]

Pesticide Management and Disposal; Standards for Pesticide Containers and Containment:

Proposed Amendments; comments due by 7-11-08; published 6-11-08 [FR E8-12843]

Proposed Significant New Use Rules on Certain Chemical Substances; comments due by 7-9-08; published 6-9-08 [FR E8-12862]

Revisions to the California State Implementation Plan, Sacramento Metropolitan Air Quality Management District; comments due by 7-7-08; published 6-6-08 [FR E8-12477]

FEDERAL COMMUNICATIONS COMMISSION

Agency Information Collection Activities; Proposals, Submissions, and Approvals; comments due by 7-8-08; published 5-9-08 [FR E8-10371]

Facilitating the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the, etc.; comments due by 7-7-08; published 5-8-08 [FR E8-10105]

HEALTH AND HUMAN SERVICES DEPARTMENT

Centers for Medicare & Medicaid Services

Medicare Program; Changes for Long-Term Care Hospitals Required by Certain Provisions of the Medicare, Medicaid, SCHIP Extension Act of 2007:

3-Year Delay in the Application of Payment Adjustments for Short Stay Outliers and Changes to the Standard Federal Rate; comments due by 7-7-08; published 5-6-08 [FR 08-01217]

HOMELAND SECURITY DEPARTMENT

Coast Guard

Safety and Security Zones: New York Marine Inspection Zone and Captain of the Port Zone; comments due by 7-7-08; published 5-6-08 [FR E8-10000]

Safety Zone:

BWRC Annual Thanksgiving Regatta; Lake Moolvalya, Parker, AZ; comments due by 7-11-08; published 6-11-08 [FR E8-13142]

Safety Zones:

BWRC '300' Enduro; Lake Moolvalya, Parker, AZ; comments due by 7-11-08; published 6-11-08 [FR E8-13146]

Citron Energy Drink Offshore Challenge, Lake St. Clair, Harrison Township, MI.; comments due by 7-10-08; published 6-25-08 [FR E8-14372]

Fireworks Display; Upper Potomac River, Washington Channel, Washington Harbor, DC; comments due by 7-7-08; published 6-4-08 [FR E8-12475]

Fireworks, Central and Northern MA; comments due by 7-7-08; published 6-4-08 [FR E8-12479]

IJSBA World Finals; Colorado River, Lake Havasu City, AZ; comments due by 7-11-08; published 6-11-08 [FR E8-13123]

HOMELAND SECURITY DEPARTMENT

U.S. Citizenship and Immigration Services

Agency Information Collection Activities; Proposals, Submissions, and Approvals; comments due by 7-8-08; published 5-9-08 [FR E8-10363]

INTERIOR DEPARTMENT

Indian Affairs Bureau

Job Placement and Training; comments due by 7-8-08; published 4-9-08 [FR E8-07304]

INTERIOR DEPARTMENT

Fish and Wildlife Service

2008-2009 Refuge-Specific Hunting and Sport Fishing Regulations (Additions); comments due by 7-11-08; published 6-11-08 [FR E8-12193]

Endangered and Threatened Wildlife and Plants:

12 Month Finding on a Petition to List the White-tailed Prairie Dog (Cynomys leucurus) as Threatened or Endangered; comments due by 7-7-08; published 5-6-08 [FR E8-09830]

90-Day Finding on a Petition to List Kokanee (Oncorhynchus nerka) in Lake Sammamish, Washington, as Threatened or Endangered; comments due by 7-7-08; published 5-6-08 [FR E8-09832]

Designation of Critical Habitat for the Louisiana Black Bear (Ursus americanus luteolus); comments due by 7-7-08; published 5-6-08 [FR E8-09635]

Designation of Critical Habitat for the Salt Creek Tiger Beetle (Cicindela nevadica lincolniana); comments due by 7-11-08; published 6-3-08 [FR E8-12401]

Petition To List the San Francisco Bay-Delta Population of the Longfin Smelt (Spirinchus thaleichthys) as Endangered; comments due by 7-7-08; published 5-6-08 [FR E8-09835]

Status Review Initiation; Bald Eagle in the Sonoran Desert Area of Central Arizona and Northwestern Mexico; comments due by 7-7-08; published 5-20-08 [FR E8-11052]

LABOR DEPARTMENT

Employment Standards Administration

Labor Organization Annual Financial Reports; comments due by 7-11-08; published 6-19-08 [FR E8-13837]

LABOR DEPARTMENT

Employment and Training Administration

Labor Certification Process and Enforcement:

Temporary Employment in Occupations Other Than Agriculture or Registered Nursing in the United States, etc.; comments due by 7-7-08; published 5-22-08 [FR E8-11214]

NUCLEAR REGULATORY COMMISSION

Regulation of Advanced Nuclear Power Plants; Draft Statement of Policy; comments due by 7-8-08; published 5-9-08 [FR E8-10443]

TRANSPORTATION DEPARTMENT

Federal Aviation Administration

Airworthiness Directives:

Agusta S.p.A. Model A109C, A109E, and A109K2 Helicopters; comments due by 7-8-08; published 5-9-08 [FR E8-10054]

Airbus Model A300-600 Airplanes; comments due by 7-7-08; published 6-6-08 [FR E8-12727]

ATR Model ATR42 200, 300, and 320 Airplanes; comments due by 7-10-08; published 6-10-08 [FR E8-12934]

BAE Systems (Operations) Limited (Jetstream) Model 4101 Airplanes; comments due by 7-9-08; published 6-9-08 [FR E8-12828]

Bell Helicopter Textron Model 204B, 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP Helicopters; comments due by 7-7-08; published 5-6-08 [FR E8-09790]

Boeing Model 747 100, 747 100B, 747 100B SUD, 747 200B, 747 200C, 747 200F, 747 300, 747 400, 747 400D, 747 400F, and 747SR Series Airplanes; comments due by 7-7-08; published 5-23-08 [FR E8-11565]

Boeing Model 747SP Series Airplanes; comments due by 7-7-08; published 5-23-08 [FR E8-11567]

Boeing Model 757-200 and -200PF Series Airplanes, and Model 767-200 and -300 Series Airplanes; comments due by 7-7-08; published 5-20-08 [FR E8-11286]

Bombardier Model CL 600 2C10 (Regional Jet Series 700, 701, & 702) Airplanes et al.; comments due by 7-9-08; published 6-9-08 [FR E8-12833]

Bombardier Model CL 600 2C10, et al.; comments due by 7-9-08; published 6-9-08 [FR E8-12819]

CFM International, S.A. CFM56 5B1/P Turbofan Engine Airplane Series; comments due by 7-7-08; published 5-7-08 [FR E8-10050]

Eurocopter France Model EC120B Helicopters; comments due by 7-7-08; published 5-6-08 [FR E8-09799]

Airworthiness Directives; EADS SOCATA Model TBM 700 Airplanes; comments due by 7-9-08; published 6-9-08 [FR E8-12818]

Airworthiness Directives; Pilatus Aircraft Ltd. Model PC-6 Airplanes; comments due by 7-9-08; published 6-9-08 [FR E8-12816]

TRANSPORTATION DEPARTMENT

Federal Motor Carrier Safety Administration

Commercial Driver's License Testing and Learner's Permit Standards; Extension of Comment Period; comments due by 7-9-08; published 6-9-08 [FR E8-12876]

TRANSPORTATION DEPARTMENT

National Highway Traffic Safety Administration

Insurer Reporting Requirements; List of Insurers Required to File Reports; comments due by 7-7-08; published 5-6-08 [FR E8-09999]

LIST OF PUBLIC LAWS

This is a continuing list of public bills from the current session of Congress which have become Federal laws. It may be used in conjunction with "PLUS" (Public Laws Update Service) on 202–741–6043. This list is also available online at *http://www.archives.gov/federal-register/laws.html*.

The text of laws is not published in the **Federal Register** but may be ordered in "slip law" (individual pamphlet) form from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 (phone, 202–512–1808). The text will also be made available on the Internet from GPO Access at *http://www.gpoaccess.gov/plaws/index.html*. Some laws may not yet be available.

S. 2420/P.L. 110–247

Federal Food Donation Act of 2008 (June 20, 2008; 122 Stat. 2314)

Last List June 20, 2008

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CFR CHECKLIST

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Title	Stock Number	Price	Revision Date
1	(869–064–00001–7)	5.00	[4] Jan. 1, 2008
2	(869–064–00002–5)	8.00	Jan. 1, 2008
3 (2006 Compilation and Parts 100 and 102)	(869–064–00003–3)	35.00	[1] Jan. 1, 2008
4	(869–064–00004–1)	13.00	Jan. 1, 2008
5 Parts:			
1–699	(869–064–00005–0)	63.00	Jan. 1, 2008
700–1199	(869–064–00006–8)	53.00	Jan. 1, 2008
1200–End	(869–064–00007–6)	64.00	Jan. 1, 2008
6	(869–064–00008–4)	13.50	Jan. 1, 2008
7 Parts:			
1–26	(869–064–00009–2)	47.00	Jan. 1, 2008
27–52	(869–064–00010–6)	52.00	Jan. 1, 2008
53–209	(869–064–00011–4)	40.00	Jan. 1, 2008
210–299	(869–064–00012–2)	65.00	Jan. 1, 2008
300–399	(869–064–00013–1)	49.00	Jan. 1, 2008
400–699	(869–064–00014–9)	45.00	Jan. 1, 2008
700–899	(869–064–00015–7)	46.00	Jan. 1, 2008
900–999	(869–064–00016–5)	63.00	Jan. 1, 2008
1000–1199	(869–064–00017–3)	22.00	Jan. 1, 2008
1200–1599	(869–064–00018–1)	64.00	Jan. 1, 2008
1600–1899	(869–064–00019–0)	67.00	Jan. 1, 2008
1900–1939	(869–064–00020–3)	31.00	Jan. 1, 2008
1940–1949	(869–064–00021–1)	50.00	Jan. 1, 2008
1950–1999	(869–064–00022–0)	49.00	Jan. 1, 2008
2000–End	(869–064–00023–8)	53.00	Jan. 1, 2008
8	(869–064–00024–6)	66.00	Jan. 1, 2008
9 Parts:			
1–199	(869–064–00025–4)	64.00	Jan. 1, 2008
200–End	(869–064–00026–2)	61.00	Jan. 1, 2008
10 Parts:			
1–50	(869–064–00027–1)	64.00	Jan. 1, 2008
51–199	(869–064–00028–9)	61.00	Jan. 1, 2008
200–499	(869–064–00029–7)	46.00	Jan. 1, 2008
500–End	(869–064–00030–1)	65.00	Jan. 1, 2008
11	(869–064–00031–9)	44.00	Jan. 1, 2008
12 Parts:			
1–199	(869–064–00032–7)	37.00	Jan. 1, 2008
200–219	(869–064–00033–5)	40.00	Jan. 1, 2008
220–299	(869–064–00034–3)	64.00	Jan. 1, 2008
300–499	(869–064–00035–1)	47.00	Jan. 1, 2008
500–599	(869–064–00036–0)	42.00	Jan. 1, 2008
600–899	(869–064–00037–8)	59.00	Jan. 1, 2008
900–End	(869–064–00038–6)	53.00	Jan. 1, 2008
13	(869–064–00039–4)	58.00	Jan. 1, 2008
14 Parts:			
1–59	(869–064–00040–8)	66.00	Jan. 1, 2008
60–139	(869–064–00041–6)	61.00	Jan. 1, 2008
140–199	(869–064–00042–4)	33.00	Jan. 1, 2008
200–1199	(869–064–00043–2)	53.00	Jan. 1, 2008
1200–End	(869–064–00044–1)	48.00	Jan. 1, 2008
15 Parts:			
0–299	(869–064–00045–9)	43.00	Jan. 1, 2008
300–799	(869–064–00046–7)	63.00	Jan. 1, 2008
800–End	(869–064–00047–5)	45.00	Jan. 1, 2008
16 Parts:			
0–999	(869–064–00048–3)	53.00	Jan. 1, 2008
1000–End	(869–064–00049–1)	63.00	Jan. 1, 2008
17 Parts:			
1–199	(869–064–00051–3)	53.00	Apr. 1, 2008
*200–239	(869–064–00052–1)	63.00	Apr. 1, 2008
*240–End	(869–064–00053–0)	65.00	Apr. 1, 2008
18 Parts:			
1–399	(869–064–00054–8)	65.00	Apr. 1, 2008
400–End	(869–064–00055–6)	29.00	Apr. 1, 2008
19 Parts:			
1–140	(869–064–00056–4)	64.00	Apr. 1, 2008
141–199	(869–064–00057–2)	61.00	Apr. 1, 2008
200–End	(869–064–00058–1)	34.00	Apr. 1, 2008
20 Parts:			
*1–399	(869–064–00059–9)	53.00	Apr. 1, 2008
400–499	(869–062–00060–0)	64.00	Apr. 1, 2007
500–End	(869–064–00061–1)	66.00	Apr. 1, 2008
21 Parts:			
1–99	(869–064–00062–9)	43.00	Apr. 1, 2008
100–169	(869–062–00063–4)	49.00	Apr. 1, 2007
170–199	(869–064–00064–5)	53.00	Apr. 1, 2008
200–299	(869–064–00065–3)	20.00	Apr. 1, 2008
300–499	(869–064–00066–1)	33.00	Apr. 1, 2008
500–599	(869–064–00067–0)	50.00	Apr. 1, 2008
600–799	(869–064–00068–8)	20.00	Apr. 1, 2008
800–1299	(869–064–00069–6)	63.00	Apr. 1, 2008
1300–End	(869–064–00070–0)	28.00	Apr. 1, 2008
22 Parts:			
*1–299	(869–064–00071–8)	66.00	Apr. 1, 2008
300–End	(869–064–00072–6)	48.00	Apr. 1, 2008
23	(869–064–00073–4)	48.00	Apr. 1, 2008
24 Parts:			
0–199	(869–064–00074–2)	63.00	Apr. 1, 2008
200–499	(869–064–00075–1)	53.00	Apr. 1, 2008
500–699	(869–064–00076–9)	33.00	Apr. 1, 2008
700–1699	(869–064–00077–7)	64.00	Apr. 1, 2008
1700–End	(869–064–00078–5)	33.00	Apr. 1, 2008
25	(869–062–00079–1)	64.00	Apr. 1, 2007
26 Parts:			
§§ 1.0–1–1.60	(869–064–00080–7)	52.00	Apr. 1, 2008
*§§ 1.61–1.169	(869–064–00081–5)	66.00	Apr. 1, 2008
§§ 1.170–1.300	(869–062–00082–1)	60.00	Apr. 1, 2007
§§ 1.301–1.400	(869–064–00083–1)	50.00	Apr. 1, 2008
§§ 1.401–1.440	(869–064–00084–0)	59.00	Apr. 1, 2008
§§ 1.441–1.500	(869–064–00085–8)	61.00	Apr. 1, 2008
§§ 1.501–1.640	(869–064–00086–6)	52.00	Apr. 1, 2008
§§ 1.641–1.850	(869–064–00087–4)	64.00	Apr. 1, 2008
§§ 1.851–1.907	(869–064–00088–2)	64.00	Apr. 1, 2008
§§ 1.908–1.1000	(869–064–00089–1)	63.00	Apr. 1, 2008
*§§ 1.1001–1.1400	(869–064–00090–4)	64.00	Apr. 1, 2008
§§ 1.1401–1.1550	(869–064–00091–2)	61.00	Apr. 1, 2008
§§ 1.1551–End	(869–064–00092–1)	53.00	Apr. 1, 2008
2–29	(869–064–00093–9)	63.00	Apr. 1, 2008
*30–39	(869–064–00094–7)	44.00	Apr. 1, 2008
*40–49	(869–064–00095–5)	31.00	[6] Apr. 1, 2008
50–299	(869–064–00096–3)	45.00	Apr. 1, 2008

Title	Stock Number	Price	Revision Date
300–499	(869–062–00097–9)	61.00	Apr. 1, 2007
500–599	(869–062–00098–7)	12.00	[5] Apr. 1, 2007
600–End	(869–064–00099–8)	20.00	Apr. 1, 2008
27 Parts:			
1–39	(869–064–00100–5)	35.00	Apr. 1, 2008
40–399	(869–064–00101–3)	67.00	Apr. 1, 2008
400–End	(869–064–00102–1)	21.00	Apr. 1, 2008
28 Parts:			
0–42	(869–062–00103–7)	61.00	July 1, 2007
43–End	(869–062–00104–5)	60.00	July 1, 2007
29 Parts:			
0–99	(869–062–00105–3)	50.00	[7] July 1, 2007
100–499	(869–062–00106–1)	23.00	July 1, 2007
500–899	(869–062–00107–0)	61.00	[7] July 1, 2007
900–1899	(869–062–00108–8)	36.00	July 1, 2007
1900–1910 (§§ 1900 to 1910.999)	(869–062–00109–6)	61.00	July 1, 2007
1910 (§§ 1910.1000 to end)	(869–062–00110–0)	46.00	July 1, 2007
1911–1925	(869–062–00111–8)	30.00	July 1, 2007
1926	(869–062–00112–6)	50.00	July 1, 2007
1927–End	(869–062–00113–4)	62.00	July 1, 2007
30 Parts:			
1–199	(869–062–00114–2)	57.00	July 1, 2007
200–699	(869–062–00115–1)	50.00	July 1, 2007
700–End	(869–062–00116–9)	58.00	July 1, 2007
31 Parts:			
0–199	(869–062–00117–7)	41.00	July 1, 2007
200–499	(869–062–00118–5)	46.00	July 1, 2007
500–End	(869–062–00119–3)	62.00	July 1, 2007
32 Parts:			
1–39, Vol. I		15.00	[2] July 1, 1984
1–39, Vol. II		19.00	[2] July 1, 1984
1–39, Vol. III		18.00	[2] July 1, 1984
1–190	(869–062–00120–7)	61.00	July 1, 2007
191–399	(869–062–00121–5)	63.00	July 1, 2007
400–629	(869–062–00122–3)	61.00	July 1, 2007
630–699	(869–062–00123–1)	37.00	July 1, 2007
700–799	(869–062–00124–0)	46.00	July 1, 2007
800–End	(869–062–00125–8)	47.00	July 1, 2007
33 Parts:			
1–124	(869–062–00126–6)	57.00	July 1, 2007
125–199	(869–062–00127–4)	61.00	July 1, 2007
200–End	(869–062–00128–2)	57.00	July 1, 2007
34 Parts:			
1–299	(869–062–00129–1)	50.00	July 1, 2007
300–399	(869–062–00130–4)	40.00	July 1, 2007
400–End & 35	(869–062–00131–2)	61.00	July 1, 2007
36 Parts:			
1–199	(869–062–00132–1)	37.00	July 1, 2007
200–299	(869–062–00133–9)	37.00	July 1, 2007
300–End	(869–062–00134–7)	61.00	July 1, 2007
37	(869–062–00135–5)	58.00	July 1, 2007
38 Parts:			
0–17	(869–062–00136–3)	60.00	July 1, 2007
18–End	(869–062–00137–1)	62.00	July 1, 2007
39	(869–062–00138–0)	42.00	July 1, 2007
40 Parts:			
1–49	(869–062–00139–8)	60.00	July 1, 2007
50–51	(869–062–00140–1)	45.00	July 1, 2007
52 (52.01–52.1018)	(869–062–00141–0)	60.00	July 1, 2007
52 (52.1019–End)	(869–062–00142–8)	64.00	July 1, 2007
53–59	(869–062–00143–6)	31.00	July 1, 2007
60 (60.1–End)	(869–062–00144–4)	58.00	July 1, 2007
60 (Apps)	(869–062–00145–2)	57.00	July 1, 2007
61–62	(869–062–00146–1)	45.00	July 1, 2007
63 (63.1–63.599)	(869–062–00147–9)	58.00	July 1, 2007
63 (63.600–63.1199)	(869–062–00148–7)	50.00	July 1, 2007
63 (63.1200–63.1439)	(869–062–00149–5)	50.00	July 1, 2007
63 (63.1440–63.6175)	(869–062–00150–9)	32.00	July 1, 2007
63 (63.6580–63.8830)	(869–062–00151–7)	32.00	July 1, 2007
63 (63.8980–End)	(869–062–00152–5)	35.00	July 1, 2007
64–71	(869–062–00153–3)	29.00	July 1, 2007
72–80	(869–062–00154–1)	62.00	July 1, 2007
81–84	(869–062–00155–0)	50.00	July 1, 2007
85–86 (85–86.599–99)	(869–062–00156–8)	61.00	July 1, 2007
86 (86.600–1–End)	(869–062–00157–6)	61.00	July 1, 2007
87–99	(869–062–00158–4)	60.00	July 1, 2007
100–135	(869–062–00159–2)	45.00	July 1, 2007
136–149	(869–062–00160–6)	61.00	July 1, 2007
150–189	(869–062–00161–4)	50.00	July 1, 2007
190–259	(869–062–00162–2)	39.00	[7] July 1, 2007
260–265	(869–062–00163–1)	50.00	July 1, 2007
266–299	(869–062–00164–9)	50.00	July 1, 2007
300–399	(869–062–00165–7)	42.00	July 1, 2007
400–424	(869–062–00166–5)	56.00	[7] July 1, 2007
425–699	(869–062–00167–3)	61.00	July 1, 2007
700–789	(869–062–00168–1)	61.00	July 1, 2007
790–End	(869–062–00169–0)	61.00	July 1, 2007
41 Chapters:			
1, 1–1 to 1–10		13.00	[3] July 1, 1984
1, 1–11 to Appendix, 2 (2 Reserved)		13.00	[3] July 1, 1984
3–6		14.00	[3] July 1, 1984
7		6.00	[3] July 1, 1984
8		4.50	[3] July 1, 1984
9		13.00	[3] July 1, 1984
10–17		9.50	[3] July 1, 1984
18, Vol. I, Parts 1–5		13.00	[3] July 1, 1984
18, Vol. II, Parts 6–19		13.00	[3] July 1, 1984
18, Vol. III, Parts 20–52		13.00	[3] July 1, 1984
19–100		13.00	[3] July 1, 1984
1–100	(869–062–00170–3)	24.00	July 1, 2007
101	(869–062–00171–1)	21.00	July 1, 2007
102–200	(869–062–00172–0)	56.00	July 1, 2007
201–End	(869–062–00173–8)	24.00	July 1, 2007
42 Parts:			
1–399	(869–062–00174–6)	61.00	Oct. 1, 2007
400–413	(869–062–00175–4)	32.00	Oct. 1, 2007
414–429	(869–062–00176–2)	32.00	Oct. 1, 2007
430–End	(869–062–00177–1)	64.00	Oct. 1, 2007
43 Parts:			
1–999	(869–062–00178–9)	56.00	Oct. 1, 2007
1000–end	(869–062–00179–7)	62.00	Oct. 1, 2007
44	(869–062–00180–1)	50.00	Oct. 1, 2007
45 Parts:			
1–199	(869–062–00181–9)	60.00	Oct. 1, 2007
200–499	(869–060–00182–7)	34.00	[9] Oct. 1, 2007
500–1199	(869–062–00183–5)	56.00	Oct. 1, 2007
1200–End	(869–062–00184–3)	61.00	Oct. 1, 2007
46 Parts:			
1–40	(869–062–00185–1)	46.00	Oct. 1, 2007
41–69	(869–062–00186–0)	39.00	Oct. 1, 2007
70–89	(869–062–00187–8)	14.00	Oct. 1, 2007
90–139	(869–062–00188–6)	44.00	Oct. 1, 2007
140–155	(869–062–00189–4)	25.00	Oct. 1, 2007
156–165	(869–062–00190–8)	34.00	Oct. 1, 2007
166–199	(869–062–00191–6)	46.00	Oct. 1, 2007
200–499	(869–062–00192–4)	40.00	Oct. 1, 2007
500–End	(869–062–00193–2)	25.00	Oct. 1, 2007
47 Parts:			
0–19	(869–062–00194–1)	61.00	Oct. 1, 2007
20–39	(869–062–00195–9)	46.00	Oct. 1, 2007
40–69	(869–062–00196–7)	40.00	Oct. 1, 2007
70–79	(869–062–00197–5)	61.00	Oct. 1, 2007
80–End	(869–062–00198–3)	61.00	Oct. 1, 2007
48 Chapters:			
1 (Parts 1–51)	(869–062–00199–1)	63.00	Oct. 1, 2007
1 (Parts 52–99)	(869–062–00200–9)	49.00	Oct. 1, 2007
2 (Parts 201–299)	(869–062–00201–7)	50.00	Oct. 1, 2007
3–6	(869–062–00202–5)	34.00	Oct. 1, 2007

Title	Stock Number	Price	Revision Date
7–14	(869–062–00203–3)	56.00	Oct. 1, 2007
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49 Parts:			
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400–599	(869–062–00210–3)	64.00	Oct. 1, 2007
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50 Parts:			
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17.1–17.95(b)	(869–062–00216–5)	32.00	Oct. 1, 2007
17.95(c)–end	(869–062–00217–3)	32.00	Oct. 1, 2007
17.96–17.99(h)	(869–062–00218–1)	61.00	Oct. 1, 2007
17.99(i)–end and 17.100–end	(869–062–00219–0)	47.00	[8] Oct. 1, 2007
18–199	(869–062–00226–3)	50.00	Oct. 1, 2007
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660–End	(869–062–00223–8)	31.00	Oct. 1, 2007
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[1] Because Title 3 is an annual compilation, this volume and all previous volumes should be retained as a permanent reference source.

[2] The July 1, 1985 edition of 32 CFR Parts 1–189 contains a note only for Parts 1–39 inclusive. For the full text of the Defense Acquisition Regulations in Parts 1–39, consult the three CFR volumes issued as of July 1, 1984, containing those parts.

[3] The July 1, 1985 edition of 41 CFR Chapters 1–100 contains a note only for Chapters 1 to 49 inclusive. For the full text of procurement regulations in Chapters 1 to 49, consult the eleven CFR volumes issued as of July 1, 1984 containing those chapters.

[4] No amendments to this volume were promulgated during the period January 1, 2005, through January 1, 2006. The CFR volume issued as of January 1, 2005 should be retained.

[5] No amendments to this volume were promulgated during the period April 1, 2000, through April 1, 2007. The CFR volume issued as of April 1, 2000 should be retained.

[6] No amendments to this volume were promulgated during the period April 1, 2006 through April 1, 2007. The CFR volume issued as of April 1, 2006 should be retained.

[7] No amendments to this volume were promulgated during the period July 1, 2006, through July 1, 2007. The CFR volume issued as of July 1, 2006 should be retained.

[8] No amendments to this volume were promulgated during the period October 1, 2005, through October 1, 2007. The CFR volume issued as of October 1, 2005 should be retained.

[9] No amendments to this volume were promulgated during the period October 1, 2006, through October 1, 2007. The CFR volume issued as of October 1, 2006 should be retained.