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Contents

Federal Register

Vol. 72, No. 63

Tuesday, April 3, 2007

Agency for Healthcare Research and Quality
NOTICES
Meetings:
Healthcare Research and Quality National Advisory Council, 15884–15885

Agriculture Department
See Animal and Plant Health Inspection Service
See Commodity Credit Corporation
See Farm Service Agency
See Food Safety and Inspection Service

Air Force Department
NOTICES
Environmental statements; record of decision:
Barry M. Goldwater Range Integrated Natural Resource Management Plan, AZ, 15866–15867

Animal and Plant Health Inspection Service
RULES
Plant-related quarantine, foreign:
Chrysanthemum white rust, 15805–15812

Centers for Disease Control and Prevention
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15885

Coast Guard
RULES
Ports and waterways safety; regulated navigation areas, safety zones, security zones, etc.:
Appomattox River, Hopewell, VA, 15837–15838
Georgetown Channel, Potomac River, Washington DC, 15834–15837
Regattas and marine parades:
Plymouth Drag Boat Race, 15832–15834
PROPOSED RULES
Drawbridge operations:
Connecticut, 15852–15854

Commerce Department
See Industry and Security Bureau
See International Trade Administration
See National Institute of Standards and Technology
See National Oceanic and Atmospheric Administration

Commodity Credit Corporation
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15860

Customs and Border Protection Bureau
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15891–15893

Defense Department
See Air Force Department
See Navy Department
NOTICES
Meetings:
Education Benefits Board of Actuaries, 15866
Medicare-Eligible Retiree Health Care Board of Actuaries, 15866
Retirement Board of Actuaries, 15866

Education Department
NOTICES
Grants and cooperative agreements; availability, etc.:
Indian education programs—
Indian Education Formula Grant Program, 15867–15868
Meetings:
Historically Black Colleges and Universities Capital Financing Advisory Board, 15869

Employment and Training Administration
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15909–15911
Meetings:
Native American Employment and Training Council, 15911–15912

Energy Department
See Energy Information Administration
See Federal Energy Regulatory Commission
NOTICES
Environmental statements; availability, etc.:
Nevada Test Site and EnergySolutions LLC facility, UT; depleted uranium oxide conversion product generated from depleted uranium hexafluoride; disposal, 15869–15871
Environmental statements; notice of intent:
Global Nuclear Energy Partnership, 15871–15872

Energy Information Administration
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15872–15874

Environmental Protection Agency
RULES
Air quality implementation plans; approval and promulgation; various States:
Delaware, 15839–15848
PROPOSED RULES
Air pollutants, hazardous; national emission standards:
Locomotives engines and marine compression-ignition engines less than 30 liters per cylinder, 15938–16151
NOTICES
Air programs:
State implementation plans; adequacy status for transportation conformity purposes—
Ohio, 15879–15880
Meetings:
Scientific Counselors Board, 15880–15881

Executive Office of the President
See Presidential Documents

Farm Credit Administration
RULES
Farm credit system:
Federal Agricultural Mortgage Corporation, disclosure and reporting requirements; risk-based capital requirements; revision; effective date, 15812

Farm Service Agency
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15860–15861

Federal Aviation Administration
RULES
Airworthiness directives:
Airbus, 15812–15814
Boeing, 15820–15822
Columbia Aircraft Manufacturing, 15822–15824
Empresa Brasileira de Aeronautica S.A. (EMBRAER), 15814–15816
Gulfstream, 15816–15818
Honeywell Flight Management Systems, 15818–15820
Class E airspace; correction, 15824–15825
Standard instrument approach procedures, 15825–15828
PROPOSED RULES
Airworthiness directives:
Mitsubishi Heavy Industries, 15850–15852
NOTICES
Reports and guidance documents; availability, etc.:
Known icing conditions; interpretation letter, 15931–15932

Federal Emergency Management Agency
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15893–15894

Federal Energy Regulatory Commission
NOTICES
Electric rate and corporate regulation combined filings, 15874–15876
Environmental statements; availability, etc.:
Pacific Gas & Electric Co., 15876
Environmental statements; notice of intent:
Tres Palacios Gas Storage LLC, 15877–15878
Hydroelectric applications, 15878–15879
Applications, hearings, determinations, etc.:
El Paso Natural Gas Co., 15874
Honeoye Storage Corp., 15874

Federal Mediation and Conciliation Service
NOTICES
Reports and guidance documents; availability, etc.:
Labor-management committees; program guidelines/application solicitation, 15881–15884

Federal Motor Carrier Safety Administration
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15932–15933
Motor carrier safety standards:
Commercial driver's license standards; exemption applications—
Isuzu Motors America, Inc., 15933

Federal Transit Administration
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15933–15934

Financial Management Service
See Fiscal Service

Fiscal Service
NOTICES
Surety companies acceptable on Federal bonds:
Markel Insurance Co., 15935

Fish and Wildlife Service
PROPOSED RULES
Endangered and threatened species:
Critical habitat designations—
Coastal California gnatcatcher and San Diego fairy shrimp, 15857–15859

Food and Drug Administration
RULES
Medical devices:
Immunology and microbiology devices—
Herpes simplex virus types 1 and 2 serological assays; reclassification, 15828–15830
NOTICES
Medical devices:
Premarket approval applications, list; safety and effectiveness summaries availability, 15885–15886
Meetings:
Oncologic Drugs Advisory Committee, 15886–15887
Reports and guidance documents; availability, etc.:
Animal cloning risk assessment plan; industry guidance, 15887–15888
Herpes simplex virus types 1 and 2 serological assays; Class II special controls, 15888–15889

Food Safety and Inspection Service
NOTICES
Meetings:
Codex Alimentarius Commission—
Food Labelling Codex Committee, 15861–15862

Foreign Assets Control Office
RULES
Sudanese sanctions regulations and Iranian transactions regulations:
Goods or technology exportation or reexportation via diplomatic pouch, 15831–15832

General Services Administration
PROPOSED RULES
Federal Management Regulation:
Federal asset sales; personal property sales, 15854–15857

Health and Human Services Department
See Agency for Healthcare Research and Quality
See Centers for Disease Control and Prevention
See Food and Drug Administration
See Health Resources and Services Administration
See Substance Abuse and Mental Health Services Administration

Health Resources and Services Administration
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15889–15890

Homeland Security Department
See Coast Guard
See Customs and Border Protection Bureau
See Federal Emergency Management Agency

Housing and Urban Development Department
NOTICES
Grant and cooperative agreement awards:
Emergency Capital Repair Program, 15896–15899
Lead Based Paint Hazard Control Program et al., 15894–15896

Indian Affairs Bureau
NOTICES
Land acquisitions into trust:
Mississippi Band of Choctaw Indians, 15899–15901
Liquor and tobacco sale or distribution ordinance:
Chippewa Cree Tribe of the Rocky Boy's Indian Reservation of Montana, 15901–15903
Meetings:
Exceptional Children Advisory Board, 15903–15904

Industry and Security Bureau
NOTICES
Meetings:
Information Systems Technical Advisory Committee, 15862

Interior Department
See Fish and Wildlife Service
See Indian Affairs Bureau
See Land Management Bureau
See Reclamation Bureau

International Trade Administration
NOTICES
Antidumping:
Cased pencils from—
China, 15862–15863
Furfuryl alcohol from—
Thailand, 15863
Committees; establishment, renewal, termination, etc.:
U.S.-Brazil CEO Forum, 15863–15864

Justice Department
See Justice Programs Office
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15905–15906
Privacy Act; systems of records, 15906

Justice Programs Office
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15906–15907

Labor Department
See Employment and Training Administration
NOTICES
Organization, functions, and authority delegations:
Assistant Secretary for Employment and Training, 15907–15909

Land Management Bureau
NOTICES
Survey plat filings:
Montana, 15904

National Institute of Standards and Technology
NOTICES
National Voluntary Laboratory Accreditation Program:
Radiation detection instruments used in homeland security applications, 15864–15865

National Oceanic and Atmospheric Administration
RULES
Fishery conservation and management:
Alaska; fisheries of Exclusive Economic Zone—
Pacific cod, 15848–15849
NOTICES
Endangered and threatened species:
Atlantic sturgeon; status review report, 15865–15866

National Science Foundation
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15912

Navy Department
NOTICES
Environmental statements; availability, etc.:
Naval Air Station Oceana, VA and Marine Corps Air Station Cherry Point, NC; introduction of F/A-18 E/F (Super Hornet) aircraft; hearings, 15867

Nuclear Regulatory Commission
NOTICES
Meetings:
Reactor Safeguards Advisory Committee, 15914
Applications, hearings, determinations, etc.:
Dominion Energy Kewaunee, Inc.; withdrawn, 15912–15913
Southern Nuclear Operating Co., 15913–15914
STP Nuclear Operating Co., 15914

Personnel Management Office
NOTICES
Senior Executive Service; career positions reserved during 2006; list, 16154–16251

Postal Regulatory Commission
NOTICES
Practice and procedure:
Rate recommendations; reconsideration, 15914–15916

Presidential Documents
PROCLAMATIONS
Special observances:
Cancer Control Month (Proc. 8119), 16253–16256
ADMINISTRATIVE ORDERS
South Korea; notice of intent to enter into free trade agreement (Notice of Apr. 1, 2007), 16257–16259

Public Debt Bureau
See Fiscal Service

Reclamation Bureau
NOTICES
Environmental statements; availability, etc.:
Red River Valley Water Supply Project, ND, 15904–15905

Securities and Exchange Commission
NOTICES
Agency information collection activities; proposals, submissions, and approvals, 15916–15918
Investment Company Act of 1940:
Silas Partners I, LLC, et al., 15919–15923
Meetings; Sunshine Act, 15923
Self-regulatory organizations; proposed rule changes:
American Stock Exchange LLC, 15923–15924
National Association of Securities Dealers, Inc., 15924–15926

New York Stock Exchange LLC, 15926–15929
NYSE Arca, Inc., 15929–15930

State Department
RULES
International Traffic in Arms regulations:
Vietnam; arms transfer policy, 15830–15831
NOTICES
International Emergency Economic Powers Act:
Blocking property of weapons of mass destruction proliferators and their supporters; additional designations, 15930–15931

Substance Abuse and Mental Health Services Administration

NOTICES
Federal agency urine drug testing; certified laboratories meeting minimum standards, list, 15890–15891

Surface Transportation Board
NOTICES
Railroad operation, acquisition, construction, etc.:
Union Pacific Railroad Co. et al., 15934

Transportation Department
See Federal Aviation Administration
See Federal Motor Carrier Safety Administration
See Federal Transit Administration
See Surface Transportation Board

Treasury Department
See Fiscal Service
See Foreign Assets Control Office
See United States Mint
NOTICES
Boycotts, international:
Countries requiring cooperation; list, 15934

United States Mint
NOTICES
American buffalo gold proof one-ounce coins; price establishment, 15935

Separate Parts In This Issue

Part II
Environmental Protection Agency, 15938–16151

Part III
Personnel Management Office, 16154–16251

Part IV
Executive Office of the President, Presidential Documents, 16253–16256

Part V
Executive Office of the President, Presidential Documents, 16257–16259

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.

CFR

Proclamations:
8119.....16255

Administrative Orders:
Notices:
Notice of April 1, 2007 16259

7 CFR
319.....15805

12 CFR
652.....15812
655.....15812

14 CFR
39 (6 documents) 15812, 15814, 15816, 15818, 15820, 15822
71 (2 documents) 15824, 15825
97.....15825

Proposed Rules:
39.....15850

21 CFR
866.....15828

22 CFR
126.....15830

31 CFR
538.....15831
560.....15831

33 CFR
100.....15832
165 (2 documents) 15834, 15837

Proposed Rules:
117.....15852

40 CFR
52.....15839

Proposed Rules:
92.....15938
94.....15938
1033.....15938
1039.....15938
1042.....15938
1065.....15938
1068.....15938

41 CFR

Proposed Rules:
102-38.....15854

50 CFR
679.....15848

Proposed Rules:
17.....15857

Rules and Regulations

Federal Register
Vol. 72, No. 63
Tuesday, April 3, 2007

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.

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

7 CFR Part 319

[Docket No. 03–016–3]

RIN 0579–AC18

Cut Flowers From Countries With Chrysanthemum White Rust

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: We are amending the cut flowers regulations to establish specific requirements for the importation of cut flowers that are hosts of chrysanthemum white rust (CWR) from countries where the disease is known to occur. We are also amending the nursery stock regulations to update lists of countries where CWR is known to occur. We are making these changes in order to make our cut flowers and nursery stock regulations consistent. This action is necessary because of numerous recent findings of CWR on cut flowers from Europe that pose a risk of introducing CWR in the United States.

DATES: *Effective Date:* May 3, 2007.

FOR FURTHER INFORMATION CONTACT: Mr. Tony Roman, Import Specialist, Commodity Import Analysis and Operation, PPQ, APHIS, 4700 River Road Unit 133, Riverdale, MD 20737–1231; (301) 734–8758.

SUPPLEMENTARY INFORMATION:

Background

The regulations in 7 CFR part 319 prohibit or restrict the importation of plants, plant parts, and related materials to prevent the introduction of plant pests into the United States. The regulations in ''Subpart-Nursery Stock, Plants, Roots, Bulbs, Seeds, and Other Plant Products,'' §§ 319.37 through 319.37–14 (referred to below as the nursery stock regulations) restrict, among other things, the importation of living plants, plant parts, and seeds for propagation. Conditions governing the importation of cut flowers into the United States are contained in ''Subpart—Cut Flowers'' (§§ 319.74–1 through 319.74–4, referred to below as the cut flowers regulations).

On July 7, 2005, we published in the **Federal Register** (70 FR 39194–39199, Docket No. 03–016–1) a proposal [1] to amend the cut flowers regulations to establish specific requirements for the importation of cut flowers that are hosts of chrysanthemum white rust (CWR) from countries where the disease is known to occur. We also proposed to amend the nursery stock regulations to update lists of countries where CWR is known to occur.

We solicited comments concerning our proposal for 60 days ending September 6, 2005. On September 20, 2005, we published a document in the **Federal Register** (70 FR 55036, Docket No. 03–016–2) reopening the comment period for our proposed rule until October 21, 2005. We received eight comments by that date. The comments were from representatives of State and foreign governments, industry organizations, importers and exporters, and distributors. Two of those commenters supported the proposed rule. The remaining commenters expressed some reservations, which are discussed below.

General Comments

Two commenters stated that information about production site registration in the background section and the rule portion was inconsistent. Specifically, the commenters stated that it was unclear if all cut flower production sites in countries where CWR is known to occur would have to register with their national plant protection organizations (NPPOs) or if only those wishing to export to the United States would have to do so.

The commenter is correct, in that the wording used in the background section and the proposed regulatory text in our proposal regarding production site registration was inconsistent. The background section of the proposed rule stated that all production sites in countries where CWR is known to occur would have to register with their NPPOs. The proposed regulatory text stated that cut flowers would have to originate from production sites that were registered with their country's NPPO. It is our intent to only require those production sites that wish to ship CWR-susceptible species of cut flowers to the United States to register with their NPPOs. Because the error appeared only in the background section, it is not necessary to make a change in the regulatory text in this final rule.

One commenter took issue with our statement that CWR is not established in the United States. The commenter said that the CWR status of a country should be based on official survey information in conformance with international standards. Also, the commenter stated that we should recognize areas within countries as pest-free rather than considering the entire country to be affected, and that this recognition should be based upon official surveys conducted in accordance with the International Plant Protection Convention's (IPPC) standards for pest-free areas.

We maintain that CWR is not established in the United States. Based on the definitions given in the International Standards for Phytosanitary Measures (ISPM) No. 8, ''Determination of Pest Status in an Area,'' when CWR is found in the United States, it fits under the category of ''Transient: Actionable, under eradication.'' The explanation of this category given in ISPM No. 8 is that ''the pest has been detected as an isolated population which may survive into the immediate future and, without phytosanitary measures for eradication, may establish. Appropriate phytosanitary measures have been applied for its eradication.'' As stated in the proposed rule, whenever CWR has been detected in the United States, we have taken immediate action to eradicate the disease. With regard to recognizing areas within countries as CWR-free, we have not identified any CWR-free areas within the countries where the disease is known to occur at this time, but would be willing to do so if an affected country submits to APHIS

[1] To view the proposed rule and the comments we received, go to *http://www.regulations.gov*, click on the ''Advanced Search'' tab, and select ''Docket Search.'' In the Docket ID field, enter APHIS–2005–0061, then click on ''Submit.'' Clicking on the Docket ID link in the search results page will produce a list of all documents in the docket.

scientific documentation that demonstrates the pest-free status of an area or areas within the country, and if the area otherwise meets the requirements in ISPM No. 4 ''Requirements for the Establishment of Pest Free Areas.''

One commenter stated that risk mitigations should be based on a pest risk analysis, but noted that no pest risk analysis was done for the proposed rule. The commenter stated that it would be useful for APHIS to communicate to NPPOs the risks that have been identified by APHIS in this matter.

We explained in our proposed rule that we have been administratively regulating cut flowers from countries where CWR is known to occur since 1974. Under these circumstances, we believe that it is unnecessary to conduct a formal pest risk analysis. We also stated in our proposed rule that we are currently applying similar administrative restrictions to cut flowers from Mexico and the Netherlands and that these measures have been effective in preventing the introduction of CWR by cut flowers from those countries.

Two commenters stated that APHIS inspectors should not be allowed to oversee program operations in other countries. One of the commenters stated that APHIS being allowed to exercise influence over export certifications is inconsistent with IPPC standards and that inspecting production sites should be left up to the individual exporting country. The second commenter took issue with the statement in our proposed rule that, ''* * * if any shipment of cut flowers is found to be infested with CWR upon arrival in the United States, we would prohibit imports from the originating production site until such a time as APHIS and the national plant protection organization of the exporting country can agree that the eradication measures taken have been effective and the pest risk within the production site has been eliminated.'' The commenter stated that the effectiveness of eradication measures should be determined by the exporting country's NPPO, not APHIS.

As the NPPO of the United States, we have the right to monitor program operations in other countries in order to ensure that proper procedures are being followed so as to prevent the introduction of quarantine pests and diseases into the United States. APHIS inspectors will monitor production sites and pest survey information, but the NPPO of the individual countries will be ultimately responsible for monitoring and applying appropriate pest-control measures when necessary. Further, the APHIS inspectors who will be involved in monitoring the effectiveness of each country's program will primarily be APHIS employees who are already working closely with the NPPO in each country. With regard to eradication measures, it is not our intention to dictate which measures a country uses to eradicate CWR once it is detected. Our concern is with ensuring that the measures used by the production site have been effective and that the pest risk within the production site has been eliminated.

One commenter stated that the taxonomy of the genus *Chrysanthemum* has changed over the years and that the table of CWR hosts in § 319.74–2 should reflect these changes. The commenter noted that the plants belonging to the former *Chrysanthemum* spp. complex have been transferred to several other genera and that only three species are now recognized as belonging to the genus *Chrysanthemum* (*i.e.*, *C. carinatum*, *C. coronarium* and *C. segetum*). The commenter added that these species are not hosts to CWR. The commenter also stated that the common name ''chrysanthemum'' should be associated with entries for the *Dendrathema* spp., *Nipponanthemum* spp., *Leucanthemella* spp., and *Ajania pacifica*, but not with entries of *Chrysanthemum* spp. Finally, the commenter stated that in the proposed rule, *Leucanthemum* appears as a synonym for a susceptible species when it is not considered a host and *Chrysanthemum* appears as a susceptible species.

The commenter is correct in that the taxonomy of the genus *Chrysanthemum* has changed over the years; however, the taxonomy has changed again since the suggestions made by the commenter were used. The earlier splitting of the genus referred to by the commenter caused a lot of resistance and confusion, because these plants were well-known as chrysanthemums and many countries did not want to use the new names. In 1995, a formal proposal was made to the International Botanical Congress to conserve the genus *Chrysanthemum*. The proposal was approved in the 1999 meeting of the Botanical Congress and the resulting ''St. Louis Code'' of 2000 conserved the genus *Chrysanthemum*. APHIS updated the taxonomic names in accordance with the decision, and we use the currently accepted names as treated in the USDA, Agricultural Research Service Germplasm Resources Information Network. The table in § 319.74–2 reflects the current taxonomy, and the synonyms listed in the second column include those names in use before the genus *Chrysanthemum* was conserved.

One commenter stated that plants for planting pose a greater risk than cut flowers because cut flowers will shortly end up in someone's home, while plants for planting can be propagated.

The regulations in § 319.37–2 prohibit the importation of CWR-susceptible species of plants for planting from countries where the disease is known to occur. In addition, the regulations in § 319.37–5(c) require that restricted articles from countries where CWR is not known to occur be accompanied by a phytosanitary certificate with a declaration that the ''article was grown in a greenhouse nursery and found by the plant protection service of the country in which grown to be free of CWR based on visual examination of the parent stock, the articles for importation, and the greenhouse nursery in which the articles for importation and the parent stock were grown, once a month for 4 consecutive months immediately prior to importation.''

One commenter stated that we should clarify that Myclobutanil is the only fungicide listed that is intended for foliar fungicide application.

This information was provided in our economic analysis in a paragraph discussing the measures taken if CWR is found in the United States. We simply listed common pesticides that can be used to control CWR and it was not our intention to describe specific details about the appropriate uses of each of those pesticides. Further, the list was not part of the proposed mitigation measures.

One commenter stated that the proposed survey of one-quarter mile surrounding a positive site within the United States is too short. The commenter added that USDA literature indicates that spores may be dispersed by wind more than 700 meters (0.43 miles) away from the positive site.

We are not making any changes in response to this comment because it relates to our CWR national management plan and not the restrictions for cut flowers imports set forth in this rule; however, we will examine our national management plan and update it if warranted.

Effects on Existing Programs in Other Countries

One commenter stated that the rule would have a negative impact on Canadian exporters because chrysanthemums are often imported to Canada, made into bouquets, and then re-exported to the United States. These cut flowers are not accompanied by a phytosanitary certificate. The commenter was concerned that the

proposed requirements would cause demand to exceed supply because only chrysanthemums that originated in a country where CWR is not known to occur would be allowed re-exportation in Canadian bouquets. The commenter also asked that consideration be given to the Flowers Canada pilot program, which allows for certain species of cut flowers originating from specific countries to enter the United States without 100 percent inspection. Along those same lines, a second commenter asked if cut flowers from South American countries where CWR is known to occur would be eligible for re-exportation to the United States if they had been cleared through the Miami Cut Flower Release Program before being moved to Canada and made into bouquets.

Based on numerous interceptions of CWR on cut flowers in recent years, we believe it is necessary to require additional restrictions on cut flowers from countries where CWR is known to occur. This means that only flowers of Canadian origin, or that originate in a country where CWR does not exist, will be eligible for importation under the regulations unless the flowers are accompanied by a phytosanitary certificate. With regard to the Flowers Canada pilot program, currently, this program does not include chrysanthemums because of the risk of introducing CWR into the United States; however, the Flowers Canada program will not otherwise be affected by the rule. With regard to the Miami Cut Flower Release Program, chrysanthemums from Canada entering the United States for a second time will be allowed entry because they have already been inspected and released in the United States under the program.

Two commenters asked that the final rule take into account the fact that in some countries, like Colombia, the programs in place to address CWR are not directly run by the NPPO. The commenters added that APHIS has not intercepted CWR on cut flowers from Colombia since 1990 despite the large amount of flowers that are exported to the United States from that country. One of the commenters stated that the measures imposed on cut flowers from Colombia are equivalent to—and in some cases exceed—the requirements set forth in our proposal, but that because of the proposed requirement for direct participation by the NPPO of the country of origin, Colombia would not be eligible to ship cut flowers of CWR-susceptible species to the United States without substantially modifying its existing procedures. The commenters requested that we modify some of the proposed measures for Colombian exporters.

In Colombia, Ascoflores is an exporter's association that has a cooperative working agreement with the Colombian Plant Protection Organization to dedicate personnel to plant health programs in the cut flower sector and currently oversees inspections of production sites and issues plant health declarations for Colombian cut flowers. We recognize that Colombia has in place measures that are not run by the NPPO, but that are equivalent to the requirements set forth in our proposal and that the rule is currently written as if APHIS will only accept certifications and documentation from the NPPO of the country of origin. We also acknowledge that as a result of Ascoflores' efforts, we have not had any interceptions of CWR on cut flowers from Colombia for more than 15 years and that this evidence supports the efficacy of the current measures in place in Colombia. Therefore, we have amended § 319.74–2(d)(3)(i) in this final rule to provide that production sites must be registered with the NPPO of the country of origin or its designee, and that the NPPO or its designee must provide a list of registered sites to APHIS. In addition, we have amended § 319.74–2(d)(3)(ii) to provide that each shipment of cut flowers must be accompanied by a phytosanitary certificate or equivalent documentation issued by the NPPO of the country of origin or its designee, that contains an additional declaration stating that the place of production as well as the consignment have been inspected and found free of *Puccinia horiana*.

Economic Analysis

One commenter took issue with the statement in our economic analysis certifying that the proposed requirements would not have a significant impact on a substantial number of small entities. The commenter provided figures that demonstrated that the economic effects of this rule on Colombian growers and exporters would be significant.

While we do recognize that the final rule will entail additional costs for importers for inspection and certification in foreign countries, the statement in the proposed rule referred to small entities in the United States, not foreign countries. As required by the Regulatory Flexibility Act, our economic analyses focus on the effects of our rules on small entities within the United States. Under the Plant Protection Act, our decisionmaking related to allowing or denying the importation of commodities must be based on phytosanitary considerations and not economic effects; even when considering the economic effects on U.S. small entities.

Additional Changes in This Final Rule

Since the publication of our proposed rule, we have had several findings of CWR on cut flowers from Ecuador. Therefore, in this final rule, we are adding Ecuador to the list of countries where CWR is known to occur.

In § 319.74–2(d) of our proposed rule, we listed Norway and the Ukraine as countries where CWR is known to occur; however, we failed to include Norway and the Ukraine in the lists of countries in § 319.37–2(a). In this final rule, we are correcting this error by adding Norway and the Ukraine to the list of countries where CWR is known to occur in § 319.37–2(a).

In each of the places where a list of countries where CWR is known to occur appeared in the proposed rule (i.e., §§ 319.37–2(a) and 319.74–2(d)(2)), we are amending those lists to update the listing of countries that comprise the European Union. We are also amending the table in § 319.37–2(a) by amending the entries for *Leucanthemella serotina* and *Nipponanthemum nipponicum* so that they reflect the complete list of countries where CWR is known to occur. We overlooked those two entries in our proposed rule. Similarly, we are amending §§ 319.37–5(c) and 319.37–7(a) to update the list of countries where CWR is known to occur that appear in each of those paragraphs.

Finally, as mentioned previously in this document, the taxonomy of *Chrysanthemum* has changed as a result of the conservation of the genus *Chrysanthemum.* As a result of this conservation, species that were formerly considered *Dendranthema* are now considered *Chrysanthemum.* Therefore, we are amending §§ 319.37–2(a) and 319.37–7(a)(3) by revising the entries for *Dendranthema* spp. to read ''see *Chrysanthemum* spp.'' This will prevent confusion on the part of importers who continue to use the name Dendranthema. We are also amending the entries for *Chrysanthemum* spp. in §§ 319.37–2(a), 319.37–5(c), and 319.37–7(a)(3) by adding ''includes *Dendranthema* spp.''

Executive Order 12866 and Regulatory Flexibility Act

This rule has been reviewed under Executive Order 12866. The rule has been determined to be not significant for the purposes of Executive Order 12866 and, therefore, has not been reviewed by the Office of Management and Budget.

We are amending the cut flowers regulations to establish specific requirements for the importation of cut flowers that are hosts of CWR from countries where the disease is known to occur. We are also amending the nursery stock regulations to update lists of countries where CWR is known to occur. This action is necessary because of numerous recent findings of CWR on cut flowers from Europe that pose a risk of introducing CWR in the United States.

In 2005, U.S. floriculture and nursery crop sales were close to $15.2 billion based on growers' receipts. Chrysanthemums were among the most profitable flowers for their growers. Total U.S. sales of chrysanthemums were estimated at $86.2 million in 2002. Of this amount, $68.9 million were attributed to florists' cut chrysanthemums and the remaining $17.3 million to potted (i.e., hardy) chrysanthemums. Chrysanthemums were not only one of the top four garden plants in terms of sales in 2005, they were also the garden plants with the second fastest price gains since 1995.[2]

Between 2001 and 2005, 10 percent ($64.7 million) of the money spent on imported cut flowers was for chrysanthemums. About 91.6 percent of the cut flowers imported into the United States originate in countries where, based on interceptions by U.S. inspectors, CWR exists.[3]

APHIS has prepared a national management plan which describes procedures in the event a nursery in the United States is infected with CWR. The plan calls for the nursery to be placed into quarantine status. If there are very few infected chrysanthemum plants, the grower has the option to use a fungicide to control the disease or to destroy the crop by incineration. However, no plant should leave the nursery for 8 weeks or until the nursery has been inspected and certified as being free from CWR. In addition to these containment measures, the plan calls for an inspection of every chrysanthemum grower and every residence within a quarter mile to be inspected for CWR.[4]

The fungicides most often recommended to fight the fungus *Puccinia horiana* Henn., which causes CWR, are Myclobutanil, metam sodium, Dazomet, Chloropicrin, and methyl bromide. The cost of fungicide application varies, depending upon the plant size and number of leaves. A study by the National Agricultural Pesticide Impact Assessment Program and the University of California estimated the cost of different chemical treatments per acre of ornamental/nursery plants infected with fungus diseases, including CWR, by State. For field-grown nursery plants, all acreage was treated with fungicides. The treatment entailed spraying the flower plants with metam sodium, which costs $550 per acre, and then applying an herbicide at $200 per acre, totaling $750 per acre. For greenhouse plants, the treatment costs to fight CWR or any other fungus are higher.[5]

In 1994, a property in California was quarantined after it was found to have chrysanthemums infected with CWR. The State followed with a survey around the affected residential area and found 70 more properties in the area with infected chrysanthemums. It cost $32,000, about $500 per residence, to eradicate the disease. A second survey by the State conducted 8 weeks following the first treatment process found very few remaining infected properties. However, the quarantine lasted much longer the second time and the average cost per property reached $7,000.[6]

In 1995, chrysanthemum growers in San Diego County, CA, spent, on average, $5,000 per business establishment to fight a CWR infestation. The infestation was eradicated quickly and followed by an 8-week host-free period. However, the cost reached $100,000 for one greenhouse that experienced repeated infestations and remained quarantined for 10 months. Between 1992 and 1997, direct and indirect losses from CWR infestations to chrysanthemum growers in Santa Barbara County, CA, were approximately $2 million. The county reported an annual value of chrysanthemum production of more than $10 million in 1997.[7]

Potential Effects

The economic effects that could result from the changes in the regulations are expected to be small for U.S. importers of cut chrysanthemums. The cost of the phytosanitary certification will be borne by the exporters, who may pass those costs on to U.S. importers. The expected benefit from the changes in import requirements for cut flowers from all countries where CWR is known to occur is the protection of U.S. floriculture and nursery crop industries and the jobs of the people they employ. In 2005, these two industries contributed $15.2 billion in sales revenue to the U.S. economy.

Potential Effects on Small Entities

The Regulatory Flexibility Act requires that agencies specifically consider the economic effects their rules on small entities. The Small Business Administration has established the size standards based on the North American Industry Classification System (NAICS) for determining which economic entities meet the definition of a small firm. The small entity size standard for nursery and tree production (NAICS code 111421) is $750,000 or less in annual receipts. A total of 1,691 floriculture operations out of 10,965 operations had sales of $500,000 or more. Thus, at least 85 percent of all floriculture operations can be classified as small entities, and it is likely that an even higher percentage can be classified as small entities due to the $250,000 discrepancy.[8]

This rule will continue to allow imports of cut chrysanthemums from countries where CWR is known to occur, as long as the exporters from these countries comply with the import requirements described in this rule. We do not know the cost of certification in these countries compared to the average value of imported consignments of chrysanthemums, but it is expected to be minor. We do not expect that small entities in the U.S. floriculture industry will be significantly affected. However, the requirements will help safeguard the U.S. floriculture and nursery industries from additional introductions of CWR.

Under these circumstances, the Administrator of the Animal and Plant Health Inspection Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

Executive Order 12988

This rule has been reviewed under Executive Order 12988, Civil Justice Reform. If this rule is adopted: (1) All State and local laws and regulations that are inconsistent with this rule will be preempted; (2) no retroactive effect will be given to this rule; and (3) administrative proceedings will not be required before parties may file suit in court challenging this rule.

[2] Floriculture and Nursery Crops Outlook/Electronic Outlook Report from the Economic Research Service/FLO–2006/June 2006/Andy Jerardo.

[3] *http://apps1.fao.org/* and *http://untrade.fas.usda.gov/*.

[4] Rizvi, Anwar S., Roeland Elliston, and Philip Bell, ''Chrysanthemum White Rust: A National Management Plan for Exclusion and Eradication,'' June 2002.

[5] Exotic Pests and Diseases: Biology, Economics, Public Policy, 1999. Published by the Agricultural Issues Center. University of California at Davis: pp. 76–86.

[6] See footnote 5.

[7] See footnote 5.

[8] National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, 2001 Floriculture Crops.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the information collection or recordkeeping requirements included in this rule have been approved by the Office of Management and Budget (OMB) under OMB control number 0579–0271.

E-Government Act Compliance

The Animal and Plant Health Inspection Service is committed to compliance with the E-Government Act to promote the use of the Internet and other information technologies, to provide increased opportunities for citizen access to Government information and services, and for other purposes. For information pertinent to E-Government Act compliance related to this rule, please contact Mrs. Celeste Sickles, APHIS' Information Collection Coordinator, at (301) 734–7477.

List of Subjects in 7 CFR Part 319

Coffee, Cotton, Fruits, Imports, Logs, Nursery stock, Plant diseases and pests, Quarantine, Reporting and recordkeeping requirements, Rice, Vegetables.

■ Accordingly, we are amending 7 CFR part 319 as follows:

PART 319—FOREIGN QUARANTINE NOTICES

■ 1. The authority citation for part 319 continues to read as follows:

Authority: 7 U.S.C. 450, 7701–7772, and 7781–7786; 21 U.S.C. 136 and 136a; 7 CFR 2.22, 2.80, and 371.3.

■ 2. In the table in § 319.37–2(a), the entries for ''*Chrysanthemum* spp. (chrysanthemum)'', ''*Dendranthema* spp. (chrysanthemum)'', ''*Leucanthemella serotina*'', and ''*Nipponanthemum nipponicum*'' are revised to read as follows:

§ 319.37–2 Prohibited articles.

(a) * * *

Prohibited article (includes seeds only if specifically mentioned)	Foreign places from which prohibited	Plant pests existing in the places named and capable of being transported with the prohibited article
* *	* * * * *	* *
Chrysanthemum, spp. (chrysanthemum, includes *Dendranthema* spp.).	Andorra, Argentina, Australia, Belarus, Bosnia and Herzegovina, Brazil, Brunei, Canary Islands, Chile, China, Colombia, Croatia, Ecuador, Iceland, Japan, Korea, Liechtenstein, Macedonia, Malaysia, Mexico, Moldova, Monaco, New Zealand, Norway, Peru, Republic of South Africa, Russia, San Marino, Switzerland, Taiwan, Thailand, Tunisia, Ukraine, Uruguay, Venezuela, Yugoslavia; the European Union (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom); and all countries, territories, and possessions of countries located in part or entirely between 90° and 180° East longitude.	*Puccinia horiana* P. Henn. (white rust of chrysanthemum).
* *	* * * * *	* *
Dendranthema spp. (chrysanthemum).	See *Chrysanthemum* spp.	See *Chrysanthemum* spp.
* *	* * * * *	* *
Leucanthemella serotina	Andorra, Argentina, Australia, Belarus, Bosnia and Herzegovina, Brazil, Brunei, Canary Islands, Chile, China, Colombia, Croatia, Ecuador, Iceland, Japan, Korea, Liechtenstein, Macedonia, Malaysia, Mexico, Moldova, Monaco, New Zealand, Norway, Peru, Republic of South Africa, Russia, San Marino, Switzerland, Taiwan, Thailand, Tunisia, Ukraine, Uruguay, Venezuela, Yugoslavia; the European Union (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom); and all countries, territories, and possessions of countries located in part or entirely between 90° and 180° East longitude.	*Puccinia horiana* P. Henn. (white rust of chrysanthemum).
* *	* * * * *	* *
Nipponanthemum nipponicum	Andorra, Argentina, Australia, Belarus, Bosnia and Herzegovina, Brazil, Brunei, Canary Islands, Chile, China, Colombia, Croatia, Ecuador, Iceland, Japan, Korea, Liechtenstein, Macedonia, Malaysia, Mexico, Moldova, Monaco, New Zealand, Norway, Peru, Republic of South Africa, Russia, San Marino, Switzerland, Taiwan, Thailand, Tunisia, Ukraine, Uruguay, Venezuela, Yugoslavia; the European Union (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom); and all countries, territories, and possessions of countries located in part or entirely between 90° and 180° East longitude.	*Puccinia horiana* P. Henn. (white rust of chrysanthemum).

Prohibited article (includes seeds only if specifically mentioned)	Foreign places from which prohibited	Plant pests existing in the places named and capable of being transported with the prohibited article
* * * * * * *		

* * * * *

■ 3. In § 319.37–5, paragraph (c) is revised to read as follows:

§ 319.37–5 Special foreign inspection and certification requirements.

* * * * *

(c) Any restricted article (except seeds) of *Chrysanthemum* spp. (chrysanthemum, includes *Dendranthema* spp.), *Leucanthemella serotina,* or *Nipponanthemum nipponicum,* from any foreign place except Andorra, Argentina, Australia, Belarus, Bosnia and Herzegovina, Brazil, Brunei, Canary Islands, Chile, China, Colombia, Croatia, Ecuador, Iceland, Japan, Korea, Liechtenstein, Macedonia, Malaysia, Mexico, Moldova, Monaco, New Zealand, Norway, Peru, Republic of South Africa, Russia, San Marino, Switzerland, Taiwan, Thailand, Tunisia, Ukraine, Uruguay, Venezuela, Yugoslavia; the European Union (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom); and all countries, territories, and possessions of countries located in part or entirely between 90° and 180° East longitude shall, at the time of arrival at the port of first arrival in United States, be accompanied by a phytosanitary certificate of inspection. The phytosanitary certificate of inspection must contain a declaration that such article was grown in a greenhouse nursery and found by the plant protection service of the country in which grown to be free from white rust of chrysanthemum (caused by the rust fungus Puccinia horiana P. Henn.) based on visual examination of the parent stock, the articles for importation, and the greenhouse nursery in which the articles for importation and the parent stock were grown, once a month for 4 consecutive months immediately prior to importation.

* * * * *

■ 4. In § 319.37–7, paragraph (a)(3), the table is amended by revising the entries for ''*Chrysanthemum* spp. (chrysanthemum) meeting the conditions in § 319.37–5(c)'', ''*Leucanthemella serotin*a'', and ''*Nipponanthemum nipponicum*'', and by removing the entry for ''*Dendranthema* spp. (chrysanthemum) meeting the conditions in § 319.37–5(c)'' and adding in its place an entry for ''*Dendranthema* spp. (chrysanthemum)'' to read as follows:

§ 319.37–7 Postentry quarantine.

(a) * * *

(3) * * *

Restricted article (excluding seeds)	Foreign country(ies) or locality(ies) from which imported
* *	* * * * *
Chrysanthemum spp. (chrysanthemum, includes *Dendranthema* spp.) meeting the conditions in § 319.37–5(c).	All except Andorra, Argentina, Australia, Belarus, Bosnia and Herzegovina, Brazil, Brunei, Canary Islands, Chile, China, Colombia, Croatia, Ecuador, Iceland, Japan, Korea, Liechtenstein, Macedonia, Malaysia, Mexico, Moldova, Monaco, New Zealand, Norway, Peru, Republic of South Africa, Russia, San Marino, Switzerland, Taiwan, Thailand, Tunisia, Ukraine, Uruguay, Venezuela, Yugoslavia; the European Union (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom); and all countries, territories, and possessions of countries located in part or entirely between 90° and 180° East longitude.
* *	* * * * *
Dendranthema spp. (chrysanthemum)	See *Chrysanthemum* spp.
* *	* * * * *
Leucanthemella serotina	All except Andorra, Argentina, Australia, Belarus, Bosnia and Herzegovina, Brazil, Brunei, Canary Islands, Chile, China, Colombia, Croatia, Ecuador, Iceland, Japan, Korea, Liechtenstein, Macedonia, Malaysia, Mexico, Moldova, Monaco, New Zealand, Norway, Peru, Republic of South Africa, Russia, San Marino, Switzerland, Taiwan, Thailand, Tunisia, Ukraine, Uruguay, Venezuela, Yugoslavia; the European Union (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom); and all countries, territories, and possessions of countries located in part or entirely between 90° and 180° East longitude.
* *	* * * * *
Nipponanthemum nipponicum	All except Andorra, Argentina, Australia, Belarus, Bosnia and Herzegovina, Brazil, Brunei, Canary Islands, Chile, China, Colombia, Croatia, Ecuador, Iceland, Japan, Korea, Liechtenstein, Macedonia, Malaysia, Mexico, Moldova, Monaco, New Zealand, Norway, Peru, Republic of South Africa, Russia, San Marino, Switzerland, Taiwan, Thailand, Tunisia, Ukraine, Uruguay, Venezuela, Yugoslavia; the European Union (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom); and all countries, territories, and possessions of countries located in part or entirely between 90° and 180° East longitude.
* *	* * * * *

* * * * *

■ 5. Section 319.74–2 is amended as follows:

■ a. By redesignating paragraphs (d) and (e) as paragraphs (e) and (f), respectively.

■ b. By adding a new paragraph (d) to read as set forth below.

■ c. By adding, at the end of the section, an OMB citation to read as set forth below.

§ 319.74–2 Conditions governing the entry of cut flowers.

* * * * *

(d) *Chrysanthemum white rust hosts.* (1) The following *Chrysanthemum*, *Leucanthemella*, and *Nipponanthemum* spp. are considered to be hosts of chrysanthemum white rust:

Accepted name of susceptible species	Synonyms	Common name
Chrysanthemum arcticum L.	*Arctanthemum arcticum* (L.) Tzvelev and *Dendranthema arcticum* (L.) Tzvelev.	Arctic chrysanthemum and arctic daisy.
Chrysanthemum boreale (Makino) Makino.	*Chrysanthemum indicum* L. var. *boreale* Makino and *Dendranthema boreale* (Makino) Ling ex Kitam.	
Chrysanthemum indicum L.	*Dendranthema indicum* (L.) Des Moul.	
Chrysanthemum japonense Nakai	*Dendranthema japonense* (Nakai) Kitam. and *Dendranthema occidentali-japonense* Kitam.	Nojigiku.
Chrysanthemum japonicum Makino	*Chrysanthemum makinoi* Matsum. & Nakai and *Dendranthema japonicum* (Makino) Kitam.	Ryuno-giku.
Chrysanthemum×*morifolium* Ramat	*Anthemis grandiflorum* Ramat., *Anthemis stipulacea* Moench, *Chrysanthemum sinense* Sabine ex Sweet, *Chrysanthemum stipulaceum* (Moench) W. Wight, *Dendranthema*×*grandiflorum* (Ramat.) Kitam., *Dendranthema*×*morifolium* (Ramat.) Tzvelev, and *Matricaria morifolia* Ramat.	Florist's chrysanthemum, chrysanthemum, and mum.
Chrysanthemum pacificum Nakai	*Ajania pacifica* (Nakai) K. Bremer & Humphries and *Dendranthema pacificum* (Nakai) Kitam.	Iso-giku.
Chrysanthemum shiwogiku Kitam	*Ajania shiwogiku* (Kitam.) K. Bremer & Humphries and *Dendranthema shiwogiku* (Kitam.) Kitam.	Shio-giku.
Chrysanthemum yoshinaganthum Makino ex Kitam.	*Dendranthema yoshinaganthum* (Makino ex Kitam.) Kitam.	
Chrysanthemum zawadskii Herbich subsp. *yezoense* (Maek.) Y. N. Lee.	*Chrysanthemum arcticum* subsp. maekawanum Kitam, *Chrysanthemum arcticum* var. *yezoense* Maek. [basionym], *Chrysanthemum yezoense* Maek. [basionym], *Dendranthema yezoense* (F. Maek.) D. J. N. Hind, and *Leucanthemum yezoense* (Maek.) A. Löve & D. Löve.	
Chrysanthemum zawadskii Herbich subsp. *zawadskii*.	*Chrysanthemum sibiricum* Turcz. ex DC., nom. inval., *Dendranthema zawadskii* (Herbich) Tzvelev, and *Dendranthema zawadskii* var. *zawadskii*.	
Leucanthemella serotina (L.) Tzvelev	*Chrysanthemum serotinum* L., *Chrysanthemum uliginosum* (Waldst. & Kit. ex Willd.) Pers., and *Pyrethrum uliginosum* (Waldst. & Kit. ex Willd.).	Giant daisy or high daisy.
Nipponanthemum nipponicum (Franch. ex Maxim.) Kitam.	*Chrysanthemum nipponicum* (Franch. ex Maxim.) Matsum. and *Leucanthemum nipponicum* Franch. ex Maxim.	Nippon daisy or Nippon-chrysanthemum.

(2) Chrysanthemum white rust is considered to exist in the following regions: Andorra, Argentina, Australia, Belarus, Bosnia and Herzegovina, Brazil, Brunei, Canary Islands, Chile, China, Colombia, Croatia, Ecuador, Iceland, Japan, Korea, Liechtenstein, Macedonia, Malaysia, Mexico, Moldova, Monaco, New Zealand, Norway, Peru, Republic of South Africa, Russia, San Marino, Switzerland, Taiwan, Thailand, Tunisia, Ukraine, Uruguay, Venezuela, Yugoslavia; the European Union (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom); and all countries, territories, and possessions of countries located in part or entirely between 90° and 180° East longitude.

(3) Cut flowers of any species listed in paragraph (d)(1) of this section may be imported into the United States from any region listed in paragraph (d)(2) of this section only under the following conditions:

(i) The flowers must be grown in a production site that is registered with the national plant protection organization (NPPO) of the country in which the production site is located or with the NPPO's designee, and the NPPO or its designee must provide a list of registered sites to APHIS.

(ii) Each shipment of cut flowers must be accompanied by a phytosanitary certificate or equivalent documentation, issued by the NPPO of the country of origin or its designee, that contains an additional declaration stating that the place of production as well as the consignment have been inspected and found free of *Puccinia horiana*.

(iii) Box labels and other documents accompanying shipments of cut flowers must be marked with the identity of the registered production site.

(iv) APHIS-authorized inspectors must also be allowed access to production sites and other areas necessary to monitor the chrysanthemum white rust-free status of the production sites.

(4) Cut flowers not meeting these conditions will be refused entry into the United States. The detection of chrysanthemum white rust in a shipment of cut flowers from a registered production site upon arrival in the United States will result in the prohibition of imports originating from the production site until such time when APHIS and the NPPO of the exporting country, can agree that the eradication measures taken have been

effective and that the pest risk within the production site has been eliminated.

* * * * *

(Approved by the Office of Management and Budget under control number 0579–0271.)

Done in Washington, DC, this 28th day of March 2007.

Kevin Shea,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. E7–6128 Filed 4–2–07; 8:45 am]

BILLING CODE 3410–34–P

FARM CREDIT ADMINISTRATION

12 CFR Parts 652 and 655

RIN 3052–AC17

Federal Agricultural Mortgage Corporation Funding and Fiscal Affairs; Federal Agricultural Mortgage Corporation Disclosure and Reporting Requirements; Risk-Based Capital Requirements; Effective Date

AGENCY: Farm Credit Administration.

ACTION: Notice of effective date.

SUMMARY: The Farm Credit Administration (FCA) published a final rule under parts 652 and 655 on December 26, 2006 (71 FR 77247). This final rule is intended to more accurately reflect risk in the risk-based capital stress test (RBCST) in order to improve the RBCST's output—Federal Agricultural Mortgage Corporation's regulatory minimum risk-based capital level. In accordance with 12 U.S.C. 2252, the effective date of the final rule is 30 days from the date of publication in the **Federal Register** during which either or both Houses of Congress are in session. Based on the records of the sessions of Congress, the effective date of the regulations is March 31, 2007.

DATES: *Effective Date:* The regulation amending 12 CFR parts 652 and 655, published on December 26, 2006 (71 FR 77247) is effective March 31, 2007.

FOR FURTHER INFORMATION CONTACT: Joseph T. Connor, Associate Director for Policy and Analysis, Office of Secondary Market Oversight, Farm Credit Administration, McLean, VA 22102–5090, (703) 883–4280, TTY (703) 883–4434; or Rebecca S. Orlich, Senior Counsel, Office of General Counsel, Farm Credit Administration, McLean, VA 22102–5090, (703) 883–4020, TTY (703) 883–4020.

(12 U.S.C. 2252(a)(9) and (10))

Dated: March 28, 2007.

Roland E. Smith,

Secretary, Farm Credit Administration Board.

[FR Doc. E7–6076 Filed 4–2–07; 8:45 am]

BILLING CODE 6705–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–26812; Directorate Identifier 2006–NM–199–AD; Amendment 39–15006; AD 2007–07–09]

RIN 2120–AA64

Airworthiness Directives; Airbus Model A318, A319, A320, and A321 Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding an existing airworthiness directive (AD), which applies to certain Airbus Model A318–100, A319–100, A320–200, A321–100, and A321–200 series airplanes; and Model A320–111 airplanes. That AD currently requires modification of the electrical bonding of all structures and systems installed inside the center fuel tank. This new AD requires modification of additional bonding points inside the center fuel tank. This AD results from a report that additional bonding points need to be modified in order to prevent electrical arcing in the center fuel tank. We are issuing this AD to prevent electrical arcing in the center fuel tank due to inadequate bonding, which could result in an explosion of the center fuel tank and consequent loss of the airplane.

DATES: This AD becomes effective May 8, 2007.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of May 8, 2007.

On October 26, 2005 (70 FR 55228, September 21, 2005), the Director of the Federal Register approved the incorporation by reference of Airbus Service Bulletin A320–28–1104, Revision 01, dated December 8, 2004.

ADDRESSES: You may examine the AD docket on the Internet at *http://dms.dot.gov* or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC.

Contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Tim Dulin, Aerospace Engineer, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; telephone (425) 227–2141; fax (425) 227–1149.

SUPPLEMENTARY INFORMATION:

Examining the Docket

You may examine the airworthiness directive (AD) docket on the Internet at *http://dms.dot.gov* or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647–5227) is located on the plaza level of the Nassif Building at the street address stated in the **ADDRESSES** section.

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2005–19–14, amendment 39–14279 (70 FR 55228, September 21, 2005). The existing AD applies to certain Airbus Model A318–100, A319–100, A320–200, A321–100, and A321–200 series airplanes; and Model A320–111 airplanes. That NPRM was published in the **Federal Register** on January 12, 2007 (72 FR 1467). That NPRM proposed to continue to require modification of the electrical bonding of all structures and systems installed inside the center fuel tank. That NPRM also proposed to require modification of additional bonding points inside the center fuel tank.

Comments

We provided the public the opportunity to participate in the development of this AD. No comments have been received on the NPRM or on the determination of the cost to the public.

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

The following table provides the estimated costs for U.S. operators to comply with this AD. There are approximately 720 U.S.-registered airplanes. The average labor rate is $80 per work hour.

ESTIMATED COSTS

Action	Work hours	Parts	Cost per airplane	Fleet cost
Modification of electrical bonding (required by AD 2005–19–14).	Between 49 and 64	Between $10 and $370	Between $3,930 and $5,490.	Between $2,829,600 and $3,952,800.
Modification of additional bonding points (new action).	Between 6 and 7 hours	$100	Between $580 and $660 ...	Between $417,600 and $475,200.

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 have determined that this AD will not have federalism implications under Executive Order 13132. This AD will 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 this AD:

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

(2) Is not a ''significant rule'' under 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 AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 Federal Aviation Administration (FAA) amends § 39.13 by removing amendment 39–14279 (70 FR 55228, September 21, 2005) and by adding the following new airworthiness directive (AD):

2007–07–09 Airbus: Amendment 39–15006. FAA–2007–26812; Directorate Identifier 2006–NM–199–AD.

Effective Date

(a) This AD becomes effective May 8, 2007.

Affected ADs

(b) This AD supersedes AD 2005–19–14.

Applicability

(c) This AD applies to Airbus Model A318, A319, A320, and A321 airplanes; certificated in any category; except airplanes that have received Airbus Modification 31892 in production.

Unsafe Condition

(d) This AD results from a report that additional bonding points need to be modified in order to prevent electrical arcing in the center fuel tank. We are issuing this AD to prevent electrical arcing in the center fuel tank due to inadequate bonding, which could result in an explosion of the center fuel tank and consequent loss of the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Restatement of the Requirements of AD 2005–19–14

Modification

(f) Within 58 months after October 26, 2005 (the effective date of AD 2005–19–14): Modify the electrical bonding of all structures and systems installed inside the center fuel tank by accomplishing all of the actions in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–28–1104, Revision 01, dated December 8, 2004; Revision 02, dated February 21, 2005; or Revision 03, including Appendix 01, dated February 23, 2006. After the effective date of this AD, only Revision 03 may be used.

Actions Accomplished According to Previous Issue of the Service Bulletin

(g) Actions done before October 26, 2005, in accordance with Airbus Service Bulletin A320–28–1104, dated December 2, 2003, are acceptable for compliance with the corresponding requirements of paragraph (f) of this AD.

New Requirements of This AD

Modification (Additional Bonding Points)

(h) For airplanes on which the actions specified in Airbus Service Bulletin A320–28–1104, dated December 2, 2003; Revision 01, dated December 8, 2004; or Revision 02, dated February 21, 2005; have been done before the effective date of this AD: Within 78 months after the effective date of this AD, modify the electrical bonding of the structures and systems identified in the additional actions specified in paragraph 3.B.(3) of the Accomplishment Instructions of Airbus Service Bulletin A320–28–1104, Revision 03, including Appendix 01, dated February 23, 2006.

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

(3) AMOCs approved previously in accordance with AD 2005–19–14, are approved as AMOCs for the corresponding provisions of paragraph (f) of this AD.

Related Information

(j) European Aviation Safety Agency airworthiness directive 2006–0176, dated June 26, 2006, also addresses the subject of this AD.

Material Incorporated by Reference

(k) You must use the service information identified in Table 1 of this AD, as applicable, to perform the actions that are required by this AD, unless the AD specifies otherwise.

TABLE 1.—ALL MATERIAL INCORPORATED BY REFERENCE

Airbus Service Bulletin	Revision level	Date
A320–28–1104	01	December 8, 2004.
A320–28–1104	02	February 21, 2005.
A320–28–1104, including Appendix 01	03	February 23, 2006.

(1) The Director of the Federal Register approved the incorporation by reference of the documents identified in Table 2 of this AD in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

TABLE 2.—NEW MATERIAL INCORPORATED BY REFERENCE

Airbus Service Bulletin	Revision level	Date
A320–28–1104	02	February 21, 2005.
A320–28–1104, including Appendix 01	03	February 23, 2006.

(2) On October 26, 2005 (70 FR 55228, September 21, 2005), the Director of the Federal Register approved the incorporation by reference of Airbus Service Bulletin A320–28–1104, Revision 01, dated December 8, 2004.

(3) Contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; 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/cfr/ibr-locations.html.*

Issued in Renton, Washington, on March 22, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–5886 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2006–25419; Directorate Identifier 2006–NM–055–AD; Amendment 39–15007; AD 2007–07–10]

RIN 2120–AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model ERJ 170 Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain EMBRAER Model ERJ 170 airplanes. This AD requires replacing the mini-latches on certain lavatory waste compartment doors with new, stronger latches, and other specified actions. This AD results from reports of certain lavatory waste compartment doors opening during flight due to movement of the waste compartment during takeoff, because the mini-latches installed on the doors of those compartments lose their strength over time. We are issuing this AD to prevent the inability of the waste compartment doors to adequately contain a fire inside the lavatory waste compartment, and consequent uncontained fire and smoke within a lavatory during flight.

DATES: This AD becomes effective May 8, 2007.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of May 8, 2007.

ADDRESSES: You may examine the AD docket on the Internet at *http://dms.dot.gov* or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC.

Contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343—CEP 12.225, Sao Jose dos Campos—SP, Brazil, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; telephone (425) 227–1175; fax (425) 227–1149.

SUPPLEMENTARY INFORMATION:

Examining the Docket

You may examine the AD docket on the Internet at *http://dms.dot.gov* or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647–5227) is located on the plaza level of the Nassif Building at the street address stated in the **ADDRESSES** section.

Discussion

The FAA issued a supplemental notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to certain EMBRAER Model ERJ 170 airplanes. That supplemental NPRM was published in the **Federal Register** on January 26, 2007 (72 FR 3761). That supplemental NPRM proposed to require replacing the mini-latches on certain lavatory waste compartment doors with new, stronger latches, and other specified actions.

Comments

We provided the public the opportunity to participate in the development of this AD. No comments have been received on the supplemental NPRM or on the determination of the cost to the public.

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed in the supplemental NPRM.

Costs of Compliance

The following table provides the estimated costs for U.S. operators to comply with this AD.

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Parts	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
Replacement of lavatory waste compartment door latches	2	$80	$0	$160	75	$12,000

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 have determined that this AD will not have federalism implications under Executive Order 13132. This AD will 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 this AD:

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

(2) Is not a ''significant rule'' under 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 AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

2007–07–10 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39–15007. Docket No. FAA–2006–25419; Directorate Identifier 2006–NM–055–AD.

Effective Date

(a) This AD becomes effective May 8, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to EMBRAER Model ERJ 170–100 LR, –100 STD, –100 SE, –100 SU, –200 LR, –200 STD, and –200 SU airplanes, certificated in any category; as identified in EMBRAER Service Bulletin 170–25–0024, Revision 01, dated January 9, 2006.

Unsafe Condition

(d) This AD results from reports of certain lavatory waste compartment doors opening during flight due to movement of the waste compartment during takeoff, because the mini-latches installed on those doors lose their strength over time. We are issuing this AD to prevent the inability of the waste compartment doors to adequately contain a fire inside the lavatory waste compartment, and consequent uncontained fire and smoke within a lavatory during flight.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Replacement of Mini-Latches on Certain Lavatory Waste Compartment Doors

(f) Within 700 flight hours after the effective date of this AD: Replace the mini-latches for the forward and aft lavatory waste compartment doors by accomplishing all the actions, except for the forward and aft lavatory mirror rework, specified in paragraphs 3.B. and 3.G. of paragraph 4., ''Appendix 1,'' of EMBRAER Service Bulletin 170–25–0024, Revision 01, dated January 9, 2006.

Note 1: EMBRAER Service Bulletin 170–25–0024, Revision 01, dated January 9, 2006, refers to C & D Aerospace Service Bulletin 170–18616–25–023, Revision 1, dated November 29, 2005, as an additional source of service information for replacing the mini-latches on certain lavatory waste compartment doors required by paragraph (f) of this AD.

Credit for Actions Done Using Previous Issue of Service Information

(g) Replacements done before the effective date of this AD in accordance with paragraphs 3.B. and 3.G. of paragraph 4., ''Appendix 1,'' of EMBRAER Service Bulletin 170–25–0024, dated July 21, 2005, are considered acceptable for compliance with the corresponding action specified in this AD.

Alternative Methods of Compliance (AMOCs)

(h)(1) The Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

Related Information

(i) Brazilian airworthiness directive 2005–11–01, effective December 8, 2005, also addresses the subject of this AD.

Material Incorporated by Reference

(j) You must use EMBRAER Service Bulletin 170–25–0024, Revision 01, dated January 9, 2006, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343—CEP 12.225, Sao Jose dos Campos—SP, Brazil, for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; 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/cfr/ibr-locations.html.*

Issued in Renton, Washington, on March 22, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–5885 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–27737; Directorate Identifier 2007–NM–029–AD; Amendment 39–15008; AD 2007–07–11]

RIN 2120–AA64

Airworthiness Directives; Gulfstream Aerospace LP Model Gulfstream 200 Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Due to quality escape during serial production, the jumpers at the Right Fuel Standby Pump Connector 4Q1 were manufactured from 14 AWG electrical wiring instead of 12 AWG wires as required per approved drawing. The possible overheating of the 14 AWG jumpers routed in vicinity of the fuel tank may present the unsafe flight condition.

This AD requires actions that are intended to address the unsafe condition described in the MCAI.

DATES: This AD becomes effective April 18, 2007.

The Director of the Federal Register approved the incorporation by reference of a certain publication, listed in the AD as of April 18, 2007.

We must receive comments on this AD by May 3, 2007.

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

- DOT Docket Web Site: Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.
- Fax: (202) 493–2251.
- Mail: Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–0001.
- Hand Delivery: Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://dms.dot.gov;* or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647–5227) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mike Borfitz, Aerospace Engineer, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; telephone (425) 227–2677; fax (425) 227–1149.

SUPPLEMENTARY INFORMATION:

Streamlined Issuance of AD

The FAA is implementing a new process for streamlining the issuance of ADs related to MCAI. This streamlined process will allow us to adopt MCAI safety requirements in a more efficient manner and will reduce safety risks to the public. This process continues to follow all FAA AD issuance processes to meet legal, economic, Administrative Procedure Act, and **Federal Register** requirements. We also continue to meet our technical decision-making responsibilities to identify and correct unsafe conditions on U.S.-certificated products.

This AD references the MCAI and related service information that we considered in forming the engineering basis to correct the unsafe condition. The AD contains text copied from the MCAI and for this reason might not follow our plain language principles.

Discussion

The Civil Aviation Authority of Israel (CAAI), which is the aviation authority for Israel, has issued Israeli Airworthiness Directive 28–07–02–03, dated February 11, 2007 (referred to after this as ''the MCAI''), to correct an unsafe condition for the specified products. The MCAI states:

Due to quality escape during serial production, the jumpers at the Right Fuel Standby Pump Connector 4Q1 were manufactured from 14 AWG electrical wiring instead of 12 AWG wires as required per approved drawing. The possible overheating of the 14 AWG jumpers routed in vicinity of the fuel tank may present the unsafe flight condition.

The corrective actions include replacing the wiring, inspecting for other components damaged by overheating, and replacing damaged components if necessary. You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Gulfstream has issued Alert Service Bulletin 200–28A–315, dated February 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 AD

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

Differences Between the AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are highlighted in a NOTE within the AD.

FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice

and comment prior to adoption of this rule because, due to a quality escape during serial production, the jumpers at the right fuel standby pump connector 4Q1 were manufactured from 14 AWG electrical wiring instead of 12 AWG wires as required per approved drawing. The overheating of the 14 AWG jumpers routed in vicinity of the fuel tank may cause the unsafe flight condition. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2007–27737; Directorate Identifier 2007–NM–029–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to *http://dms.dot.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

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 AD will not have federalism implications under Executive Order 13132. This AD will 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 AD:

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 AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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:

2007–07–11 Gulfstream Aerospace LP (Formerly Israel Aircraft Industries, Ltd.): Amendment 39–15008. Docket No. FAA–2007–27737; Directorate Identifier 2007–NM–029–AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective April 18, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Gulfstream Model Gulfstream 200 airplanes, certificated in any category, serial numbers 121 through 154.

Subject

(d) Fuel.

Reason

(e) The mandatory continued airworthiness information (MCAI) states:

Due to quality escape during serial production, the jumpers at the Right Fuel Standby Pump Connector 4Q1 were manufactured from 14 AWG electrical wiring instead of 12 AWG wires as required per approved drawing. The possible overheating of the 14 AWG jumpers routed in vicinity of the fuel tank may present the unsafe flight condition.

The corrective actions include replacing the wiring, inspecting for other components damaged by overheating, and replacing damaged components if necessary.

Actions and Compliance

(f) Within 25 flight hours or 30 days, whichever occurs first, after the effective date of this AD, unless already done, do the following actions.

(1) Replace the wiring according to the Gulfstream Alert Service Bulletin 200–28A–315, dated February 5, 2007.

(2) Do a general visual inspection for other components damaged by overheating. Replace all damaged components, before further flight, using a method approved by either the Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA; or the Civil Aviation Authority of Israel (CAAI) (or its delegated agent). One approved method is the Gulfstream G200 Maintenance Manual.

Note 1: For the purposes of this AD, a general visual inspection is: ''A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to ensure visual access to all surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked.''

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows:

(1) The MCAI specifies to ''inspect and replace the wiring'' and ''replace other components damaged by overheating.'' However, this AD requires replacing the wiring, inspecting for other components damaged by overheating, and replacing damaged components as applicable. We have defined the inspection as a ''general visual inspection.''

(2) The MCAI does not specify service information for replacing components other than wiring. We require that the replacements be done in accordance with a method approved by the FAA or CAAI.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, International Branch, ANM–116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mike Borfitz,

Aerospace Engineer, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; telephone (425) 227–2677; fax (425) 227–1149. Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

(2) *Airworthy Product:* For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) *Reporting Requirements:* For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120–0056.

Related Information

(h) Refer to MCAI Israeli Airworthiness Directive 28–07–02–03, dated February 11, 2007, and Gulfstream Alert Service Bulletin 200–28A–315, dated February 5, 2007, for related information.

Material Incorporated by Reference

(i) You must use Gulfstream Alert Service Bulletin 200–28A–315, dated February 5, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Mail Station D–25, Savannah, Georgia 31402–2206.

(3) You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; 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/cfr/ibr-locations.html.*

Issued in Renton, Washington, on March 23, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–5898 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–27735; Directorate Identifier 2007–NM–027–AD; Amendment 39–15009; AD 2007–07–12]

RIN 2120–AA64

Airworthiness Directives; Honeywell Flight Management Systems (FMSs) Served by Honeywell NZ–2000 Navigation Computers Approved Under Technical Standard Order (TSO) TSO–C115a, and IC–800 Integrated Avionics Computers Approved Under TSOs C9c, C52a, and C115a; as Installed on Various Transport Category Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Honeywell FMSs served by Honeywell NZ–2000 navigation computers and IC–800 integrated avionics computers. This AD requires identifying affected computers by part number and software modification level and revising the Limitations section of applicable airplane flight manuals to provide procedures for retaining optimum position determination and intended navigation. This AD results from reports of in-flight unannunciated shifts of computed position in airplanes with the subject flight management system (FMS) computers. We are issuing this AD to prevent a shift in the FMS computed position, which could result in uncommanded deviations from the intended flight path of the airplane and, if those deviations are undetected by the flight crew, compromised terrain/traffic avoidance.

DATES: This AD becomes effective April 18, 2007.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of April 18, 2007.

We must receive comments on this AD by June 4, 2007.

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

- DOT Docket Web site: Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590.
- Fax: (202) 493–2251.
- Hand Delivery: Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Contact Honeywell, P.O. Box 21111, Phoenix, AZ 85036–1111, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Joe Brownlee, Flight Test Pilot, Flight Test Branch, ANM–160L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712–4137; telephone (562) 627–5365; fax (562) 627–5210.

SUPPLEMENTARY INFORMATION:

Discussion

We have received reports of in-flight unannunciated shifts of computed position in airplanes with Honeywell NZ–2000 navigation and IC–800 integrated avionics computers serving Honeywell Flight Management Systems (FMSs). The computed position shift, attributed to a software design error induced during a previous software modification, occurs when the number of inertial reference units (IRUs) supplying data to the FMS degrades from 3 to 2 or from 2 to 1, or increases from 2 to 3 or from 1 to 2. If the FMS system is coupled to an autopilot or flight director system, this shift in the FMS computed position could result in uncommanded deviations from the intended flight path of the airplane and, if those deviations are undetected by the flight crew, compromised terrain/traffic avoidance.

Relevant Service Information

We have reviewed Honeywell Technical Newsletter A23–6111–008, Revision 001, dated February 22, 2007. This technical newsletter describes procedures for determining affected FMS computers receiving position information from multiple IRUs by identifying the part number and software modification level of the NZ–2000 navigation and IC–800 integrated avionics computers serving these Flight Management Systems. For airplanes with affected part numbers and software modification levels, the newsletter also describes revising the Limitations section of the applicable airplane flight manuals (AFMs) to provide procedures for deselecting all but one IRS to each FMS on every power-up cycle. The

AFM revision is provided as Appendix A in the newsletter.

FAA's Determination and Requirements of This AD

The unsafe condition described previously is likely to exist or develop on other airplanes of the same type design. For this reason, we are issuing this AD to prevent errors in airplane position displays and consequent deviation from the intended flight path. This AD requires accomplishing the actions specified in the Technical Newsletter described previously.

Interim Action

We consider this AD interim action. The manufacturer is currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, we might consider additional rulemaking.

FAA's Determination of the Effective Date

Since an unsafe condition exists that requires the immediate adoption of this AD, we have found that notice and opportunity for public comment before issuing this AD are impracticable, and that good cause exists to make this AD effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any relevant written data, views, or arguments regarding this AD. Send your comments to an address listed in the **ADDRESSES** section. Include ''Docket No. FAA–2007–27735; Directorate Identifier 2007–NM–027–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD that might suggest a need to modify it.

We will post all comments we receive, without change, to *http://dms.dot.gov*, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of that web site, anyone can find and read the comments in any of our dockets, including 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), or you may visit *http://dms.dot.gov*.

Examining the Docket

You may examine the AD docket on the Internet at *http://dms.dot.gov*, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647–5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

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 have determined that this AD will not have federalism implications under Executive Order 13132. This AD will 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 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 AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

2007–07–12 Honeywell, Inc.: Amendment 39–15009. Docket No. FAA–2007–27735; Directorate Identifier 2007–NM–027–AD.

Effective Date

(a) This AD becomes effective April 18, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all Honeywell NZ–2000 navigation computers approved under Technical Standard Order (TSO) TSO–C115a, and IC–800 integrated avionics computers approved under TSOs C9c, C52a, and C115a; as installed on transport category airplanes, certificated in any category, including but not limited to the airplanes identified in Table 1 of this AD.

TABLE 1.—KNOWN AFFECTED AIRPLANES

Manufacturer	Model
Bombardier, Inc	CL–600–2B16 (CL–601–3A, CL–601–3R, and CL–604) airplanes.
Dassault Aviation	Mystere-Falcon 900 airplanes.
Gulfstream Aerospace Corporation	G–1159A, G–IV, and GV airplanes.
Lockheed	382G series airplanes.

TABLE 1.—KNOWN AFFECTED AIRPLANES—Continued

Manufacturer	Model
Raytheon Aircraft Company	BAe.125 Series 800A (including C–29A and U–125) airplanes. Hawker 800XP and 1000 airplanes.

Unsafe Condition

(d) This AD results from reports of in-flight unannunciated shifts of computed position in airplanes with the subject flight management system (FMS) computers identified in paragraph (c) of this AD. We are issuing this AD to prevent a shift in the FMS computed position, which could result in uncommanded deviations from the intended flight path of the airplane and, if those deviations are undetected by the flight crew, compromised terrain/traffic avoidance.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Identification of Part Number/Modification Level

(f) Within 14 days after the effective date of this AD: Determine if the installed NZ–2000 navigation computers and IC–800 integrated avionics computers serving FMSs have computer part numbers and software modification levels identified in Honeywell Technical Newsletter A23–6111–008, Revision 001, dated February 22, 2007. For purposes of this AD, airplanes with FMS computers having a part number and software modification level identified in the newsletter are ''affected airplanes.''

Revision of Airplane Flight Manual (AFM)

(g) For any affected airplane: Within 14 days after the effective date of this AD, revise the Limitations section of the applicable AFM to incorporate the information included in Appendix A of Honeywell Technical Newsletter A23–6111–008, Revision 001, dated February 22, 2007. This may be done by inserting a copy of Appendix A of the newsletter into the AFM.

Alternative Methods of Compliance (AMOCs)

(h)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(i) You must use Honeywell Technical Newsletter A23–6111–008, Revision 001, dated February 22, 2007, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Honeywell, P.O. Box 21111, Phoenix, AZ 85036–1111, for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; 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/cfr/ibr-locations.html*.

Issued in Renton, Washington, on March 23, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–5896 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–27736; Directorate Identifier 2007–NM–001–AD; Amendment 39–15010; AD 2007–07–05]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 777 Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Boeing Model 777 airplanes. This AD requires a one-time inspection to determine the part number of the left and right air supply and cabin pressure controllers (ASCPCs) and installation of new ASCPC software if necessary. This AD results from a report of an ASCPC failure during flight. We are issuing this AD to prevent an ASCPC failure that could stop airflow into the airplane, inhibit the cabin altitude warning message, and cause an incorrect display of cabin altitude. These failures could result in depressurization of the airplane without warning.

DATES: This AD becomes effective April 18, 2007.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of April 18, 2007.

We must receive comments on this AD by June 4, 2007.

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

- DOT Docket Web site: Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, room PL–401, Washington, DC 20590.
- Fax: (202) 493–2251.
- Hand Delivery: Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street SW., Washington, DC, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124–2207, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: David Webber, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM–150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; telephone (425) 917–6451; fax (425) 917–6590.

SUPPLEMENTARY INFORMATION:

Discussion

We have received a report indicating that the left air supply and cabin pressure controller (ASCPC) incorrectly shut off the right air conditioning pack and the left bleed, and erratically opened and closed the isolation valves, on a Model 777 airplane during flight. This resulted in periods of loss of conditioned inflow to the cabin and flight deck. The flightcrew descended the airplane to 10,000 feet and returned to the airport. Investigation into this event revealed that the actions of the ASCPC resulted from a solder defect in the Aeronautical Radio, Inc. (ARINC) 629 hardware that occurred during manufacturing. The manufacturing error

was determined to be an isolated event. However, subsequent analysis revealed a software deficiency within the ASCPC that would not detect this single point failure. This defect caused an intermittent open to ARINC 629 built-in-test (BIT) 13 for all input words. This, in turn, caused the ASCPC to enter the auxiliary power unit-to-pack takeoff (APT) mode above 30,000 feet. The ASCPC internal BIT did not detect the defect and allowed the ASCPC to continue to operate. This condition, if not corrected, could stop airflow into the airplane, inhibit the cabin altitude warning message, and cause an incorrect display of cabin altitude. These failures could result in depressurization of the airplane without warning.

Relevant Service Information

We have reviewed Boeing Service Bulletin 777–36A0026, Revision 1, dated February 8, 2007. The service bulletin describes procedures for installing new ASCPC operational program software (OPS) to prevent the failures caused by the solder defect. The software also includes updates that are not related to the defect.

The replacement software is different from the existing software as follows:

- APT logic is revised to improve fault tolerance.
- ARINC 629 integrity tests are added.
- Composite critical fault counter (CCFC) is revised to be reset to zero upon determination that no validated critical faults have occurred within the last one hour.
- List of parameters that are stored in the compact flash disk are updated.
- ARINC 429 wraparound BIT logic is revised to correct a fault isolation error.
- Core software for the central processing module (CPM) of the modular digital controller (MDC) is revised to initialize an un-initiated variable that could result in nuisance ASCPC faults.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA's Determination and Requirements of This AD

The unsafe condition described previously is likely to exist or develop on other airplanes of the same type design. For this reason, we are issuing this AD to prevent an ASCPC failure that could stop airflow into the airplane, inhibit the cabin altitude warning message, and cause an incorrect display of cabin altitude. These failures could result in depressurization of the airplane without warning. This AD requires a one-time inspection to determine the part number of the left and right ASCPCs and installation of new ASCPC software if necessary.

FAA's Determination of the Effective Date

Since an unsafe condition exists that requires the immediate adoption of this AD, we have found that notice and opportunity for public comment before issuing this AD are impracticable, and that good cause exists to make this AD effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any relevant written data, views, or arguments regarding this AD. Send your comments to an address listed in the **ADDRESSES** section. Include ''Docket No. FAA–2007–27736; Directorate Identifier 2007–NM–001–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD that might suggest a need to modify it.

We will post all comments we receive, without change, to *http://dms.dot.gov*, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of that web site, anyone can find and read the comments in any of our dockets, including 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), or you may visit *http://dms.dot.gov*.

Examining the Docket

You may examine the AD docket on the Internet at *http://dms.dot.gov*, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647–5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

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 have determined that this AD will not have federalism implications under Executive Order 13132. This AD will 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 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 AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

2007–07–05 Boeing: Amendment 39–15010. Docket No. FAA–2007–27736; Directorate Identifier 2007–NM–001–AD.

Effective Date

(a) This AD becomes effective April 18, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all Boeing Model 777–200, –200LR, –300, and –300ER series airplanes, certificated in any category.

Unsafe Condition

(d) This AD results from a report of an air supply and cabin pressure controller (ASCPC) failure during flight. We are issuing this AD to prevent an ASCPC failure that could stop airflow into the airplane, inhibit the cabin altitude warning message, and cause an incorrect display of cabin altitude. These failures could result in depressurization of the airplane without warning.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Inspection To Determine Part Number (P/N) of the ASCPCs

(f) For all airplanes: Within 90 days after the effective date of this AD, perform an inspection of the left and right ASCPCs to determine the part number.

ASCPC Software Installation

(g) For airplanes on which any ASCPC having P/N 1152972–4 is found during the inspection required by paragraph (f) of this AD: Within 90 days after the effective date of this AD, install new ASCPC operational program software (OPS) in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777–36A0026, Revision 1, dated February 8, 2007.

Installation of Certain OPS Software Prohibited

(h) As of the effective date of this AD, installation of OPS P/N 3673–GRS–101–00, P/N 3670–GRS–102–00, or P/N 3671–GRS–103–00 is prohibited.

(i) As of the effective date of this AD, no person may install an ASCPC, P/N 111152972–4, on any airplane, unless it has had ASCPC OPS P/N 3676–GRS–104–00 installed in accordance with paragraph (g) of this AD.

Credit for Actions Done Using Previous Service Information

(j) Actions accomplished before the effective date of this AD in accordance with Boeing Alert Service Bulletin 777–36A0026, dated December 19, 2006, are considered acceptable for compliance with the corresponding actions specified in this AD.

Alternative Methods of Compliance (AMOCs)

(k)(1) The Manager, Seattle Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(l) You must use Boeing Service Bulletin 777–36A0026, Revision 1, dated February 8, 2007, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124–2207, for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; 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/cfr/ibr-locations.html*.

Issued in Renton, Washington, on March 21, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–5897 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–27628; Directorate Identifier 2007–CE–025–AD; Amendment 39–15011; AD 2007–07–06]

RIN 2120–AA64

Airworthiness Directives; Columbia Aircraft Manufacturing (Previously the Lancair Company) Models LC40–550FG, LC41–550FG, and LC42–550FG Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Columbia Aircraft Manufacturing (previously The Lancair Company) Models LC40–550FG, LC41–550FG, and LC42–550FG airplanes. This AD requires you to add information to the Limitations section of the Airplane Flight Manual (AFM). This AD also requires you to repetitively inspect the aileron and the elevator linear bearings and control rods for foreign object debris, scarring, or damage and take all necessary corrective actions. This AD results from reports of possible foreign object contamination of the linear bearings. We are issuing this AD to prevent jamming in the aileron and elevator control systems, which could result in failure. This failure could lead to loss of control.

DATES: This AD becomes effective on April 9, 2007.

On April 9, 2007 the Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD.

We must receive any comments on this AD by June 4, 2007.

ADDRESSES: Use one of the following addresses to comment on this AD.

- *DOT Docket Web site:* Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.
- *Mail:* Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–0001.
- *Fax:* (202) 493–2251.
- *Hand Delivery:* Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov*. Follow the instructions for submitting comments.

To get the service information identified in this AD, contact Columbia Aircraft Manufacturing Corp., 22550 Nelson Road, Bend, Oregon 97701; *telephone:* (888) 599–8660; *e-mail: Product.Support@FlyColumbia.com.*

To view the comments to this AD, go to *http://dms.dot.gov*. The docket number is FAA–2007–27628; Directorate Identifier 2007–CE–025–AD.

FOR FURTHER INFORMATION CONTACT: Jeff Morfitt, Aerospace Engineer, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, WA 98057; telephone: (425) 917–6405; fax: (425) 917–6590.

SUPPLEMENTARY INFORMATION:

Discussion

We received a report of an incident involving a pilot flying a Model LC41–550FG airplane. The pilot experienced a roll (aileron) system control jam, which prevented him from rolling the airplane in one direction. Investigation revealed the cause of the problem to be foreign material lodged in a linear bearing (part number LA57272500), which supports a push-pull tube in the aileron control system.

This same bearing is used in two places (left and right) in the aileron control system and four places (two left and two right) in the elevator control system. The foreign material (hardened pieces of adhesive material), which was apparently present at the time of airplane delivery, randomly lodged in the linear bearing after approximately 200 flight hours. This shows that potential exists for similar events to occur at any time if foreign material is present near one of these bearings.

The internal control systems are identical for all three airplane models affected by this AD. Jamming or roughness in the control systems also interferes with the proper functioning of the autopilot.

This condition, if not corrected, could result in jamming of the aileron and elevator control systems, which could result in loss of control.

Relevant Service Information

We reviewed Columbia Mandatory Service Bulletin SB–07–002, dated March 14, 2007. The service information describes procedures for adding information to the ''Before Starting Engine'' checklist and inspecting the aileron and the elevator linear bearings and control rods for foreign object debris, scarring, or damage.

FAA's Determination and Requirements of This AD

We are issuing this AD because we evaluated all the information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design. This AD requires adding information to the Limitations section of the AFM. This AD also requires you to repetitively inspect the aileron and the elevator linear bearings and control rods for foreign object debris, scarring, or damage and take all necessary corrective actions.

In preparing this rule, we contacted type clubs and aircraft operators to get technical information and information on operational and economic impacts. We did not receive any information through these contacts. If received, we would have included a discussion of any information that may have influenced this action in the rulemaking docket.

FAA's Determination of the Effective Date

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impracticable, and that good cause exists for making this amendment effective in fewer than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and an opportunity for public comment. We invite you to send any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under the **ADDRESSES** section. Include the docket number ''FAA–2007–27628; Directorate Identifier 2007–CE–025–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We will post all comments we receive, without change, to *http://dms.dot.gov*, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive concerning this AD.

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 AD will not have federalism implications under Executive Order 13132. This AD will 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 this AD:

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

(2) Is not a ''significant rule'' under 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 AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket that contains the AD, the regulatory evaluation, any comments received, and other information on the Internet at *http://dms.dot.gov*; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647–5227) is located at the street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 airworthiness directive (AD):

2007–07–06 Columbia Aircraft Manufacturing (Previously The Lancair Company): Amendment 39–15011; Docket No. FAA–2007–27628; Directorate Identifier 2007–CE–025–AD.

Effective Date

(a) This AD becomes effective on April 9, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the following airplane models and serial numbers that are certificated in any category:

Model	Serial No.
LC40–550FG	40001 through 40079.
LC41–550FG	41001 and up.
LC42–550FG	42001 and up.

Unsafe Condition

(d) This AD is the result of reports of possible foreign object contamination of the linear bearings. We are issuing this AD to prevent jamming in the aileron and elevator control systems, which could result in failure. This failure could lead to loss of control.

Compliance

(e) To address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
(1) Insert Appendix A of Columbia Mandatory Service Bulletin SB–07–002, dated March 14, 2007, into the Limitations section of the Airplane Flight Manual (AFM).	Before further flight after April 9, 2007 (the effective date of this AD).	The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may do the AFM insertion requirement of this AD. Make an entry in the aircraft records showing compliance with this portion of the AD following section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).
(2) Access and inspect the aileron and elevator linear bearings on both wings for foreign object debris.	Initially inspect within the next 35 hours time-in-service (TIS) after April 9, 2007 (the effective date of this AD). Repetitively inspect thereafter at intervals not to exceed 12 calendar months.	Following Columbia Mandatory Service Bulletin SB–07–002, dated March 14, 2007, and the applicable maintenance manual.
(3) Remove any debris found during any inspection required in paragraph (e)(2) of this AD.	Remove any debris before further flight after the inspection in which the debris is found.	Following Columbia Mandatory Service Bulletin SB–07–002, dated March 14, 2007, and the applicable maintenance manual.
(4) Inspect the aileron and elevator control rods for scarring or damage near the linear bearings.	Initially inspect within the next 35 hours TIS after April 9, 2007 (the effective date of this AD). Repetitively inspect thereafter at intervals not to exceed 12 calendar months.	Following Columbia Mandatory Service Bulletin SB–07–002, dated March 14, 2007, and the applicable maintenance manual.
(5) Contact the manufacturer at the address specified in paragraph (g)(2) of this AD for a repair scheme if any scarring or damage is found during any inspection required in paragraph (e)(4) of this AD.	Make all repairs before further flight after the inspection in which scarring or damage is found.	Following Columbia Mandatory Service Bulletin SB–07–002, dated March 14, 2007, and the applicable maintenance manual.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Seattle Aircraft Certification Office (ACO), FAA, ATTN: Jeff Morfitt, Aerospace Engineer, 1601 Lind Avenue SW., Renton, WA 98057; telephone: (425) 917–6405; *fax:* (425) 917–6590, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(g) You must use Columbia Mandatory Service Bulletin SB–07–002, dated March 14, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Columbia Aircraft Manufacturing Corp., 22550 Nelson Road, Bend, Oregon 97701; *telephone:* (888) 599–8660; *e-mail: Product.Support@FlyColumbia.com.*

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106; 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.*

Issued in Kansas City, Missouri, on March 27, 2007.

Kim Smith,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–6011 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

Docket No. FAA–2005–23157; Airspace Docket No. 05–ANM–15]

RIN 2120–AA66

Amendment to Class E Airspace; Kalispell, MT

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; technical amendment.

SUMMARY: This technical amendment corrects a final rule published in the **Federal Register** on July 24, 2006 (71 FR 41727), Docket No. FAA–2005–23157, Airspace Docket No. 05–ANM–15. In that rule, the reference to FAA Order 7400.9 was published as FAA Order 7400.9O. The correct reference is FAA Order 7400.9P. Also, the corresponding date that refers to the date the Order was signed was omitted. The final rule should state ''* * * dated September 1, 2006 * * *'' (prior to the effective date),

instead of ''* * * updated yearly * * *'' This technical amendment corrects those errors.

EFFECTIVE DATE: 0901 UTC, April 3, 2007. The Director of the Federal Register approves this incorporation by reference action under 1 CFR part 51, subject to the annual revision of FAA Order 7400.9 and publication of conforming amendments.

FOR FURTHER INFORMATION CONTACT: Tameka Bentley, Airspace and Rules, Office of System Operations Airspace and AIM, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267–8783.

SUPPLEMENTARY INFORMATION:

History

On July 24, 2006, a final rule was published in the **Federal Register**, Docket No. FAA–2005–23157, Airspace Docket No. 05–ANM–15 that amended Title 14 Code of Federal Regulations part 71 by amending Class E Airspace; Kalispell, MT (71 FR 41727). In that rule, the reference to FAA Order 7400.9 was published as FAA Order 7400.9O. The correct reference is FAA Order 7400.9P. In addition, the corresponding date that refers to the date the Order was signed had been omitted. The final rule should state ''* * * dated September 1, 2006 * * *'' (prior to the effective date), instead of ''* * * updated yearly * * *''

Amendment to Final Rule

■ Accordingly, pursuant to the authority delegated to me, the reference to FAA Order 7400.9 for Airspace Docket No. FAA–2005–23157, Airspace Docket No. 05–ANM–15, as published in the **Federal Register** on July 24, 2006 (71 FR 41727), is corrected as follows:

■ On page 41727, column 2, (from the bottom, counting up) line 3, and column 3, (from the bottom, counting up) lines 7, and 9, amend the language to read:

§ 71.1 [Amended]

* * * * *

''FAA Order 7400.9P'' instead of ''FAA Order 7400.9O''

Remove ''* * * updated yearly * * *'' and insert ''* * * dated September 1, 2006 * * *''

* * * * *

Issued in Washington, DC, March 23, 2007.

Edith V. Parish,

Manager, Airspace and Rules.

[FR Doc. E7–6098 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2005–23361; Airspace Docket No. 05–ANM–17]

RIN 2120–AA66

Revision of Class E Airspace; Pinedale, WY

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; technical amendment.

SUMMARY: This technical amendment corrects a final rule published in the **Federal Register** on July 24, 2006 (71 FR 41728), Docket No. FAA–2005–23361, Airspace Docket No. 05–ANM–17. In that rule, the reference to FAA Order 7400.9 was published as FAA Order 7400.9O. The correct reference is FAA Order 7400.9P. Also, the corresponding date that refers to the date the Order was signed was omitted. The final rule should state ''* * * dated September 1, 2006 * * *'' (prior to the effective date), instead of ''* * * updated yearly * * *''. This technical amendment corrects those errors.

EFFECTIVE DATE: 0901 UTC, April 3, 2007. The Director of the Federal Register approves this incorporation by reference action under 1 CFR part 51, subject to the annual revision of FAA Order 7400.9 and publication of conforming amendments.

FOR FURTHER INFORMATION CONTACT: Tameka Bentley, Airspace and Rules, Office of System Operations Airspace and AIM, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267–8783.

SUPPLEMENTARY INFORMATION:

History

On July 24, 2006, a final rule was published in the **Federal Register**, Docket No. FAA–2005–23361, Airspace Docket No. 05–ANM–17 that amended Title 14 Code of Federal Regulations part 71 by revising Class E Airspace; Pinedale, WY (71 FR 41728). In that rule, the reference to FAA Order 7400.9 was published as FAA Order 7400.9O. The correct reference is FAA Order 7400.9P. In addition, the corresponding date that refers to the date the Order was signed had been omitted. The final rule should state ''* * * dated September 1, 2006 * * *'' (prior to the effective date), instead of ''* * * updated yearly * * *''.

Amendment to Final Rule

■ Accordingly, pursuant to the authority delegated to me, the reference to FAA Order 7400.9 for Airspace Docket No. FAA–2005–23361, Airspace Docket No. 05–ANM–17, as published in the **Federal Register** on July 24, 2006 (71 FR 41728), is corrected as follows:

■ On page 41728, column 2, line 13, and column 3, lines 5, and 7, amend the language to read:

§ 71.1 [Amended]

* * * * *

''FAA Order 7400.9P'' instead of ''FAA Order 7400.9O''

Remove ''* * * updated yearly * * *'' and insert ''* * * dated September 1, 2006 * * *''

* * * * *

Issued in Washington, DC, March 23, 2007.

Edith V. Parish,

Manager, Airspace and Rules.

[FR Doc. E7–6100 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 30543 Amdt. No. 3212]

Standard Instrument Approach Procedures, Weather Takeoff Minimums; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment establishes, amends, suspends, or revokes Standard Instrument Approach Procedures (SIAPs) and/or Weather Takeoff Minimums for operations at certain airports. These regulatory actions are needed because of the adoption of new or revised criteria, or because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, addition of new obstacles, or changes in air traffic requirements. These changes are designed to provide safe and efficient use of the navigable airspace and to promote safe flight operations under instrument flight rules at the affected airports.

DATES: This rule is effective April 3, 2007. The compliance date for each SIAP and/or Weather Takeoff Minimums is specified in the amendatory provisions.

The incorporation by reference of certain publications listed in the

regulations is approved by the Director of the **Federal Register** as of April 3, 2007.

ADDRESSES: Availability of matters incorporated by reference in the amendment is as follows:

For Examination—1. FAA Rules Docket, FAA Headquarters Building, 800 Independence Avenue, SW., Washington, DC 20591;

2. The FAA Regional Office of the region in which the affected airport is located;

3. The National Flight Procedures Office, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 or,

4. 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.*

For Purchase—Individual SIAP and Weather Takeoff Minimums copies may be obtained from:

1. FAA Public Inquiry Center (APA–200), FAA Headquarters Building, 800 Independence Avenue, SW., Washington, DC 20591; or

2. The FAA Regional Office of the region in which the affected airport is located.

By Subscription—Copies of all SIAPs and Weather Takeoff Minimums mailed once every 2 weeks, are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

FOR FURTHER INFORMATION CONTACT: Donald P. Pate, Flight Procedure Standards Branch (AFS–420), Flight Technologies and Programs Division, Flight Standards Service, Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 South MacArthur Blvd. Oklahoma City, OK. 73169 (Mail Address: P.O. Box 25082 Oklahoma City, OK. 73125) telephone: (405) 954–4164.

SUPPLEMENTARY INFORMATION: This amendment to Title 14 of the Code of Federal Regulations, Part 97 (14 CFR part 97), establishes, amends, suspends, or revokes SIAPs and/or Weather Takeoff Minimums. The complete regulatory description of each SIAP and/or Weather Takeoff Minimums is contained in official FAA form documents which are incorporated by reference in this amendment under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR part 97.20. The applicable FAA Forms are identified as FAA Forms 8260–3, 8260–4, 8260–5 and 8260–15A. Materials incorporated by reference are available for examination or purchase as stated above.

The large number of SIAPs and/or Weather Takeoff Minimums, their complex nature, and the need for a special format make their verbatim publication in the **Federal Register** expensive and impractical. Further, airmen do not use the regulatory text of the SIAPs and/or Weather Takeoff Minimums but refer to their depiction on charts printed by publishers of aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each SIAP and/or Weather Takeoff Minimums contained in FAA form documents is unnecessary. The provisions of this amendment state the affected CFR sections, with the types and effective dates of the SIAPs and/or Weather Takeoff Minimums. This amendment also identifies the airport, its location, the procedure identification and the amendment number.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP and/or Weather Takeoff Minimums as contained in the transmittal. Some SIAP and/or Weather Takeoff Minimums amendments may have been previously issued by the FAA in a Flight Data Center (FDC) Notice to Airmen (NOTAM) as an emergency action of immediate flight safety relating directly to published aeronautical charts. The circumstances which created the need for some SIAP, and/or Weather Takeoff Minimums amendments may require making them effective in less than 30 days. For the remaining SIAPs and/or Weather Takeoff Minimums, an effective date at least 30 days after publication is provided.

Further, the SIAPs and/or Weather Takeoff Minimums contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these SIAPs and/or Weather Takeoff Minimums, the TERPS criteria were applied to the conditions existing or anticipated at the affected airports. Because of the close and immediate relationship between these SIAPs and/or Weather Takeoff Minimums and safety in air commerce, I find that notice and public procedure before adopting these SIAPs and/or Weather Takeoff Minimums are impracticable and contrary to the public interest and, where applicable, that good cause exists for making some SIAPs and/or Weather Takeoff Minimums effective in less than 30 days.

Conclusion

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 97

Air Traffic Control, Airports, Incorporation by reference, and Navigation (Air).

Issued in Washington, DC on March 23, 2007.

James J. Ballough,

Director, Flight Standards Service.

Adoption of the Amendment

■ Accordingly, pursuant to the authority delegated to me, under Title 14, Code of Federal Regulations, Part 97 (14 CFR part 97) is amended by establishing, amending, suspending, or revoking Standard Instrument Approach Procedures and Weather Takeoff Minimums effective at 0901 UTC on the dates specified, as follows:

PART 97—STANDARD INSTRUMENT APPROACH PROCEDURES

■ 1. The authority citation for part 97 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44701, 44719, 44721–44722.

■ 2. Part 97 is amended to read as follows:

Effective 10 May 2007

Bessemer, AL, Bessemer, ILS OR LOC RWY 5, Amdt 1
Bessemer, AL, Bessemer, RNAV (GPS) RWY 5, Orig
Bessemer, AL, Bessemer, GPS RWY 5, Orig, CANCELLED
Bessemer, AL, Bessemer, Takeoff Minimums and Obstacle DP, Orig
Huntsville, AL, Madison County Executive, ILS OR LOC/DME RWY 18, Orig
Fort Yukon, AK, Fort Yukon, RNAV (GPS) RWY 4, Orig
Fort Yukon, AK, Fort Yukon, RNAV (GPS) RWY 22, Orig

Fort Yukon, AK, Fort Yukon, GPS RWY 3, Orig, CANCELLED
Fort Yukon, AK, Fort Yukon, GPS RWY 21, Orig, CANCELLED
Fort Yukon, AK, Fort Yukon, VOR/DME OR TACAN–A, Orig
Fort Yukon, AK, Fort Yukon, VOR/DME OR TACAN RWY 3, Amdt 1C, CANCELLED
Fort Yukon, AK, Fort Yukon, VOR/DME OR TACAN RWY 22, Amdt 2
Fort Yukon, AK, Fort Yukon, VOR RWY 3, Amdt 4B, CANCELLED
Fort Yukon, AK, Fort Yukon, VOR RWY 21, Amdt 4A, CANCELLED
Fort Yukon, AK, Fort Yukon, Takeoff Minimums and Obstacle DP, Amdt 1
Hemet, CA, Hemet-Ryan, NDB–A, Amdt 1A, CANCELLED
Marysville, CA, Yuba County, VOR RWY 32, Amdt 10D, CANCELLED
Colorado Springs, CO, City of Colorado Springs Muni, RNAV (GPS) RWY 17R, Amdt 1A
Middletown, DE, Summit, RNAV (GPS) RWY 17, Amdt 1
Middletown, DE, Summit, RNAV (GPS) RWY 35, Orig
Middletown, DE, Summit, GPS RWY 35, ORIG–A, CANCELLED
Jacksonville, FL, Jacksonville Intl, VOR/DME RWY 31, Amdt 1
Jacksonville, FL, Jacksonville Intl, Takeoff Minimums and Textual DP, Orig
Miami, FL, Miami Intl, RNAV (GPS) RWY 8L, Amdt 1
Miami, FL, Miami Intl, RNAV (GPS) RWY 26R, Amdt 1
West Palm Beach, FL, Palm Beach Intl, RNAV (GPS) RWY 31, Amdt 1
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, ILS OR LOC RWY 10, Amdt 1, ILS RWY 10 (CAT II), ILS RWY 10 (CAT III)
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, ILS OR LOC RWY 28, Amdt 1, ILS RWY 28 (CAT II)
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, ILS PRM RWY 10, Amdt 1, ILS PRM RWY 10 (CAT II), ILS PRM RWY 10 (CAT III) (SIMULTANEOUS CLOSE PARALLEL)
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, ILS PRM RWY 28, Amdt 1, ILS PRM RWY 28 (CAT II) (SIMULTANEOUS CLOSE PARALLEL)
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 9L, Amdt 2
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 8L, Amdt 2
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 8R, Amdt 2
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 9R, Amdt 2
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 10, Amdt 1
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 26L, Amdt 2
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 26R, Amdt 2
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 27L, Amdt 2
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 27R, Amdt 2
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (GPS) Y RWY 28, Amdt 1
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 8L, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 8R, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 9L, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 9R, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 10, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 26L, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 26R, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 27L, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 27R, Orig
Atlanta, GA, Hartsfield-Jackson Atlanta Intl, RNAV (RNP) Z RWY 28, Orig Brunswick, GA, Brunswick Golden Isles, ILS OR LOC RWY 7, Amdt 9
Freeport, IL, Albertus, RNAV (GPS) RWY 24, Orig
Freeport, IL, Albertus, VOR RWY 24, Amdt 7
Freeport, IL, Albertus, Takeoff Minimums and Textual DP, Orig
Seymour, IN, Freeman Muni, RNAV (GPS) RWY 14, Orig
Seymour, IN, Freeman Muni, RNAV (GPS) RWY 23, Amdt 1
Seymour, IN, Freeman Muni, RNAV (GPS) RWY 32, Orig
Seymour, IN, Freeman Muni, RNAV (GPS) RWY 5, Orig
Seymour, IN, Freeman Muni, NDB RWY 5, Amdt 4
Seymour, IN, Freeman Muni, LOC/NDB RWY 5, Orig
Seymour, IN, Freeman Muni, LOC RWY 5, Amdt 3, CANCELLED
Seymour, IN, Freeman Muni, Takeoff Minimums and Textual DP, Orig
Shelbyville, IN, Shelbyville Muni, RNAV (GPS) RWY 1, Amdt 1
Shelbyville, IN, Shelbyville Muni, RNAV (GPS) RWY 19, Amdt 1
Middlesboro, KY, Middlesboro-Bell County, RNAV (GPS)–A, Orig
Williamsburg, KY, Williamsburg-Whitley County, RNAV (GPS) RWY 2, Orig
Williamsburg, KY, Williamsburg-Whitley County, RNAV (GPS) RWY 20, Orig
Williamsburg, KY, Williamsburg-Whitley County, Takeoff Minimums and Textual DP, Orig
Belfast, ME, Belfast Muni, RNAV (GPS) RWY 15, Orig
Belfast, ME, Belfast Muni, RNAV (GPS) RWY 33, Orig
Belfast, ME, Belfast Muni, Takeoff Minimums and Textual DP, Amdt 2
Belfast, ME, Belfast Muni, GPS RWY 15, Amdt 1, CANCELLED
Belfast, ME, Belfast Muni, GPS RWY 33, Amdt 1, CANCELLED
Holland, MI, Tulip City, Takeoff Minimums and Textual DP, Orig
Holland, MI, Tulip City, ILS OR LOC/DME RWY 26, Amdt 1
Holland, MI, Tulip City, RNAV (GPS) RWY 26, Amdt 2
Holland, MI, Tulip City, RNAV (GPS) RWY 8, Amdt 1
Minneapolis, MN, Minneapolis-St Paul Intl/Wold-Chamberlain, Takeoff Minimums and Obstacle DP, Amdt 11
Oxford, MS, University-Oxford, RNAV (GPS) RWY 9, Orig
Oxford, MS, University-Oxford, RNAV (GPS) RWY 27, Orig
Oxford, MS, University-Oxford, GPS RWY 9, Orig, CANCELLED
Oxford, MS, University-Oxford, GPS RWY 27, Orig, CANCELLED
Albany, NY, Albany Intl, RNAV (GPS) RWY 1, Orig
Albany, NY, Albany Intl, RNAV (GPS) RWY 19, Orig
Albany, NY, Albany Intl, GPS RWY 1, Orig-B, CANCELLED
Albany, NY, Albany Intl, GPS RWY 19, Orig-B, CANCELLED
Elmira, NY, Elmira/Corning Rgnl, Takeoff Minimums and Textual DP, Amdt 8
Penn Yan, NY, Penn Yan, RNAV (GPS) RWY 1, Amdt 2
Plattsburgh, NY, Plattsburgh Intl, ILS or LOC/DME RWY 35, Orig
Mocksville, NC, Twin Lakes, RNAV (GPS) RWY 9, Orig
Mocksville, NC, Twin Lakes, NDB OR GPS RWY 9, Amdt 5, CANCELLED
Columbus, OH, Port Columbus Intl, ILS OR LOC RWY 10L, Amdt 18
Columbus, OH, Port Columbus Intl, ILS OR LOC RWY 28L, Amdt 28
Columbus, OH, Port Columbus Intl, ILS OR LOC RWY 28R, Amdt 3
Columbus, OH, Port Columbus Intl, RNAV (GPS) RWY 10L, Amdt 1
Columbus, OH, Port Columbus Intl, RNAV (GPS) RWY 28L, Amdt 1
Columbus, OH, Port Columbus Intl, RNAV (GPS) RWY 10R, Amdt 1
Columbus, OH, Port Columbus Intl, Takeoff Minimums and Obstacle DP, Amdt 6
Ottawa, OH, Putnam County, NDB RWY 27, Amdt 1B, CANCELLED
North Bend, OR, Southwest Oregon Regional, COPTER ILS OR LOC RWY 4, Orig
The Dalles, OR, Columbia Gorge Regional/The Dalles Muni, LDA/DME RWY 25, Orig
The Dalles, OR, Columbia Gorge Regional/The Dalles Muni, COPTER LDA/DME RWY 25, Orig
Greer, SC, Greenville-Spartanburg Intl-Roger Milliken, RNAV (GPS) RWY 4, Amdt 1
Greer, SC, Greenville-Spartanburg Intl-Roger Milliken, RNAV (GPS) RWY 22, Amdt 1
Rapid City, SD, Rapid City Regional, Takeoff Minimums and Obstacle DP, Amdt 6
Elizabethton, TN, Elizabethton Muni, RNAV (GPS) RWY 6, Orig
Jacksboro, TN, Campbell County, Takeoff Minimums and Obstacle DP, Amdt 2
Roanoke, VA, Roanoke Regional/Woodrum Field, ILS OR LOC RWY 33, Amdt 12
Moses Lake, WA, Grant County Intl, ILS OR LOC RWY 32R, Amdt 20
Moses Lake, WA, Grant County Intl, Takeoff Minimums and Obstacle DP, Orig
Spokane, WA, Felts Field, Takeoff Minimums and Textual DP, Amdt 4
Spokane, WA, Spokane Intl, ILS OR LOC RWY 3, Amdt 5, ILS RWY 3 (CAT II), ILS RWY 3 (CAT III)
Spokane, WA, Spokane Intl, ILS OR LOC/DME RWY 21, Amdt 21, ILS RWY 21 (CAT II), ILS RWY 21 (CAT III)
Ashland, WI, John F. Kennedy Memorial, LOC/DME RWY 2, Orig
Ashland, WI, John F. Kennedy Memorial, Takeoff Minimums and Textual DP, Orig
Eagle River, WI, Eagle River Union, LOC/DME RWY 4, Orig

Juneau, WI, Dodge County, RNAV (GPS) RWY 2, Orig
Juneau, WI, Dodge County, RNAV (GPS) RWY 8, Orig
Juneau, WI, Dodge County, RNAV (GPS) RWY 20, Orig
Juneau, WI, Dodge County, RNAV (GPS) RWY 26, Orig
Juneau, WI, Dodge County, NDB RWY 2, Orig
Juneau, WI, Dodge County, NDB RWY 20, Orig
Juneau, WI, Dodge County, LOC RWY 26, Amdt 1
Juneau, WI, Dodge County, GPS RWY 20, Orig, CANCELLED
Juneau, WI, Dodge County, NDB RWY 2, Amdt 10A, CANCELLED
Juneau, WI, Dodge County, NDB RWY 20, Amdt 8A, CANCELLED
Lone Rock, WI, Tri-County Regional, VOR/DME RNAV OR GPS RWY 27, Amdt 6, CANCELLED

[FR Doc. E7–5952 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 866

[Docket No. 2005N–0471]

Microbiology Devices; Reclassification of Herpes Simplex Virus Types 1 and 2 Serological Assays

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is reclassifying herpes simplex virus (HSV) types 1 and/or 2 (HSV 1 and 2) serological assays from class III (premarket approval) to class II (special controls). FDA had earlier proposed this reclassification on its own initiative based on new information. Elsewhere in this issue of the **Federal Register**, FDA is announcing the availability of a class II special controls guidance entitled ''Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays.''

DATES: This rule is effective May 3, 2007.

FOR FURTHER INFORMATION CONTACT: Sally Hojvat, Center for Devices and Radiological Health (HFZ–440), Food and Drug Administration, 2098 Gaither Rd., Rockville, MD 20850, 240–276–0496.

SUPPLEMENTARY INFORMATION:

I. Background

A. Regulatory Authorities

The Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 301 *et seq.*), as amended by the Medical Device Amendments of 1976 (the 1976 amendments) (Public Law 94–295), the Safe Medical Devices Act of 1990 (SMDA) (Public Law 101–629), the Food and Drug Administration Modernization Act of 1997 (FDAMA) (Public Law 105–115), and the Medical Device User Fee and Modernization Act (Public Law 107–250), established a comprehensive system for the regulation of medical devices intended for human use. Section 513 of the act (21 U.S.C. 360c) established three categories (classes) of devices, defined by the regulatory controls needed to provide reasonable assurance of their safety and effectiveness. The three categories of devices are class I (general controls), class II (special controls), and class III (premarket approval).

Under the 1976 amendments, class II devices were defined as devices for which there was insufficient information to show that general controls themselves would provide reasonable assurance of safety and effectiveness, but for which there was sufficient information to establish performance standards to provide such assurance. SMDA broadened the definition of class II devices to mean those devices for which the general controls by themselves are insufficient to provide reasonable assurance of safety and effectiveness, but for which there is sufficient information to establish special controls to provide such assurance, including performance standards, postmarket surveillance, patient registries, development and dissemination of guidelines, recommendations, and any other appropriate actions the agency deems necessary (section 513(a)(1)(B) of the act).

Under section 513 of the act, FDA refers to devices that were in commercial distribution before May 28, 1976 (the date of enactment of the 1976 amendments), as preamendments devices. FDA classifies these devices after it takes the following steps: (1) Receives a recommendation from a device classification panel (an FDA advisory committee); (2) publishes the panel's recommendation for comment, along with a proposed regulation classifying the device; and (3) publishes a final regulation classifying the device. FDA has classified most preamendments devices under these procedures. A person may market a preamendments device that has been classified into class III through premarket notification procedures, without submission of a premarket approval application (PMA), until FDA issues a final regulation under section 515(b) of the act (21 U.S.C. 360e(b)) requiring premarket approval.

Devices that were not in commercial distribution before May 28, 1976, generally referred to as postamendments devices, are classified automatically by statute (section 513(f) of the act) into class III without any FDA rulemaking process. Those devices remain in class III and require premarket approval unless and until FDA does the following: (1) Reclassifies the device into class I or II; (2) issues an order classifying the device into class I or II in accordance with section 513(f)(2) of the act, as amended by FDAMA; or (3) issues an order finding the device to be substantially equivalent, under section 513(i) of the act, to a legally marketed device that has been classified into class I or class II. The agency determines whether new devices are substantially equivalent to a legally marketed device by means of premarket notification procedures in section 510(k) of the act (21 U.S.C. 360(k)) and 21 CFR part 807.

Section 513(e) of the act governs reclassification of classified devices. This section provides that FDA may, by rulemaking, reclassify a device based upon ''new information.'' FDA can initiate a reclassification under section 513(e) of the act or an interested person may petition FDA to reclassify a preamendments device. The term ''new information,'' as used in section 513(e) of the act, includes information developed as a result of a reevaluation of the data before the agency when the device was originally classified, as well as information not presented, not available, or not developed at that time (see, e.g., *Holland Rantos* v. *United States Department of Health, Education, and Welfare,* 587 F.2d 1173, 1174 n.1 (D.C. Cir. 1978); *Upjohn* v. *Finch*, 422 F.2d 944 (6th Cir. 1970);*Bell* v. *Goddard*, 366 F.2d 177 (7th Cir. 1966)).

Reevaluation of the data previously before the agency is an appropriate basis for subsequent regulatory action where the reevaluation is made in light of newly available regulatory authority (see *Bell* v. *Goddard*, supra, 366 F.2d at 181; *Ethicon, Inc.* v.*FDA*, 762 F.Supp. 382, 389–91 (D.D.C. 1991)), or in light of changes in ''medical science'' (see *Upjohn* v. *Finch*, supra, 422 F.2d at 951). Whether data before the agency are past or new, the ''new information'' to support reclassification under section 513(e) of the act must be ''valid scientific evidence,'' as defined in section 513(a)(3) of the act and 21 CFR

860.7(c)(2) (see, e.g., *General Medical Co.* v. *FDA*, 770 F.2d 214 (D.C. Cir. 1985); *Contact Lens Assoc.* v. *FDA*, 766 F.2d 592 (D.C. Cir.), cert. denied, 474 U.S. 1062 (1985)).

FDA relies upon valid scientific evidence in the classification process to determine the level of regulation for devices. To be considered in the reclassification process, the valid scientific evidence upon which the agency relies must be publicly available. Publicly available information excludes trade secret and/or confidential commercial information, e.g., the contents of a pending PMA (see section 520(c) of the act (21 U.S.C. 360j(c)).

FDAMA added section 510(m) to the act that provides that a class II device may be exempted from the premarket notification requirements under section 510(k) of the act if the agency determines that premarket notification is not necessary to assure the safety and effectiveness of the device.

B. Regulatory History of the Device

In the **Federal Register** of January 9, 2006 (71 FR 1399), FDA published a proposed rule to reclassify HSV 1 and 2 serological assays into class II. These assays are used as an aid in the clinical laboratory diagnosis of diseases caused by HSV 1 and 2. FDA identified the draft guidance document entitled ''Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays'' as the special control. Interested persons were invited to comment on the proposed rule by April 10, 2006 (the draft guidance was announced in the **Federal Register** of January 9, 2006 (71 FR 1432). A proposed rule correcting the reference section of the January 9, 2006, proposed rule was published on March 13, 2006 (71 FR 12653). FDA received no comments on the proposed reclassification.

II. FDA's Conclusions

Based on the information discussed in the preamble to the proposed rule (71 FR 1399), FDA concludes that special controls, in conjunction with general controls, provide reasonable assurance of the safety and effectiveness of these devices. Elsewhere in this issue of the **Federal Register**, FDA is announcing the availability of the special controls guidance document. Following the effective date of this final classification rule, any firm submitting a 510(k) premarket notification for a HSV 1 and 2 serological assay will need to address the issues covered in the special control guidance. However, the firm need only show that its device meets the recommendations of the guidance or in some other way provides equivalent assurances of safety and effectiveness.

FDA is now codifying the classification and the special control guidance document for HSV 1 and 2 serological assays by amending § 866.3305 (21 CFR 866.3305). As stated in the proposed rule, FDA considered HSV 1 and 2 serological assays in accordance with section 510(m) of the act and determined that the device does need premarket notification to assure the safety and effectiveness of HSV 1 and 2 serological assays.

As stated in the preamble to the proposed rule (71 FR 1399), HSV serological assays of types other than type 1 and 2 will remain in class III. HSV nucleic acid amplification assays are not within the device type classified in § 866.3305.

III. Environmental Impact

The agency has determined under 21 CFR 25.34(b) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

IV. Analysis of Impacts

FDA has examined the impacts of the final rule under Executive Order 12866, and the Regulatory Flexibility Act (Public Law 96–354) (as amended by subtitle D of the Small Business Regulatory Fairness Act of 1996 (Public Law 104–121), and the Unfunded Mandates Reform Act of 1995 (Public Law 104–4)). 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 agency believes that this final rule is consistent with the regulatory philosophy and principles identified in the Executive order. In addition, the final rule is not a significant regulatory action as defined by the Executive order and so is not subject to review under the Executive order.

The Regulatory Flexibility Act requires agencies to analyze regulatory options that would minimize any significant impact of a rule on small entities. Reclassification of HSV 1 and 2 serological assays from class III to class II will relieve manufacturers of the cost of complying with the premarket approval requirements in section 515 of the act. Furthermore, the special controls guidance document does not impose any new burdens on manufacturers; it advises manufacturers about ways to comply with the special controls that allow the agency to down classify these devices. By eliminating the need for premarket approval applications, reclassification will reduce regulatory costs with respect to these devices, impose no significant economic impact on any small entities, and may permit small potential competitors to enter the marketplace by lowering their costs. The agency therefore certifies that this final rule will not have a significant economic impact on a substantial number of small entities.

Section 202(a) of the Unfunded Mandates Reform Act of 1995 requires that agencies prepare a written statement, which includes an assessment of anticipated costs and benefits, before proposing ''any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year.'' The current threshold after adjustment for inflation is $122 million, using the most current (2005) Implicit Price Deflator for the Gross Domestic Product. FDA does not expect this final rule to result in any 1-year expenditure that would meet or exceed this amount.

V. Federalism

FDA has analyzed this final rule in accordance with the principles set forth in Executive Order 13132. FDA has determined that the rule does not contain policies 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. Accordingly, the agency has concluded that the rule does not contain policies that have federalism implications as defined in the Executive order and, consequently, a federalism summary impact statement is not required.

VI. Paperwork Reduction Act of 1995

FDA concludes that this final rule contains no new collections of information. Therefore, clearance by the Office of Management and Budget under the Paperwork Reduction Act of 1995 is not required.

List of Subjects in 21 CFR Part 866

Medical devices.

■ Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner

of Food and Drugs, 21 CFR part 866 is amended as follows:

PART 866—IMMUNOLOGY AND MICROBIOLOGY DEVICES

■ 1. The authority citation for 21 CFR part 866 continues to read as follows:

Authority: 21 U.S.C. 351, 360, 360c, 360e, 360j, 371.

■ 2. Section 866.3305 is revised to read as follows:

§ 866.3305 Herpes simplex virus serological assays.

(a) *Identification.* Herpes simplex virus serological assays are devices that consist of antigens and antisera used in various serological tests to identify antibodies to herpes simplex virus in serum. Additionally, some of the assays consist of herpes simplex virus antisera conjugated with a fluorescent dye (immunofluorescent assays) used to identify herpes simplex virus directly from clinical specimens or tissue culture isolates derived from clinical specimens. The identification aids in the diagnosis of diseases caused by herpes simplex viruses and provides epidemiological information on these diseases. Herpes simplex viral infections range from common and mild lesions of the skin and mucous membranes to a severe form of encephalitis (inflammation of the brain). Neonatal herpes virus infections range from a mild infection to a severe generalized disease with a fatal outcome.

(b) *Classification.* (1) *Class II (special controls).* The device is classified as class II (special controls) if the herpes simplex virus serological assay is type 1 and/or 2. The special control for the device is FDA's guidance document entitled ''Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays.'' For availability of the guidance document, see § 866.1(e).

(2) *Class III (premarket approval).* The device is classified as class III if the herpes simplex virus serological assay is a type other than type 1 and/or 2.

(c) *Date PMA or notice of completion of a PDP is required.* No effective date has been established for the requirement for premarket approval for the devices described in paragraph (b)(2) of this section. See § 866.3.

Dated: March 23, 2007.

Linda S. Kahan,

Deputy Director, Center for Devices and Radiological Health.

[FR Doc. E7–6167 Filed 4–2–07; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF STATE

22 CFR Part 126

[Public Notice: 5740]

Amendment of the International Traffic in Arms Regulations: Policy With Respect to Vietnam

AGENCY: Department of State.

ACTION: Final rule.

SUMMARY: Notice is hereby given that the Department of State is amending the International Traffic in Arms Regulations (ITAR) regarding Vietnam at 22 CFR 126.1 to make it United States policy to consider on a case-by-case basis licenses, other approvals, exports or imports of non-lethal defense articles and defense services destined for or originating in Vietnam. The United States will deny licenses, other approvals, exports or imports of lethal defense articles and services destined for or originating in Vietnam. Under this policy, the exports of lethal-end items, components of lethal-end items (unless those components are non-lethal, safety-of-use spare parts for lethal-end items), non-lethal crowd control defense articles and defense services, and night vision devices to end-users with a role in ground security will not be approved.

DATES: *Effective Date:* This rule is effective April 3, 2007.

ADDRESSES: Interested parties may submit comments at any time by any of the following methods:

- *E-mail: DDTCResponseTeam@state.gov* with an appropriate subject line.
- *Mail:* Department of State, Directorate of Defense Trade Controls, Office of Defense Trade Controls Policy, ATTN: Regulatory Change, 12th Floor, SA–1, Washington, DC 20522–0112.
- *Fax:* 202–261–8199.
- *Hand Delivery or Courier (regular work hours only):* Department of State, Directorate of Defense Trade Controls, Office of Defense Trade Controls Policy, ATTENTION: Regulatory Change, SA–1, 12th Floor, 2401 E Street, NW., Washington, DC 20037.

Persons with access to the Internet may also view this notice by going to the regulations.gov Web site at: *http://www.regulations.gov/index.cfm.*

FOR FURTHER INFORMATION CONTACT: Ann K. Ganzer, Office of Defense Trade Controls Policy, Department of State, 12th Floor, SA–1, Washington DC 20522–0112; Telephone 202–663–2792 or FAX 202–261–8199; e-mail: *DDTCResponseTeam@state.gov*. ATTN: Regulatory Change.

SUPPLEMENTARY INFORMATION: On November 2, 2006, the Secretary of State modified the U.S. arms transfer policy toward Vietnam allowing the sale, lease, export, or other transfer of non-lethal defense articles and defense services to the country. Subsequently, the President issued a determination December 29, 2006 that the furnishing of defense articles and services to Vietnam would strengthen the security of the United States and promote world peace.

The new policy will not permit the export or other transfer to Vietnam of: (a) Lethal end items, (b) components of lethal end items, unless those components are non-lethal, safety-of-use spare parts for lethal end items, (c) non-lethal crowd control defense articles and defense services, and (d) night vision devices to end-users with a role in ground security.

Regulatory Analysis and Notices

Administrative Procedure Act

This amendment involves a foreign affairs function of the United States and, therefore, is not subject to the procedures required by 5 U.S.C. 553 and 554.

Regulatory Flexibility Act

This rule does not require analysis under the Regulatory Flexibility Act.

Unfunded Mandates Act of 1995

This rule does not require analysis under the Unfunded Mandates Reform Act.

Small Business Regulatory Enforcement Fairness Act of 1996

This amendment has been found not to be a major rule within the meaning of the Small Business Regulatory Enforcement Fairness Act of 1996. It will not have substantial direct effects on the States, the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

Executive Orders 12372 and 13132

It is determined that this rule does not have sufficient federalism implications to warrant application of the consultation provisions of Executive Orders 12372 and 13132.

Executive Order 12866

This amendment is exempt from review under Executive Order 12866, but has been reviewed internally by the Department of State to ensure consistency with the purposes thereof.

Paperwork Reduction Act

This rule does not impose any new reporting or recordkeeping requirements

subject to the Paperwork Reduction Act, 44 U.S.C. Chapter 35.

List of Subjects in 22 CFR Part 126

Arms and munitions, Exports.

■ Accordingly, for the reasons set forth above, Title 22, Chapter I, Subchapter M, part 126 is amended as follows:

PART 126—GENERAL POLICIES AND PRACTICES

■ 1. The authority citation for part 126 continues to read as follows:

Authority: Secs. 2, 38, 40, 42, and 71, Pub. L. 90–629, 90 Stat. 744 (22 U.S.C. 2752, 2778, 2780, 2791, and 2797); E.O. 11958, 42 FR 4311; 3 CFR, 1977 Comp., p. 79; 22 U.S.C. 2651a; 22 U.S.C. 287c; E.O. 12918, 59 FR 28205, 3 CFR, 1994 Comp., p. 899; Sec.1225, Pub. L. 108–375.

■ 2. Section 126.1 is amended by revising paragraph (a) and adding paragraph (l) to read as follows:

§ 126.1 Prohibited exports and sales to certain countries.

(a) *General.* It is the policy of the United States to deny licenses and other approvals for exports and imports of defense articles and defense services, destined for or originating in certain countries. This policy applies to Belarus, Cuba, Iran, North Korea, Syria, and Venezuela. This policy also applies to countries with respect to which the United States maintains an arms embargo (e.g., Burma, China, Liberia, Somalia, and Sudan) or whenever an export would not otherwise be in furtherance of world peace and the security and foreign policy of the United States. Information regarding certain other embargoes appears elsewhere in this section. Comprehensive arms embargoes are normally the subject of a State Department notice published in the **Federal Register**. The exemptions provided in the regulations in this subchapter, except § 123.17 of this subchapter, do not apply with respect to articles originating in or for export to any proscribed countries, areas, or persons in this § 126.1.

* * * * *

(l) *Vietnam.* It is the policy of the United Sates to deny licenses, other approvals, exports or imports of defense articles and defense services destined for or originating in Vietnam except, on a case-by-case basis, for:

(1) Non-lethal defense articles and defense services, and

(2) Non-lethal, safety-of-use defense articles (e.g., cartridge actuated devices, propellant actuated devices and technical manuals for military aircraft for purposes of enhancing the safety of the aircraft crew) for lethal end-items.

For non-lethal defense end-items, no distinction will be made between Vietnam's existing and new inventory.

Dated: March 13, 2007.

Stephen D. Mull,

Acting Assistant Secretary for Political-Military Affairs, Department of State.

[FR Doc. E7–6149 Filed 4–2–07; 8:45 am]

BILLING CODE 4710–25–P

DEPARTMENT OF THE TREASURY

Office of Foreign Assets Control

31 CFR Parts 538 and 560

Sudanese Sanctions Regulations; Iranian Transactions Regulations

AGENCY: Office of Foreign Assets Control, Treasury.

ACTION: Final rule.

SUMMARY: The Office of Foreign Assets Control of the U.S. Department of the Treasury is amending the Sudanese Sanctions Regulations, 31 CFR part 538, and the Iranian Transactions Regulations, 31 CFR part 560, to authorize the exportation or reexportation, directly or indirectly, from the United States or by a U.S. person, wherever located, of any goods or technology to a third-country government, or to its contractors or agents, for shipment to, respectively, Sudan or Iran via a diplomatic pouch.

DATES: *Effective Date*: April 3, 2007.

FOR FURTHER INFORMATION CONTACT: Assistant Director for Compliance Outreach & Implementation, tel.: 202/622–2490, Assistant Director for Licensing, tel.: 202/622–2480, Assistant Director for Policy, tel.: 202/622–4855, or Chief Counsel, tel.: 202/622–2410, Office of Foreign Assets Control, Department of the Treasury, Washington, DC 20220.

SUPPLEMENTARY INFORMATION:

Electronic and Facsimile Availability

This document and additional information concerning the Office of Foreign Assets Control are available from OFAC's Web site (*http://www.treas.gov/ofac*) or via facsimile through a 24-hour fax-on demand service, tel.: (202) 622–0077.

Background

The Sudanese Sanctions Regulations, 31 CFR part 538 (the ''SSR''), were promulgated to implement Executive Order 13067 of November 3, 1997 (''E.O. 13067''), in which the President declared a national emergency with respect to the policies and actions of the Government of Sudan. To deal with that emergency, E.O. 13067 imposed comprehensive trade sanctions with respect to Sudan and blocked all property and interests in property of the Government of Sudan in the United States or within the possession or control of United States persons. Subsequently, the President issued Executive Order 13412 of October 13, 2006 (''E.O. 13412''), to take additional steps with respect to the emergency declared in E.O. 13067. While it exempted specific areas of Sudan from certain prohibitions in E.O. 13067, E.O. 13412 continued the blocking of the Government of Sudan's property and interests in property and imposed a prohibition on transactions relating to Sudan's petroleum or petrochemical industries. E.O. 13412 also removed the regional government of Southern Sudan from the definition of the Government of Sudan.

Existing § 538.516 of the SSR authorizes all transactions in connection with the importation into the United States from Sudan, or the exportation from the United States to Sudan, of diplomatic pouches and their contents. OFAC is amending this general license to expand the scope of authorized transactions relating to the importation and exportation of diplomatic pouches and their contents. Specifically, OFAC is revising § 538.516 of the SSR by re-designating the original section as § 538.516(a) and by adding a new paragraph (b). New § 538.516(b) authorizes the exportation or reexportation, directly or indirectly, from the United States or by a U.S. person, wherever located, of any goods or technology to a third-country government, or to its contractors or agents, for shipment to Sudan via a diplomatic pouch. In addition, § 538.516(b) clarifies that, to the extent necessary, the shipment by a third-country government to Sudan of U.S.-origin goods or technology in a diplomatic pouch is authorized.

The Iranian Transactions Regulations, 31 CFR part 560 (the ''ITR''), implement a series of Executive orders, beginning with Executive Order 12957 of March 15, 1995, in which the President declared a national emergency with respect to the actions and policies of the Government of Iran. To deal with that threat, Executive Order 12957 imposed prohibitions on certain transactions with respect to the development of Iranian petroleum resources. On May 6, 1995, the President issued Executive Order 12959 imposing comprehensive trade sanctions to further respond to the threat, and on August 19, 1997, the President issued Executive Order 13059

consolidating and clarifying the previous orders.

Existing § 560.521 of the ITR authorizes all transactions in connection with the importation into the United States from Iran, or the exportation from the United States to Iran, of diplomatic pouches and their contents. As with § 538.516 of the SSR, OFAC is revising § 560.521 of the ITR by re-designating the original section as § 560.521(a) and by adding a new paragraph (b). New § 560.521(b) authorizes the exportation, reexportation, sale, or supply, directly or indirectly, from the United States or by a U.S. person, wherever located, of any goods or technology to a third-country government, or to its contractors or agents, for shipment to Iran via a diplomatic pouch. It also authorizes, to the extent necessary, the shipment by a third-country government to Iran of U.S.-origin goods or technology in a diplomatic pouch.

Public Participation

Because the amendments of the SSR and the ITR involve a foreign affairs function, Executive Order 12866 and the provisions of the Administrative Procedure Act (5 U.S.C. 553) requiring notice of proposed rulemaking, opportunity for public participation, and delay in effective date are inapplicable. Because no notice of proposed rulemaking is required for this rule, the Regulatory Flexibility Act (5 U.S.C. 601–612) does not apply.

Paperwork Reduction Act

The collections of information related to the SSR and the ITR are contained in 31 CFR part 501 (the ''Reporting, Procedures and Penalties Regulations''). Pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3507), those collections of information have been approved by the Office of Management and Budget under control number 1505–0164. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the collection of information displays a valid control number.

List of Subjects

31 CFR Part 538

Administrative practice and procedure, Banks, Banking, Blocking of assets, Exports, Foreign trade, Humanitarian aid, Imports, Penalties, Reporting and recordkeeping requirements, Specially designated nationals, Sudan, Terrorism, Transportation.

31 CFR Part 560

Administrative practice and procedure, Banks, Banking, Brokers, Foreign Trade, Investments, Iran, Loans, Securities.

■ For the reasons set forth in the preamble, the Office of Foreign Assets Control amends 31 CFR parts 538 and 560 as follows:

PART 538—SUDANESE SANCTIONS REGULATIONS

■ 1. The authority citation for part 538 continues to read as follows:

Authority: 3 U.S.C. 301; 31 U.S.C. 321(b); 18 U.S.C. 2339B, 2332d; 50 U.S.C. 1601–1651, 1701–1706; Pub. L. 106–387, 114 Stat. 1549; E.O. 13067, 62 FR 59989, 3 CFR, 1997 Comp., p. 230.

Subpart E—Licenses, Authorizations, and Statements of Licensing Policy

■ 2. Revise § 538.516 to read as follows:

§ 538.516 Diplomatic pouches.

The following transactions are authorized:

(a) The importation into the United States from Sudan, or the exportation from the United States to Sudan, of diplomatic pouches and their contents; and

(b) The exportation or reexportation, directly or indirectly, from the United States or by a U.S. person, wherever located, of any goods or technology to a third-country government, or to its contractors or agents, for shipment to Sudan via a diplomatic pouch. To the extent necessary, this section also authorizes the shipment of such goods or technology by the third-country government to Sudan via a diplomatic pouch.

Note to paragraph (b) of § 538.516: The exportation or reexportation of certain U.S.-origin goods or technology to a third-country government, or to its contractors or agents, may require authorization by the U.S. Department of Commerce under the Export Administration Regulations (15 CFR parts 730 *et seq.*).

PART 560—IRANIAN TRANSACTIONS REGULATIONS

■ 3. Revise the authority citation for part 560 to read as follows:

Authority: 3 U.S.C. 301; 18 U.S.C. 2339B, 2332d; 22 U.S.C. 2349aa–9; 31 U.S.C. 321(b); 50 U.S.C. 1601–1651, 1701–1706; Pub. L. 101–410, 104 Stat. 890 (28 U.S.C. 2461 note); Pub. L. 106–387, 114 Stat. 1549; E.O. 12957, 60 FR 14615, 3 CFR, 1995 Comp., p. 332; E.O. 12959, 60 FR 24757, 3 CFR, 1995 Comp., p. 356; E.O. 13059, 62 FR 44531, 3 CFR, 1997 Comp., p. 217.

Subpart E—Licenses, Authorizations, and Statements of Licensing Policy

■ 4. Revise § 560.521 to read as follows:

§ 560.521 Diplomatic pouches.

The following transactions are authorized:

(a) The importation into the United States from Iran, or the exportation from the United States to Iran, of diplomatic pouches and their contents; and

(b) The exportation, reexportation, sale, or supply, directly or indirectly, from the United States or by a U.S. person, wherever located, of any goods or technology to a third-country government, or to its contractors or agents, for shipment to Iran via a diplomatic pouch. To the extent necessary, this section also authorizes the shipment of such goods or technology by the third-country government to Iran via a diplomatic pouch.

Note to paragraph (b) of § 560.521: The exportation or reexportation of certain U.S.-origin goods or technology to a third-country government, or to its contractors or agents, may require authorization by the U.S. Department of Commerce under the Export Administration Regulations (15 CFR parts 730 *et seq.*).

Dated: February 23, 2007.

Adam J. Szubin,

Director, Office of Foreign Assets Control.

[FR Doc. E7–6155 Filed 4–2–07; 8:45 am]

BILLING CODE 4811–42–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 100

[CGD05–07–028]

RIN 1625–AA08

Special Local Regulation for Marine Events; Roanoke River, Plymouth, NC

AGENCY: Coast Guard, DHS.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing temporary special local regulations during the ''Plymouth Drag Boat Race'', a power boat race to be held on the waters of the Roanoke River, Plymouth, North Carolina. These special local regulations are necessary to provide for the safety of life on navigable waters during the event. This action is intended to restrict vessel traffic in portions of the Roanoke River adjacent to Plymouth, North Carolina during the power boat race.

DATES: This rule is effective from 10 a.m. to 8:30 p.m. on May 6, 2007.

ADDRESSES: Documents indicated in this preamble as being available in the

docket are part of docket [CGD05–07–028] and are available for inspection or copying at Commander (dpi), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, Virginia 23704–5004, between 9 a.m. and 2 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: D. M. Sens, Project Manager, Vessel Compliance and Inspection Branch, at (757) 398–6204.

SUPPLEMENTARY INFORMATION:

Regulatory Information

We did not publish a notice of proposed rulemaking (NPRM) for this regulation. Under 5 U.S.C. 553(b)(B), the Coast Guard finds that good cause exists for not publishing an NPRM, publishing an NPRM would be impracticable and contrary to public interest since immediate action is needed to minimize potential danger to the public during the event. The necessary information to determine whether the marine event poses a threat to persons and vessels was not provided with sufficient time to publish an NPRM. The danger posed by drag boat racing makes special local regulations necessary to provide for the safety of spectator craft and other vessels transiting the event area. For the safety concerns noted, it is in the public interest to have these regulations in effect during the event. The Coast Guard will issue broadcast notice to mariners to advise vessel operators of navigational restrictions. On scene Coast Guard and local law enforcement vessels will also provide actual notice to mariners.

Under 5 U.S.C. 553(d)(3) and for the same reasons, the Coast Guard finds that good cause exists for making this rule effective less than 30 days after publication in the **Federal Register**. Delaying the effective date would be contrary to the public interest, since immediate action is needed to ensure the safety of the event participants, spectator craft and other vessels transiting the event area. However advance notifications will be made to users of the Roanoke River via marine information broadcasts, local notice to mariners, commercial radio stations and area newspapers.

Background and Purpose

On May 6, 2007 the Outboard Drag Boat Association will sponsor the ''Plymouth Drag Boat Race'' on the waters of the Roanoke River. The event will consist of approximately 30 drag boats racing in heats. A fleet of spectator vessels is anticipated to gather nearby to view the competition. Due to the need for vessel control during the event, vessel traffic will be temporarily restricted to provide for the safety of participants, spectators and transiting vessels.

Discussion of Rule

The Coast Guard is establishing special local regulations on specified waters of the Roanoke River adjacent to Plymouth, North Carolina. The regulated area includes a section of the Roanoke River approximately one mile long and bounded in width by each shoreline. The rule would be enforced from 10 a.m. until 8:30 p.m. on May 6, 2007, and would restrict general navigation in the regulated area during the drag boat race. The Coast Guard, at its discretion, when practical would allow the passage of vessels when races are not taking place. Except for participants and vessels authorized by the Coast Guard Patrol Commander, no person or vessel would be allowed to enter or remain in the regulated area during the enforcement period. These regulations are needed to control vessel traffic during the events to enhance the safety of participants, spectators and transiting vessels.

Regulatory Evaluation

This 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. It is not ''significant'' under the regulatory policies and procedures of the Department of Homeland Security (DHS).

We expect the economic impact of this rule to be so minimal that a full Regulatory Evaluation under the regulatory policies and procedures of DHS is unnecessary.

Although this regulation restricts vessel traffic from transiting Roanoke River during the event, the effect of this regulation will not be significant due to the limited duration that the regulated area will be in effect and the extensive advance notifications that will be made to the maritime community via marine information broadcasts and area newspapers so mariners can adjust their plans accordingly.

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.

The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities. This rule will affect the following entities, some of which may be small entities: the owners or operators of vessels intending to transit Martin Lagoon during the event.

This rule will not have a significant economic impact on a substantial number of small entities for the following reasons. This rule will be in effect for only a short period, from 10 a.m. to sunset on May 6, 2007. Before the enforcement period, we will issue maritime advisories so mariners can adjust their plans accordingly.

Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we offered to assist small entities in understanding the rule so that they could better evaluate its effects on them and participate in the rulemaking process. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the address listed under **ADDRESSES**. The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

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 by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247).

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).

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. We have analyzed this rule under that Order and have determined that it does not have implications for federalism.

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 this preamble.

Taking of Private Property

This rule will not effect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

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.

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.

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.

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 because it is not a ''significant regulatory action'' under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

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 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.

Environment

We have analyzed this rule under Commandant Instruction M16475.lD, and Department of Homeland Security Management Directive 5100.1 which guides the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321–4370f), and have concluded that there are no factors in this case that would limit the use of a categorical exclusion under section 2.B.2 of the Instruction. Therefore, this rule is categorically excluded, under figure 2–1, paragraph (34)(h), of the Instruction, from further environmental documentation. Special local regulations issued in conjunction with a regatta or marine event permit are specifically excluded from further analysis and documentation under those sections.

List of Subjects in 33 CFR Part 100

Marine safety, Navigation (water), Reporting and recordkeeping requirements, Waterways.

■ For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 100 as follows:

PART 100—SAFETY OF LIFE ON NAVIGABLE WATERS

■ 1. The authority citation for Part 100 continues to read as follows:

Authority: 33 U.S.C. 1233.

■ 2. Add temporary § 100.35–T05–028 to read as follows:

§ 100.35–T05–028 Roanoke River, Plymouth, North Carolina.

(a) Regulated area. The regulated area includes all waters of Roanoke River commencing at the north river bank at latitude 35°52′20″ N, longitude 076°44′47″ W, thence a line 180 degree due south across the river to the shoreline thence west along the shoreline to a position located at latitude 35°51′43″ N, longitude 076°43′45″ W, thence 000 degrees due north across the river to the shoreline thence east along the shoreline to the point of origin. All coordinates reference Datum NAD 1983.

(b) Definitions:

(1) *Coast Guard Patrol Commander* means a commissioned, warrant, or petty officer of the Coast Guard who has been designated by the Commander, Coast Guard Sector North Carolina.

(2) *Official Patrol* means any vessel assigned or approved by Commander, Coast Guard Sector North Carolina with a commissioned, warrant, or petty officer on board and displaying a Coast Guard ensign.

(c) *Special local regulations:*

(1) Except for persons or vessels authorized by the Coast Guard Patrol Commander, no person or vessel may enter or remain in the regulated area.

(2) The operator of any vessel in the regulated area shall:

(i) Stop the vessel immediately when directed to do so by any Official Patrol.

(ii) Proceed as directed by any official patrol.

(d) Enforcement period. This section will be enforced from 10 a.m. to 8:30 p.m. on May 6, 2007.

Dated: March 20, 2007.

Larry L. Hereth,

Rear Admiral, U.S. Coast Guard, Commander, Fifth Coast Guard District.

[FR Doc. E7–6096 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[CGD05–06–105]

RIN 1625–AA87

Security Zone; Georgetown Channel, Potomac River, Washington, DC

AGENCY: Coast Guard, DHS.

ACTION: Final rule.

SUMMARY: The Coast Guard is establishing a permanent security zone on the waters of the upper Potomac River. This action is necessary to provide for the security of a large number of visitors to the annual July 4th celebration on the National Mall in Washington, DC. The security zone will allow for control of a designated area of the river and safeguard spectators and high-ranking officials.

DATES: This rule is effective May 3, 2007.

ADDRESSES: Comments and material received from the public, as well as documents indicated in this preamble as being available in the docket, are part of docket CGD05–06–105 and are available for inspection or copying at Coast Guard Sector Baltimore, Waterways Management Division, between 8 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Mr. Ronald Houck, at Coast Guard Sector Baltimore, Waterways Management Division, at telephone number (410) 576–2674 or (410) 576–2693.

SUPPLEMENTARY INFORMATION:

Regulatory Information

On December 1, 2006, we published a notice of proposed rulemaking (NPRM) entitled ''Security Zone; Georgetown Channel, Potomac River, Washington, DC'' in the **Federal Register** (71 FR 69517). We received no letters commenting on the proposed rule. No public meeting was requested, and none was held.

Background and Purpose

Due to increased awareness that future terrorist attacks are possible, including continued threats against U.S. interests by Al-Queda and other terrorist organizations, the Coast Guard, as lead federal agency for maritime homeland security has, determined that the Captain of the Port Baltimore must have the means to be aware of, deter, detect, intercept, and respond to asymmetric threats, acts of aggression, and attacks by terrorists on the American homeland while still maintaining our freedoms and sustaining the flow of commerce. This security zone is part of a comprehensive port security regime designed to safeguard human life, vessels, and waterfront facilities against sabotage or terrorist attacks.

In this particular rulemaking, to address the aforementioned security concerns, and to take steps to prevent the catastrophic impact that a terrorist attack against a large number of spectators and high-ranking officials during the annual July 4th celebration would have on the public interest, the Coast Guard is proposing to establish a security zone upon all waters of the Georgetown Channel of the Potomac River, from the surface to the bottom, 75 yards from the eastern shore measured perpendicularly to the shore, between the Long Railroad Bridge (the most eastern bridge of the 5-span, Fourteenth Street Bridge Complex) to the Theodore Roosevelt Memorial Bridge and all waters in between, totally including the waters of the Georgetown Channel Tidal Basin. This security zone will help the Coast Guard to prevent vessels or persons from engaging in terrorist actions against a large number of spectators and high-ranking officials during the annual July 4th celebration. Due to these heightened security concerns, and the catastrophic impact a terrorist attack on the National Mall in Washington, DC during the annual July 4th celebration would have on the large number of spectators and high-ranking officials, as well as the surrounding area and communities, a security zone is prudent for this type of event.

Discussion of Comments and Changes

The Coast Guard received no comments on the proposed rule during the comment period published in the NPRM. No public meeting was requested and none was held. As a result, no change from the proposed regulatory text was made.

Regulatory Evaluation

This 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. The security zone is of limited size, located along the shoreline, and will only be enforced for one day of the year, resulting in minimal disruption to the maritime community.

The Coast Guard received no comments on this aspect of the proposed rule during the comment period published in the NPRM. As a result, no change to the proposed regulatory text was made.

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.

The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities: The owners or operators of vessels intending to operate, remain or anchor in a portion of the Potomac River, within 75 yards from the eastern shore measured perpendicularly to the shore, between the Long Railroad Bridge (the most eastern bridge of the 5-span, Fourteenth Street Bridge Complex) to the Theodore Roosevelt Memorial Bridge and all waters in between, totally including the waters of the Georgetown Channel Tidal Basin from 12:01 a.m. to 11:59 p.m. annually on July 4th. This security zone will not have a significant economic impact on a substantial number of small entities for the following reasons. The zone is of limited size and located along the shoreline, therefore, it is expected that there will be minimal disruption to the maritime community. Before the enforcement period, the Coast Guard will issue maritime advisories widely available to users of the Potomac River.

The Coast Guard received no comments on this aspect of the proposed rule during the comment period published in the NPRM. As a result, no change to the proposed regulatory text was made.

Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we offered to assist small entities in understanding the rule so that they could better evaluate its effects on them and participate in the rulemaking process. However, we received no requests for assistance from any small entities.

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 by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247).

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).

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. We have analyzed this rule under that Order and have determined that it does not have implications for federalism.

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 this preamble.

Taking of Private Property

This rule will not effect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

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.

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.

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.

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 because it is not a ''significant regulatory action'' under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

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 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.

Environment

We have analyzed this rule under Commandant Instruction M16475.lD and Department of Homeland Security Management Directive 5100.1, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321–4370f), and have concluded that there are no factors in this case that would limit the use of a categorical exclusion under section 2.B.2 of the Instruction. Therefore, this rule is categorically excluded, under figure 2–1, paragraph (34)(g), of the Instruction, from further environmental documentation. This regulation establishes a security zone. A final ''Environmental Analysis Check List'' and a final ''Categorical Exclusion Determination'' are available in the docket where indicated under **ADDRESSES**.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

■ For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

■ 1. The authority citation for part 165 is revised to read as follows:

Authority: 33 U.S.C. 1226, 1231; 46 U.S.C. Chapter 701; 50 U.S.C. 191, 195; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Pub. L. 107–295, 116 Stat. 2064; Department of Homeland Security Delegation No. 0170.1.

■ 2. Add § 165.508 to read as follows:

§ 165.508 Security Zone; Georgetown Channel, Potomac River, Washington, DC.

(a) *Definitions.* (1) The *Captain of the Port, Baltimore, Maryland* means the Commander, Coast Guard Sector Baltimore, Maryland or any Coast Guard commissioned, warrant, or petty officer who has been authorized by the Captain of the Port, Baltimore, Maryland to act on his or her behalf.

(b) *Location.* The following area is a security zone: All waters of the Georgetown Channel of the Potomac River, from the surface to the bottom, 75 yards from the eastern shore measured perpendicularly to the shore, between the Long Railroad Bridge (the most eastern bridge of the 5-span, Fourteenth Street Bridge Complex) to the Theodore Roosevelt Memorial Bridge and all waters in between, totally including the waters of the Georgetown Channel Tidal Basin.

(c) *Regulations.* (1) All persons are required to comply with the general regulations governing security zones found in § 165.33 of this part.

(2) Entry into or remaining in this zone is prohibited unless authorized by the Coast Guard Captain of the Port, Baltimore, Maryland.

(3) Persons or vessels requiring entry into or passage through the security zone must first request authorization from the Captain of the Port, Baltimore to seek permission to transit the area. The Captain of the Port, Baltimore, Maryland can be contacted at telephone number (410) 576–2693. The Coast Guard vessels enforcing this section can be contacted on VHF Marine Band Radio, VHF channel 16 (156.8 MHz). Upon being hailed by a U.S. Coast Guard vessel by siren, radio, flashing light, or other means, the operator of a vessel shall proceed as directed. If permission is granted, all persons and vessels must comply with the instructions of the Captain of the Port, Baltimore, Maryland and proceed at the minimum speed necessary to maintain a safe course while within the zone.

(d) *Enforcement.* The U.S. Coast Guard may be assisted in the patrol and enforcement of the zone by Federal, State, and local agencies.

(e) *Enforcement period.* This section will be enforced from 12:01 a.m. to 11:59 p.m. local time annually on July 4.

Dated: March 16, 2007.

Brian D. Kelley,

Captain, U.S. Coast Guard, Captain of the Port, Baltimore, Maryland.

[FR Doc. E7–6097 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[CCGD05–07–024]

RIN 1625–AA00

Safety Zone: Celebration 2007, Appomattox River, Hopewell, VA

AGENCY: Coast Guard, DHS.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a 600 foot radius safety zone in the vicinity of Hopewell, VA centered on position 37°–19′–11″ N/077°–16′–55″ W on May 12, 2007 in support of the Celebration 2007 event. This action is intended to restrict vessel traffic movement on the Appomattox River to protect mariners from the hazards associated with fireworks displays.

DATES: This rule is effective from 8:30 p.m. to 9:30 p.m. on May 12, 2007.

ADDRESSES: Documents indicated in this preamble as being available in the docket are part of docket [CGD05–07–024] and are available for inspection or copying at Coast Guard Sector Hampton Roads, Norfolk Federal Building, 200 Granby St., 7th Floor, Norfolk, VA 23510 between 9 a.m. and 2 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Lieutenant Junior Grade TaQuitia Winn, Assistant Chief, Waterways Management Division, Sector Hampton Roads at (757) 668–5580.

SUPPLEMENTARY INFORMATION:

Regulatory Information

We did not publish a notice of proposed rulemaking (NPRM) for this regulation. Under 5 U.S.C. 553(b)(B), the Coast Guard finds that good cause exists for not publishing an NPRM. Insufficient time existed for publication of an NPRM and a final rule. Delaying this rule would be contrary to the public interest since immediate action is needed to minimize potential danger to the public during the fireworks demonstration.

Background and Purpose

On May 12, 2007, the city of Hopewell, VA will sponsor a fireworks display on the Appomattox River at position 37°–19′–11″ N/077°–16′–55″ W. Due to the need to protect mariners and spectators from the hazards associated with the fireworks display, vessel traffic will be temporarily restricted within a 600 foot radius of the fireworks barge.

Discussion of Rule

The Coast Guard is establishing a 600 foot radius safety zone on specified waters of the Appomattox River around the fireworks barge, centered on position 37°–19′–11″ N/077°–16′–55″ W in the vicinity of City Point, Hopewell, VA. This safety zone will be established in the interest of public safety during the Celebration 2007 event and will be enforced from 8:30 p.m. to 9:30 p.m. on May 12, 2007. General navigation within the safety zone will be restricted during the specified date and times. Except for participants and vessels authorized by the Coast Guard Patrol Commander, no person or vessel may enter or remain in the regulated area.

Regulatory Evaluation

This 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. Although this regulation restricts access to the safety zone, the effect of this rule will not be significant because: (i) The safety zone will be in effect for a limited duration; and (ii) the Coast Guard will make notifications via maritime advisories so mariners can adjust their plans accordingly.

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.

The Coast Guard certifies under 5 U.S.C. 605(b) that this rule would not have a significant economic impact on a substantial number of small entities because the zone will only be in place for a limited duration and maritime advisories will be issued allowing the mariners to adjust their plans accordingly. However, this rule may affect the following entities, some of which may be small entities: The owners and operators of vessels intending to transit or anchor in that portion of the Appomattox River subject to this rule from 8:30 p.m. to 9:30 p.m. on May 12, 2007.

If you think the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact Lieutenant Junior Grade TaQuitia Winn, Assistant Chief, Waterways Management Division, Sector Hampton Roads at (757) 668–5580.

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 action by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

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.).

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. We have analyzed this rule under that Order and have

determined that it does not have implications for federalism.

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 would not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

Taking of Private Property

This rule would not effect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

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.

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 would not create an environmental risk to health or risk to safety that might disproportionately affect children.

Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would 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.

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 because it is not a ''significant regulatory action'' under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

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 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.

Environment

We have analyzed this rule under Commandant Instruction M16475.lD and Department of Homeland Security Management Directive 5100.1, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321–4370f), and have concluded that there are no factors in this case that would limit the use of a categorical exclusion under section 2.B.2 of the Instruction. This rule is categorically excluded, under figure 2–1, paragraph (34)(g), of the Instruction, from further environmental documentation because it establishes a safety zone. A final ''Environmental Analysis Check List'' and a final ''Categorical Exclusion Determination'' will be available in the docket where indicated under **ADDRESSES**.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

■ For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

■ 1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1226, 1231; 46 U.S.C. Chapter 701; 50 U.S.C. 191, 195; 33 CFR 1.05–1(g), 6.04–1, 6.04–6 and 160.5; Pub. L. 107–295, 116 Stat. 2064; Department of Homeland Security Delegation No. 0170.1

■ 2. Add temporary § 165.T05–024, to read as follows:

§ 165.T05–024 Safety Zone: Celebration 2007, Appomattox River, Hopewell, VA.

(a) *Location.* The following area is a safety zone: All waters of the Appomattox River, from bottom to surface, located within 600 feet of position 37°–19′–11″ N/077°–16′–55″ W in the vicinity of City Point, Hopewell, VA.

(b) *Definition.* Captain of the Port Representative means any U.S. Coast Guard commissioned, warrant or petty officer who has been authorized by the Captain of the Port, Hampton Roads, Virginia to act on his behalf.

(c) *Regulations.* (1) In accordance with the general regulations in § 165.23 of this part, entry into this zone is prohibited unless authorized by the Captain of the Port, Hampton Roads or his designated representatives.

(2) The operator of any vessel in the immediate vicinity of this safety zone shall:

(i) Stop the vessel immediately upon being directed to do so by any commissioned, warrant or petty officer on shore or on board a vessel that is displaying a U.S. Coast Guard Ensign.

(ii) Proceed as directed by any commissioned, warrant or petty officer on shore or on board a vessel that is displaying a U.S. Coast Guard Ensign.

(3) The Captain of the Port, Hampton Roads and the Sector Duty Officer at Sector Hampton Roads in Portsmouth, Virginia can be contacted at telephone number (757) 668–5555 or (757) 484–8192.

(4) The Coast Guard Representatives enforcing the safety zone can be contacted on VHF–FM 13 and 16.

(d) *Effective date:* This regulation is effective from 8:30 p.m. to 9:30 p.m. on May 12, 2007.

Dated: March 21, 2007.

Patrick B. Trapp,

Captain, U.S. Coast Guard, Captain of the Port, Hampton Roads.

[FR Doc. E7–6158 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–15–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[DE102–1100; FRL–8291–7]

Approval and Promulgation of Air Quality Implementation Plans; Delaware; Update to Materials Incorporated by Reference

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; notice of administrative change.

SUMMARY: EPA is updating the materials submitted by Delaware that are incorporated by reference (IBR) into the State implementation plan (SIP). The regulations affected by this update have been previously submitted by the Delaware Department of Natural Resources and Environmental Control (DNREC) and approved by EPA. This update affects the SIP materials that are available for public inspection at the National Archives and Records Administration (NARA), the Air and Radiation Docket and Information Center located at EPA Headquarters in Washington, D.C., and the Regional Office.

EFFECTIVE DATE: This action is effective April 3, 2007.

ADDRESSES: SIP materials which are incorporated by reference into 40 CFR part 52 are available for inspection at the following locations: Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; the Air and Radiation Docket and Information Center, EPA Headquarters Library, Room Number 3334, EPA West Building, 1301 Constitution Ave., NW., Washington, DC 20460, and the National Archives and Records Administration. If you wish to obtain materials from a docket in the EPA Headquarters Library, please call the Office of Air and Radiation (OAR) Docket/Telephone number: (202) 566–1742; or 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.*

FOR FURTHER INFORMATION CONTACT: Harold A. Frankford, (215) 814–2108 or by e-mail at *frankford.harold@epa.gov.*

SUPPLEMENTARY INFORMATION: The SIP is a living document which the State revises as necessary to address the unique air pollution problems. Therefore, EPA from time to time must take action on SIP revisions containing new and/or revised regulations to make them part of the SIP. On May 22, 1997 (62 FR 27968), EPA revised the procedures for incorporating by reference Federally-approved SIPs, as a result of consultations between EPA and the Office of the Federal Register (OFR). The description of the revised SIP document, IBR procedures and ''Identification of plan'' format are discussed in further detail in the May 22, 1997 **Federal Register** document. On December 7, 1998 (63 FR 67407), EPA published a document in the **Federal Register** beginning the new IBR procedure for Delaware. On June 21, 2004 (69 FR 34285), EPA published an update to the IBR material for Delaware. In this document, EPA is doing the following:

1. Announcing the update to the IBR material as of February 15, 2007.

2. Making corrections to the following entries listed in the paragraph 52.420(c) chart, as described below:

a. Revising the title of Regulation 1102 (formerly Regulation 2) so that it restores the text of the revised title as published in the December 7, 2006 **Federal Register** (71 FR 70883 at 70885).

b. Adding an entry for Regulation 1102, Appendix A with a State effective date of June 1, 1997. EPA had approved the addition of this appendix as a SIP revision on January 13, 2000 (65 FR 2005), but had inadvertently omitted a corresponding entry as an addition to 40 CFR 52.420(c) at the time of EPA's approval action.

c. For the entries Regulation 1102, Sections 1, 6, 11, and 12, adding text in the ''Additional explanation'' column to indicate the SIP effective date.

d. For the entry Regulation 24, Section 10, removing the text from the ''Additional explanation'' column.

e. For the entry Regulation 31, Appendix 6(a)(9), correcting a typographical error in the ''Title/subject'' column.

3. Making corrections to the following entries listed in the paragraph 52.420(d) chart, as described below:

a. Renaming the title of the second column from ''Title/subject'' to ''Permit number.''

b. Entry for Phoenix Steel Co.—Electric Arc Furnaces Charging & Tapping #2—Correcting a typographical error in the ''Permit number'' column.

EPA has determined that today's rule falls under the ''good cause'' exemption in section 553(b)(3)(B) of the Administrative Procedures Act (APA), which, upon finding ''good cause,'' authorizes agencies to dispense with public participation, and section 553(d)(3), which allows an agency to make a rule effective immediately (thereby avoiding the 30-day delayed effective date otherwise provided for in the APA). Today's rule simply codifies provisions which are already in effect as a matter of law in Federal and approved State programs. Under section 553 of the APA, an agency may find good cause where procedures are ''impractical, unnecessary, or contrary to the public interest.'' Public comment is ''unnecessary'' and contrary to the ''public interest'' since the codification only reflects existing law. Immediate notice in the CFR benefits the public by removing outdated citations and incorrect chart entries.

Statutory and Executive Order Reviews

A. General Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by State law, it 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). This rule also does not have tribal implications because it will 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, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does 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 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it approves a state rule implementing a Federal standard. In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

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 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**. This rule is not a ''major rule'' as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

EPA has also determined that the provisions of section 307(b)(1) of the Clean Air Act pertaining to petitions for judicial review are not applicable to this action. Prior EPA rulemaking actions for each individual component of the Delaware SIP compilations had previously afforded interested parties the opportunity to file a petition for judicial review in the United States Court of Appeals for the appropriate circuit within 60 days of such rulemaking action. Thus, EPA sees no need in this action to reopen the 60-day period for filing such petitions for judicial review for this ''Identification of plan'' reorganization update action for Delaware.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and record keeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: March 9, 2007.

William T. Wisniewski,

Acting Regional Administrator, Region III.

■ 40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

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

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

Subpart I—Delaware

■ 2. Section 52.420 is amended by revising paragraphs (b), (c), and (d) to read as follows:

52.420 Identification of plan.

* * * * *

(b) *Incorporation by reference.*

(1) Material listed as incorporated by reference in paragraphs (c) and (d) was approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Material incorporated as it exists on the date of the approval, and notice of any change in the material will be published in the **Federal Register**. Entries in paragraphs (c) and (d) of this section with EPA approval dates on or after February 15, 2007 will be incorporated by reference in the next update to the SIP compilation.

(2) EPA Region III certifies that the rules/regulations provided by EPA at the addresses in paragraph (b)(3) of this section are an exact duplicate of the officially promulgated State rules/regulations which have been approved as part of the State implementation plan as of February 15, 2007.

(3) Copies of the materials incorporated by reference may be inspected at the EPA Region III Office at 1650 Arch Street, Philadelphia, PA 19103; the EPA, Air and Radiation Docket and Information Center, Room Number 3334, EPA West Building, 1301 Constitution Avenue, NW., 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.*

(c) *EPA approved regulations.*

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
Regulation 1 Definitions and Administrative Principles				
Section 1	General Provisions	5/28/74	03/23/76, 41 FR 12010.	
Section 2	Definitions	10/11/98	3/11/99, 64 FR 12085.	
Section 2	Definitions	2/8/95	9/9/99, 64 FR 48961	**New Definitions:** (Effective date: 1/7/77). —Capacity factor. —Continuous monitoring system. —Emission standard. —Equipment shutdown. —Excess Emissions. (Effective Date: 9/26/78). —Sulfuric Acid Plant.

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP—Continued

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
				Revised Definitions: (Effective date: 1/7/77). —Existing Installation, Equipment, Source, or Operation. —New Installation, Equipment, Source, or Operation.
Section 2	Definitions	2/11/03	11/1/05, 70 FR 65847	Added definition of $PM_{2.5}$
Section 3	Administrative Principles	1/7/72	05/31/72, 37 FR 10842.	
Section 4	Abbreviations	2/1/81	3/15/82, 48 FR 11013	Abbreviation of "ACAA" only.
Regulation 1102 Permits (Formerly "Regulation 2—Permits")				
Section 1	General Provisions	6/15/06	12/7/06, 71 FR 70883	SIP effective date is 2/5/07.
Section 2	Applicability	6/1/97	1/13/00, 65 FR 2048.	
Section 3	Applications Prepared by Interested Parties.	6/1/97	1/13/00, 65 FR 2048.	
Section 4	Cancellation of Construction Permits.	6/1/97	1/13/00, 65 FR 2048.	
Section 5	Action on Applications	6/1/97	1/13/00, 65 FR 2048.	
Section 6	Denial, Suspension or Revocation of Operating Permits.	6/15/06	12/7/06, 71 FR 70883	SIP effective date is 2/5/07.
Section 7	Transfer of Permit/Registration Prohibited.	6/1/97	1/13/00, 65 FR 2048.	
Section 8	Availability of Permit/Registration	6/1/97	1/13/00, 65 FR 2048.	
Section 9	Registration Submittal	6/1/97	1/13/00, 65 FR 2048.	
Section 10	Source Category Permit Application	6/1/97	1/13/00, 65 FR 2048.	
Section 11	Permit Application	6/15/06	12/7/06, 71 FR 70883	SIP effective date is 2/5/07.
Section 12	Public Participation	6/15/06	12/7/06, 71 FR 70883	SIP effective date is 2/5/07.
Section 13	Department Records	6/1/97	1/13/00, 65 FR 2048.	
Appendix A ...	[List of Permit Exemptions]	6/1/97	1/13/00, 65 FR 2048.	
Regulation 3 Ambient Air Quality Standards				
Section 1	General Provisions	2/11/03	11/1/05, 70 FR 65847	Addition of section 1.6.j.
Section 2	General Restrictions	3/11/80	10/30/81, 46 FR 53663.	
Section 3	Suspended Particulates	3/11/80	10/30/81, 46 FR 53663.	
Section 4	Sulfur Dioxide	3/11/80	10/30/81, 46 FR 53663.	
Section 5	Carbon Monoxide	3/11/80	10/30/81, 46 FR 53663.	
Section 6	Ozone	2/11/03	11/1/05, 70 FR 65847	Addition to section 6.1—"This standard shall be applicable to New Castle and Kent Counties."; Addition of section 6.2.
Section 8	Nitrogen Dioxide	3/11/80	10/30/81, 46 FR 53663.	
Section 10	Lead	3/11/80	3/11/82, 48 FR 10535.	
Section 11	PM_{10} and $PM_{2.5}$ Particulates	2/11/03	11/1/05, 70 FR 65847	Section title added "and $PM_{2.5}$"; Addition of sections 11.2.a. and 11.2.b.
Regulation 4 Particulate Emissions From Fuel Burning Equipment				
Section 1	General Provisions	5/28/74	3/23/76, 41 FR 12010.	
Section 2	Emission Limits	5/28/74	3/23/76, 41 FR 12010.	
Regulation 5 Particulate Emissions From Industrial Process Operations				
Section 1	General Provisions	5/28/74	3/23/76, 41 FR 12010.	
Section 2	General Restrictions	5/28/74	3/23/76, 41 FR 12010.	
Section 3	Restrictions on Hot Mix Asphalt Batching Operations.	5/28/74	3/23/76, 41 FR 12010.	
Section 4	Restrictions on Secondary Metal Operations.	12/2/77	07/30/79, 44 FR 44497.	
Section 5	Restrictions on Petroleum Refining Operations.	9/26/78	9/9/99, 64 FR 48961.	
Section 6	Restrictions on Prill Tower Operations.	9/26/78	08/01/80, 45 FR 51198.	
Section 7	Control of Potentially Hazardous Particulate Matter.	1/7/72	5/31/72, 37 FR 10842.	
Regulation 6 Particulate Emissions From Construction and Materials Handling				
Section 1	General Provisions	1/7/72	05/31/72, 37 FR 10842.	
Section 2	Demolition	5/28/74	03/23/76, 41 FR 12010.	

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP—Continued

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
Section 3	Grading, Land Clearing, Excavation and Use of Non-Paved Roads.	5/28/74	03/23/76, 41 FR 12010.	
Section 4	Material Movement	5/28/74	03/23/76, 41 FR 12010.	
Section 5	Sandblasting	5/28/74	03/23/76, 41 FR 12010.	
Section 6	Material Storage	5/28/74	03/23/76, 41 FR 12010.	
Regulation 7 Particulate Emissions From Incineration				
Section 1	General Provisions	05/28/74	03/23/76, 41 FR 12010.	
Section 2	Restrictions	12/8/83	10/3/84 49, FR 39061	Provisions were revised 10/13/89 by State, but not submitted to EPA as SIP revisions.
Regulation 8 Sulfur Dioxide Emissions From Fuel Burning Equipment				
Section 1	General Provisions	12/8/83	10/3/84, 49 FR 39061.	
Section 2	Limit on Sulfur Content of Fuel	5/9/85	12/08/86, 51 FR 44068.	
Section 3	Emissions Control in Lieu of Sulfur Content Limits of Section 2.	5/9/85	12/08/86, 51 FR 44068.	
Regulation 9 Emissions of Sulfur Compounds From Industrial Operations				
Section 1	General Provisions	5/9/85	12/08/86, 51 FR 44068.	
Section 2	Restrictions on Sulfuric Acid Manufacturing Operations.	9/26/78	9/9/99, 64 FR 48961	1. On 3/11/1982 (47 FR 10535), EPA approved revisions to Section 2 with a State effective date of 12/29/1980. 2. Section 2.2 (State effective date: 9/26/1980) is federally enforceable as a Section 111(d) plan and codified at 40 CFR 62.1875.
Section 3	Restriction on Sulfur Recovery Operations.	5/28/74	03/23/76, 41 FR 12010.	
Section 4	Stack Height Requirements	4/18/83	09/21/83, 48 FR 42979.	
Regulation 10 Control of Sulfur Dioxide Emissions—Kent and Sussex Counties				
Section 1	Requirements for Existing Sources of Sulfur Dioxide.	1/7/72	05/31/72, 37 FR 10842.	
Section 2	Requirements for New Sources of Sulfur Dioxide.	5/28/74	03/23/76, 41 FR 12010.	
Regulation 11 Carbon Monoxide Emissions From Industrial Process Operations—New Castle County				
Section 1	General Provisions	5/28/74	03/23/76, 41 FR 12010.	
Section 2	Restrictions on Petroleum Refining Operations.	1/7/72	05/31/72, 37 FR 10842	Citation revised 3/23/76 41 FR 12010.
Regulation 12 Control of Nitrogen Oxide Emissions				
Section 1	Applicability	11/24/93	6/14/01, 66 FR 32234.	
Section 2	Definitions	11/24/93	6/14/01, 66 FR 32234.	
Section 3	Standards	11/24/93	6/14/01, 66 FR 32234.	
Section 4	Exemptions	11/24/93	6/14/01, 66 FR 32234.	
Section 5	Alternative and Equivalent RACT Determination.	11/24/93	6/14/01, 66 FR 32234.	
Section 6	RACT Proposals	11/24/93	6/14/01, 66 FR 32234.	
Section 7	Compliance, Certification, Recordkeeping, and Reporting Requirements.	11/24/93	6/14/01, 66 FR 32234.	
Regulation 13 Open Burning				
Section 1	Prohibitions—All Counties	2/8/95	03/12/97, 62 FR 11329	EPA effective date is 5/1/98.
Section 2	Prohibitions—Specific Counties	2/8/95	03/12/97, 62 FR 11329	EPA effective date is 5/1/98.
Section 3	General Restrictions—All Counties	2/8/95	03/12/97, 62 FR 11329	EPA effective date is 5/1/98.
Section 4	Exemptions—All Counties	2/8/95	03/12/97, 62 FR 11329	EPA effective date is 5/1/98.
Regulation 14 Visible Emissions				
Section 1	General Provisions	7/17/84	07/02/85, 50 FR 27244.	
Section 2	Requirements	7/17/84	07/02/85, 50 FR 27244.	

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP—Continued

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
Section 3	Alternate Opacity Requirements	7/17/84	07/02/85, 50 FR 27244.	
Section 4	Compliance with Opacity Standards	7/17/84	07/02/85, 50 FR 27244.	
	Regulation 15 Air Pollution Alert and Emergency Plan			
Section 1	General Provisions	1/7/72	05/31/72, 37 FR 10842.	
Section 2	Stages and Criteria	3/29/88	04/06/94, 59 FR 16140.	
Section 3	Required Actions	1/7/72	05/31/72, 37 FR 10842	Delaware removed the word "standby" from Table III, section 3B effective 5/28/74, but did not submit as a SIP revision.
Section 4	Standby Plans	1/7/72	05/31/72, 37 FR 10842.	
	Regulation 16 Sources Having an Interstate Air Pollution Potential			
Section 1	General Provisions	1/7/72	05/31/72, 37 FR 10842	Delaware revised provision effective 5/28/74, but did not submit as a SIP revision.
Section 2	Limitations	1/7/72	05/31/72, 37 FR 10842.	
Section 3	Requirements	1/7/72	05/31/72, 37 FR 10842.	
	Regulation 17 Source Monitoring, Recordkeeping and Reporting			
Section 1	Definitions and Administrative Principles.	1/11/93	02/28/96, 61 FR 7453.	
Section 2	Sampling and Monitoring	7/17/84,	07/02/85, 50 FR 27244	Former SIP Sections 1 through 5 respectively; citation revised 2/28/96, 62 FR 7453.
Section 3	Minimum Emission Monitoring Requirements for Existing Sources.	1/10/77	8/25/81, 46 FR 43150.	
Section 4	Performance Specifications	1/11/93	9/9/99, 64 FR 48961.	
Section 5	Minimum Data Requirements	1/10/77	8/25/81, 46 FR 43150.	
Section 6	Data Reduction	1/11/93	9/9/99, 64 FR 48961.	
Section 7	Emission Statement	1/11/93	02/28/96, 61 FR 7453.	
	Regulation 23 Standards of Performance for Steel Plants: Electric Arc Furnaces			
Section 1	Applicability	12/2/77	07/30/79, 44 FR 44497	Correction published 8/20/80, 45 FR 55422.
Section 2	Definitions	04/18/83	09/21/83, 49 FR 39061.	
Section 3	Standard for Particulate Matter	04/18/83	09/21/83, 49 FR 39061.	
Section 4	Monitoring of Operations	12/2/77	07/30/79, 44 FR 44497	Correction published 8/20/80, 45 FR 55422.
Section 5	Test Methods and Procedures	12/2/77	07/30/79, 44 FR 44497	Correction published 8/20/80, 45 FR 55422.
	Regulation 24 Control of Volatile Organic Compound Emissions			
Section 1	General Provisions	1/11/93	5/3/95, 60 FR 21707.	
Section 2	Definitions	1/11/02	11/14/03, 68 FR 64540.	
Section 3	Applicability	1/11/93	5/3/95, 60 FR 21707.	
Section 4	Compliance Certification, Recordkeeping, and Reporting Requirements for Coating Sources.	1/29/94	01/26/96, 61 FR 2419.	
Section 5	Compliance Certification, Recordkeeping, and Reporting Requirements for Non-Coating Sources.	1/11/93	5/3/95, 60 FR 21707.	
Section 7	Circumvention	1/11/93	5/3/95, 60 FR 21707.	
Section 8	Handling, Storage, and Disposal of Volatile Organic Compounds (VOCs).	11/29/94	01/26/96, 61 FR 2419.	
Section 9	Compliance, Permits, Enforceability	1/11/93	5/3/95, 60 FR 21707.	
Section 10	Aerospace Coatings	2/11/03	3/24/04, 69 FR 13737.	
Section 11	Mobile Equipment Repair and Refinishing.	11/11/01	11/22/02, 67 FR 70315.	
Section 12	Surface Coating of Plastic Parts	11/29/94	01/26/96, 61 FR 2419.	
Section 13	Automobile and Light-Duty Truck Coating Operations.	1/11/93	5/3/95, 60 FR 21707.	
Section 14	Can Coating	1/11/93	5/3/95, 60 FR 21707.	
Section 15	Coil Coating	1/11/93	5/3/95, 60 FR 21707.	
Section 16	Paper Coating	1/11/93	5/3/95, 60 FR 21707.	
Section 17	Fabric Coating	1/11/93	5/3/95, 60 FR 21707.	

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP—Continued

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
Section 18	Vinyl Coating	1/11/93	5/3/95, 60 FR 21707.	
Section 19	Coating of Metal Furniture	1/11/93	5/3/95, 60 FR 21707.	
Section 20	Coating of Large Appliances	1/11/93	5/3/95, 60 FR 21707.	
Section 21	Coating of Magnet Wire	11/29/94	01/26/96, 61 FR 2419.	
Section 22	Coating of Miscellaneous Metal Parts.	1/11/93	5/3/95, 60 FR 21707.	
Section 23	Coating of Flat Wood Panelling	1/11/93	5/3/95, 60 FR 21707.	
Section 24	Bulk Gasoline Plants	1/11/93	5/3/95, 60 FR 21707.	
Section 25	Bulk Gasoline Terminals	11/29/94	01/26/96, 61 FR 2419.	
Section 26	Gasoline Dispensing Facility—Stage I Vapor Recovery.	1/11/02	11/14/03 68 FR 64540.	
Section 27	Gasoline Tank Trucks	1/11/93	5/3/95, 60 FR 21707.	
Section 28	Petroleum Refinery Sources	1/11/93	5/3/95, 60 FR 21707.	
Section 29	Leaks from Petroleum Refinery Equipment.	11/29/94	01/26/96, 61 FR 2419.	
Section 30	Petroleum Liquid Storage in External Floating Roof Tanks.	11/29/94	01/26/96, 61 FR 2419.	
Section 31	Petroleum Liquid Storage in Fixed Roof Tanks.	11/29/94	01/26/96, 61 FR 2419.	
Section 32	Leaks from Natural Gas/Gasoline Processing Equipment.	11/29/94	01/26/96, 61 FR 2419.	
Section 33	Solvent Metal Cleaning and Drying	11/11/01	11/22/02 67 FR 70315.	
Section 34	Cutback and Emulsified Asphalt	1/11/93	5/3/95, 60 FR 21707.	
Section 35	Manufacture of Synthesized Pharmaceutical Products.	11/29/94	01/26/96, 61 FR 2419.	
Section 36	Stage II Vapor Recovery	1/11/93	6/10/94, 59 FR 29956.	
Section 37	Graphic Arts Systems	11/29/94	01/26/96, 61 FR 2419.	
Section 38	Petroleum Solvent Dry Cleaners	1/11/93	5/3/95, 60 FR 21707.	
Section 39	Perchloroethylene Dry Cleaning	1/11/93	5/3/95, 60 FR 21707.	
Section 40	Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment.	1/11/93	5/3/95, 60 FR 21707.	
Section 41	Manufacture of High-Density Polyethylene, Polypropylene and Polystyrene Resins.	1/11/93	5/3/95, 60 FR 21707.	
Section 42	Air Oxidation Processes in the Synthetic Organic Chemical Manufacturing Industry.	1/11/93	5/3/95, 60 FR 21707.	
Section 43	Bulk Gasoline Marine Tank Vessel Loading Facilities.	11/29/94	01/26/96, 61 FR 2419.	
Section 44	Batch Processing Operations	11/29/94	01/26/96, 61 FR 2419.	
Section 45	Industrial Cleaning Solvents	11/29/94	01/26/96, 61 FR 2419.	
Section 47	Offset Lithographic Printing	11/29/94	05/14/97, 62 FR 26399.	
Section 48	Reactor Processes and Distillation Operations in the Synthetic Organic Chemical Manufacturing Industry.	11/29/94	01/26/96, 61 FR 2419.	
Section 49	Control of Volatile Organic Compound Emissions from Volatile Organic Liquid Storage Vessels.	11/29/94	01/26/96, 61 FR 2419.	
Section 50	Other Facilities that Emit Volatile Organic Compounds (VOCs).	11/29/94	03/12/97, 62 FR 11329	EPA effective date for Sections 50(a)(5) and 50(b)(3) is 5/1/98.
Appendix "A"	Test Methods and Compliance Procedures: General Provisions.	11/29/94	01/26/96, 61 FR 2419.	
Appendix "B"	Test Methods and Compliance Procedures: Determining the Volatile Organic Compound (VOC) Content of Coatings and Inks.	1/11/93	5/3/95, 60 FR 21707.	
Appendix "C"	Test Methods and Compliance Procedures: Alternative Compliance Methods for Surface Coating.	1/11/93	5/3/95, 60 FR 21707.	
Appendix "D"	Test Methods and Compliance Procedures: Emission Capture and Destruction or Removal Efficiency and Monitoring Requirements.	11/29/94	01/26/96, 61 FR 2419.	
Appendix "E"	Test Methods and Compliance Procedures: Determining the Destruction or Removal Efficiency of a Control Device.	1/11/93	5/3/95, 60 FR 21707.	

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP—Continued

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
Appendix "F"	Test Methods and Compliance Procedures: Leak Detection Methods for Volatile Organic Compounds (VOCs).	1/11/93	5/3/95, 60 FR 21707.	
Appendix "G"	Performance Specifications for Continuous Emissions Monitoring of Total Hydrocarbons.	1/11/93	5/3/95, 60 FR 21707.	
Appendix "H"	Quality Control Procedures for Continuous Emission Monitoring Systems (CEMS).	1/11/93	5/3/95, 60 FR 21707.	
Appendix "I"	Method to Determine Length of Rolling Period for Liquid—Liquid Material Balance Method.	11/29/94	01/26/96, 61 FR 2419.	
Appendix "J"	Procedures for Implementation of Regulations Covering Stage II Vapor Recovery Systems for Gasoline Dispensing Facilities.	1/11/93	6/10/94, 59 FR 29956.	
Appendix "J1"	Certified Stage II Vapor Recovery Systems.	1/11/93	6/10/94, 59 FR 29956.	
Appendix "J2"	Pressure Decay/Leak Test Procedure for Verification of Proper Functioning of Stage I & Stage II Vapor Recovery Equipment.	1/11/93	6/10/94, 59 FR 29956.	
Appendix "J3"	Dynamic Backpressure (Dry) Test and Liquid Blockage (Wet) Test Procedure for Verification of Proper Functioning of Stage II Vapor Balance Recovery Systems.	01/11/93	6/10/94, 59 FR 29956.	
Appendix "K"	Emission Estimation Methodologies	11/29/94	01/26/96, 61 FR 2419.	
Appendix "L"	Method to Determine Total Organic Carbon for Offset Lithographic Solutions.	11/29/94	01/26/96, 61 FR 2419.	
Appendix "M"	Test Method for Determining the Performance of Alternative Cleaning Fluids.	11/29/94	01/26/96, 61 FR 2419.	
Regulation 25 Requirements for Preconstruction Review				
Section 1	General Provisions	1/1/93 (As Revised 5/1/99)	2/7/01, 66 FR 9211	Excluding §§ 1.2, 1.6, 1.9(L), 1.9(M), 1.9(N), 1.9(O), which relate to Prevention of Significant Deterioration.
Section 2	Emission Offset Provisions (EOP) ...	1/1/93 (As Revised 5/1/99)	2/7/01, 66 FR 9211.	
Section 3	Prevention of Significant Deterioration of Air Quality.	5/15/90	01/27/93, 58 FR 26689.	
Regulation 26 Motor Vehicle Emissions Inspection Program				
Section 1	Applicability and Definitions	2/12/01	11/27/03, 68 FR 66343	Regulation 26 provisions apply to Sussex County only, effective November 1, 1999.
Section 2	General Provisions	2/12/01	11/27/03, 68 FR 66343.	
Section 3	Registration Requirement	5/9/85	12/08/86, 51 FR 44068.	
Section 4	Exemptions	2/12/01	11/27/03, 68 FR 66343.	
Section 5	Enforcement	7/6/82	10/17/83, 48 FR 46986.	
Section 6	Compliance, Waivers, Extensions of Time.	2/12/01	11/27/03, 68 FR 66343.	
Section 7	Inspection Facility Requirements	7/6/82	10/17/83, 48 FR 46986.	
Section 8	Certification of Motor Vehicle Officers.	7/6/82	10/17/83, 48 FR 46986.	
Section 9	Calibration and Test Procedures and Approved Equipment.	2/12/01	11/27/03, 68 FR 66343.	
Technical Memorandum 1.	Delaware Division of Motor Vehicles Vehicle Exhaust Emissions Test.	2/12/01	11/27/03, 68 FR 66343.	

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP—Continued

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
	Regulation 27 Stack Heights			
Section 1	General Provisions	4/18/83	09/21/83, 48 FR 42979.	
Section 2	Definitions Specific to this Regulation.	12/7/88	06/29/90, 55 FR 26689.	
Section 3	Requirements for Existing and New Sources.	2/18/87	06/29/90, 55 FR 26689.	
Section 4	Public Notification	2/18/87	06/29/90, 55 FR 26689.	
	Regulation 31 Low Enhanced Inspection and Maintenance Program			
Section 1	Applicability	10/11/01	11/27/03, 68 FR 66343.	
Section 2	Low Enhanced I/M Performance Standard.	10/11/01	1/27/03, 68 FR 66343.	
Section 3	Network Type and Program Evaluation.	10/11/01	11/27/03, 68 FR 66343.	
Section 4	Test Frequency and Convenience ..	6/11/99	9/30/99, 64 FR 52657.	
Section 5	Vehicle Coverage	10/11/01	11/27/03, 68 FR 66343.	
Section 6	Test Procedures and Standards	10/11/01	11/27/03, 68 FR 66343.	
Section 7	Waivers and Compliance via Diagnostic Inspection.	10/11/01	11/27/03, 68 FR 66343.	
Section 8	Motorist Compliance Enforcement ..	10/11/01	11/27/03, 68 FR 66343.	
Section 9	Enforcement Against Operators and Motor Vehicle Technicians.	10/11/01	11/27/03, 68 FR 66343.	
Section 10	Improving Repair Effectiveness	8/13/98	9/30/99, 64 FR 52657.	
Section 11	Compliance with Recall Notices	8/13/98	9/30/99, 64 FR 52657.	
Section 12	On-Road Testing	8/13/98	9/30/99, 64 FR 52657.	
Section 13	Implementation Deadlines	10/11/01	11/27/03, 68 FR 66343.	
Appendix 1(d)	Commitment to Extend the I/M Program to the Attainment Date From Secretary Tulou to EPA Administrator W. Michael McCabe.	8/13/98	9/30/99, 64 FR 52657.	
Appendix 3(a)(7).	Exhaust Emission Limits According to Model Year.	8/13/98	9/30/99, 64 FR 52657.	
Appendix 3(c)(2).	VMASTM Test Procedure	6/11/99	9/30/99, 64 FR 52657.	
Appendix 4(a)	Sections from Delaware Criminal and Traffic Law Manual.	8/13/98	9/30/99, 64 FR 52657.	
Appendix 5(a)	Division of Motor Vehicles Policy on Out of State Renewals.	8/13/98	9/30/99, 64 FR 52657.	
Appendix 5(f)	New Model Year Clean Screen	10/11/01	11/27/03, 68 FR 66343.	
Appendix 6(a)	Idle Test Procedure	10/11/01	11/27/03, 68 FR 66343.	
Appendix 6(a)(5).	Vehicle Emission Repair Report Form.	8/13/98	9/30/99, 64 FR 52657.	
Appendix 6(a)(8).	Evaporative System Integrity (Pressure) Test.	10/11/01	11/27/03, 68 FR 66343.	
Appendix 6(a)(9).	On-board Diagnostic Test Procedure OBD II Test Procedure.	10/11/01	11/27/03, 68 FR 66343.	
Appendix 7(a)	Emission Repair Technician Certification Process.	8/13/98	9/30/99, 64 FR 52657.	
Appendix 8(a)	Registration Denial System Requirements Definition.	8/13/98	9/30/99, 64 FR 52657.	
Appendix 9(a)	Enforcement Against Operators and Inspectors.	10/11/01	11/27/03, 68 FR 66343.	
	Regulation 35 Conformity of General Federal Actions to the State Implementation Plans			
Section 1	Purpose	8/14/96	7/15/97, 62 FR 37722.	
Section 2	Definitions	8/14/96	07/15/97, 62 FR 37722.	
Section 3	Applicability	8/14/96	07/15/97, 62 FR 37722.	
Section 4	Conformity Analysis	8/14/96	07/15/97, 62 FR 37722.	
Section 5	Reporting Requirements	8/14/96	07/15/97, 62 FR 37722.	
Section 6	Public Participation and Consultation.	8/14/96	07/15/97, 62 FR 37722.	
Section 7	Frequency of Conformity Determinations.	8/14/96	07/15/97, 62 FR 37722.	
Section 8	Criteria for Determining Conformity of General Federal Actions.	8/14/96	07/15/97, 62 FR 37722.	
Section 9	Procedures for Conformity Determinations of General Federal Actions.	8/14/96	07/15/97, 62 FR 37722.	

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP—Continued

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
Section 10	Mitigation of Air Quality Impacts	8/14/96	07/15/97, 62 FR 37722.	
Section 11	Savings Provision	8/14/96	07/15/97, 62 FR 37722.	
	Regulation 37 NO_X Budget Program			
Section 1	General Provisions	12/11/99	3/9/00, 65 FR 12481.	
Section 2	Applicability	12/11/99	3/9/00, 65 FR 12481.	
Section 3	Definitions	12/11/99	3/9/00, 65 FR 12481.	
Section 4	Allowance Allocation	12/11/99	3/9/00, 65 FR 12481.	
Section 5	Permits	12/11/99	3/9/00, 65 FR 12481.	
Section 6	Establishment of Compliance Accounts.	12/11/99	3/9/00, 65 FR 12481.	
Section 7	Establishment of General Accounts	12/11/99	3/9/00, 65 FR 12481.	
Section 8	Opt In Provisions	12/11/99	3/9/00, 65 FR 12481.	
Section 9	New Budget Source Provisions	12/11/99	3/9/00, 65 FR 12481.	
Section 10	NO_X Allowance Tracking System (NATS).	12/11/99	3/9/00, 65 FR 12481.	
Section 11	Allowance Transfer	12/11/99	3/9/00, 65 FR 12481.	
Section 12	Allowance Banking	12/11/99	3/9/00, 65 FR 12481.	
Section 13	Emission Monitoring	12/11/99	3/9/00, 65 FR 12481.	
Section 14	Recordkeeping	12/11/99	3/9/00, 65 FR 12481.	
Section 15	Emissions Reporting	12/11/99	3/9/00, 65 FR 12481.	
Section 16	End-of Season Reconciliation	12/11/99	3/9/00, 65 FR 12481.	
Section 17	Compliance Certification	12/11/99	3/9/00, 65 FR 12481.	
Section 18	Failure to Meet Compliance Requirements.	12/11/99	3/9/00, 65 FR 12481.	
Section 19	Program Audit	12/11/99	3/9/00, 65 FR 12481.	
Section 20	Program Fees	12/11/99	3/9/00, 65 FR 12481.	
Appendix "A"	NO_X Budget Program	12/11/99	3/9/00, 65 FR 12481.	
	Regulation 39 Nitrogen Oxides (NO_X) Budget Trading Program			
Section 1	Purpose	12/11/00	5/17/01, 66 FR 27459.	
Section 2	Emission Limitation	12/11/00	5/17/01, 66 FR 27459.	
Section 3	Applicability	12/11/00	5/17/01, 66 FR 27459.	
Section 4	Definitions	12/11/00	5/17/01, 66 FR 27459.	
Section 5	General Provisions	12/11/00	5/17/01, 66 FR 27459.	
Section 6	NO_X Authorized Account Representative for NO_X Budget Sources.	12/11/00	5/17/01, 66 FR 27459.	
Section 7	Permits	12/11/00	5/17/01, 66 FR 27459.	
Section 8	Monitoring and Reporting	12/11/00	5/17/01, 66 FR 27459.	
Section 9	NATS	12/11/00	5/17/01, 66 FR 27459.	
Section 10	NO_X Allowance Transfers	12/11/00	5/17/01, 66 FR 27459.	
Section 11	Compliance Certification	12/11/00	5/17/01, 66 FR 27459.	
Section 12	End-of-Season Reconciliation	12/11/00	5/17/01, 66 FR 27459.	
Section 13	Failure to Meet Compliance Requirements.	12/11/00	5/17/01, 66 FR 27459.	
Section 14	Individual Unit Opt-Ins	12/11/00	5/17/01, 66 FR 27459.	
Section 15	General Accounts	12/11/00	5/17/01, 66 FR 27459.	
Appendix A ...	Allowance Allocations to NO_X Budget Units Under Section 3(a)(1)(i) and 3(a)(1)(ii) of Regulation No. 39.	12/11/00	5/17/01, 66 FR 27459.	
Appendix B ...	Regulation No. 37—Regulation No. 39 Program Transition.	12/11/00	5/17/01, 66 FR 27459.	
	Regulation 40 Delaware's National Low Emission Vehicle (NLEV) Regulation			
Section 1	Applicability	10/11/99	12/28/99, 64 FR 72564	Issued on September 1, 1999 by Secretary's Order No. 99–A–0046.
Section 2	Definitions	10/11/99	12/28/99, 64 FR 72564.	
Section 3	Program Participation	10/11/99	12/28/99, 64 FR 72564.	
	Regulation 41 Limiting Emissions of Volatile Organic Compounds From Consumer and Commercial Products			
Section 1	Architectural and Industrial Maintenance Coatings.	03/11/02	11/22/02, 67 FR 70315.	
Section 2	Commercial Products	01/11/02	11/22/02, 67 FR 70315.	
Section 3	Portable Fuel Containers	11/11/01	11/22/02, 67 FR 70315.	

EPA-APPROVED REGULATIONS IN THE DELAWARE SIP—Continued

State citation	Title/subject	State effective date	EPA approval date	Additional explanation
Regulation 42 Specific Emission Control Requirements				
Section 1	Control of NO_X Emissions from Industrial Boilers.	12/11/01	11/22/02, 67 FR 70315.	

(d) *EPA approved State source-specific requirements.*

EPA-APPROVED DELAWARE SOURCE-SPECIFIC REQUIREMENTS

Name of source	Permit No.	State effective date	EPA approval date	Additional explanation
Getty Oil Co	75–A–4	8/5/75	3/7/79, 44 FR 12423	52.420(c)(11).
Phoenix Steel Co.—Electric Arc Furnaces Charging & Tapping #2.	77–A–8	12/2/77	7/30/79 ..... 44 FR 25223.	52.420(c)(12).
Delmarva Power & Light—Indian River.	89–A–7/APC 89/197	2/15/89	1/22/90, 55 FR 2067	52.420(c)(38).
SPI Polyols, Inc	Secretary's Order No. 2000–A–0033.	7/11/00	6/14/01, 66 FR 32231	Polyhydrate Alcohol's Catalyst Regenerative Process—Approved NO_X RACT Determination.
Citisteel	Secretary's Order No. 2000–A–0033.	7/11/00	6/14/01, 66 FR 32231	Electric Arc Furnace—Approved NO_X RACT Determination.
General Chemical Corp	Secretary's Order No. 2000–A–0033.	7/11/00	6/14/01, 66 FR 32231	(1) Sulfuric Acid Process & Interstage Absorption System. (2) Metallic Nitrite Process—Approved NO_X RACT Determinations.

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[FR Doc. 07–1648 Filed 4–2–07; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 070213033–7033–01; I.D. 032807A]

Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Catcher Vessels Less Than 60 ft (18.3 m) LOA Using Pot or Hook-and-Line Gear 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 catcher vessels less than 60 ft (18.3 meters (m)) length overall (LOA) using pot or hook-and-line gear in the Bering Sea and Aleutian Islands management area (BSAI). This action is necessary to prevent exceeding the 2007 Pacific cod total allowable catch (TAC) allocated to catcher vessels less than 60 ft (18.3 m) LOA using pot or hook-and-line gear in the BSAI.

DATES: Effective 1200 hrs, Alaska local time (A.l.t.), March 30, 2007, through 2400 hrs, A.l.t., December 31, 2007.

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

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the BSAI 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 2007 and 2008 final harvest specification for groundfish in the BSAI (72 FR 9451, March 2, 2007), and the reallocation on March 5, 2007 (72 FR 10428, March 8, 2007) allocated a directed fishing allowance for Pacific cod of 2,321 metric tons to catcher vessels less than 60 ft (18.3 m) LOA using pot or hook-and-line gear in the BSAI. See § 679.20(c)(3)(iii) and (c)(5), and (a)(7)(i)(C).

In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that the 2007 Pacific cod directed fishing allowance allocated to catcher vessels less than 60 ft (18.3 m) LOA using pot or hook-and-line gear in the BSAI has been reached. Consequently, NMFS is prohibiting directed fishing for Pacific cod by catcher vessels less than 60 ft (18.3 m) LOA using pot or hook-and-line gear 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 catcher vessels less than 60 ft (18.3 m) LOA using pot or hook-and-line gear 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 March 27, 2007.

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: March 28, 2007.

James P. Burgess

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

[FR Doc. 07–1631 Filed 3–29–07; 2:26 pm]

BILLING CODE 3510–22–S

Proposed Rules

Federal Register
Vol. 72, No. 63
Tuesday, April 3, 2007

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.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–27191; Directorate Identifier 2007–CE–007–AD]

RIN 2120–AA64

Airworthiness Directives; Mitsubishi Heavy Industries MU–2B Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directives (AD) 93–07–11 and AD 94–04–16, which apply to certain Mitsubishi Heavy Industries MU–2B Series airplanes. AD 93–07–11 and AD 94–04–16 currently require you to reduce the maximum deflection of the elevator nose-down trim to a 1-degree to 3-degree range. When the above AD actions were issued, there was no associated elevator trim indicator change. Without such change, the trim reaches the maximum nose-down limit and the indicator still shows additional nose-down trim available. In attempting to force additional nose-down trim, pilots have manually jammed the trim system preventing subsequent electric trim changes until the pilot manually freed the trim wheel. Consequently, this proposed AD would retain the actions from AD 93–07–11 and AD 94–04–16 and add the action of modifying the elevator trim indicator scale dial to be consistent with the reduced elevator trim capability. We are proposing this AD to prevent the above scenarios from occurring with consequent loss of control.

DATES: We must receive comments on this proposed AD by June 4, 2007.

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

- DOT Docket Web site: Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.
- *Mail:* Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–0001.
- *Fax:* (202) 493–2251.
- *Hand Delivery:* Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov.* Follow the instructions for submitting comments.

For service information identified in this proposed AD, contact Mitsubishi Heavy Industries America, Inc., 4951 Airport Parkway, Suite 800, Addison, Texas 75001; telephone: 972–934–5480; facsimile: 972–934–5488.

FOR FURTHER INFORMATION CONTACT: Werner G. Koch, Aerospace Engineer, Fort Worth Airplane Certification Office, ASW–150, Rotorcraft Directorate, FAA, 2601 Meacham Boulevard, Fort Worth, Texas 76137–4298; telephone: (817) 222–5133; fax: (817) 222–5960.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments regarding this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include the docket number, ''FAA–2007–27191; Directorate Identifier 2007–CE–007–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://dms.dot.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive concerning this proposed AD.

Discussion

Several incidents caused by excessive control wheel force on Mitsubishi Heavy Industries MU–2B series airplanes caused us to issue AD 93–07–11, Amendment 39–8543 and AD 94–04–16, Amendment 39–8836 (59 FR 8520, February 23, 1994). AD 93–07–11 and AD 94–04–16 currently require you to reduce the maximum deflection of the elevator nose-down trim to a 1-degree to 3-degree range on certain Mitsubishi Heavy Industries MU–2B series airplanes.

When the above AD actions were issued, there was no associated elevator trim indicator change. Consequently, when the trim reaches the maximum nose-down limit, the indicator still shows additional nose-down trim available. This condition may result in the pilot thinking that more nose-down trim is available beyond the mechanical stop. In attempting to force additional nose-down trim beyond the mechanical stop, pilots have manually jammed the trim system preventing subsequent electric trim changes until the pilot manually freed the trim wheel. This condition, if not corrected, could result in loss of control.

Relevant Service Information

The following service information was included in AD 93–07–11 and AD 94–04–16 and will remain in effect for this AD:

- Mitsubishi Heavy Industries, Ltd., Service Bulletin No. 079/27–010, dated August 28, 1992; and
- Mitsubishi Heavy Industries, Ltd., Service Bulletin No. 216, dated September 11, 1992.

The above service information describes procedures for reducing the maximum deflection of the elevator nose-down trim to a 1-degree to 3-degree range.

We have reviewed the following service information for this AD:

- Mitsubishi Heavy Industries, Ltd., Service Bulletin No. 091/27–011, dated August 6, 1998; and
- Mitsubishi Heavy Industries, Ltd., Service Bulletin No. 228, dated July 13, 1998.

The above service information describes procedures for modifying the elevator trim indicator scale dial to be consistent with the elevator trim capability.

FAA's Determination and Requirements of the Proposed AD

We are proposing this AD because we evaluated all information and determined that without the elevator trim indicator scale dial modifications

the unsafe condition described previously is likely to exist or develop on other products of the same type design. This proposed AD would supersede AD 93–07–11 and AD 94–04–16 with a new AD that would retain the actions from AD 93–07–11 and AD 94–04–16 and add the action of modifying the elevator trim indicator scale dial to be consistent with the elevator trim capability. This proposed AD would require you to use the service information described previously to perform these actions.

Costs of Compliance

We estimate that this proposed AD would affect 400 airplanes in the U.S. registry.

Costs Retained From AD 93–07–11 and AD 94–04–16

We estimate the following costs to do the proposed modification of the elevator nose-down trim:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
6 work-hours × $80 per hour = $480	$300	$780	$312,000

Additional Costs for This AD

We estimate the following costs to do the proposed modification of the elevator trim indicator scale dial:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
1 work-hour × $80 per hour = $80	N/A	$80	$32,000

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

Examining the AD Docket

You may examine the AD docket that contains the proposed AD, the regulatory evaluation, any comments received, and other information on the Internet at *http://dms.dot.gov;* or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647–5227) is located at the street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

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 removing Airworthiness Directives (ADs) 93–07–11, Amendment 39–8543 and 94–04–16, Amendment 39–8836 (59 FR 8520, February 23, 1994), and adding the following new AD:

Mitsubishi Heavy Industries: Docket No. FAA–2007–27191; Directorate Identifier 2007–CE–007–AD.

Comments Due Date

(a) We must receive comments on this airworthiness directive (AD) action by June 4, 2007.

Affected ADs

(b) This AD supersedes AD 93–07–11, Amendment 39–8543 and AD 94–04–16, Amendment 39–8836.

Applicability

(c) This AD applies to the following airplane models and serial numbers that are certificated in any category:

(1) Category 1 Airplanes:

Model	Serial Nos.
(i) MU–2B, MU–2B–10, MU–2B–15, MU–2B–20, MU–2B–25, and MU–2B–26.	008 through 347 (except 313 and 321).
(ii) MU–2B–30, MU–2B–35, and MU–2B–36	501 through 696 (except 652 and 661).

(2) Category 2 Airplanes:

Model	Serial Nos.
(i) MU–2B–25, MU–2B–26, MU–2B–26A, and MU–2B–40	313SA, 321SA, 348SA through 459SA.
(ii) MU–2B–35, MU–2B–36A, and MU–2B–60	652SA, 661SA and 697SA through 1569SA.

Unsafe Condition

(d) This AD results from several incidents caused by excessive control wheel force. We are issuing this AD to retain the actions of AD 93–07–11 and AD 94–04–16 to prevent excessive control wheel force caused by extreme elevator nose-down trim deflection. We are also issuing this AD to modify the elevator trim indicator scale dial to be consistent with the reduced elevator trim capability. Inconsistencies between the elevator indicator scale dial and the elevator trim mechanical stop may result in the pilot thinking that more nose-down trim is available beyond the mechanical stop. Attempting to force additional nose-down trim beyond the mechanical stop may jam the trim system, preventing subsequent electric trim changes until the pilot manually frees the trim wheel. These conditions may result in loss of control of the airplane.

Compliance

(e) To address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
(1) Reduce the maximum deflection of the elevator nose-down trim to a 1-degree to 3-degree range.	(i) *For Category 1 airplanes:* Within 100 hours time-in-service (TIS) after April 11, 1994 (the effective date of AD 94–04–16).	(A) *For Category 1 airplanes:* Follow Mitsubishi Heavy Industries, Ltd., Service Bulletin No. 216, dated September 11, 1992.
	(ii) *For Category 2 airplanes:* Within 100 hours TIS after June 1, 1993 (the effective date of AD 93–07–11).	(B) *For Category 2 airplanes:* Follow Mitsubishi Heavy Industries, Ltd., Service Bulletin No. 079/27–010, dated August 28, 1992.
(2) Modify the elevator trim indicator scale dial.	Within 100 hours TIS after the effective date of this AD.	(i) For Category 1 airplanes: Follow Mitsubishi Heavy Industries, Ltd., Service Bulletin No. 228, dated July 13, 1998. (ii) For Category 2 airplanes: Follow Mitsubishi Heavy Industries, Ltd., Service Bulletin No. 091/27–011, dated August 6, 1998.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Fort Worth Airplane Certification Office (ACO), FAA, ATTN: Werner G. Koch, Aerospace Engineer, Fort Worth ACO, ASW–150, Rotorcraft Directorate, FAA, 2601 Meacham Boulevard, Fort Worth, Texas 76137–4298; telephone: (817) 222–5133; fax: (817) 222–5960, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(g) AMOCs approved for AD 93–07–11, Amendment 39–8543 and AD 94–04–16, Amendment 39–8836 are approved for this AD.

Related Information

(h) To get copies of the service information referenced in this AD, contact Mitsubishi Heavy Industries America, Inc., 4951 Airport Parkway, Suite 800, Addison, Texas 75001; telephone: 972–934–5480; facsimile: 972–934–5488. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC, or on the Internet at *http://dms.dot.gov.* The docket number is Docket No. FAA–2007–27191; Directorate Identifier 2007–CE–007–AD.

Issued in Kansas City, Missouri, on March 27, 2007.

Kim Smith,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–6121 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[CGD01–07–019]

RIN 1625–AA09

Drawbridge Operation Regulations; Norwalk River, Norwalk, CT

AGENCY: Coast Guard, DHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to change the drawbridge operating regulations governing the operation of the Washington Street S136 Bridge, mile 0.0, across the Norwalk River at Norwalk, Connecticut. This proposed rule would allow the bridge to remain in the closed position to facilitate the running of the annual Norwalk River Fun Run held on the first Saturday morning in December, with a rain date for the next day in the event of

inclement weather. This rule is necessary to facilitate safety of race participants and the uninterrupted running of the event.

DATES: Comments and related material must reach the Coast Guard on or before June 4, 2007.

ADDRESSES: You may mail comments and related material to Commander (dpb), First Coast Guard District Bridge Branch, One South Street, Battery Park Building, New York, New York, 10004, or deliver them to the same address between 7 a.m. and 3 p.m., Monday through Friday, except, Federal holidays. The telephone number is (212) 668–7165. The First Coast Guard District, Bridge Branch, maintains the public docket for this rulemaking. Comments and material received from the public, as well as documents indicated in this preamble as being available in the docket, will become part of this docket and will be available for inspection or copying at the First Coast Guard District, Bridge Branch, between 7 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Ms. Judy Leung-Yee, Project Officer, First Coast Guard District, (212) 668–7195.

SUPPLEMENTARY INFORMATION:

Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related material. If you do so, please include your name and address, identify the docket number for this rulemaking (CGD01–07–019), indicate the specific section of this document to which each comment applies, and give the reason for each comment. Please submit all comments and related material in an unbound format, no larger than 8½ by 11 inches, suitable for copying. If you would like to know if they reached us, 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.

Public Meeting

We do not now plan to hold a public meeting; however, you may submit a request for a meeting by writing to the First Coast Guard District, Bridge Branch, 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**.

Background and Purpose

The Washington Street S136 Bridge has a vertical clearance of 9 feet at mean high water, and 16 feet at mean low water in the closed position. The existing drawbridge operation regulations are listed at 33 CFR 117.217(a).

The bridge owner, the Connecticut Department of Transportation, requested a change to the regulations to help facilitate the running of the annual Norwalk River Fun Run Event which is run on the first Saturday in December.

Under this proposed rule the Washington Street S136 Bridge would remain in the closed position from 10 a.m. through 12 p.m. on the first Saturday in December with a rain date for the next day, the first Sunday after the first Saturday in December in the event of inclement weather.

Discussion of Proposed Rule

This rule change is necessary to facilitate the safe and orderly running of the annual Norwalk River Fun Run event. The Norwalk River supports mostly commercial vessel traffic which is minimal in December.

This proposed rule change would allow the Washington Street S136 Bridge to remain in the closed position from 10 a.m. through 12 p.m. on the first Saturday in December with a rain date for the next day, the first Sunday after the first Saturday in December, should inclement weather cause the postponement of the event.

Regulatory Evaluation

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.

We expect the economic impact of this proposed rule to be so minimal that a full Regulatory Evaluation under the regulatory policies and procedures of DHS is unnecessary.

This conclusion is based on the fact that the bridge closure is of short duration and during a time period the bridge seldom receives requests to open.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have considered whether this proposed 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.

The Coast Guard certifies under section 5 U.S.C. 605(b) that this proposed rule would not have a significant economic impact on a substantial number of small entities.

This conclusion is based on the fact that the bridge closure is of short duration and during a time period the bridge seldom receives a request to open.

If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rule would have a significant economic impact on it, please submit a comment (see **ADDRESSES**) explaining why you think it qualifies and how and to what degree this rule would economically affect it.

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 this proposed rule so that they can better evaluate its effects on them and participate in the rulemaking. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact, Commander (dpb), First Coast Guard District, Bridge Branch, One South Street, New York, NY, 10004. The telephone number is (212) 668–7165. The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

Collection of Information

This proposed rule would call for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520.).

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. We have analyzed this proposed rule under that Order and have determined that it does not have implications for federalism.

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 proposed rule would not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

Taking of Private Property

This proposed rule 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.

Civil Justice Reform

This proposed 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.

Protection of Children

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would 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.

Energy Effects

We have analyzed this proposed 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 because it is not a ''significant regulatory action'' under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

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 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 proposed rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

Environment

We have analyzed this proposed rule under Commandant Instruction M16475.1D, and Department of Homeland Security Management Directive 5100.1, which guides 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 that there are no factors in this case that would limit the use of a categorical exclusion under section 2.B.2 of the Instruction. Therefore, we believe that this rule should be categorically excluded, under figure 2–1, paragraph (32)(e) of the Instruction, from further environmental documentation as this action relates to the promulgation of operating regulations or procedures for drawbridges. Under figure 2–1, paragraph (32)(e) of the Instruction, an ''Environmental Analysis Checklist'' is not required for this rule. Comments on this section will be considered before we make the final decision on whether to categorically exclude this rule from further environmental review.

List of Subjects in 33 CFR Part 117

Bridges.

Regulations

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR part 117 as follows:

PART 117—DRAWBRIDGE OPERATION REGULATIONS

1. The authority citation for part 117 continues to read as follows:

Authority: 33 U.S.C. 499; Department of Homeland Security Delegation No. 0170.1; 33 CFR 1.05–1(g); section 117.255 also issued under the authority of Pub. L. 102–587, 106 Stat. 5039.

2. Section 117.217 is amended by revising paragraph (a) to read as follows:

§ 117.217 Norwalk River.

(a) The draw of the Washington Street S136 Bridge, mile 0.0, at Norwalk, shall operate as follows:

(1) The draw shall open on signal; except that, from 7 a.m. to 8:45 a.m., 11:45 a.m. to 1:15 p.m., and 4 p.m. to 6 p.m., Monday through Friday, except holidays, the draw need not be opened for the passage of vessels that draw less than 14 feet of water.

(2) The draw need not open for the passage of vessel traffic, from 10 a.m. to 12 p.m., on the first Saturday in December, to facilitate the running of the annual Norwalk River Fun Run. Should inclement weather force the postponement of the race the above bridge closure shall be implemented the next day, the first Sunday after the first Saturday in December, from 10 a.m. to 12 p.m.

(3) The bridge opening signal is three short blasts. Vessels drawing 14 feet of water or more shall add one prolonged blast after the three short blasts.

* * * * *

Dated: March 15, 2007.

Timothy S. Sullivan,

Rear Admiral, U.S. Coast Guard, Commander, First Coast Guard District.

[FR Doc. E7–6144 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–15–P

GENERAL SERVICES ADMINISTRATION

41 CFR Part 102–38

[FMR Case 2007–102–2; Docket FMR–2007–0001, Sequence 1]

RIN 3090–AI33

Federal Management Regulation; FMR Case 2007–102–2, Sale of Personal Property—Federal Asset Sales (FAS) Sales Centers

AGENCY: Office of Governmentwide Policy, General Services Administration (GSA).

ACTION: Proposed rule.

SUMMARY: The General Services Administration is amending the Federal Management Regulation (FMR) by adding provisions for the sale of personal property through Federal Asset Sales (FAS) Sales Centers.

DATES: Interested parties should submit comments in writing on or before May

3, 2007 to be considered in the formulation of a final rule.

ADDRESSES: Submit comments identified by FMR case 2007–102–2 by any of the following methods:

• Federal eRulemaking Portal: *http://www.regulations.gov*. Search for any document by first selecting the proper document types and selecting ''General Services Administration'' as the agency of choice. At the ''Keyword'' prompt, type in the FMR case number (for example, FMR Case 2007–102–2) and click on the ''Submit'' button. You may also search for any document by clicking on the ''Advanced search/document search'' tab at the top of the screen, selecting from the agency field ''General Services Administration,'' and typing the FMR case number in the keyword field. Select the ''Submit'' button.

• Fax: 202–501–4067.

• Mail: General Services Administration, Regulatory Secretariat (VIR), 1800 F Street, NW., Room 4035, ATTN: Laurieann Duarte, Washington, DC 20405.

Instructions: Please submit comments only and cite FMR case 2007–102–2 in all correspondence related to this case. All comments received will be posted without change to *http://www.regulations.gov*, including any personal information provided.

FOR FURTHER INFORMATION CONTACT: The Regulatory Secretariat, Room 4035, GS Building, Washington, DC, 20405, at (202) 501–4755 for information pertaining to status or publication schedules. For clarification of content, contact Mr. Robert Holcombe, Office of Governmentwide Policy, Personal Property Management Policy, at (202) 501–3828, or e-mail at *robert.holcombe@gsa.gov*. Please cite FMR case 2007–102–2.

SUPPLEMENTARY INFORMATION:

A. Background

This proposed amendment to part 102–38 of the Federal Management Regulation (41 CFR part 102–38) would provide new policy to implement the Federal Asset Sales (FAS) e-Government initiative. The goals of this initiative are to:

• Maximize the value that the Federal Government receives from selling its real and personal property assets by maximizing the visibility of the assets to prospective buyers. This regulation only addresses the sale of personal property.

• Effect transparency in the sales process so that agencies are aware of the costs and performance of their sales alternatives, prospective buyers are aware of the conditions of the items offered for sale, and information on Federal sales activities and results are easily available to the public.

• Collect and report Governmentwide data on the volume, proceeds, cost, and other performance characteristics of Federal property sales.

This part discusses the requirement for agencies to sell their property through designated Sales Centers (SCs). The definitions of terms related to the FAS initiative are provided in this part, along with the policy related to how agencies must implement this initiative.

Changes are also being made to this part to strengthen the terms and conditions of sale to specifically include requirements to dispose of assets in accordance with Federal, State, and local laws and regulations (section 102–38.75).

B. Executive Order 12866

It has been determined that this proposed rule is not a significant regulatory action for the purposes of Executive Order 12866.

C. Paperwork Reduction Act

The Paperwork Reduction Act does not apply because the proposed changes to the FMR do not impose information collection requirements that require the approval of the Office of Management and Budget under 44 U.S.C. 3501, *et seq.*

D. Small Business Regulatory Enforcement Fairness Act

This proposed rule is exempt from Congressional review under 5 U.S.C. 801 since it relates solely to agency management and personnel.

List of Subjects in 41 CFR Part 102–38

Government property management, Surplus Government property.

Dated: January 25, 2007.

Kevin Messner,

Acting Associate Administrator.

For the reasons set forth in the preamble, GSA amends 41 CFR part 102–38 as set forth below:

PART 102–38—SALE OF PERSONAL PROPERTY

1. The authority citation for part 102–38 continues to read as follows:

Authority: 40 U.S.C 545 and 40 U.S.C. 121(c).

§ 102–38.25 [Amended]

2. Amend § 102–38.25 by removing ''holding'' and adding ''Sales Center'' in its place.

3. Amend § 102–38.30 by revising the heading to read as follows:

§ 102–38.30 How does an executive agency request a deviation from the provisions of this part?

* * * * *

4. Amend § 102–38.35 by adding the definitions ''Federal Asset Sales (FAS)'', ''Holding Agency'', ''Migration Plan'', and ''Sales Center (SC)'' to read as follows:

§ 102–38.35 What definitions apply to this part?

* * * * *

Federal Asset Sales (FAS) refers to the e-Government initiative to improve the way the Federal Government manages and sells its real and personal property assets. Under this initiative, only an agency designated as a Sales Center (SC) may sell Federal property. The *FAS* program is governed by the *FAS* Executive Steering Committee (ESC), with GSA as the managing partner agency.

Holding Agency refers to the agency in possession of personal property eligible for sale under this Part.

* * * * *

Migration Plan refers to the document a holding agency prepares to summarize its choice of SC and its plan for migrating agency sales to the SC(s). The format for this document is determined by the FAS ESC.

* * * * *

Sales Center (SC) means an agency that has been designated as an official sales agent for Federal property. The criteria for becoming an *SC*, the selection process, and the ongoing *SC* requirements for posting property for sale to the FAS portal and reporting sales activity and performance data are established by the FAS ESC and can be obtained from the FAS Program Management Office at GSA. *SCs* are expected to provide exemplary asset management solutions in one or more of the following areas: on-line sales; off-line sales; and sales-related value added services. *SCs* will enter into agreements with holding agencies to sell property belonging to these agencies.

* * * * *

5. Revise § 102–38.40 to read as follows:

§ 102–38.40 Who may sell personal property?

An executive agency may sell personal property (including on behalf of another agency when so requested) only if it is a designated Sales Center (SC). An SC may engage contractor support to sell personal property. Only a duly authorized agency official may execute the sale award documents and bind the United States.

6. Amend §102–38.50 by revising the heading and introductory paragraph to read as follows:

§ 102–38.50 What must we do when an executive agency suspects violations of 40 U.S.C. 559, fraud, bribery, or criminal collusion in connection with the disposal of personal property?

If an executive agency suspects violations of 40 U.S.C. 559, fraud, bribery, or criminal collusion in connection with the disposal of personal property, the agency must—

* * * * *

7. Revise § 102–38.60 to read as follows:

§ 102–38.60 Who is responsible for the costs of care and handling of the personal property before it is sold?

The holding agency is responsible for the care and handling costs of the personal property until it is removed by the buyer, the buyer's designee, or an SC. The holding agency may request the SC to perform care and handling services in accordance with their agreement. When specified in the terms and conditions of sale, the SC may charge costs for storage when the buyer is delinquent in removing the property. The amount so charged may only be retained by the agency performing the care and handling in accordance with § 102–38.295.

§ 102–38.65 [Amended]

8. Amend § 102–38.65 in the heading, by removing ''we are'' and adding ''we or the holding agency is'' in its place; and in the second sentence by adding ''or the holding agency'' after ''you''.

§ 102–38.70 [Amended]

9. Amend § 102–38.70 in the heading, by removing ''we'' and adding ''the holding agency'' in its place; and in paragraph (a), by removing ''you'' and adding ''the holding agency'' in its place.

10. Amend § 102–38.75 by revising the introductory text to paragraph (a), and paragraph (a)(12) to read as follows:

§ 102–38.75 How may we sell personal property?

(a) You will sell personal property upon such terms and conditions as the head of your agency or designee deems proper to promote the fairness, openness, and timeliness necessary for the sale to be conducted in a manner most advantageous to the Government. When you are selling property on behalf of another agency, you must consult with the holding agency to determine any special or unique sales terms and conditions. You must also document the required terms and conditions of each sale, including, but not limited to, the following terms and conditions, as applicable:

* * * * *

(12) Requirements to comply with applicable laws and regulations. Part 101–42 of this subchapter contains useful guidance addressing many of these requirements. You should also contact your agency's Office of General Counsel or Environmental Office to identify applicable Federal, State, or local environmental laws and regulations.

* * * * *

11. Revise § 102–38.120 to read as follows:

§ 102–38.120 When may we conduct negotiated sales of personal property at fixed prices (fixed price sale)?

You may conduct negotiated sales of personal property at fixed prices (fixed price sale) under this section when:

(a) The items are authorized to be sold at fixed price by the GSA Office of Travel, Transportation, and Asset Management (MT) in GSA Bulletin FMR B–10 (located at *www.gsa.gov/fmrbulletin*). You may also contact MT at the address listed in § 102–38.115 to determine which items are on this list of authorized items;

(b) The head of your agency, or designee, determines in writing that such sales serve the best interest of the Government. When you are selling property on behalf of a holding agency, you must consult with the holding agency in determining whether a fixed price sale meets this criterion; and

(c) You must publicize such sales to the extent consistent with the value and nature of the property involved, and the prices established must reflect the estimated fair market value of the property. Property is sold on a first-come, first-served basis. You or the holding agency may also establish additional terms and conditions that must be met by the successful purchaser in accordance with § 102–38.75.

12. Revise § 102–38.295 to read as follows:

§ 102–38.295 May we retain sales proceeds?

(a) You may retain that portion of the sales proceeds, in accordance with your agreement with the holding agency, equal to your direct costs and reasonably related indirect costs (including your share of the Governmentwide costs to support the FAS Internet portal and Governmentwide reporting requirements) incurred in selling personal property.

(b) A holding agency may retain that portion of the sales proceeds equal to its costs of care and handling directly related to the sale of personal property by the SC (*e.g.*, shipment to the SC, storage pending sale, and inspection by prospective buyers).

(c) After accounting for amounts retained under paragraphs (a) and (b), a holding agency may retain the balance of proceeds from the sale of its agency's personal property when—

(1) It has the statutory authority to retain all proceeds from sales of personal property;

(2) The property sold was acquired with non-appropriated funds as defined in § 102–36.40 of this subchapter B;

(3) The property sold was surplus Government property that was in the custody of a contractor or subcontractor, and the contract or subcontract provisions authorize the proceeds of sale to be credited to the price or cost of the contract or subcontract;

(4) The property was sold to obtain replacement property under the exchange/sale authority pursuant to part 102–39 of this subchapter B; or

(5) The property sold was related to waste prevention and recycling programs, under the authority of Section 607 of Public Law 107–67 (Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999, Public Law 107–67, 115 Stat. 514). Consult your General Counsel or Chief Financial Officer for guidance on use of this authority.

13. Revise the section heading to § 102–38.300 to read as follows:

§ 102–38.300 What happens to sales proceeds that neither we nor the holding agency are authorized to retain, or that are unused?

* * * * *

14. Add Subpart H, consisting of § 102–38.360 to read as follows:

Subpart H—Implementation of the Federal Asset Sales Program

§ 102–38.360 What must an executive agency do to implement the Federal Asset Sales (FAS) program?

An executive agency must:

(a) Complete a migration plan which outlines the agency's action and timetable to begin using or become a SC. The migration plan must include the deadline to have all agency personal property sales conducted by an SC no later than [date six months after publication of the final rule in the **Federal Register**].

(b) Migrate all agency sales processes to your selected SC(s) no later than [date six months after publication of the final rule in the **Federal Register**]. Content

and format of item data reported to the SC for sale must be in conformance with standards developed by the FAS ESC.

(c) Provide all post-sale data and metrics to the FAS Planning Office in care of GSA MT using format and process developed by the FAS ESC no later than [date six months after publication of the final rule in the **Federal Register**].

[FR Doc. E7–6068 Filed 4–2–07; 8:45 am]

BILLING CODE 6820–14–S

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AI71 and RIN 1018–AI72

Endangered and Threatened Wildlife and Plants; Reopening of Public Comment Periods for the Proposed Designations of Critical Habitat for the Coastal California Gnatcatcher and the San Diego Fairy Shrimp

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rules; reopening of public comment periods.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service) announce the reopening of the public comment period on our April 24, 2003, proposed rule (68 FR 20228) to designate critical habitat for the coastal California gnatcatcher (*Polioptila californica californica*) and our April 22, 2003, proposed rule (68 FR 19888) to designate critical habitat for the San Diego fairy shrimp (*Branchinecta sandiegonensis*). The comment period will provide the public and Federal, State, and local agencies and Tribes with an opportunity to submit in writing updated comments and information on these species and associated habitat, the proposed critical habitat designations, and respective draft economic analyses. Comments relevant to issues identified for consideration in the April 22 and April 24, 2003, proposed critical habitat rules and the April 8, 2004, notice of availability of the draft economic analyses for these species that were previously submitted during one of the prior public comment periods need not be resubmitted as they have already been incorporated into the public record and will be fully considered in any final decision. Comments relevant to issues identified in the April 8, 2004, **Federal Register** notice (69 FR 18515) reopening the comment period on the proposed determination of a Distinct Vertebrate Population Segment for the California gnatcatcher also need not be resubmitted as that determination will be made separately from the critical habitat designations for the coastal California gnatcatcher and San Diego fairy shrimp.

DATES: We will accept comments and information until May 3, 2007. Any comments received after the closing date may not be considered in the final decisions on these proposals.

ADDRESSES: If you wish to comment, you may submit your comments and materials on these proposals to us by any one of the following methods:

1. You may submit written comments and information to Jim Bartel, Field Supervisor, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92011.

2. You may hand-deliver written comments and information to the Carlsbad Fish and Wildlife Office at the above address.

3. You may send comments by facsimile to 760–431–5901.

4. You may send comments by electronic mail (e-mail) to *FW8cfwocomments@fws.gov.* Please include ''Attn: RIN 1018–AI71 and RIN 1018–AI72'' in the subject line of your e-mail and your name and address in the body of your message. If you do not receive a confirmation from the system that we have received your message, contact us directly by telephone at 760–431–9440.

5. You may go to the Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments.

Comments and materials received, as well as supporting documentation used in the preparation of these proposed rules, will be available for public inspection, by appointment, during normal business hours at the Carlsbad Fish and Wildlife Office at the above address (telephone 760–431–9440).

Copies of the proposed rule and draft economic analysis for the coastal California gnatcatcher and San Diego fairy shrimp are available on the Internet at *http://www.fws.gov/Carlsbad.* You may also request copies of these documents by contacting the Carlsbad Fish and Wildlife Office at the above address.

FOR FURTHER INFORMATION CONTACT: Tannika Engelhard, Branch Chief, Listing, Carlsbad Fish and Wildlife Office (telephone 760–431–9440). Persons who use a telecommunications device for the hearing impaired (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339.

SUPPLEMENTARY INFORMATION:

Public Comments Solicited

We are soliciting comments from the public, governmental agencies, Tribes, the scientific community, industry, or any other interested parties concerning events that have occurred since the April 2003 publications of the proposed designations of critical habitat for the coastal California gnatcatcher and San Diego fairy shrimp and the April 2004 publications of the draft economic analyses of the proposed designations for both species and any new information relevant to the status of the species and their essential habitats.

With regard to the proposed rule and draft economic analysis for the coastal California gnatcatcher, we particularly seek comments concerning:

(1) Land use designations and current or planned activities in the subject areas and their possible impacts on areas proposed as critical habitat for the coastal California gnatcatcher, including new information regarding areas proposed as critical habitat that may have lost coastal sage scrub as a result of development or other land use;

(2) Approval and issuance of an incidental take permit under section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended (Act), for the Orange County Southern Subregion Habitat Conservation Plan (HCP);

(3) Progress in the development and/or implementation of other regional HCPs, including the Natural Community Conservation Plan/HCP for the City of Rancho Palos Verdes in Los Angeles County, CA, and the Western Riverside County Multiple Species HCP;

(4) Effects of the large wildfires that occurred in October 2003 and more recently on the coastal sage scrub habitat in Ventura, Los Angeles, Riverside, San Bernardino, and San Diego counties; and

(5) Publication of new biological information regarding the effects of wildfires from 2003 to the present or other relevant biological publications addressing the status and recovery of sage scrub habitat and conservation of the coastal California gnatcatcher.

With regard to the proposed designation of critical habitat for the San Diego fairy shrimp, we particularly seek comments concerning:

(1) Land use designations and current or planned activities in the subject areas and their possible impacts on areas proposed as critical habitat for the San Diego fairy shrimp, including new information regarding areas proposed as critical habitat that may have lost vernal pool habitat as a result of development;

(2) Information regarding newly identified vernal pools that were not

previously known to support the San Diego fairy shrimp and whether these areas are essential to the conservation of the species, and why; and

(3) The October 13, 2006, ruling by the U.S. District Court for the Southern District of California that enjoined the incidental take permit for seven vernal pool species (including the San Diego fairy shrimp) issued to the City of San Diego under the City's Subarea Plan for the Southwestern San Diego County Multiple Species Conservation Program (MSCP), and how areas within the boundaries of the City of San Diego's Subarea Plan of the MSCP that have been proposed for exclusion from critical habitat for the San Diego fairy shrimp should be evaluated in light of the Court's decision.

With regard to the proposed designation of critical habitat for both the coastal California gnatcatcher and the San Diego fairy shrimp, we particularly seek comments concerning any new information regarding costs associated with the proposed designations of critical habitat for these species, and whether the 2004 draft economic analyses made appropriate assumptions regarding likely regulatory changes, indirect effects (e.g., property tax losses due to reduced home construction), opportunity costs, and regional costs associated with land use controls that could arise from the designation of critical habitat for the coastal California gnatcatcher and San Diego fairy shrimp.

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.

Background

On October 24, 2000, we published a final rule designating approximately 513,650 ac (207,890 ha) of land in portions of Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties as critical habitat for the coastal California gnatcatcher (65 FR 63680). A final rule designating approximately 4,025 ac (1,629 ha) of land in Orange and San Diego counties as critical habitat for the San Diego fairy shrimp was published in the **Federal Register** on October 23, 2000 (65 FR 63438). Following the publication of these final rules, several lawsuits were filed against the Service by multiple parties, including the Natural Resources Defense Council (NRDC), Building Industry Association of Southern California, National Association of Home Builders, Foothill/Eastern Transportation Corridor, and Rancho Mission Viejo, L.L.C. (*NRDC* v. *U.S. Dept. of Interior,* CV–99–2496 (C.D.Cal., filed 12/20/00); *Building Industry Association of Southern California et al.* v. *Norton, CV 01–7028 (D.C.C., filed 1/17/01)*, and *Rancho Mission Viejo L.L.C.* v. *Babbitt, CV 01–8412 (D.D.C., filed 12/28/00))*, challenging the critical habitat designations for the coastal California gnatcatcher and/or San Diego fairy shrimp. On June 11, 2002, the U.S. District Court for the Central District of California granted our request for a remand of the coastal California gnatcatcher and San Diego fairy shrimp critical habitat designations so that we could reconsider their associated economic analyses. For more information about the litigation history associated with these critical habitat designations, please see the Previous Federal Action sections of the April 24, 2003, proposed rule for the coastal California gnatcatcher (68 FR 20228) and the April 22, 2003 proposed rule for the San Diego fairy shrimp (68 FR 19890).

On April 24, 2003, we published a proposed rule in the **Federal Register** (68 FR 20228) to designate critical habitat for the coastal California gnatcatcher on approximately 495,795 acres (ac) (200,595 hectares (ha)) of land in Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties.

The Service published a proposed rule in the April 22, 2003, edition of the **Federal Register** (68 FR 19888) to designate critical habitat for the San Diego fairy shrimp on approximately 6,098 ac (2,468 ha) of land in Orange and San Diego counties.

We accepted public comments on these two proposed rules until June 23, 2003. On April 8, 2004, we published a notice in the **Federal Register** announcing the availability of draft economic analyses for the proposed designations, reopening the public comment periods on our proposed rules, and announcing the scheduling of public hearings on our proposed critical habitat designations and draft economic analyses for the coastal California gnatcatcher and San Diego fairy shrimp. Public hearings were conducted on April 29, 2004, from 1 to 3 p.m. and from 6 to 8 p.m. in Carlsbad, California. The second public comment period closed on May 10, 2004. The public comment period for the coastal California gnatcatcher and San Diego fairy shrimp proposed critical habitat rules is again reopened, and we will accept comments and information until May 3, 2007. Any comments received after the closing date may not be considered in the final decisions on these proposals.

The Service initiated work on the final critical habitat rules for the coastal California gnatcatcher and the San Diego fairy shrimp, but due to other priorities we did not finalize the designations. On February 8, 2007, a motion was filed by the Plaintiffs requesting the Court to direct us to finalize critical habitat designations for the coastal California gnatcatcher and San Diego fairy shrimp. We reached an agreement with the Plaintiffs whereby final designations would be completed on or before November 2, 2007. This settlement agreement has been submitted to the Court for approval.

Areas currently designated as critical habitat for the coastal California gnatcatcher and San Diego fairy shrimp will remain in place until such time as new final regulations for these species become effective.

Critical habitat receives protection from destruction or adverse modification through required consultation under section 7 of the Act, with regard to actions carried out, funded, or authorized by a Federal agency. Section 4(b)(2) of the Act requires that we designate or revise critical habitat on the basis of the best scientific and commercial data available, after taking into consideration economic, national security, and any other relevant impacts of specifying any particular area as critical habitat. The draft economic analysis for the proposed rule to designate critical habitat for the coastal California gnatcatcher estimated that the proposed designation may result in a potential economic cost, resulting from section 7 of the Act, of approximately $915 million through the year 2025, with an estimated annualized cost of $114 million. In the development of a final rule, we will evaluate these potential economic impacts and may exclude specific areas from the final designation on the basis of economics, conservation programs and partnerships, or other factors pursuant to section 4(b)(2) of the Act. Any such exclusion would result in a reduction of the potential economic impacts of this designation.

Section 318 of the National Defense Authorization Act for FY04 (Pub. L. 108–136), amended the Act by adding a new section 4(a)(3)(B) that prohibits the Service from designating as critical habitat any lands or other geographical areas owned or controlled by the

Department of Defense, or designated for its use, that are subject to an Integrated Natural Resources Management Plan prepared under section 101 of the Sikes Act Improvement Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is being proposed for designation. In the development of the final designation of critical habitat each species, the areas proposed will be reviewed to determine if the application of section 4(a)(3)(B) of the Act may be appropriate.

We also prepared a draft economic analysis of the April 22, 2003, proposed rule to designate critical habitat for the San Diego fairy shrimp. The draft analysis of this proposed designation estimates that potential economic costs associated with section 7 of the Act range up to $54.6 million over the next 20 years, with a potential annualized impact of $7.2 million.

We are reopening the comment period to allow all interested parties to comment simultaneously on the proposed rules for the coastal California gnatcatcher and San Diego fairy shrimp and the draft economic analyses and to provide new information regarding the species and their essential habitats and events that have occurred since the publication of the proposed rules in April 2003 and release of the draft economic analyses in April 2004.

References Cited

A complete list of all references used in the development of the proposed critical habitat designations for the coastal California gnatcatcher and San Diego fairy shrimp is available upon request from the Carlsbad Fish and Wildlife Office (see **ADDRESSES** section).

Author

The primary authors of this notice are the staff of the Carlsbad Fish and Wildlife Office (see **ADDRESSES** section).

Authority: The authority for this action is the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*).

Dated: March 22, 2007.

David M. Verhey,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. E7–5743 Filed 4–2–07; 8:45 am]

BILLING CODE 4310–55–P

Notices

Federal Register
Vol. 72, No. 63
Tuesday, April 3, 2007

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

Commodity Credit Corporation

Notice of Request for Extension of Currently Approved Information Collections

AGENCY: Commodity Credit Corporation, USDA.

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces the Commodity Credit Corporation's (CCC) intention to request an extension for a currently approved information collections in support of the regulations governing the foreign donation of agricultural commodities under the section 416(b) and Food for Progress programs, and the McGovern-Dole International Food for Education and Child Nutrition Program.

DATES: Comments on this notice must be received by June 4, 2007.

Additional Information or Comments: Contact Ronald Croushorn, Director, Food Assistance Division, Foreign Agricultural Service, U.S. Department of Agriculture, Stop 1034, Washington, DC 20250–1034, telephone (202) 720–4221 or e-mail at *ron.croushorn@usda.gov.*

SUPPLEMENTARY INFORMATION:

Title: Foreign Donation of Agricultural Commodities (Foreign Donation) and McGovern-Dole International Food for Education and Child Nutrition Program (Food for Education).

OMB Number: 0551–0035: Foreign Donation of Agricultural Commodities and McGovern-Dole International Food for Education and Child Nutrition Program.

Expiration Date of Approval: August 31, 2007.

Type of Request: Extension of currently approved information collections.

Abstract: Under both Foreign Donation of Agricultural Commodities and the McGovern-Dole International Food for Education and Child Nutrition Program, information will be gathered from applicants desiring to receive grants under the programs to determine the viability of requests for resources to implement activities in foreign countries. Applicants that receive grants must submit compliance reports until commodities or local currencies generated from the sale thereof are utilized. Shipping agents must submit information and certifications regarding their activities amd affiliations. Documents are used to develop effective grant agreements and assure statutory requirements and objectives are met.

Estimate of Burden: The public reporting burden for each respondent resulting from information collection under the Foreign Donation Program or the Food for Education Program varies in direct relation to the number and type of agreements entered into by such respondent. The estimated average reporting burden for the Foreign Donation of Agricultural Commodities is 11 hours per response and for the Food for Education Program is 11 hours per response.

Respondents: U.S. private voluntary organizations, U.S. cooperatives, foreign governments, shipping agents, ship owners and brokers, and survey companies.

Estimate Number of Respondents: 241 per annum.

Estimated Number of Responses per Respondent: 19 per annum.

Estimated Total Annual Burden of Respondents: 50,434 hours.

Copies of this information collection can be obtained from Tamoria Thompson-Hall, the Agency Information Collection Coordinator, at (202) 690–1690 or e-mail at *Tamoria.thompson@usda.gov.*

Requests for comments: Send comments regarding (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; (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 automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments may be sent to Ronald Croushorn, Director, Food Assistance Division, FAS, USDA, Stop 1034, Washington, DC 20250, or *ron.croushorn@usda.gov,* or to the Desk Officer for Agriculture, Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Washington, DC 20503. Persons with disabilities who require an alternative means for communication of information (Braille, large print, audiotape, etc.) should contact USDA's Target Center at (202) 720–2600 (voice and TDD).

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.

Signed at Washington, DC, on March 28, 2007.

Michael Yost,

Administrator Foreign Agricultural Service.

[FR Doc. 07–1628 Filed 4–2–07; 8:45 am]

BILLING CODE 3410–10–M

DEPARTMENT OF AGRICULTURE

Farm Service Agency

Information Collection: Farm Loan Programs Account Servicing Policies

AGENCY: Farm Service Agency, USDA.

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, the Farm Service Agency is seeking comments from all interested individuals and organizations on the extension of an approved information collection associated with Farm Loan Programs Account Servicing Policies.

DATES: Comments on this notice must be received on or before June 4, 2007 to be assured consideration.

ADDRESSES: The comments should be addressed to James D. Rowe, Direct Loan Servicing Branch Chief, USDA, FSA, Farm Loan Programs, Loan Servicing Division, 1400 Independence Avenue, SW., STOP 0523, Washington, DC 20250–0523. The comments also may be submitted to by e-mail to *james.rowe@wdc.usda.gov.* The

comments should be also sent to the Desk Officer for Agriculture, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT: James D. Rowe, USDA, Farm Service Agency, Loan Servicing and Property Management Division, (202) 720–6834 and *james.rowe@wdc.usda.gov.* Comments should include the OMB control number and the title of the information collection.

SUPPLEMENTARY INFORMATION:

Title: (7 CFR 1951–S) Farm Loan Programs Account Servicing Policies.

OMB Control Number: 0560–0161.

Expiration Date: September 30, 2007.

Type of Request: Extension of a Currently Approved Information Collection.

Abstract: The Farm Loan Programs (FLP) provides supervised credit in the form of loans to family farmers and ranchers to purchase land and finance agricultural production. The regulations covering this information collection request describe the policies and procedures the agency will use to service most delinquent FLP loans. Servicing of accounts is administered in accordance with Sections 331D and 353 of the Consolidated Farm and Rural Development Act (CONACT) (7 U.S.C. 1981d and 2001). The FSA is using the collected information to service the borrower's loan account. Failure to collect the information would result in borrowers not being provided with available servicing options and could result in liquidation.

Estimate of Annual Burden: Public reporting burden for this collection of information is estimated to average .53 hours per response.

Respondents: Individuals or households, businesses or other for profit and farms.

Estimated Number of Respondents: 26,904.

Estimated Number of Responses per Respondent: 1.0

Estimated Total Annual Burden on Respondents: 14,312 hours.

Comments are invited 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 burden including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility and clarity of the information to be collected; (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 technological collection techniques or other forms of information technology.

All comments received in response to this notice, including names and addresses when provided, will be a matter of public record. Comments will be summarized and included in the submission for Office of Management and Budget approval.

Signed in Washington, DC on March 28, 2007.

Teresa C. Lasseter,

Administrator, Farm Service Agency.

[FR Doc. E7–6137 Filed 4–2–07; 8:45 am]

BILLING CODE 3410–05–P

DEPARTMENT OF AGRICULTURE

Food Safety and Inspection Service

[Docket No. FSIS–2007–0011]

Codex Alimentarius Commission: Meeting of the Codex Committee on Food Labelling

AGENCY: Office of the Under Secretary for Food Safety, USDA.

ACTION: Notice of public meeting and request for comments.

SUMMARY: The Office of the Under Secretary for Food Safety, U.S. Department of Agriculture (USDA), and the Food and Drug Administration (FDA), U.S. Department of Health and Human Services, are sponsoring a public meeting on April 10, 2007. The objective of the public meeting is to provide information and receive public comments on agenda items and draft United States positions that will be discussed at the Thirty-fifth Session of the Codex Committee on Food Labelling (CCFL) of the Codex Alimentarius Commission (Codex), which will be held in Ottawa, Canada, on April 30–May 4, 2007. The Under Secretary for Food Safety and FDA recognize the importance of providing interested parties the opportunity to obtain background information on the 35th Session of CCFL and to address items on the agenda.

DATES: The public meeting is scheduled for Tuesday, April 10, 2007 from 1 p.m. to 4 p.m.

ADDRESSES: The public meeting will be held in the Room 107A, Jamie Whitten Federal Building, 1200 Independence Ave., SW., Washington, DC 20250. Documents related to the 35th Session of CCFL are accessible via the World Wide Web at the following address: *http://www.codexalimentarius.net/current.asp.*

The U.S. Delegate to the CCFL, Dr. Barbara Schneeman, invites U.S. interested parties to submit their comments electronically to the following e-mail address: *ccfl@fda.hhs.gov.*

For Further Information About the 35th Session of CCFL Contact: Dr. Michael Wehr, Center for Food Safety and Applied Nutrition, 5100 Paint Branch Parkway, College Park, MD 20740. Phone (301) 436–1284, Fax: (301) 436–2972, e-mail *michael.wehr@fda.hhs.gov.*

For Further Information About the Public Meeting Contact: Edith Kennard, International Issues Analyst, U.S. Codex Office, Food Safety and Inspection Service, Room 4861, South Building, 1400 Independence Ave., SW., Washington, DC 20250. Phone (202) 205–7760, Fax: (202) 720–3157.

SUPPLEMENTARY INFORMATION:

Background

The Codex Alimentarius Commission (Codex) was established in 1963 by two United Nations organizations, the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). Through adoption of food standards, codes of practice, and other guidelines developed by its committees, and by promoting their adoption and implementation by governments, Codex seeks to protect the health of consumers and ensure that fair practices are used in trade.

The Codex Committee on Food Labelling (CCFL) drafts provisions on labeling applicable to all foods; considers, amends if necessary, and endorses specific provisions on labeling of draft standards, codes of practice, and guidelines prepared by other Codex committees; studies specific labeling problems assigned to it by the Commission; and studies problems associated with the advertisement of food with particular reference to claims and misleading descriptions. The Committee is chaired by Canada.

Issues To Be Discussed at the Public Meeting

The following items on the Agenda for the 35th Session of the CCFL will be discussed during the public meeting:

- Matters Referred to the Committee from other Codex bodies.
- Matters Referred by FAO/WHO: Draft Action Plan for Implementation of the Global Strategy on Diet, Physical Activity and Health.
- Consideration of Labelling Provisions in Draft Codex Standards.
- Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods: Draft

Revised Annex 2: Table 3, parts 1 & 2, Table 1, Natural Sodium Nitrate; Addition of Ethylene.

- Labelling of Foods and Food Ingredients Obtained through Certain Techniques of Genetic Modification/ Genetic Engineering: Definitions and Labelling Provisions.
- Proposed Draft Amendment to the General Standard for the Labelling of Prepackaged Foods: Quantitative Declaration of Ingredients.
- Proposed Draft Definition of Advertising in Relation to Nutrition and Health Claims.
- Discussion Paper on Modified Standardized Common Names.

Each issue listed will be fully described in documents distributed, or to be distributed, by the Secretariat prior to the meeting. Members of the public may access or request copies of these documents (see **ADDRESSES**).

Public Meeting

At the April 10, 2007 public meeting, draft U.S. positions on the agenda items will be described, discussed, and attendees will have the opportunity to pose questions and offer comments. Written comments may be offered at the meeting or sent to the U.S. Delegate for CCFL, Dr. Barbara Schneeman (see **ADDRESSES**). Written comments should state that they relate to activities of the 35th Session of CCFL.

Additional Public Notification

Public awareness of all segments of rulemaking and policy development is important. Consequently, in an effort to ensure that minorities, women, and persons with disabilities are aware of this notice, FSIS will announce it on-line through the FSIS Web page located at *http://www.fsis.usda.gov/regulations/2007_Notices_Index/.* FSIS also will make copies of this **Federal Register** publication available through the FSIS Constituent Update, which is used to provide information regarding FSIS policies, procedures, regulations, **Federal Register** notices, FSIS public meetings, recalls, and other types of information that could affect or would be of interest to constituents and stakeholders. The update is communicated via Listserv, a free electronic mail subscription service for industry, trade and farm groups, consumer interest groups, allied health professionals, and other individuals who have asked to be included. The update is available on the FSIS Web page. Through the Listserv and Web page, FSIS is able to provide information to a much broader and more diverse audience. In addition, FSIS offers an e-mail subscription service which provides automatic and customized access to selected food safety news and information. This service is available at *http://www.fsis.usda.gov/news_and_events/email_subscription/.* Options range from recalls to export information to regulations, directives and notices. Customers can add or delete subscriptions themselves and have the option to password protect their account.

Done at Washington, DC, on March 29, 2007.

F. Edward Scarbrough,

U.S. Manager for Codex Alimentarius.

[FR Doc. E7–6129 Filed 4–2–07; 8:45 am]

BILLING CODE 3410–DM–P

DEPARTMENT OF COMMERCE

Bureau of Industry and Security

Information Systems Technical Advisory Committee; Notice of Partially Closed Meeting

The Information Systems Technical Advisory Committee (ISTAC) will meet on April 25 and 26, 2007, 9 a.m., in the Herbert C. Hoover building, Room 3884, 14th Street between Constitution and Pennsylvania Avenues, NW., Washington, DC. The Committee advises the Office of the Assistant Secretary for Export Administration on technical questions that affect the level of export controls applicable to information systems equipment and technology.

Wednesday, April 25

Public Session

1. Welcome and Introductions.
2. Remarks from Bureau of Industry and Security (BIS).
3. Processor Technology Roadmap.
4. Industry Presentation Category 5, Part 1.
5. Information System Technology in the Military Critical Technologies List (MCTL).
6. Commercial Encryption Technology.
7. Working Group Reports on Comprehensive Review of Commerce Control List (CCL).

Thursday, April 26

Closed Session

8. Discussion of matters determined to be exempt from the provisions relating to public meetings found in 5 U.S.C. app. 2 Sections 10(a)(1) and 10(a)(3).

A limited number of seats will be available for the public session. Reservations are not accepted. To the extent time permits, members of the public may present oral statements to the Committee. The public may submit written statements at any time before or after the meeting. However, to facilitate distribution of public presentation materials to Committee members, the committee suggests that public presentation materials or comments be forwarded before the meeting to Ms. Yvette Springer at *Yspringer@bis.doc.gov.*

The Assistant Secretary for Administration, with the concurrence of the delegate of the General Counsel, formally determined on March 15, 2007, pursuant to Section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. app. 2 Section (10)(d)), that the portion of the meeting concerning trade secrets and commercial or financial information deemed privileged or confidential as described in 5 U.S.C. 552b(c)(4) and the portion of the meeting concerning matters the disclosure of which would be likely to frustrate significantly implementation of an agency action as described in 5 U.S.C. 552b(c)(9)(B) shall be exempt from the provisions relating to public meetings found in 5 U.S.C. app, 2 Sections 10(a)(1) and 10(a)(3). The remaining portions of the meeting will be open to the public.

For more information, call Yvette Springer at (202) 482–2813.

Dated: March 29, 2007.

Yvette Springer,

Committee Liaison Officer.

[FR Doc. 07–1629 Filed 4–2–07; 8:45 am]

BILLING CODE 3510–JT–M

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–827]

Extension of Time Limit for Final Results in the 2004–2005 Antidumping Duty Administrative Review: Certain Cased Pencils From the People's Republic of China

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

DATES: *Effective Date:* April 3, 2007.

FOR FURTHER INFORMATION CONTACT: Magd Zalok or Drew Jackson, AD/CVD Operations, Office 4, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 482–4162 or (202) 482–4406, respectively.

SUPPLEMENTARY INFORMATION:

Background

On February 1, 2006, the Department of Commerce (the Department) published in the **Federal Register** a notice of initiation of an administrative review of the antidumping duty order on certain cased pencils from the People's Republic of China (PRC) covering the period December 1, 2004, through November 30, 2005. *See Initiation of Antidumping and Countervailing Duty Administrative Reviews and Request for Revocation in Part,* 71 FR 5241 (February 1, 2006). On December 7, 2006, the Department published in the **Federal Register** the preliminary results of the instant review. *See Certain Cased Pencils from the People's Republic of China; Preliminary Results of Antidumping Duty Administrative Review,* 71 FR 70949. The final results of review are currently due no later than April 6, 2007.

Extension of Time Limit for Final Results of Review

Section 751(a)(3)(A) of the Tariff Act of 1930, as amended (the Act), requires the Department to make a final determination in an antidumping duty administrative review within 120 days after the date on which the preliminary determination is published. However, if it is not practicable to complete the review within this time period, section 751(a)(3)(A) of the Act allows the Department to extend the time limit for the final determination to 180 days from the date of publication of the preliminary determination (or 300 days if the Department has not extended the time limit for the preliminary determination). We have determined that it is not practicable to complete the final results of this review within the original time limit because the Department requires additional time to consider a number of complex issues involving, *inter alia,* the valuation of a major input, and selection of a surrogate source for manufacturing overhead expenses, general expenses, and profit. Therefore, in accordance with section 751(a)(3)(A) of the Act, the Department is extending the time period for completion of these final results of review by 30 days. We intend to issue the final results of review no later than May 7, 2007 (the first business day after the extended due date of May 6, 2007).

Dated: March 28, 2007.

Stephen J. Claeys,

Deputy Assistant Secretary for Import Administration.

[FR Doc. E7–6161 Filed 4–2–07; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

(A–549–812)

Furfuryl Alcohol from Thailand: Notice of Extension of Time Limit for Preliminary Results of the 2005–2006 Antidumping Administrative Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: April 3, 2007.

FOR FURTHER INFORMATION CONTACT: Damian Felton or Brandon Farlander, AD/CVD Operations, Office 1, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482–0133 and (202) 482–0182, respectively.

SUPPLEMENTARY INFORMATION:

Background

On August 30, 2006, the Department of Commerce (''the Department'') published a notice of initiation of administrative review of the antidumping duty order on furfuryl alcohol from Thailand covering the period July 1, 2005 through June 30, 2006. *See Initiation of Antidumping and Countervailing Duty Administrative Reviews and Requests for Revocation in Part*, 71 FR 51573 (August 30, 2006). However, since the initiation, the Department has revoked this order effective May 4, 2006. *See Furfuryl Alcohol from Thailand; Final Results of the Second Sunset Review of the Antidumping Duty Order and Revocation of the Order*, 72 FR 9729 (March 5, 2006). Therefore, the period of review is now July 1, 2005 through May 3, 2006.

The preliminary results for this review are currently due no later than April 2, 2006.

Extension of Time Limit for Preliminary Results

Section 751(a)(3)(A) of the Tariff Act of 1930, as amended (''the Act''), requires the Department to issue the preliminary results of an administrative review within 245 days after the last day of the anniversary month of an order for which a review is requested and a final determination within 120 days after the date on which the preliminary results are published. However, if it is not practicable to complete the review within the time period, section 751(a)(3)(A) of the Act allows the Department to extend these deadlines to a maximum of 365 days and 180 days, respectively.

We determine that it is not practicable to complete the preliminary results of this review by the current deadline of April 2, 2007. As a result of the revocation of the order, the period of review changed. This requires the Department to consider a new universe of possible transactions for this administrative review. Consequently, we require additional time to issue and analyze supplemental questionnaires. Therefore, in accordance with section 751(a)(3)(A) of the Act and 19 CFR 351.213(h)(2), we are extending the time period for issuing the preliminary results of this review to July 31, 2007. The deadline for the final results of this administrative review continues to be 120 days after the publication of the preliminary results.

We are issuing and publishing this notice in accordance with sections 751(a)(1) and 777(i)(1) of the Act.

Dated: March 28, 2007.

Stephen J. Claeys,

Deputy Assistant Secretary for Import Administration.

[FR Doc. E7–6159 Filed 4–3–07; 8:45 am]

BILLING CODE 3510–DS–S

DEPARTMENT OF COMMERCE

International Trade Administration

Notice of Amendment for Applicants for Appointment to the United States-Brazil CEO Forum

AGENCY: International Trade Administration, Department of Commerce.

ACTION: Amendment to prior notice.

SUMMARY: The Governments of the United States and Brazil have agreed to establish a U.S.-Brazil CEO Forum. This notice announces an amendment to the eligibility requirements for applications for American representatives to join the U.S. Section of the Forum.

DATES: Applications should be received no later than April 20, 2007.

ADDRESSES: Please send requests for consideration to Lorrie Lopes, International Trade Specialist, Office of Latin America and Caribbean, U.S. Department of Commerce, either by fax at (202) 482–4726 or by mail to U.S. Department of Commerce, 14th and Constitution Avenue, NW., Room 3203, Washington, DC 20230.

FOR FURTHER INFORMATION CONTACT: Lorrie Lopes, Office of Latin America and Caribbean, U.S. Department of Commerce, telephone: (202) 482–4157. Additional information, including the Terms of Reference, can be found at

http://trade.gov/press/press_releases/2007/brazilceo_01.asp

SUPPLEMENTARY INFORMATION: On March 23, 2007, the International Trade Administration of the U.S. Department of Commerce published a **Federal Register** notice soliciting applications from U.S. persons interested in serving as members of the U.S. Section of the U.S.-Brazil CEO Forum. *See* 72 FR 13747. The International Trade Administration of the U.S. Department of Commerce is amending the previous notice due to the level of interest in the Forum. The amendment to the eligibility criteria changes ''each candidate also must be a U.S. citizen residing in the United States and able to travel to Brazil or locations in the United States to attend official Forum meetings as well as independent U.S. Section and Committee meetings,'' to ''each candidate also must be a U.S. citizen or otherwise legally authorized to work in the United States and able to travel to Brazil and locations in the United States to attend official Forum meetings as well as independent U.S. Section and Committee meetings.'' Applicants must meet all other requirements put forward in the previous notice. *See* 72 FR 13747.

Dated: March 29, 2007.

Anne Driscoll,

Acting Director for the Office of Latin America and the Caribbean.

[FR Doc. E7–6160 Filed 4–2–07; 8:45 am]

BILLING CODE 3510–DA–P

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

[Docket No.: 0612242610–7036–01]

Establishment of and Availability of Applications for the Laboratory Accreditation Program for Radiation Detection Instruments Under the National Voluntary Laboratory Accreditation Program

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice.

SUMMARY: Under the National Voluntary Laboratory Accreditation Program (NVLAP) the National Institute of Standards and Technology (NIST) announces the establishment of a laboratory accreditation program and the availability of applications for accreditation for laboratories that perform testing of radiation detection instruments using standards developed by the American National Standards Institute, Homeland Security Instrumentation and Radiation Protection Instrumentation groups.

DATES: Laboratories interested in seeking accreditation are required to submit an application to NVLAP and pay required fees. Applications will be considered as received.

ADDRESSES: Laboratories may obtain requirement documents and an application for accreditation for this program by calling (301) 975–4016, by writing to Radiation Detection Instrument Testing Program Manager, National Voluntary Laboratory Accreditation Program, 100 Bureau Drive/MS 2140, Gaithersburg, MD 20899–2140, or by sending e-mail to *nvlap@nist.gov.*

FOR FURTHER INFORMATION CONTACT: Betty Ann Sandoval, Senior Program Manager, NIST/NVLAP, 100 Bureau Drive/MS 2140, Gaithersburg, MD 20899–2140, Phone: (301) 975–8446 or e-mail: *betty.sandoval@nist.gov.* Information regarding NVLAP and the accreditation process can be viewed at *http://www.nist.gov/nvlap.*

SUPPLEMENTARY INFORMATION:

Background

The United States Department of Homeland Security (DHS) requested that NIST establish a laboratory accreditation program for laboratories that test radiation detection instruments used in homeland security applications. In response to the request from DHS, and after consultation with interested parties through public workshops and other means, the National Voluntary Laboratory Accreditation Program (NVLAP) has established an accreditation program for laboratories that test radiation detection instruments.

This notice is issued in accordance with NVLAP procedures and general requirements, found in Title 15 Part 285 of the Code of Federal Regulations.

Technical Requirements for the Accreditation Process

NVLAP accreditation criteria are established in accordance with the Code of Federal Regulations (CFR, Title 15, Part 285), NVLAP Procedures and General Requirements. NVLAP accreditation is in full conformance with the standards of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), including ISO/IEC 17025.

Accreditation is granted to a laboratory following successful completion of a process, which includes submission of an application and payment of fees by the laboratory, an on-site assessment by technical experts, resolution of any non-conformities identified during the on-site assessment, and participation in proficiency testing. The accreditation is formalized through issuance of a Certificate of Accreditation and Scope of Accreditation.

General requirements for accreditation are given in *NIST Handbook 150, NVLAP Procedures and General Requirements.* The specific technical and administrative requirements for the program for accreditation of laboratories that test radiation detection instruments are given in *NIST Handbook 150–23, Homeland Security Applications—Radiation Detection Instruments.* Laboratories must meet all NVLAP criteria and requirements in order to become accredited. To be considered for accreditation, the applicant laboratory must provide a completed application to NVLAP, pay all required fees, agree to conditions for accreditation, and provide a quality manual to NVLAP (or a designated NVLAP assessor) prior to the beginning of the assessment process.

Application Requirements

(1) Legal Name and full address of the laboratory;

(2) Ownership of the laboratory;

(3) Authorized Representative's name and contact information;

(4) Names, titles and contact information for laboratory staff nominated to serve as Approved Signatories of test or calibration reports that reference NVLAP accreditation;

(5) Organization chart defining relationships that are relevant to performing testing and calibrations covered in the accreditation request;

(6) General description of the laboratory, including its facilities and scope of operations; and

(7) Requested scope of accreditation.

In addition, the laboratory shall provide a copy of its quality manual and related documentation, where appropriate, prior to the on-site assessment. NVLAP will review the quality management documentation and discuss any noted nonconformities with the Authorized Representative before the on-site visit. Laboratories that apply for accreditation will be required to pay for NVLAP fees and undergo on-site assessment and shall meet proficiency testing requirements before initial accreditation can be granted.

PRA Clearance

This action contains a collection of information requirements subject to review and approval by the Office of Management and Budget (OMB) under

the Paperwork Reduction Act (PRA) of 1995. Collection activities for NVLAP are currently approved by OMB under control number 0693–0003. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information unless it displays a currently valid OMB Control Number.

Dated: March 27, 2007.

James E. Hill,

Acting Deputy Director.

[FR Doc. E7–6177 Filed 4–2–07; 8:45 am]

BILLING CODE 3510–13–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 032207D]

Endangered and Threatened Wildlife and Plants; Notice of Availability of the Status Review Report for Atlantic Sturgeon in the United States

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

ACTION: Notice of Availability of the Status Review Report for Atlantic Sturgeon in the United States.

SUMMARY: We, NMFS, convened a Status Review Team (SRT) consisting of Federal biologists from NMFS, U.S. Geological Survey (USGS), and U.S. Fish and Wildlife Service (FWS). The SRT has completed a Status Review Report of Atlantic sturgeon in the United States. This notice makes this report available to the public in the **Federal Register**.

ADDRESSES: Requests for a copy of the Status Review Report should be addressed to Marcia Hobbs, NMFS, Northeast Regional Office, Protected Resources Division, One Blackburn Drive, Gloucester, MA 01930. A copy of the Status Review Report can also be downloaded from the following web address: *http://www.nero.noaa.gov/prot_res/CandidateSpeciesProgram/csr.htm*

FOR FURTHER INFORMATION CONTACT: Kim Damon-Randall, NMFS Northeast Region, 978–281–9300 ext. 6535, or Dr. Stephania Bolden, NMFS Southeast Region,727–824–5312.

SUPPLEMENTARY INFORMATION:

Background

On June 2, 1997, we and FWS (jointly, the Services) received a petition from the Biodiversity Legal Foundation requesting us to list Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), in the United States where it continues to exist, as threatened or endangered under the Endangered Species Act (ESA) and to designate critical habitat within a reasonable period of time following the listing. A notice was published in the **Federal Register** on October 17, 1997, stating the Services had determined substantial information existed indicating the petitioned action may be warranted (62 FR 54018). The ESA requires the Services to make listing determinations based on the best scientific and commercial information available after conducting a review of the status of species and after taking into account efforts to protect the species.

On September 21, 1998, after completing a comprehensive status review, the Services published a 12–month determination in the **Federal Register** announcing that listing was not warranted at that time (63 FR 50187). On the same date, Atlantic sturgeon were retained on the NMFS candidate species list (63 FR 50211; subsequently changed to the Species of Concern List (69 FR 19975; April 15, 2004)). Concurrently, the Atlantic States Marine Fisheries Commission (ASMFC) completed Amendment 1 to the 1990 Atlantic Sturgeon Fishery Management Plan that imposed a 20–40 year moratorium on all U.S. Atlantic sturgeon fisheries until the Atlantic Coast spawning stocks could be restored to a level where 20 subsequent year classes of adult females were protected (ASMFC, 1998). In 1999, pursuant to section 804(b) of the Atlantic Coastal Fisheries Cooperative Management Act (16 U.S.C. 5101 *et seq.*), we followed this action by closing the Exclusive Economic Zone to Atlantic sturgeon retention.

In 2003, we sponsored a workshop with ASMFC and FWS on the ''Status and Management of Atlantic Sturgeon'' in Raleigh, North Carolina, to discuss the current status of sturgeon along the Atlantic Coast and determine what obstacles, if any, were impeding the recovery of Atlantic sturgeon (Kahnle *et al.*, 2005). The results of the workshop reported ''mixed'' reviews where some populations seemed to be recovering while others were declining. Bycatch and habitat degradation were noted as possible causes for some population declines.Based on the information gathered by the participants during the 2003 workshop on Atlantic sturgeon, we decided that a second review of Atlantic sturgeon status was needed to determine if listing as threatened or endangered under the ESA was warranted. In 2006, we convened a SRT to conduct a thorough review of the status of the species.

The 2007 Status Review Report

On February 23, 2007, the SRT finalized its report on the status of Atlantic sturgeon (Status Review for Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)). The status review report was also reviewed and supplemented by eight state and regional experts who provided individual expert opinions on the information contained in the status review report and provided additional information to ensure the report provided the best available data. Lastly, the report was peer reviewed by six experts from academia and received favorable reviews. The final report incorporates edits and information in light of this peer review and the expert reviews. Consistent with the February 7, 1996, joint FWS and NMFS Distinct Vertebrate Population Segment Policy (61 FR 4722), the SRT concluded that Atlantic sturgeon populations should be divided into five distinct population segments (DPSs). The five DPSs were named: (1) Gulf of Maine, (2) New York Bight, (3) Chesapeake Bay, (4) Carolina, and (5) South Atlantic. These Atlantic sturgeon DPSs were discrete because they were markedly separated from each other based on physical, genetic, and physiological factors. They were also significant to the species because they: (1) were located in a unique ecological setting; (2) had unique genetic characteristics; and (3) would represent a significant gap in the range of the taxon if any one of them were to become extirpated. Canadian populations were considered to be discrete from the Gulf of Maine DPS because there were significant differences in control of exploitation and regulatory mechanism for the populations (i.e., still support a commercial fishery). Further support for discreteness between Canadian populations and the Gulf of Maine DPS was the marked separation between them based on genetic, physiological, and habitat features. Therefore, Canadian populations were not included in the Gulf of Maine DPS, and they were not considered further in the status review report.

The SRT evaluated the status of Atlantic sturgeon DPSs by analyzing the impacts of the factors listed in section 4(a)(1) of the ESA on each subpopulation within each DPS and considering whether the subpopulations constituted significant portions of the range of each DPS. The SRT identified 15 stressors within these factors and

summarized their impacts on Atlantic sturgeon using a semi-quantitative extinction risk analysis (ERA), similar to that used by other status review reports. Of the stressors evaluated, bycatch mortality, water quality, lack of adequate state and/or Federal regulatory mechanisms, and dredging activities were most often identified as the most significant threats to the viability of Atlantic sturgeon subpopulations. Additionally, some subpopulations were impacted by unique stressors, such as habitat impediments (e.g., Cape Fear and Santee-Cooper rivers) and apparent ship strikes (e.g., Delaware and James rivers).

The SRT used the ERA to conclude that three of the five DPSs (New York Bight, Chesapeake Bay, and Carolina) were likely (>50 percent chance) to become endangered in the foreseeable future, which was defined as 20 years. The remaining DPSs (Gulf of Maine and South Atlantic) were found to have a moderate risk (<50 percent chance) of becoming endangered in the next 20 years. The ERA of these two remaining DPSs suggested that the DPSs do not warrant listing, though the available science may not be sufficient to allow a full assessment of these DPSs.

Currently, we are considering the information presented in the final status review report, the comments from the peer reviewers, and the response of the SRT to the peer reviewers to determine if action under the ESA is warranted. A decision regarding our listing determination will be published in the **Federal Register**.

Authority

The authority for this action is the ESA, as amended (16 U.S.C. 1531 *et seq.*).

Dated: March 27, 2007.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

[FR Doc. E7–6173 Filed 4–2–07; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF DEFENSE

Office of the Secretary

DoD Education Benefits Board of Actuaries

AGENCY: Department of Defense.

ACTION: Notice of meeting.

SUMMARY: A meeting of the Board has been scheduled to execute the provisions of the Chapter 101, Title 10, United States Code (10 U.S.C. 2006). The Board shall review DoD actuarial methods and assumptions to be used in the valuation of the Department of Defense Education Benefits Fund. Persons desiring to attend the DoD Education Benefits Board of Actuaries meeting, or make an oral presentation or submit a written statement for consideration at the meeting, must notify Inger Pettygrove at (703) 696–7413 by August 13, 2007.

Notice of this meeting is required under the Federal Advisory Committee Act.

DATES: August 30, 2007, 1 p.m. to 5 p.m.

ADDRESSES: 4040 N. Fairfax Drive, Suite 270, Arlington, VA 22203.

FOR FURTHER INFORMATION CONTACT: Inger Pettygrove, DoD Office of the Actuary, 4040 N. Fairfax Drive, Suite 308, Arlington, VA 22203, (703) 696–7413.

March 28, 2007.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, DoD.

[FR Doc. 07–1623 Filed 4–2–07; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Office of the Secretary

DoD Medicare-Eligible Retiree Health Care Board of Actuaries

AGENCY: Department of Defense.

ACTION: Notice of meeting.

SUMMARY: A meeting of the Board has been scheduled to execute the provisions of Chapter 56 Title 10, United States Code (10 U.S.C. 1114 *et seq.*). The Board shall review DoD actuarial methods and assumptions to be used in the valuation of benefits under DoD retiree health care programs for Medicare-eligible beneficiaries. Persons desiring to attend the DoD Medicare-Eligible Retiree Health Care Board of Actuaries meeting, or make an oral presentation or submit a written statement for consideration at the meeting, must notify Margot Kaplan at 703–696–7404 by June 25, 2007. Notice of this meeting is required under the Federal Advisory Committee Act.

DATES: July 12, 2007, 1:30 p.m.–5 p.m.

ADDRESSES: 4040 N Fairfax Drive, Suite 270, Arlington, VA 22203.

FOR FURTHER INFORMATION CONTACT: Margot Kaplan, DoD Office of the Actuary, 4040 N. Fairfax Drive, Suite 308, Arlington, VA 22203, (703) 696–7404.

Dated: March 28, 2007.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, DoD.

[FR Doc. 07–1622 Filed 4–2–07; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Office of the Secretary

DoD Retirement Board of Actuaries

AGENCY: Department of Defense.

ACTION: Notice of meeting.

SUMMARY: A meeting of the Board has been scheduled to execute the provisions of Chapter 74, Title 10, United States Code (10 U.S.C. 1464 *et seq.*) The Board shall review DoD actuarial methods and assumptions to be used in the valuation of the Military Retirement System. Persons desiring to attend the DoD Retirement Board of Actuaries meeting, or make an oral presentation or submit a written statement for consideration at the meeting, must notify Inger Pettygrove at (703) 696–7413 by August 13, 2007.

Notice of this meeting is required under the Federal Advisory Committee Act.

DATES: August 31, 2007 10 a.m. to 1 p.m.

ADDRESSES: 4040 N. Fairfax Drive, Suite 270, Arlington, VA 22203.

FOR FURTHER INFORMATION CONTACT: Inger Pettygrove, DoD Office of the Actuary, 4040 N. Fairfax Drive, Suite 308, Arlington, VA 22203 (703) 696–7413.

Dated: March 28, 2007.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, DoD.

[FR Doc. 07–1624 Filed 4–2–07; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Department of the Air Force

Record of Decision—Barry M. Goldwater Range Integrated Natural Resource Management Plan Environmental Impact Statement

ACTION: Notice of Availability (NOA).

SUMMARY: The United States Air Force and the United States Marine Corps completed Barry M. Goldwater Range Integrated Natural Resource Management Plan Environmental Impact Statement (EIS) by signing a Record of Decision (ROD). The ROD is

based on matters discussed in the Final EIS, inputs from the public and regulatory agencies, and other relevant factors. The Final EIS was made available on May 26, 2006 through a notice in the **Federal Register** (Volume 71, Number 102) with a waiting period ending June 26, 2006. The ROD documents the decisions of the Air Force and the Marine Corps as analyzed in the Final EIS, in furtherance of the Military Lands Withdrawal Act of 1999 (Pub. L. 106–65) and the Sikes Act (16 U.S.C. 670) prescribing a management plan for the natural resources present on the BMGR.

FOR FURTHER INFORMATION CONTACT: Mr. Jack Bush, Headquarters Air Force, 703–604–5264 or Ms. Mary D. Hassell, Headquarters Marine Corps, 703–695–8240, ext 3339.

Bao-Anh Trinh,

Air Force Federal Register Liaison Officer.

[FR Doc. E7–6136 Filed 4–2–07; 8:45 am]

BILLING CODE 5001–05–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Additional Public Hearing in the City of Charlotte, NC and Extension of Public Comment Period for the Draft Supplemental Environmental Impact Statement (SEIS) for the Introduction of F/A–18 E/F (Super Hornet) Aircraft to the East Coast of the United States (Construction and Operation of an Outlying Landing Field)

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969 [42 U.S.C. sections 4321–4345] and its implementing regulations (40 CFR parts 1500–1508), the Department of the Navy prepared and filed with the U.S. Environmental Protection Agency (EPA) the Draft SEIS on February 16, 2007. A notice of public hearing dates and locations was published in the **Federal Register**, 72 FR 8151, on February 23, 2007, and a Notice of Availability of the Draft SEIS was published in the **Federal Register**, 72 FR 8155, on February 23, 2007. On March 19, 2007, the Secretary of the Navy was requested to hold an additional public hearing in the City of Charlotte, North Carolina.

DATES AND ADDRESSES: A public hearing has been scheduled for April 17, 2007, at the Charlotte Conference Center, 501 South College Street, Charlotte, NC. An open information session will precede the scheduled public hearing and allow interested individuals to review information presented in the Draft SEIS. Navy representatives will be available during the information session to provide clarification as necessary related to the Draft SEIS. The open information session is scheduled from 4:30 p.m. to 6:30 p.m., followed by the public hearing from 7 p.m. to 10 p.m.

FOR FURTHER INFORMATION CONTACT: OLF SEIS Project Manager, Naval Facilities Engineering Command, Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508–1278; facsimile 757–322–4894.

SUPPLEMENTARY INFORMATION: Federal, state and local agencies, as well as interested parties, are invited and encouraged to be present or represented at the public hearing. Oral statements will be heard and transcribed by a stenographer; however, to ensure the accuracy of the record, all statements should be submitted in writing. All statements, both oral and written, will become part of the public record on the Draft SEIS and will be addressed in the Final SEIS. Equal weight will be given to both oral and written statements.

In the interest of available time and to ensure all who wish to provide an oral statement have the opportunity to do so, each speaker's comments will be limited to three (3) minutes. If a longer statement is to be presented, it should be summarized at the public hearing, and the full text summarized in writing either at the hearing, mailed or faxed to the contact.

Due to the fact that an additional public hearing has been scheduled for April 17, 2007, the Navy has extended the public comment period on the Draft SEIS to May 9, 2007. This allows a public comment period of 75 days. All comments on the Draft SEIS must be postmarked by May 9, 2007 to be considered in the Final SEIS. *Comments may be mailed to:* Commander, Naval Facilities Engineering Command Atlantic, Attn: OLF SEIS Project Manager, 6506 Hampton Boulevard, Norfolk, VA 23508–1278; facsimile 757–322–4894.

The Draft SEIS was distributed to the following library: Main Library of Charlotte located at 310 N. Tryon Street, Charlotte, NC 28202. An electronic copy is also available for public viewing at: *http://www.olfseis.com.* Requests for single copies of the Draft SEIS (on CD–ROM) or its Executive Summary may be made online at *http://www.olfseis.com* or by calling 1–866–615–6477.

Dated: March 27, 2007.

M.A. Harvison,

Lieutenant Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. E7–6078 Filed 4–2–07; 8:45 am]

BILLING CODE 3810–FF–P

DEPARTMENT OF EDUCATION

[CFDA 84.060A]

Indian Education Formula Grants to Local Educational Agencies—Notice Inviting Part II of Applications for Fiscal Year (FY) 2007

AGENCY: Office of Elementary and Secondary Education, Department of Education.

SUPPLEMENTARY INFORMATION:

Background: On January 19, 2007, the Department published a Notice in the **Federal Register** inviting applications under Part I of the Indian education formula grants application (72 FR 2501). In that Notice, the Department established a deadline of February 20, 2007 for Part I of the application and stated that the Department would publish a notice inviting applications and establishing a deadline for Part II of that application once the information collection requirements were approved by the Office of Management and Budget (OMB). OMB has approved those requirements. This Notice invites applications and establishes a deadline for submission of Part II of the application. Submissions under Part II will be accepted only from those eligible applicants that met the Part I deadline.

Purpose of Program: The Indian Education Formula Grant to Local Educational Agencies program provides grants to support local educational agencies (LEAs) and other eligible entities described in this notice in their efforts to reform and improve elementary and secondary school programs that serve Indian students. The Department funds programs designed to help Indian students to meet the same challenging State academic content and student academic achievement standards used for all students. In addition, under section 7116 of the Elementary and Secondary Education Act of 1965, as amended (ESEA), the Secretary will, upon receipt of an acceptable plan for the integration of education and related services, authorize the entity receiving the funds under this program to consolidate, in accordance with the entity's plan, the funds for any Federal program exclusively serving Indian children, or the funds reserved under any Federal

program to serve exclusively Indian children, that are awarded under a statutory or administrative formula to the entity, for the purposes of providing education and related services to Indian students. Instructions for submitting an integration of education and related services plan are included in the web-based EASIE application system described elsewhere in this notice under *Application Process and Submission Information.*

Eligible Applicants: LEAs, certain schools funded by the Department of the Interior-Bureau of Indian Education, and Indian tribes under certain conditions, as prescribed by section 7112(c) of the ESEA.

Application Process and Submission Information: The application process for the Indian Education Formula Grants to Local Educational Agencies program has changed to the Formula Grant Electronic Application System for Indian Education (EASIE), an easy-to-use, web-based application system. Formula Grant EASIE provides special features that will progressively enhance data availability and performance reporting for applicants, including the use of data from State submissions to ED*Facts,* the Department's data collection system containing performance information from State educational agencies about schools and Federal education programs. To the extent that your State has provided the necessary ED*Facts* data files, Formula Grant EASIE will be able to interface with ED*Facts* and pull those LEA-specific data into the application. Additionally, this new system allows the Department to review applications and interact online with applicants during the application review and approval process.

Although you may download and print sample forms from the system, the application must be submitted electronically through the Formula Grant EASIE unless you do not have Internet access and have made prior arrangements with the Department. For approval to submit a paper application, you must contact the ED*Facts* Partner Support Center (see the contact information listed elsewhere in this notice under **FOR FURTHER INFORMATION CONTACT**) prior to the deadline for transmittal of a Part II application. If you are approved to submit a paper application, you must meet the submission deadlines included in this notice.

Registration for Formula Grant EASIE is required. For information on how to register, contact the EDFacts Partner Support Center listed elsewhere in this notice under **FOR FURTHER INFORMATION CONTACT**.

The Formula Grant EASIE application is divided into two parts—Part I and Part II.

Part I, Student Count, provides the appropriate data entry screens to submit your Indian student count totals. The deadline for submission of Indian student count totals under Part I was February 20, 2007. Applications that did not meet the deadline for Part I will not be considered for funding in the initial allocation of awards.

Part II, Program and Budget Information, provides your award amount based on the Indian student count total submitted under Part I. Part II also enables you to enter student performance data, identify your project's services and activities, and build a realistic program budget based on a known grant amount. Based on student assessment data, you will select your program objectives and services from a variety of menu options that were designed with grantee input.

DATES: *Part II of Formula Grant EASIE Available:* April 3, 2007.

Deadline for Transmittal of PART II Applications: May 3, 2007.

Applications or data submissions under Part II will be accepted only from those eligible applicants that met the Part I deadline.

If funds become available after the initial allocation of funds, applications not meeting the deadline for Part I may be considered for funding if the Secretary determines, under section 7118(d) of the ESEA, that reallocation of those funds to applicants filing after the deadline would best assist in advancing the purposes of the program. However, the amount and length of an individual award, if any, may be less than the applicant would have received had the application been submitted on time.

Deadline for Intergovernmental Review: June 4, 2007.

Available Funds: $95,331,060.

Estimated Range of Awards: $3,000–$2,000,000.

Estimated Average Size of Awards: $80,422.

Estimated Number of Awards: 1,185.

Note: The Department is not bound by any estimates in this notice.

Project Period: 12 months.

Applicable Regulations: The Education Department General Administrative Regulations (EDGAR) in 34 CFR Parts 75, 77, 79, 80, 81, 82, 84, 85, 86, 97, 98, and 99.

Note: The regulations in 34 CFR part 79 apply to all applicants except federally recognized Indian tribes.

Performance Measures: The Secretary has established the following key performance measures for assessing the effectiveness of the Indian Education Formula Grants to Local Educational Agency program: (1) The percentage of American Indian and Alaska Native students in grades 4 and 8 who are at or above the basic level in reading on the National Assessment of Educational Progress (NAEP); and (2) the percentage of American Indian and Alaska Native students in grades 4 and 8 who are at or above the basic level in mathematics on the NAEP.

FOR FURTHER INFORMATION CONTACT: Contact the ED*Facts* Partner Support Center, Telephone: 877–457–3336 (877–HLP–EDEN) or by e-mail at: *eden_OIE@ed.gov*

Individuals who use a telecommunications device for the deaf (TDD) may call the ED*Facts* Partner Support Center 1–888–403–3336 (888–403–EDEN).

Individuals with disabilities may obtain a copy of the application package or a copy of this document in an alternative format (e.g., Braille, large print, audiotape, or computer diskette) on request by contacting the EDFacts Partner Support Center.

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.*

Program Authority: 20 U.S.C. 7421 *et seq.*

Dated: March 29, 2007.

Kerri L. Briggs,

Acting Assistant Secretary for Elementary and Secondary Education.

[FR Doc. E7–6172 Filed 4–2–07; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

The Historically Black Colleges and Universities Capital Financing Advisory Board

AGENCY: The Historically Black Colleges and Universities Capital Financing Board, Department of Education.

ACTION: Notice of an open meeting.

SUMMARY: This notice sets forth the schedule and proposed agenda of an upcoming open meeting of the Historically Black Colleges and Universities Capital Financing Advisory Board. The notice also describes the functions of the Board. Notice of this meeting is required by Section 10(a)(2) of the Federal Advisory Committee Act and is intended to notify the public of their opportunity to attend.

DATES: Friday, April 20, 2007.

Time: 10 a.m.–2 p.m.

ADDRESSES: Xavier University, University Center Building, 1 Drexel Drive, New Orleans, Louisiana 70125.

FOR FURTHER INFORMATION CONTACT: Don E. Watson, Executive Director, Historically Black College and University Capital Financing Program, 1990 K Street, NW., Washington, DC 20006; *telephone:* (202) 219–7037; *fax:* (202) 502–7677; e-mail: *donald.watson@ed.gov*.

Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FRS) at 1–800–877–8339, Monday through Friday between the hours of 8 a.m. and 8 p.m., Eastern Standard Time.

SUPPLEMENTARY INFORMATION: The Historically Black College and University Capital Financing Advisory Board (Board) is authorized by Title III, Part D, Section 347 of the Higher Education Act of 1965, as amended in 1998 (20 U.S.C. 1066f). The Board is established within the Department of Education to provide advice and counsel to the Secretary and the designated bonding authority as to the most effective and efficient means of implementing construction financing on historically black college and university campuses and to advise Congress regarding the progress made in implementing the program. Specifically, the Board will provide advice as to the capital needs of Historically Black Colleges and Universities, how those needs can be met through the program, and what additional steps might be taken to improve the operation and implementation of the construction financing program.

The purpose of this meeting is to review current program activities, provide guidance for 2007 activities, and to make recommendations to the Secretary on the current capital needs of Historically Black Colleges and Universities.

Individuals who will need accommodations for a disability in order to attend the meeting (e.g., interpreting services, assistance listening devices, or materials in alternative format) should notify Don Watson at 202 219–7037, no later than April 5, 2007. We will attempt to meet requests for accommodations after this date but cannot guarantee their availability. The meeting site is accessible to individuals with disabilities.

An opportunity for public comment is available on Friday, April 20, 2007 between 12:15 p.m.–12:45 p.m. Those members of the public interested in submitting written comments may do so by submitting them to the attention of Don E. Watson, 1990 K Street, NW., Washington, DC, by Friday, April 13, 2007.

Records are kept of all Board proceedings and are available for public inspection at the Office of the Historically Black College and University Capital Financing Advisory Board (Board), 1990 K Street, NW., Washington, DC 20006, from the hours of 9 a.m. to 5 p.m., Eastern Standard Time Monday through Friday (EST).

Electronic Access to This Document: You may view this document, as well as all other documents of this Department 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/federegister*.

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*.

James F. Manning,

Delegated the Authority of Assistant Secretary for Postsecondary Education.

[FR Doc. E7–6090 Filed 4–2–07; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY

Notice of Availability of a Draft Supplement Analysis for Disposal of Depleted Uranium Oxide Conversion Product Generated From Doe's Inventory of Depleted Uranium Hexafluoride

AGENCY: Department of Energy.

ACTION: Notice of availability of a draft supplement analysis.

SUMMARY: DOE has prepared a Draft Supplement Analysis (SA) pursuant to DOE regulations implementing the National Environmental Policy Act (NEPA), 10 CFR 1021.314. The draft SA addresses DOE's proposal to dispose of the depleted uranium oxide conversion product at either the DOE-owned low-level radioactive waste disposal facility at the Nevada Test Site (NTS) or at EnergySolutions LLC, a commercial low-level waste disposal facility in Clive, Utah (EnergySolutions; formerly known as Envirocare of Utah, Inc.).

In April 1999, the U.S. Department of Energy (DOE) published a Programmatic Environmental Impact Statement (PEIS) for management of its Depleted Uranium Hexafluoride (DUF_6) inventory. The PEIS included a generic assessment of the disposal of depleted uranium oxide conversion product (as U_3O_8 or UO_2) and concluded that disposal of either product in shallow earthen structures, vaults, or mines would adequately protect human health and the environment over the time period considered, as long as the disposal facility is located in a dry environment and appropriately engineered (e.g., the cover material is maintained). Subsequently, DOE prepared site-specific final Environmental Impact Statements (EISs) for construction and operation of DUF_6 conversion facilities at the DOE's Paducah, Kentucky, and Portsmouth, Ohio, sites in the Final Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Paducah, Kentucky Site, DOE/EIS–0359, and the Final Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio Site, DOE/EIS–0360. DOE published its Record of Decision for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Paducah, Kentucky Site, and Record of Decision for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth,

Ohio Site (RODs) on July 27, 2004 (69 FR 44649 and 69 FR 44654).

In each site-specific ROD, DOE announced its decision to implement the actions described as the preferred alternative in the corresponding conversion facility EIS, which included the following actions:

- DOE will construct and operate a conversion facility at Location A within each of the Paducah and Portsmouth sites.
- All shipments to and from the conversion facility sites, including any potential shipments of non-DUF_6 cylinders currently stored at the East Tennessee Technology Park (ETTP), will be conducted by either truck or rail, as appropriate. Cylinders will be shipped in a manner that is consistent with U.S. Department of Transportation (DOT) regulations for the shipment of UF_6 cylinders.
- Current cylinder management activities (handling, inspection, monitoring, and maintenance) will continue, consistent with Cylinder Project Management Plan for Depleted Uranium Hexafluoride, effective October 2003, which covers actions needed to meet safety and environmental requirements, until conversion can be accomplished.
- The aqueous hydrofluoric acid (HF) produced during conversion will be sold for use. If necessary, calcium fluoride (CaF_2) will be produced and reused, or disposed of as appropriate.
- The depleted uranium oxide conversion product will be reused to the extent possible or packaged in emptied cylinders for disposal at an appropriate disposal facility. DOE plans to decide the specific disposal location(s) for the depleted uranium oxide conversion product after additional appropriate NEPA review. Accordingly, DOE will continue to evaluate its disposal options and will consider any further information or comments relevant to that decision. DOE will give a minimum 45-day notice before making the specific disposal decision and will provide any supplemental NEPA analysis for public review and comment.

The conversion facility RODs did not declare a decision regarding the location for disposal of depleted uranium oxide conversion product. The reason DOE did not make its disposal decision at the time it issued the RODs for construction and operation of the two DUF6 conversion facilities is that it discovered that it had, through an oversight, not served copies of the draft and final site-specific EISs (DOE 2004a, b) to the States of Utah, home of EnergySolutions, and Nevada, home of NTS, as required in 40 CFR 1502.19. As a result, each ROD states DOE's intention to decide the specific disposal location(s) for the depleted uranium oxide conversion product after additional appropriate NEPA review.

This draft SA addresses the additional appropriate NEPA review committed to in the earlier RODs. The draft SA identifies no significant new circumstances or information relevant to environmental concerns that bear on DOE's decisions on disposal locations or the impacts of those decisions. Based on the draft SA that is the subject of this Notice, DOE believes that a supplemental EIS is not needed to support amending the conversion facility RODs to decide the disposal location for the depleted uranium oxide conversion product. The depleted uranium oxide conversion product may be disposed either at the EnergySolutions low-level waste disposal facility or at the NTS low-level waste disposal facility. DOE plans to issue amended RODs under the conversion facility EISs no sooner than 45 days from the publication of this Notice.

DATES: DOE will consider all public comments on this matter submitted by May 18, 2007.

ADDRESSES: Comments should be submitted electronically via the Web at *http://web.ead.anl.gov/uranium/* or by regular mail. Written comments can be mailed to: DU Disposal Supplement Analysis Comment, Argonne National Laboratory, Building 900, Mail Stop 3, 9700 S. Cass Avenue, Argonne, IL 60439.

FOR FURTHER INFORMATION CONTACT: Copies of the Supplement Analysis for Disposal of Depleted Uranium Oxide Conversion Product Generated From DOE's Inventory of Depleted Uranium Hexafluoride (DOE/EIS–0359/0360–SA–001) is available on the Depleted UF_6 Management Information Network at: *http://web.ead.anl.gov/uranium/*, and on DOE's NEPA Web site at *http://www.eh.doe.gov/nepa/whatsnew.html*. To request printed copies of this document, please write: DU Disposal Supplement Analysis Comment, Argonne National Laboratory, Building 900, Mail Stop 3, 9700 S. Cass Avenue, Argonne, IL 60439.

For further information on DOE's NEPA process, contact: Ms. Carol Borgstrom, Director, Office of NEPA Policy and Compliance, GC–20, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, *Telephone:* 202–586–4600, or leave a message at 1–800–472–2756.

SUPPLEMENTARY INFORMATION: Uranium Disposition Services, LLC (UDS) began construction of the DUF_6 conversion facilities at Paducah, Kentucky and Portsmouth, Ohio in July 2004. The main products from the conversion of DOE's inventory of DUF_6 will be depleted uranium oxide conversion product and aqueous hydrogen fluoride (HF). The quantities of depleted uranium oxide conversion product produced annually will be approximately 10,800 metric tons (t) (11,800 tons) at Portsmouth and 14,300 t (15,800 tons) at Paducah. UDS is planning to sell the HF product to a commercial user.

In addition to depleted uranium oxide conversion product, two other products from the conversion process require disposal: (1) Emptied DUF_6 cylinders and (2) a relatively small quantity of CaF_2 (approximately 18 t [20 tons] at Portsmouth and 24 t [26 tons] at Paducah annually). UDS is planning to use the emptied cylinders as disposal containers for the depleted uranium oxide conversion product. Therefore, the emptied cylinders would become part of the depleted uranium oxide waste stream. Any cylinders not used as disposal containers would be disposed of as low-level waste at an appropriate facility in compliance with applicable regulations. The small quantity of CaF_2 would be disposed with the unused depleted uranium oxide. Therefore, the unused depleted uranium oxide, most of the emptied cylinders, and the small quantity of CaF_2 would be sent to the same disposal facility.

The PEIS considered the environmental impacts of six alternative strategies for long-term management of DOE's DUF_6 inventory. The alternative strategies included: (1) Options for continued storage of DUF_6 in cylinders at the three sites where it was stored (Paducah, KY, Portsmouth, OH, and ETTP in Oak Ridge, TN); (2) long-term storage as DUF_6 at a consolidated site; (3) conversion of the DUF_6 to an oxide followed by long-term storage; (4) conversion to an oxide or depleted uranium metal followed by use; (5) conversion to an oxide followed by disposal; and (6) no action. The analyses of the long-term storage and disposal alternatives included the transportation of the depleted uranium oxide to generic storage or disposal sites located 155 mi (250 km), 620 mi (1,000 km), or 3,100 mi (5,000 km) from the conversion facilities. DOE analyzed the impacts of depleted uranium conversion product disposal using generic assumptions about disposal site characteristics, rather than actual characteristics for any particular disposal site. A technical

support document for the PEIS investigated the feasibility of depleted uranium disposal at six low-level waste disposal facilities based on waste acceptance criteria, available capacity, and disposal cost (*Depleted Uranium Storage and Disposal Trade Study:* Summary Report, ORNL/TM–2000/10). This document and subsequent follow-up studies have verified that the only currently operating dry-environment, low-level waste disposal facilities that are feasible for disposal of the depleted uranium oxide conversion product are the NTS and EnergySolutions facilities.

Like the PEIS, site-specific EISs for each conversion facility assumed that depleted uranium oxide would be classified as low-level waste. This assumption is consistent with a recent ruling by the U.S. Nuclear Regulatory Commission (NRC) in the licensing proceeding for a commercial uranium enrichment facility (NRC 2005a,b,c,d and 2006a,b). The site-specific EISs stated that the disposal facility (or facilities) would be (1) selected in a manner consistent with DOE policies and orders, and (2) authorized or licensed to receive the conversion products by DOE (in conformance with DOE orders), the NRC (in conformance with NRC regulations), or an NRC agreement state agency (in conformance with state laws and regulations determined to be equivalent to NRC regulations).

DOE is now proposing to amend the site-specific RODs to decide that the depleted uranium oxide conversion product may be disposed of at either the NTS or the EnergySolutions low-level waste disposal facilities. Accordingly, DOE has prepared the draft SA that is the subject of this Notice. All other aspects of the depleted UF_6 conversion program remain as previously described in the site-specific EISs and RODs.

The draft SA identifies no significant new circumstances or information relevant to environmental concerns that bear on DOE's decisions on disposal locations or the impacts of those decisions. Since issuance of the two site-specific UF_6 conversion facility final EISs, the following circumstances have changed. In May 2006, a contract was signed with Solvay Fluorides, a commercial vendor, for purchase of the HF co-product. On June 2, 2006, the NRC issued an order that determined that the Envirocare (now EnergySolutions) site near Clive, Utah, appears to be suitable for near-term disposal of depleted uranium. The transportation campaign has been slightly modified to include more cylinders per railcar with fewer shipments per year. Impacts from the modified campaign for both operations and accident scenarios are projected to be about the same as those presented in the site-specific EISs.

DOE believes, based on the analysis in the draft SA, that disposal at either NTS or EnergySolutions low-level waste disposal facilities are reasonable alternatives. Regarding the alternative of disposal at the EnergySolutions facility, DOE believes that adequate NEPA documentation exists to support disposal of any unused depleted uranium oxide conversion product as well as for emptied UF_6 cylinders that would be used for disposal containers and the small quantity of CaF_2 that would be generated during the conversion process. With respect to NTS low-level waste facility, the draft SA analyses show that there is adequate NEPA coverage for all actions leading up to delivery at the NTS and that site-specific NEPA coverage at the NTS is adequate for disposal of up to 60,000 m^3 of unused depleted uranium oxide conversion product. Furthermore, upcoming reviews of the NTS site-wide EIS will evaluate disposal of additional uranium oxide conversion product volumes at NTS. Accordingly, DOE believes that a supplemental EIS (or an environmental assessment) is not needed to support amending the site-specific RODs to address disposal of the depleted uranium oxide conversion product.

DOE plans to issue amended RODs under the conversion facility EISs no sooner than 30 days after issuance of the final SA. DOE will consider all public comments on the draft SA submitted by May 18, 2007.

Issued in Washington, DC, March 27, 2007.

Mark W. Frei,

Deputy Assistant Secretary for Program Planning and Budget.

[FR Doc. E7–6039 Filed 4–2–07; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Notice of Extension of Time to Submit Scoping Comments on the Programmatic Environmental Impact Statement for the Global Nuclear Energy Partnership

AGENCY: Office of Nuclear Energy, U.S. Department of Energy.

ACTION: Notice of extension of time to submit scoping comments.

SUMMARY: In response to public requests, the Department of Energy (DOE) announces an extension of time to submit comments on the proposed scope, alternatives, and environmental issues to be analyzed in the Programmatic Environmental Impact Statement for the Global Nuclear Energy Partnership (GNEP PEIS). This date has been extended to June 4, 2007, thereby giving an additional 61 days to provide comments.

ADDRESSES: Please direct comments, suggestions, or relevant information on the GNEP PEIS to: Mr. Timothy A. Frazier, GNEP PEIS Document Manager, Office of Nuclear Energy, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585–0119; Telephone: 866–645–7803, Fax: 866–645–7807, e-mail to: *GNEP-PEIS@nuclear.energy.gov.* Please mark envelopes, faxes, and e-mails: ''GNEP PEIS Comments.'' Additional information on GNEP may be found at *http://www.gnep.energy.gov.*

FOR FURTHER INFORMATION CONTACT: For general information on DOE's National Environmental Policy Act (NEPA) process, please contact: Ms. Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance, GC–20, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585–0103, 202–586–4600, or by leaving a message at 1–800–472–2756. Additional information regarding DOE's NEPA activities is available on the DOE NEPA Web site at *http://www.eh.doe.gov/nepa.* This notice is available at *http://www.eh.doe.gov/nepa* and *http://www.gnep.energy.gov.*

SUPPLEMENTARY INFORMATION: On January 4, 2007, DOE published a Notice of Intent (NOI) (72 FR 331) to prepare the GNEP PEIS pursuant to the National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321 *et seq.*, and the Council on Environmental Quality's (CEQ's) and DOE's regulations implementing NEPA, 40 CFR parts 1500–1508 and 10 CFR part 1021, respectively. With the publication of the NOI, DOE began the PEIS scoping period and invited Federal, state, and local governments, Native American Tribes, industry, other organizations, and the public to provide comments on the proposed scope, alternatives, and environmental issues to be analyzed in the GNEP PEIS. In response to public requests, DOE is now extending the time for submittal of scoping comments an additional 61 days from April 4, 2007, to June 4, 2007. DOE will consider all comments received during the scoping period in preparing the GNEP PEIS. Late comments will be considered to the extent practicable.

Issued in Washington, DC, on March 29, 2007.

Dennis R. Spurgeon,

Assistant Secretary for Nuclear Energy.

[FR Doc. E7–6175 Filed 4–2–07; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Energy Information Administration

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Energy Information Administration (EIA), Department of Energy (DOE).

ACTION: Agency Information Collection Activities: Proposed Collection; Comment Request.

SUMMARY: The EIA is soliciting comments on the proposed revision and three-year extension to the following EIA Forms:

• EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey.''

• EIA–63B, ''Annual Photovoltaic Module/Cell Manufacturers Survey.''

• EIA–902, ''Annual Geothermal Heat Pump Manufacturers Survey.''

DATES: Comments must be filed by June 4, 2007. If you anticipate difficulty in submitting comments within that period, contact the person listed below as soon as possible.

ADDRESS: Send comments to Fred Mayes. To ensure receipt of the comments by the due date, submission by FAX (202–287–1964) or e-mail *fred.mayes@eia.doe.gov* is recommended. The mailing address is Energy Information Administration, EI–52, Forrestal Building, U.S. Department of Energy, Washington, DC 20585. Alternatively, Fred Mayes may be contacted by telephone at 202–287–1750.

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of any forms and instructions should be directed to Fred Mayes at the address listed above.

SUPPLEMENTARY INFORMATION:

I. Background
II. Current Actions
III. Request for Comments

I. Background

The Federal Energy Administration Act of 1974 (Pub. L. 93–275, 15 U.S.C. 761 *et seq.*) and the DOE Organization Act (Pub. L. 95–91, 42 U.S.C. 7101 *et seq.*) require the EIA to carry out a centralized, comprehensive, and unified energy information program. This program collects, evaluates, assembles, analyzes, and disseminates information on energy resource reserves, production, demand, technology, and related economic and statistical information. This information is used to assess the adequacy of energy resources to meet near and longer term domestic demands.

The EIA, as part of its effort to comply with the Paperwork Reduction Act of 1995 (Pub. L. 104–13, 44 U.S.C. 3501, *et seq.*), provides the general public and other Federal agencies with opportunities to comment on collections of energy information conducted by or in conjunction with the EIA. Any comments received help the EIA to prepare data requests that maximize the utility of the information collected, and to assess the impact of collection requirements on the public. Also, the EIA will later seek approval by the Office of Management and Budget (OMB) under Section 3507(a) of the Paperwork Reduction Act of 1995.

Form EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey,'' collects information on the distribution of solar thermal panels by manufacturers; Form EIA–63B, ''Annual Photovoltaic Module/Cell Manufacturers Survey,'' collects information on the distribution by manufacturers of photovoltaic (PV) cells/modules; and Form EIA–902, ''Annual Geothermal Heat Pump Manufacturers Survey,'' collects information on distribution of geothermal heat pumps by manufacturers. Specifically, all forms collect information on manufacturing, imports, exports, and shipments. The EIA has been collecting the above information annually and proposes to continue the surveys. The data collected will be disseminated in electronic products and electronic data files for use by government and private sector analysts. For details on EIA's renewables information program, please visit the renewable and alternative fuels page of EIA's Web site at *http://www.eia.doe.gov/fuelrenewable.html.*

II. Current Actions

EIA proposes to collect information on Forms EIA–63A, EIA–63B, and EIA–902 using EIA's Internet Data Collection (IDC) system as the primary mode for reporting information. Survey respondents must provide an e-mail address to EIA to receive instructions on the procedures for submitting information electronically. The IDC system utilizes secure socket layer software to encrypt and protect the information transmitted between a respondent and EIA. All software that is necessary to report electronically is provided by EIA at no cost to the respondents. Respondents need to register one time with EIA and receive a mailing identification and code prior to reporting electronically.

The EIA has completed an extensive review and update of the renewable survey collection instruments. The objective of the review is to provide a standardized survey instrument and unified data collection approach for all three renewable forms. All three forms collect information from manufacturers of renewable energy equipment. The proposed forms revision is the result of efforts, which includes input from the renewable energy industry, other industry users of the data, government agencies, consumer groups, and private sector analysts. EIA will be requesting approval for its revisions and a three-year extension for its renewable surveys with the following proposed survey changes.

Form EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey.''

The EIA proposes the following revisions, additions, and deletions to harmonize the data requested across the three surveys.

(1) *Addition:* Item 3.1 (a) Collector Manufacturing.

(2) *Addition:* Item 4.3 Average Thermal Performance Rating of Collector.

(3) *Revision:* Item 4.3 Market Sector becomes Item 4.4 Domestic Shipments by Sector.

• Collect domestic shipments by sector instead of total shipments by sector.

• Change the sector headings from Residential, Commercial, Industrial, Utility, and Other to Residential, Commercial, Industrial, Electric Power, and Transportation.

(4) *Revision/Deletion:* Item 4.4 End Use becomes Item 4.5 Domestic Shipments by End Use.

• Collect only domestic shipments by end use instead of domestic and foreign shipments by end use as the total number of shipments.

• Delete ''other'' end use type category under Item 4.4.8 Other (describe).

(5) *Revision/Deletion:* Item 4.9 becomes Item 4.10. Delete the seller type category Item 4.9 (f) Other (describe).

Form EIA–63B, ''Annual Photovoltaic Modules/Cells Manufacturers Survey.''

The EIA proposes the following revisions, additions, and deletions to harmonize the data requested across the three surveys.

(1) *Addition:* Item 3.4 What percentage of your company's total sales

volume do photovoltaic-related activities compose?

(2) *Addition:* Item 4.3 Energy Conversion Efficiency.

(3) *Revision:* Item 4.4 Domestic Shipments by Sector.

• Collect only domestic shipments by sector instead of domestic and foreign shipments by sector as the total number of shipments.

• Change the sector headings from Residential, Commercial, Industrial, Utility, and Other to Residential, Commercial, Industrial, Electric Power, and Transportation.

(4) *Revision/Deletion:* Item 4.3 End Use becomes Item 4.5 Domestic Shipments by End Use.

• Collect only domestic shipments by end use instead of domestic and foreign shipments by end use as the total number of shipments.

• Delete ''Other'' as an end use category.

(5) *Revision/Deletion:* Item 4.9 becomes Item 4.10. Delete the seller type Item 4.9 (g) Other (describe).

(6) *Addition:* Item 6.1 Shipments by Origin.

(7) *Addition:* Item 6.2 Shipments by Destination.

Form EIA–902, ''Annual Geothermal Heat Pump Manufacturers Survey.''

The EIA proposes the following revisions, additions, and deletions to be consistent with the data elements collected across the three surveys.

(1) *Addition:* Item 2.0 Manufacturing Status.

• Collect the same Manufacturing Status information as collected on Form EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey,'' and Form EIA–63B, ''Annual Photovoltaic Modules/Cells Manufacturers Surveys.''

(2) *Addition:* Item 3.0 Manufacturer and Marketing Data.

• Collect the same Manufacturer and Marketing data as collected on Form EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey,'' and Form EIA–63B, ''Annual Photovoltaic Modules/Cells Manufacturers Surveys.''

(3) *Revision/Addition/Deletion:* Item 4.0 Geothermal Heat Pump Shipment Data.

• Category headings in section 2.0 ''Shipments In Calendar Year,'' have been moved to Section 4.0 on the new proposed form. Specifically, ''Total Shipments by Type of Heat Pump'' is moved to Item 4.1, ''Number of Heat Pumps;'' ''Total Rated Capacity'' is moved to Item 4.2, ''Total GHP Shipments (total rated capacity in tons);'' ''Average Cooling Efficiency (EER)'' is moved to Item 4.4, ''Average Cooling Efficiency (EER);'' and ''Average Heating Efficiency (COP)'' is moved to Item 4.5, ''Average heating Efficiency (COP).''

• Addition: Item 4.3 Total Value of GHP Shipments (dollars).

• Item 5.0 ''Domestic Shipments by Sector is moved to Item 4.6 and the rows and columns are transposed.''

• Add Item 4.7 Domestic Shipment by End Use.

• Add Item 4.8 Imports.

• Add Item 4.9 Exports.

• Add Item 4.10 List of Country (ies) of Origin of Imports to collect the same information as on Form EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey,'' and Form EIA–63B, ''Annual Photovoltaic Modules/Cells Manufacturers Surveys.''

• Add Item 4.11 List of Country (ies) of Destination for Exports to collect the same information as on Form EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey,'' and Form EIA–63B, ''Annual Photovoltaic Modules/Cells Manufacturers Surveys.''

• Move preceding Item 4.0 Domestic Shipments by Customer Type to proposed Item 4.12 Shipments by Customer Type.

(4) *Addition:* Item 5.0 Systems Data.

• Add a new Item 5.0 ''Systems Data to collect the same information as collected on Form EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey,'' and Form EIA–63B, ''Annual Photovoltaic Modules/Cells Manufacturers Surveys.''

(5) *Revision/Deletion:* Item 6.0 Geographic Data.

• Item 3.0 ''Shipments by Destination is moved to Item 6.2 of the proposed revised form and the three column headings ''ARI–320, ARI–325/330, and Other (Non-ARI Rated GHPs)'' are collapsed into a single column heading. Item 6.1 was added to collect the same geographic information regarding imports as on Form EIA–63A, ''Annual Solar Thermal Collector Manufacturers Survey,'' and Form EIA–63B, ''Annual Photovoltaic Modules/Cells Manufacturers Surveys.''

III. Request for Comments

Prospective respondents and other interested parties should comment on the actions discussed in item II. The following guidelines are provided to assist in the preparation of comments. Please indicate to which form(s) your comments apply.

General Issues

A. Is the proposed collection of information necessary for the proper performance of the functions of the agency and does the information have practical utility? Practical utility is defined as the actual usefulness of information to or for an agency, taking into account its accuracy, adequacy, reliability, timeliness, and the agency's ability to process the information it collects.

B. What enhancements can be made to the quality, utility, and clarity of the information to be collected?

As a Potential Respondent to the Request for Information

A. What actions could be taken to help ensure and maximize the quality, objectivity, utility, and integrity of the information to be collected?

B. Are the instructions and definitions clear and sufficient? If not, which instructions need clarification?

C. Can the information be submitted by the due date?

D. Public reporting burden for this collection is estimated to average 3.25 hours per response for Form EIA–63A, 3.25 hours per response for Form EIA–63B, and 3.25 hours per response for Form EIA–902. The estimated burden includes the total time necessary to provide the requested information. In your opinion, how accurate is this estimate?

E. The agency estimates that the only cost to a respondent is for the time it will take to complete the collection. Will a respondent incur any start-up costs for reporting, or any recurring annual costs for operation, maintenance, and purchase of services associated with the information collection?

F. What additional actions could be taken to minimize the burden of this collection of information? Such actions may involve the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

G. Does any other Federal, State, or local agency collect similar information? If so, specify the agency, the data element(s), and the methods of collection.

As a Potential User of the Information To Be Collected

A. What actions could be taken to help ensure and maximize the quality, objectivity, utility, and integrity of the information disseminated?

B. Is the information useful at the levels of detail to be collected?

C. For what purpose(s) would the information be used? Be specific.

D. Are there alternate sources for the information and are they useful? If so, what are their weaknesses and/or strengths?

Comments submitted in response to this notice will be summarized and/or included in the request for OMB

approval of the form. They also will become a matter of public record.

Statutory Authority: Sections 3506(c)(2) and 3507(a) of the Paperwork Reduction Act of 1995 (Pub. L. 104–13, 44 U.S.C. 3501, *et seq.*)

Issued in Washington DC, March 27, 2007.

Jay H. Casselberry,

Agency Clearance Officer, Energy Information Administration.

[FR Doc. E7–6123 Filed 4–2–07; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RP07–361–000]

El Paso Natural Gas Company; Notice of Tariff Filing and Firm Transportation Service Agreements

March 28, 2007.

Take notice that on March 26, 2007, El Paso Natural Gas Company (El Paso) tendered for filing as part of its FERC Gas Tariff, Second Revised Volume No. 1A, Fifteenth Revised Sheet No. 2 to become effective April 26, 2007.

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 and 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 in accordance with the provisions of Section 154.210 of the Commission's regulations (18 CFR 154.210). Anyone filing an intervention or protest must serve a copy of that document on the Applicant. Anyone filing an intervention or protest on or before the intervention or protest date need not 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 online 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.

Philis J. Posey,

Acting Secretary.

[FR Doc. E7–6105 Filed 4–2–07; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RP07–182–001]

Honeoye Storage Corporation; Notice of Proposed Substitute Change in FERC Gas Tariff

March 28, 2007.

Take notice that on March 26, 2007, Honeoye Storage Corporation (Honeoye) tendered for filing as part of its FERC Gas Tariff, First Revised Volume 1A, four (4) substitute revised tariff sheets to be effective April 1, 2007. The substitute revised tariff sheets are designated as:

Substitute First Revised Sheet No. 74
Substitute Original Sheet No. 99A
Substitute First Revised Sheet No. 100
Substitute Second Revised Sheet No. 106

Honeoye states that copies of the filing are being mailed to those parties who have filed motions to intervene in this proceeding.

Any person desiring to protest this filing must file in accordance with Rule 211 of the Commission's Rules of Practice and Procedure (18 CFR 385.211). Protests to this filing 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. Such protests must be filed in accordance with the provisions of Section 154.210 of the Commission's regulations (18 CFR 154.210). Anyone filing a protest must serve a copy of that document on all the parties to the proceeding.

The Commission encourages electronic submission of protests 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 to the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426.

This filing is accessible online 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.

Philis J. Posey,

Acting Secretary.

[FR Doc. E7–6104 Filed 4–2–07; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

March 28, 2007.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER99–845–011.

Applicants: Puget Sound Energy, Inc.

Description: Puget Sound Energy, Inc submits notice of change in status, pursuant to the requirements of Order 652.

Filed Date: 03/23/2007.

Accession Number: 20070327–0243.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER99–2602–007.

Applicants: LSP-Kendall Energy, LLC.

Description: LSP-Kendall Energy, LLC submits its updated triennial market power analysis.

Filed Date: 03/26/2007.

Accession Number: 20070327–0196.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER99–4102–006.

Applicants: Milford Power Company, LLC.

Description: Milford Power Company, LLC submits a notice of change in status that the Commission relied upon to grant them market-based rate authority.

Filed Date: 03/26/2007.

Accession Number: 20070327–0195.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER05–89–008; ER95–1528–015; ER96–1088–042; ER01–2659–009; ER02–2199–007; ER03–54–007; ER03–56–007; ER96–1858–020; ER03–674–009; ER99–1936–008; ER01–1114–008; ER01–2306–002; ER97–2758–015.

Applicants: Wisconsin Public Service Corporation; WPS Power Development, LLC and WPS Energy Services, Inc.; Combined Locks Energy Center, LLC; WPS Empire State, Inc.; WPS Beaver Falls Generation, LLC; WPS Syracuse Generation, LLC; Mid-American Power, LLC; Quest Energy, LLC; WPS Canada Generation, Inc and WPS New England Generation, Inc.; WPS Westwood Generation, LLC; Peoples Energy Services Corporation; Advantage Energy, Inc., Upper Peninsula Power Company.

Description: Integrys Energy Group Inc on behalf of its subsidiaries submits a notice of change in status as set forth in the Commission's Order 652.

Filed Date: 03/23/2007.

Accession Number: 20070327–0153.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER06–1410–002; ER06–1411–002.

Applicants: Entergy Nuclear Palisades, LLC; Entergy Nuclear Power Marketing, LLC.

Description: Entergy Nuclear Palisades, LLC et al. submits revised pages to their tariff to remove references to the sale of ancillary services in the Midwest ISO market area.

Filed Date: 03/23/2007.

Accession Number: 20070327–0154.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER07–314–002.

Applicants: Southwest Power Pool, Inc.

Description: Southwest Power Pool, Inc submits its partially executed revised Network Integration Transmission Service Agreement with American Electric Power Service Corp agent for Public Service Company of Oklahoma.

Filed Date: 03/26/2007.

Accession Number: 20070327–0198.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–419–001.

Applicants: PJM Interconnection L.L.C.

Description: PPL Electric Utilities Corp responds to FERC's 2/22/07 letter that requested additional information re the 1/8/07 filing of Third Revised Service Agreement 941 with Metropolitan Edison Company.

Filed Date: 03/26/2007.

Accession Number: 20070327–0191.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–575–001.

Applicants: MidAmerican Energy Company.

Description: MidAmerican Energy Company submits copies of the Network Integration Transmission Service Agreement & Network Operating Agreement, designated as First Revised Service Agreement 117.

Filed Date: 03/26/2007.

Accession Number: 20070328–0074.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–649–000.

Applicants: EL Segundo Power II, LLC.

Description: El Segundo Power II, LLC submits an application for market based rate authority and associated waivers and blanket approvals.

Filed Date: 03/23/2007.

Accession Number: 20070327–0157.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER07–650–000.

Applicants: Integrys Energy Services, Inc.

Description: Integrys Energy Services of New York, Inc submits a notice of succession informing FERC that WPS Energy services, Inc has changed its name to Integrys Energy Services, Inc.

Filed Date: 03/23/2007.

Accession Number: 20070327–0156.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER07–651–000.

Applicants: Integrys Energy Services of New York, Inc.

Description: Integrys Energy Services of New York, Inc submits notice of succession informing FERC that Advantage Energy, Inc has changed its name to Integrys Energy Services of New York, Inc.

Filed Date: 03/23/2007.

Accession Number: 20070327–0155.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER07–652–000.

Applicants: Niagara Mohawk Power Corporation.

Description: Niagara Mohawk Power Corp dba National Grid submits its Original Service Agreement 929 with Hampshire Paper Co, Inc under NYISO's OATT, FERC Electric Tariff, Original Volume 1.

Filed Date: 03/23/2007.

Accession Number: 20070327–0182.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER07–653–000.

Applicants: The United Illuminating Company.

Description: The United Illuminating Co request for approval of incentive rate treatment for costs associated w/ construction of a new 345–kV transmission line and upgrades to the existing 115-kV line from Middletown to Norwalk, Connecticut.

Filed Date: 03/23/2007.

Accession Number: 20070327–0245.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER07–654–000.

Applicants: Southern Company Services, Inc.

Description: Southern Company Services as agent for Mississippi Power Co submits a Notice of Cancellation of Interconnection Agreement by and between KGen Enterprise LLC and Mississippi Power etc.

Filed Date: 03/26/2007.

Accession Number: 20070327–0158.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–655–000.

Applicants: ISO New England Inc.

Description: ISO New England Inc submits materials which identify the monthly Installed Capacity Requirements established by the ISO for the 2007/2008 Power.

Filed Date: 03/23/2007.

Accession Number: 20070327–0159.

Comment Date: 5 p.m. Eastern Time on Friday, April 13, 2007.

Docket Numbers: ER07–656–000.

Applicants: CMT Fund IX LLC.

Description: CMT Fund IX LLC submits an application for authority to sell electric power and related services at market based rates.

Filed Date: 03/26/2007.

Accession Number: 20070327–0160.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–657–000.

Applicants: Westar Energy, Inc.

Description: Westar Energy, Inc submits notice of cancellation of an Electric Power Supply Agreement with the City of Minneapolis, Kansas designated as First Revised FERC Rate Schedule 211.

Filed Date: 03/26/2007.

Accession Number: 20070327–0197.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–658–000.

Applicants: Williams Power Company, Inc.

Description: Williams Power Co, Inc submits its proposed FERC Electric Rate Schedule 2 and supporting cost data.

Filed Date: 03/26/2007.

Accession Number: 20070327–0194.

Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–659–000.

Applicants: Westar Energy, Inc.

Description: Westar Energy, Inc submits notice of cancellation of an Electric Power Supply Agreement w/the City of Hillsboro, Kansas, designated as First Revised FERC Rate Schedule 234.

Filed Date: 03/26/2007.

Accession Number: 20070328–0077.
Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–660–000.
Applicants: Westar Energy, Inc.
Description: Westar Energy, Inc submits Notice of Cancellation of an Electric Power Supply Agreement with the City of Sabetha, Kansas designated as First Revised Rate Schedule 235.
Filed Date: 03/26/2007.
Accession Number: 20070328–0075.
Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–661–000.
Applicants: Westar Energy, Inc.
Description: Westar Energy, Inc submits Notice of Cancellation of an Electric Power Supply Agreement with the City of Holton, Kansas designated as First Revised Rate Schedule FERC 226.
Filed Date: 03/26/2007.
Accession Number: 20070328–0076.
Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Docket Numbers: ER07–662–000.
Applicants: PJM Interconnection, LLC.
Description: PJM Interconnection LLC submits a signature page to the PJM Consolidated Transmission Owners Agreement executed by Neptune Regional Transmission System LLC and a revised Attachment A to the TOA.
Filed Date: 03/27/2007.
Accession Number: 20070328–0072.
Comment Date: 5 p.m. Eastern Time on Tuesday, April 17, 2007.

Docket Numbers: ER07–664–000.
Applicants: Conectiv Energy Supply, Inc.
Description: Conectiv Energy Supply, Inc submits their request to make wholesale power sales to its affiliate, Delmarva Power & Light Co.
Filed Date: 03/27/2007.
Accession Number: 20070328–0168.
Comment Date: 5 p.m. Eastern Time on Tuesday, April 17, 2007.

Docket Numbers: ER07–667–000.
Applicants: Xcel Energy Operating Companies.
Description: Xcel Energy Services Inc on behalf of Public Service Company of Colorado submits proposed corrections to the previously filed revisions to the Substitute First Revised Sheet 325.
Filed Date: 03/26/2007.
Accession Number: 20070328–0073.
Comment Date: 5 p.m. Eastern Time on Monday, April 16, 2007.

Take notice that the Commission received the following public utility holding company filings:

Docket Numbers: PH07–9–000.
Applicants: CNG Holdings, Inc.
Description: CNG Holdings Inc. submits *FERC Form 65 A Exemption Notification.*
Filed Date: 03/16/2007.
Accession Number: 20070316–5058.
Comment Date: 5 p.m. Eastern Time on Friday, April 06, 2007.

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 dockets(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.

Philis J. Posey,

Acting Secretary.

[FR Doc. E7–6107 Filed 4–2–07; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No 77–162]

Pacific Gas and Electric Company; Notice of Availability of Environmental Assessment

March 28, 2007.

In accordance with the National Environmental Policy Act of 1969 and the Federal Energy Regulatory Commission (Commission or FERC) regulations contained in the Code of Federal Regulations (CFR) (18 CFR part 380 [FERC Order No. 486, 52 FR 47897]), the Office of Energy Project's staff (staff) reviewed a proposal to amend the license for the Potter Valley Project, to allow a temporary variance in license required flows for frost protection in Potter Valley for the period March 15–April 14, 2007, and prepared an environmental assessment (EA) for this proposed amendment. In this EA, staff analyzes the impacts of the temporary change in flows on the environmental resources, including fisheries resources of the project area and the protection against economic loss to agricultural interests in Potter Valley. The EA concludes that the proposed action will not constitute a major federal action significantly affecting the human environment.

A copy of the EA is attached to Commission order titled ''Order Granting License Amendment, and Providing Notice and Opportunity to Intervene and Comment'', issued March 21, 2007 and is available for review at the Commission in the Public Reference Room, located at 888 First Street, NE., Room 2A, Washington, DC 20426, 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 field to access the document. For assistance, call toll-free 1–866–209–3676 or e-mail *FERCOnlineSupport@ferc.gov.* For TTY, call (202) 502–8659.

Philis J. Posey,

Acting Secretary.

[FR Doc. E7–6103 Filed 4–2–07; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP07–90–000]

Tres Palacios Gas Storage LLC; Notice of Intent To Prepare an Environmental Assessment for the Proposed Tres Palacios Gas Storage Project and Request for Comments on Environmental Issues

March 28, 2007.

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 Tres Palacios Gas Storage Project involving construction and operation of a new salt dome cavern gas storage project and pipelines by Tres Palacios Gas Storage LLC (Tres Palacios) in Matagorda and Wharton Counties, Texas.[1] This EA will be used by the Commission in its decision-making process to determine whether the project is in the public convenience and necessity.

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 (Tres Palacios) 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 (*http://www.ferc.gov*).

Summary of the Proposed Project

Tres Palacios is proposing to provide a total of about 36.04 billion cubic feet (Bcf) of storage capacity, supported by about 17.95 Bcf of cushion gas capacity, and be capable of injecting gas at maximum rate of 1.0 Bcf per day and withdrawing and delivering gas at a maximum rate of 2.5 Bcf per day. Tres Palacios seeks authority to undertake the following construction-related activities in Texas:

- Convert three existing solution-mined caverns in Matagorda County that were previously used for brine production;
- Drill a second well into each of the three solution-mined caverns in Matagorda County to support gas injections and withdrawals;
- Construct a gas handling facility in Matagorda County consisting of ten 4,800-horsepower natural gas-engine driven compressors;
- Construct a pipeline header system consisting of: North Pipeline Corridor—a 30.3-mile-long segment of dual 24-inch-diameter pipeline in Matagorda and Wharton Counties and a second 0.7 mile-long segment of single 24-inch-diameter pipeline in Wharton County; and South Pipeline Corridor—a 6.4-mile-long segment of dual 24-inch-diameter pipeline and a second 4.4-mile-long segment of single 24-inch-diameter pipeline in Matagorda County;
- Construct eight meter and regulator stations and ten interconnect facilities in Matagorda and Wharton Counties; and
- Construct eight main line block valves in Matagorda and Wharton Counties.

Tres Palacios would connect its pipeline header system with Valero Natural Gas Pipe Line Company, Tennessee Gas Pipeline Company, Transcontinental Gas Pipe Line Corporation, Natural Gas Pipeline Company of America, Gulf South Pipeline Company, LP, Crosstex Gulf Coast Transmission Company, LLC, Kinder Morgan Tejas Pipeline, L.P., Florida Gas Transmission Company, LLC, Channel Pipeline Company, and Texas Eastern Transmission, L.P.

The location of the project facilities is shown in Appendix 1.[2]

Land Requirements for Construction

Construction of the proposed facilities would require about 498.2 acres of land. Following construction, about 174.7 acres would be maintained as new aboveground facility sites and permanent rights-of-way. The remaining 323.5 acres of land would be restored and allowed to revert to its former use.

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[3] 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

[1] Tres Palacios' application was filed with the Commission under Section 7 of the Natural Gas Act.

[2] 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.

[3] ''We'', ''us'', and ''our'' refer to the environmental staff of the Office of Energy Projects (OEP).

instructions in the public participation section below.

Public Participation

You can make a difference by providing us with your specific comments or concerns about the project. By becoming a commentor, your concerns will be addressed in the EA and considered by the Commission. You should focus on the potential environmental effects of the proposal, alternatives to the proposal, and measures to avoid or lessen environmental impact. The more specific your comments, the more useful they will be. Please carefully follow these instructions to ensure that your comments are received in time and properly recorded:

• Send an original and two copies of your letter to: Philis Posey, Acting 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.

• Reference Docket No. CP07–90–000.

• Mail your comments so that they will be received in Washington, DC on or before April 30, 2007.

The Commission strongly encourages electronic filing of any comments or interventions or protests to this proceeding. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site at *http://www.ferc.gov* under the ''e-Filing'' link and the link to the User's Guide. Before you can file comments you will need to create a free account which can be created on-line.

We may mail the EA for comment. If you are interested in receiving it, 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, or ''intervenor''. 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). Intervenors have the right to seek rehearing of the Commission's decision. Motions to Intervene should be electronically submitted using the Commission's eFiling system at *http://www.ferc.gov.* Persons without Internet access should send an original and 14 copies of their motion to the Secretary of the Commission at the address indicated previously. Persons filing Motions to Intervene on or before the comment deadline indicated above must send a copy of the motion to the Applicant. All filings, including late interventions, submitted after the comment deadline must be served on the Applicant and all other intervenors identified on the Commission's service list for this proceeding. Persons on the service list with e-mail addresses may be served electronically; others must be served a hard copy of the filing.

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 environmental comments considered.

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 above-ground 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.

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.

Philis J. Posey,

Acting Secretary.

[FR Doc. E7–6101 Filed 4–2–07; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 12628–001]

The City of Nashua, IA; Notice of Intent To File License Application, Filing of Pre-Application Document, and Approving Use of the Traditional Licensing Process

March 28, 2007.

a. *Type of Filing:* Notice of Intent to File License Application and Request to Use the Traditional Licensing Process.

b. *Project No.:* 12628–001.

c. *Dated Filed:* January 18, 2007.

d. *Submitted By:* The City of Nashua, Iowa.

e. *Name of Project:* Cedar Lake Dam Hydroelectric Project.

f. *Location:* The project would be located at the existing Cedar Lake Dam, on the Cedar River, in Chickasaw County, Iowa. The project would not occupy any Federal land.

g. *Filed Pursuant to:* 18 CFR 5.3 of the Commission's regulations.

h. *Potential Applicant Contact:* Ms. Rebecca Neal, The City of Nashua, 402 Main Street, Nashua, IA 50658; (641) 435–4156.

i. *FERC Contact:* Michael Watts, (202) 502–6123, or *michael.watts@ferc.gov.*

j. The City of Nashua filed its request to use the Traditional Licensing Process on January 18, 2007. The City of Nashua provided public notice of its request on January 31, 2007. In a letter dated March 23, 2007, the Director of the Office of Energy Projects approved the City of Nashua's request to use the Traditional Licensing Process.

k. With this notice, we are initiating informal consultation with: (a) The U.S. Fish and Wildlife Service under section 7 of the Endangered Species Act; and (b) the Iowa State Historic Preservation Officer, as required by section 106, National Historical Preservation Act, and the implementing regulations of the Advisory Council on Historic Preservation at 36 CFR 800.2.

l. The City of Nashua filed a Pre-Application Document (PAD; including

a proposed process plan and schedule) with the Commission, pursuant to 18 CFR 5.6 of the Commission's regulations.

m. A copy of the PAD is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site (*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 Online Support at *FERCOnlineSupport@ferc.gov* or toll free at 1–866–208–3676, or for TTY, (202) 502–8659. A copy is also available for inspection and reproduction at the address in paragraph h.

Register online at *http://ferc.gov/esubscribenow.htm* to be notified via e-mail of new filing and issuances related to this or other pending projects. For assistance, contact FERC Online Support.

Philis J. Posey,

Acting Secretary.

[FR Doc. E7–6102 Filed 4–2–07; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[OH–164–1; FRL–8294–5]

Adequacy Status of the Dayton-Springfield, OH, Submitted 8-Hour Ozone Redesignation and Maintenance Plan for Transportation Conformity Purposes

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of adequacy.

SUMMARY: In this notice, EPA is notifying the public that we have found that the motor vehicle emissions budgets (MVEBs) for 8-hour ozone in Dayton-Springfield (Clark, Greene, Miami, and Montgomery Counties), Ohio-which were submitted as part of a redesignation request and maintenance plan for this area-are adequate for conformity purposes. As a result of our finding, Dayton-Springfield must use the MVEBs from the submitted 8-hour ozone redesignation and maintenance plan for future conformity determinations.

DATES: This finding is effective April 18, 2007.

FOR FURTHER INFORMATION CONTACT: Anthony Maietta, Life Scientist, Criteria Pollutant Section (AR–18J), Air Programs Branch, Air and Radiation Division, United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8777, *Maietta.anthony@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, whenever ''we'', ''us'' or ''our'' is used, we mean EPA.

Background

Today's action is simply an announcement of a finding that we have already made. EPA Region 5 sent a letter to the Ohio Environmental Protection Agency on February 9, 2007, stating that the 2005 and 2018 MVEBs in the Dayton-Springfield area are adequate. Ohio submitted the budgets as part of the 8-hour ozone redesignation request and maintenance plan for this area. This submittal was announced on EPA's conformity Web site, and received no comments: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm,* (once there, click on ''What SIP submissions are currently under EPA adequacy review?'').

The 2005 and 2018 MVEBs, in tons per day (tpd), for volatile organic compounds (VOC) and oxides of nitrogen (NO_X) for Dayton-Springfield are as follows:

	2005 MVEB (tpd)	2018 MVEB (tpd)
VOC	29.19	14.73
NO_X	63.88	21.42

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 State Implementation Plan (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 emission 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.

The finding and the response to comments are available at EPA's conformity Web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm.*

Authority: 42 U.S.C. 7401–7671q.

Dated: March 21, 2007.

Gary Gulezian,

Acting Regional Administrator, Region 5.

[FR Doc. E7–6148 Filed 4–2–07; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[OH–165–1; FRL–8294–7]

Adequacy Status of the Parkersburg, Steubenville-Weirton, Lima, Wheeling, and Canton, OH, Submitted 8-Hour Ozone Redesignation and Maintenance Plans for Transportation Conformity Purposes

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of adequacy.

SUMMARY: In this action, EPA is notifying the public that EPA has found that the motor vehicle emissions budgets (MVEBs) for 8-hour ozone for five areas in the State of Ohio, submitted as part of the redesignation and maintenance plans for these areas, are adequate for conformity purposes. As a result of our finding, the Parkersburg (Washington County), Steubenville-Weirton (Jefferson County), Lima (Allen County), Wheeling (Belmont County), and Canton (Stark County) areas must use the MVEBs from the submitted 8-hour ozone redesignation and maintenance plans for future conformity determinations.

DATES: This finding is effective April 18, 2007.

FOR FURTHER INFORMATION CONTACT: Anthony Maietta, Life Scientist, Criteria Pollutant Section (AR–18J), Air Programs Branch, Air and Radiation Division, United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8777, *Maietta.anthony@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, whenever ''we'', ''us'' or ''our'' is used, we mean EPA.

Background

Today's action is simply an announcement of findings that we have already made. On December 28, 2006,

EPA Region 5 sent a letter to the Ohio Environmental Protection Agency (OEPA) stating that the 2009 and 2018 MVEBs in the Steubenville-Weirton area are adequate. EPA Region 5 sent letters to OEPA on January 22, 2007, stating that the 2009 and 2018 MVEBs in the Parkersburg, Lima, Wheeling, and Canton areas are adequate. Ohio submitted the budgets as part of the 8-hour ozone redesignation requests and maintenance plans for these areas. The submittals were announced on EPA's conformity website, and received no comments: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm,* (once there, click on ''What SIP submissions are currently under EPA adequacy review?'').

The 2009 and 2018 MVEBs, in tons per day, for volatile organic compounds (VOC) for these areas are as follows:

Area	2009	2018
Parkersburg	2.59	1.67
Steubenville-Weirton	2.63	1.37
Lima	5.08	2.89
Wheeling	2.60	1.52
Canton	10.02	5.37

The 2009 and 2018 MVEBs, in tons per day, for oxides of nitrogen (NO_X) for these areas are as follows:

Area	2009	2018
Parkersburg	3.58	1.76
Steubenville-Weirton	4.10	1.67
Lima	8.28	3.47
Wheeling	4.69	1.91
Canton	18.03	7.08

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 State Implementation Plan (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 emission 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.

The finding and the response to comments are available at EPA's conformity Web site: *heep://www.epa.gov/otaq/stateresources/transconf/adequacy.htm.*

Authority: 42 U.S.C. 7401–7671 q.

Dated: March 21, 2007.

Gary Gulezian,

Acting Regional Administrator, Region 5.

[FR Doc. E7–6150 Filed 4–2–07; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–ORD–2006–0979; FRL–8294–6]

Board of Scientific Counselors, Safe Pesticides/Safe Products (SP2) Research Program Subcommittee Meeting—April 2007

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Meeting.

SUMMARY: Pursuant to the Federal Advisory Committee Act, Public Law 92–463, the Environmental Protection Agency, Office of Research and Development (ORD), gives notice of one meeting of the Board of Scientific Counselors (BOSC) SP2 Subcommittee.

DATES: The meeting (a teleconference call) will be held on Wednesday, April 25, 2007, from 3 p.m. to 5 p.m. All times noted are eastern time. The meetings may adjourn early if all business is finished. Requests for the draft agenda or for making oral presentations at the meetings will be accepted up to 1 business day before each meeting.

ADDRESSES: Participation in the conference call will be by teleconference only—meeting rooms will not be used. Members of the public may obtain the call-in number and access code for the call from Heather Drumm, whose contact information is listed under the **FOR FURTHER INFORMATION CONTACT** section of this notice. Submit your comments, identified by Docket ID No. EPA–HQ–ORD–2006–0979, by one of the following methods:

- *http://www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail:* Send comments by electronic mail (e-mail) to: *ORD.Docket@epa.gov,* Attention Docket ID No. EPA–HQ–ORD–2006–0979.
- *Fax: Fax comments to:* (202) 566–0224, Attention Docket ID No. EPA–HQ–ORD–2006–0979.
- *Mail:* Send comments by mail to: Board of Scientific Counselors, Safe Pesticides/Safe Products Subcommittee Docket, Mailcode: 28221T, 1200 Pennsylvania Ave., NW., Washington, DC, 20460, Attention Docket ID No. EPA–HQ–ORD–2006–0979.
- *Hand Delivery or Courier.* Deliver comments to: EPA Docket Center (EPA/DC), Room B102, EPA West Building, 1301 Constitution Avenue, NW., Washington, DC, Attention Docket ID No. EPA–HQ–ORD–2006–0979. **Note:** this is not a mailing address. 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 Docket ID No. EPA–HQ–ORD–2006–0979. 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.*

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 Board of Scientific Counselors, Safe Pesticides/Safe Products Subcommittee Docket, EPA/DC, EPA West, Room B102, 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 ORD Docket is (202) 566–1752.

FOR FURTHER INFORMATION CONTACT: The Designated Federal Officer via mail at: Heather Drumm, Mail Drop 8104–R, Office of Science Policy, Office of Research and Development, Environmental Protection Agency, 1300 Pennsylvania Ave., NW., Washington, DC 20460; *via phone/voice mail at:* (202) 564–8239; *via fax at:* (202) 565–2911; *or via e-mail* at: *drumm.heather@epa.gov.*

SUPPLEMENTARY INFORMATION:

General Information

Any member of the public interested in receiving a draft BOSC agenda or making a presentation at the meeting may contact Heather Drumm, the Designated Federal Officer, via any of the contact methods listed in the **FOR FURTHER INFORMATION CONTACT** section above. In general, each individual making an oral presentation will be limited to a total of three minutes.

Proposed agenda items for the meeting includes but is not limited to discussion of progress on the final report. The meeting is open to the public.

Information on Services for Individuals with Disabilities: For information on access or services for individuals with disabilities, please contact Heather Drumm at (202) 564–8239 or *drumm.heather@epa.gov.* To request accommodation of a disability, please contact Heather Drumm, preferably at least 10 days prior to the meeting, to give EPA as much time as possible to process your request.

Dated: March 26, 2007.

Jeffery Morris,

Acting Director, Office of Science Policy.

[FR Doc. E7–6147 Filed 4–2–07; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL MEDIATION AND CONCILIATION SERVICE

Labor Management Cooperation Act of 1978 (Pub. L. 95–524)

AGENCY: Federal Mediation and Conciliation Service.

ACTION: Request for public comment on draft Fiscal Year 2007, program guidelines/application solicitation for labor-management committees.

SUMMARY: The Federal Mediation and Conciliation Service (FMCS) is publishing a draft Fiscal Year 2007 Program Guidelines/Application Solicitation for the Labor-Management Cooperation Program. The program is supported by Federal funds authorized by the Labor-Management Cooperation Act of 1978, subject to annual appropriations. This solicitation contains a change in the deadline for accepting applications.

DATES: Written comments must be submitted to the office listed in the **ADDRESSES** section below within 30 days from the date of this publication in the **Federal Register**.

ADDRESSES: Michael Bartlett, Federal Register Liaison, Federal Mediation and Conciliation Service, 2100 K Street, NW., Washington, DC 20427. Comments may be submitted by fax at (202) 606–5345 or electronic mail (e-mail) to *mbartlett@fmcs.gov*. All comments and data in electronic form must be identified by the appropriate agency form number.

FOR FURTHER INFORMATION CONTACT: Linda Stubbs, Grants Management Specialist, FMCS, 2100 K Street, NW., Washington, DC 20427. Telephone number 202–606–8181, e-mail to *lstubbs@fmcs.gov* or fax at (202) 606–3434.

A. Introduction

The following is the *draft* Solicitation for the Fiscal Year (FY) 2007 cycle of the Labor-Management Cooperation Program as it pertains to the support of labor-management committees. These guidelines represent the continuing efforts of the Federal Mediation and Conciliation Service to implement the provisions of the Labor-Management Cooperation Act of 1978, which was initially implemented in FY1981. The Act authorizes FMCS to provide assistance in the establishment and operation of company/plant, area, public sector, and industry-wide labor-management committees which:

(A) Have been organized jointly by employers and labor organizations representing employees in that company/plant, area, government agency, or industry; and

(B) Are established for the purpose of improving labor-management relationships, job security, and organizational effectiveness; enhancing economic development; or involving workers in decisions affecting their working lives, including improving communication with respect to subjects of mutual interest and concern.

The Program Description and other sections that follow, as well as a separately published FMCS Financial and Administrative Grants Manual, make up the basic guidelines, criteria, and program elements a potential applicant for assistance under this program must know in order to develop an application for funding consideration for either a company/plant, area-wide, industry, or public sector labor-management committee. Directions for obtaining an application kit may be found in Section H. A copy of the Labor-Management Cooperation Act of 1978, included in the application kit, should be reviewed in conjunction with this solicitation.

B. Program Description

Objectives

The Labor-Management Cooperation Act of 1978 identifies the following seven general areas for which financial assistance would be appropriate:

(1) To improve communication between representatives of labor and management;

(2) To provide workers and employers with opportunities to study and explore new and innovative joint approaches to achieving organizational effectiveness;

(3) To assist workers and employers in solving problems of mutual concern not susceptible to resolution within the collective bargaining process;

(4) To study and explore ways of eliminating potential problems which reduce the competitiveness and inhibit the economic development of the company/plant, area, or industry;

(5) To enhance the involvement of workers in making decisions that affect their working lives;

(6) To expand and improve working relationships between workers and managers; and

(7) To encourage free collective bargaining by establishing continuing mechanisms for communication between employers and their employees through Federal assistance in the formation and operation of labor-management committees.

The primary objective of this program is to encourage and support the establishment and operation of joint

labor-management committees to carry out specific objectives that meet the aforementioned general criteria. The term ''labor'' refers to employees represented by a labor organization and covered by a formal collective bargaining agreement. These committees may be found at the plant (company), area, industry, or public sector levels.

A plant or company committee is generally characterized as restricted to one or more organizational or productive units operated by a single employer. An area committee is generally composed of multiple employers of diverse industries as well as multiple labor unions operating within and focusing upon a particular city, county, contiguous multicounty, or statewide jurisdiction.

An industry committee generally consists of a collection of agencies or enterprises and related labor union(s) producing a common product or service in the private sector on a local, state, regional, or nationwide level. A public sector committee consists of government employees and managers in one or more units of a local or state government, managers and employees of public institutions of higher education, or of employees and managers of public elementary and secondary schools. Those employees must be covered by a formal collective bargaining agreement or other enforceable labor-management agreement. In deciding whether an application is for an area or industry committee, consideration should be given to the above definitions as well as to the focus of the committee.

In FY2007, competition will be open to company/plant, area, private industry, and public sector committees. Special consideration will be given to committee applications involving innovative or unique efforts. All application budget requests should focus directly on supporting the committee. Applicants should avoid seeking funds for activities that are clearly available under other Federal programs (e.g., job training, mediation of contract disputes, etc.).

Required Program Elements

1. *Problem Statement*—The application should have numbered pages and discuss in detail what specific problem(s) face the company/plant, area, government, or industry and its workforce that will be addressed by the committee. Applicants must document the problem(s) using as much relevant data as possible and discuss the full range of impacts these problem(s) could have or are having on the company/plant, government, area, or industry. An industrial or economic profile of the area and workforce might prove useful in explaining the problem(s). This section basically discusses why the effort is needed.

2. *Results or Benefits Expected*—By using specific goals and objectives, the application must discuss in detail what the labor-management committee will accomplish during the life of the grant. Applications that promise to provide objectives after a grant is awarded will receive little or no credit in this area. While a goal of ''improving communication between employers and employees'' may suffice as one over-all goal of a project, the objectives must, whenever possible, be expressed in specific and measurable terms. Applicants should focus on the outcome, impacts or changes that the committee's efforts will have. Existing committees should focus on expansion efforts/results expected from FMCS funding. The goals, objectives, and projected impacts will become the foundation for future monitoring and evaluation efforts of the grantee, as well as the FMCS grants program.

3. *Approach*—This section of the application specifies how the goals and objectives will be accomplished. At a minimum, the following elements must be included in all grant applications:

(a) A discussion of the strategy the committee will employ to accomplish its goals and objectives;

(b) A listing, by name and title, of all existing or proposed members of the labor-management committee. The application should also offer a rationale for the selection of the committee members (e.g., members represent 70% of the area or company/plant workforce);

(c) A discussion of the number, type, and role of all committee staff persons. Include proposed position descriptions for all staff that will have to be hired as well as resumes for staff already on board; noting, that grant funds may not be used to pay for existing employees; an assurance that grant funds will not be used to pay for existing employees;

(d) In addressing the proposed approach, applicants must also present their justification as to why Federal funds are needed to implement the proposed approach;

(e) A statement of how often the committee will meet (we require meetings at least every other month) as well as any plans to form subordinate committees for particular purposes; and

(f) For applications from existing committees, a discussion of past efforts and accomplishments and how they would integrate with the proposed expanded effort.

4. *Major Milestones*—This section must include an implementation plan that indicates what major steps, operating activities, and objectives will be accomplished as well as a timetable for when they will be finished. A milestone chart must be included that indicates what specific accomplishments (process and impact) will be completed by month over the life of the grant using ''month one'' as the start date. The accomplishment of these tasks and objectives, as well as problems and delays therein, will serve as the basis for quarterly progress reports to FMCS.

Applicants must prepare their budget narrative and milestone chart using a start date of ''month one'' and an end date of ''month twelve'' or ''month eighteen'', as appropriate. Thus, if applicant is seeking a twelve month grant, use figures reflecting month one through twelve. If applicant is seeking an eighteen month grant, use figures reflecting month one through eighteen. If the grant application is funded; FMCS will identify the start and end date of the grant on the Application for Federal Assistance (SF–424) form.

5. *Evaluation*—Applicants must provide for either an external evaluation or an internal assessment of the project's success in meeting its goals and objectives. An evaluation plan must be developed which briefly discusses what basic questions or issues the assessment will examine and what baseline data the committee staff already has or will gather for the assessment. This section should be written with the application's own goals and objectives clearly in mind and the impacts or changes that the effort is expected to cause.

6. *Letters of Commitment*—Applications must include current letters of commitment from *all* proposed or existing committee participants and chairpersons. These letters should indicate that the participants support the application and will attend scheduled committee meetings. A blanket letter signed by a committee chairperson or other official on behalf of all members is not acceptable. We encourage the use of individual letters submitted on company or union letterhead represented by the individual. The letters should match the names provided under Section 3(b).

7. *Other Requirements*—Applicants are also responsible for the following:

(a) The submission of data indicating approximately how many employees will be covered or represented through the labor-management committee;

(b) From existing committees, a copy of the existing staffing levels, a copy of the by-laws (if any), a breakout of

annual operating costs and identification of all sources and levels of current financial support;

(c) A detailed budget narrative that clearly identifies each line item and the estimated cost (a complete breakdown of each line item) based on policies and procedures contained in the FMCS Financial and Administrative Grants Manual;

(d) An assurance that the labor-management committee will not interfere with any collective bargaining agreements;

(e) An assurance that committee meetings will be held at least every other month and that written minutes of all committee meetings will be prepared and made available to FMCS; and

(f) An assurance that the maximum rate for an individual consultant paid from grant project can be no more than $950 for an eight-hour-day. The day includes preparation, evaluation and travel time. Also, time and effort records must be maintained.

Selection Criteria

The following criteria will be used in the scoring and selection of applications for award:

(1) The extent to which the application has clearly identified the problems and justified the needs that the proposed project will address.

(2) The degree to which appropriate and *measurable* goals and objectives have been developed to address the problems/needs of the applicant.

(3) The feasibility of the approach proposed to attain the goals and objectives of the project and the perceived likelihood of accomplishing the intended project results. This section will also address the degree of innovativeness or uniqueness of the proposed effort.

(4) The appropriateness of committee membership and the degree of commitment of these individuals to the goals of the application as indicated in the letters of support.

(5) The feasibility and thoroughness of the implementation plan in specifying major milestones and target dates.

(6) The cost effectiveness and fiscal soundness of the application's budget request, as well as the application's feasibility vis-a-vis its goals and approach.

(7) The overall feasibility of the proposed project in light of all of the information presented for consideration; and

(8) The value to the government of the application in light of the overall objectives of the Labor-Management Cooperation Act of 1978. This includes such factors as innovativeness, site location, cost, and other qualities that impact upon an applicant's value in encouraging the labor-management committee concept.

C. Eligibility

Eligible grantees include state and local units of government, labor-management committees (or a labor union, management association, or company on behalf of a committee that will be created through the grant), and certain third-party private non-profit entities on behalf of one or more committees to be created through the grant. Federal government agencies and their employees are not eligible.

Third-party private, non-profit entities that can document that a major purpose or function of their organization is the improvement of labor relations are eligible to apply. However, all funding must be directed to the functioning of the labor-management committee, and all requirements under Part B must be followed. Applications from third-party entities must document particularly strong support and participation from all labor and management parties with whom the applicant will be working. Applications from third-parties which do not directly support the operation of a new or expanded committee will not be deemed eligible, nor will applications signed by entities such as law firms or other third-parties failing to meet the above criteria.

Successful grantees will be bound by OMB Circular 110 i.e. ''contractors that develop or draft specifications, requirements, statements of work, and invitations for bids and/or requests for proposals shall be *excluded* (emphasis added from competing for such procurements).

Applicants who received funding under this program in the last 6 years for committee operations are not eligible to re-apply. The only exception will be made for grantees that seek funds on behalf of an entirely different committee whose efforts are totally outside of the scope of the original grant.

D. Allocations

The FY2007 appropriation for this program is $396,000. The Grant Review Board will review submissions and make recommendations for awards based on merit without regard to category.

In addition, to the competitive process identified in the preceding paragraph, FMCS will subject to funds availability, set aside a sum not to exceed thirty percent of its non-reserved appropriation to be awarded on a non-competitive basis. These funds will be used only to support applications that have been solicited by the Director of the Service and are not subject to the dollar range noted in Section E. All funds returned to FMCS from a competitive grant award may be awarded on a non-competitive basis in accordance with budgetary requirements.

E. Dollar Range and Length of Grants

Awards to expand existing or establish new labor-management committees will be for a period of up to 18 months. If successful progress is made during this initial budget period and all grant funds are not obligated within the specified period, these grants may, at the discretion of FMCS, be extended for up to six months.

The dollar range of awards is as follows:

—Up to $65,000 over a period of up to 18 months for company/plant committees or single department public sector applicants;

—Up to $125,000 per 18-month period for area, industry, and multi-department public sector committee applicants.

Additionally, FMCS reserves the right under special conditions to award supplemental (continuation) grants subject to funds availability. If awarded the additional amount is added to the current grant amount.

Applicants are reminded that these figures represent maximum Federal funds only. If total costs to accomplish the objectives of the application exceed the maximum allowable Federal funding level and its required grantee match, applicants may supplement these funds through voluntary contributions from other sources. Applicants are also strongly encouraged to consult with their local or regional FMCS field office to determine what kinds of training may be available at no cost before budgeting for such training in their applications. A list of our field leadership team and their phone numbers may be obtained from the FMCS Web site (*http://www.fmcs.gov*) under ''Who We Are''.

F. Cash Match Requirements and Cost Allowability

All applicants must provide at least 10 percent of the total allowable project costs in cash. Matching funds may come from State or local government sources or private sector contributions, but may generally not include other Federal funds. Funds generated by grant-supported efforts are considered

''project income,'' and may not be used for matching purposes.

It is the policy of this program to reject all requests for *indirect or overhead* costs as well as ''in-kind'' match contributions. In addition, grant funds must not be used to supplant private or local/state government funds currently spent for committee purposes. Funding requests from existing committees should focus entirely on the costs associated with the expansion efforts. Also, under no circumstances may business or labor officials participating on a labor-management committee be compensated out of grant funds for time spent at committee meetings or time spent in committee training sessions. Applicants generally will not be allowed to claim all or a portion of existing full-time staff as an expense or match contribution. For a more complete discussion of cost allowability, applicants are encouraged to consult the FY2007 FMCS Financial and Administrative Grants Manual, which will be included in the application kit.

G. Application Submission and Review Process

The Application for Federal Assistance (SF–424) form must be signed by *both* a labor and management representative. In lieu of signing the SF–424 form, representatives may type their name, title, and organization on plain bond paper with a signature line signed and dated, in accordance with block 18 of the SF–424 form. The individual listed as contact person in block 6 on the application form will generally be the only person with whom FMCS will communicate during the application review process. Please be sure that person is available once the application has been submitted. Additionally, it is the applicant's responsibility to notify FMCS in writing of any changes (e.g. if the address or contact person has changed).

We will accept applications beginning May 1, 2007, and continue to do so until July 31, 2008, or until all FY2007 grant funds are obligated. Awards will be made by September 30, 2008. Proposals may be accepted at any time between April 1, 2007 and July 31, 2008, but proposals received late in the cycle have a greater risk of not being funded due to unavailability of funds. Once your application has been received and acknowledged by FMCS, no applications or supplementary materials will be accepted thereafter. Applicants are highly advised to contact the FMCS Grants Program prior to committing any resources to the preparation of a proposal.

An original application containing numbered pages, plus three copies, should be addressed to the Federal Mediation and Conciliation Service, Labor-Management Grants Program, 2100 K Street, NW., Washington, DC 20427. FMCS will not consider videotaped submissions or video attachments to submissions. FMCS will confirm receipt of all applications within 10 days thereof.

All eligible applications will be reviewed and scored by a Grant Review Board. The Board(s) will recommend selected applications for rejection or further funding consideration. The Director or his/her designee will finalize the scoring and selection process. All FY2007 grant applicants will be notified of results and all grant awards will be made by September 30, 2008. Applications that fail to adhere to eligibility or other major requirements will be administratively rejected by the Director or his/her designee.

H. Contact

Individuals wishing to apply for funding under this program should contact the Federal Mediation and Conciliation Service as soon as possible to obtain an application kit. Please consult the FMCS Web site (*http://www.fmcs.gov*) to download forms and information. These kits and additional information or clarification can be obtained free of charge by contacting the Federal Mediation and Conciliation Service, Labor-Management Grants Program, 2100 K Street, NW., Washington, DC 20427, Linda Stubbs at (202) 606–8181 (*lstubbs@fmcs.gov*).

Additionally, we are currently accepting applications for FY2006 grant cycle and will do so until July 31, 2007 or until all FY2006 funding has been obligated. Please consult the FMCS Web site (*http://www.fmcs.gov*) to download forms and information.

Fran Leonard,

Director, Budget and Finance, Federal Mediation and Conciliation Service.

[FR Doc. 07–1554 Filed 4–2–07; 8:45 am]

BILLING CODE 6732–01–P

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, this notice announces a meeting of the National Advisory Council for Healthcare Research and Quality.

DATES: The meeting will be held on Friday, April 13, 2007, from 9 a.m. to 4 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 April 2, 2007. The agenda, roster, and minutes are available from Ms. Bonnie Campbell, Committee Management Officer, Agency for Healthcare Quality and Research, 540 Gaither Road, Rockville, Maryland 20850. Her phone number is (301) 427–1554.

SUPPLEMENTARY INFORMATION:

I. Purpose

Section 921 of the Public Health Service Act (42 U.S.C. 299c) established the National Advisory Council for Healthcare Research and Quality. 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 the Agency to enhance the quality, improve the outcomes, reduce the costs of health care services, improve access to such services through scientific research, and to 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, April 13, the Council meeting will begin at 9 a.m., with the call to order by the Council Chair and approval of previous Council minutes. The Director, AHRQ, will present her

update on AHRQ's current research, programs, and initiatives. The Chair will officially welcome new members to the Council. The official agenda will be available on AHRQ's Web site at *www.ahrq.gov* no later than April 9, 2007.

Dated: March 26, 2007.

Carolyn M. Clancy,

Director.

[FR Doc. 07–1642 Filed 3–29–07; 5:05 pm]

BILLING CODE 4160–90–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day-07–06AC]

Proposed Data Collections Submitted for Public Comment and Recommendations

In compliance with the requirement of Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995 for opportunity for public comment on proposed data collection projects, the Centers for Disease Control and Prevention (CDC) will publish periodic summaries of proposed projects. To request more information on the proposed projects or to obtain a copy of the data collection plans and instruments, call 404–639–5960 and send comments to Joan F. Karr, CDC Acting Reports Clearance Officer, 1600 Clifton Road, MS–D74, Atlanta, GA 30333 or send an e-mail to *omb@cdc.gov.*

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 shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (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 respondents, including through the use of automated collection techniques or other forms of information technology. Written comments should be received within 60 days of this notice.

Proposed Project

Low Back Exposure Assessment Tool for Mining—NEW—National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC).

Background and Brief Description

The Federal Mine Safety & Health Act of 1977, Section 501, enables CDC/NIOSH to carry out research relevant to the health and safety of workers in the mining industry. Mining has one of the highest incidence rates for back pain of any industry, and back injuries are consistently the leading cause of lost work days in the industry. The objective of this project is to develop a self-administered, paper and pencil risk assessment tool for the development of low back disorders specifically directed towards use in the mining industry. Many current methods of assessing the risk of low back disorders do not address stressors that are relatively unique to the mining environment, including the restricted vertical spaces in many coal mines that require workers to adopt stooping or kneeling postures for extended periods of their workday.

The low back exposure assessment tool for mining will assess various occupational exposures associated with development of back disorders in the literature (postural demands, lifting, whole body vibration exposure, individual and psychosocial issues), as well as specific mining stressors and will develop a score that will be used to assess the degree of risk for the job and the individual. The tool will be useful in both prioritizing jobs that need interventions to reduce low back disorder risk, and in evaluating the effectiveness of interventions through tool administration before and after the implementation of an intervention. There will be no cost to the respondents other than their time.

Estimated Annualized Burden Hours:

Respondents	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden hours
Surface and Underground Miners	320 miners	1	15/60	80

Dated: March 27, 2007.

Joan F. Karr,

Acting Reports Clearance Officer, Centers for Disease Control and Prevention.

[FR Doc. E7–6139 Filed 4–2–07; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket Nos. 2006M–0411, 2006M–0512, 2006M–0412, 2006M–0396, 2006M–0460, 2006M–0456, 2006M–0459, 2006M–0455, 2006M–0457, 2006M–0473, 2006M–0490, 2006M–0492, 2006M–0529, 2006M–0530 and 2006M–0531]

Medical Devices; Availability of Safety and Effectiveness Summaries for Premarket Approval Applications

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is publishing a list of premarket approval applications (PMAs) that have been approved. This list is intended to inform the public of the availability of safety and effectiveness summaries of approved PMAs through the Internet and the agency's Division of Dockets Management.

ADDRESSES: Submit written requests for copies of summaries of safety and effectiveness to the Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. Please cite the appropriate docket number as listed in table 1 of this document when submitting a written request. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the summaries of safety and effectiveness.

FOR FURTHER INFORMATION CONTACT: Thinh Nguyen, Center for Devices and Radiological Health (HFZ–402), Food and Drug Administration, 9200

Corporate Blvd., Rockville, MD 20850, 301–594–2186, ext. 152.

SUPPLEMENTARY INFORMATION:

I. Background

In the **Federal Register** of January 30, 1998 (63 FR 4571), FDA published a final rule that revised 21 CFR 814.44(d) and 814.45(d) to discontinue individual publication of PMA approvals and denials in the **Federal Register**. Instead, the agency now posts this information on the Internet on FDA's Web site at *http://www.fda.gov*. FDA believes that this procedure expedites public notification of these actions because announcements can be placed on the Internet more quickly than they can be published in the **Federal Register**, and FDA believes that the Internet is accessible to more people than the **Federal Register**.

In accordance with section 515(d)(4) and (e)(2) of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 360e(d)(4) and (e)(2)), notification of an order approving, denying, or withdrawing approval of a PMA will continue to include a notice of opportunity to request review of the order under section 515(g) of the act. The 30-day period for requesting reconsideration of an FDA action under § 10.33(b) (21 CFR 10.33(b)) for notices announcing approval of a PMA begins on the day the notice is placed on the Internet. Section 10.33(b) provides that FDA may, for good cause, extend this 30-day period. Reconsideration of a denial or withdrawal of approval of a PMA may be sought only by the applicant; in these cases, the 30-day period will begin when the applicant is notified by FDA in writing of its decision.

The regulations provide that FDA publish a quarterly list of available safety and effectiveness summaries of PMA approvals and denials that were announced during that quarter. The following is a list of approved PMAs for which summaries of safety and effectiveness were placed on the Internet from October 1, 2006, through December 31, 2006. There were no denial actions during this period. The list provides the manufacturer's name, the product's generic name or the trade name, and the approval date.

TABLE 1.—LIST OF SAFETY AND EFFECTIVENESS SUMMARIES FOR APPROVED PMAS MADE AVAILABLE FROM OCTOBER 1, 2006, THROUGH DECEMBER 31, 2006.

PMA No./Docket No.	Applicant	Trade Name	Approval Date
P040027/2006M–0411	W.L. Gore & Associates	GORE VIATORR TIPS	December 6, 2004
P040023/2006M–0512	DePuy Orthopedics, Inc.	DURALOC OPTION CERAMIC HIP SYSTEM	May 3, 2005
P030047/2006M–0412	Cordis Corp.	CORDIS PRECISE NITINOL STENT	September 22, 2006
P050038/2006M–0396	Medafor, Inc.	ARISTA AH ABSORBABLE HEMOSTATIC, NON-COLLAGEN BASED	September 26, 2006
P970053(S9)/2006M–0460	Nidek, Inc.	NIDEK EC–5000 EXCIMER LASER	October 11, 2006
P050022/2006M–0456	Siemens Medical Solutions USA, Inc.	SYNGO LUNG COMPUTER ASSISTED DETECTION (CAD) SYSTEM	October 18, 2006
P050025/2006M–0459	Endotex Interventional Systems, Inc.	ENDOTEX NEXSTENT CAROTID STENT & DELIVERY SYSTERM; AND ENDOTEX NEXSTENT CAROTID STENT & MONORAIL DELIVERY SYSTERM	October 27, 2006
P020012/2006M–0455	Artes Medical USA, Inc.	ARTEFILL	October 27, 2006
P040050/2006M–0457	Uroplasty, Inc.	MACROPLASTIQUE IMPLANTS	October 30, 2006
P050031/2006M–0473	Paragon Vision Sciences	PARAGON Z CRT	November 16, 2006
P020056/2006M–0490	Allergan	INAMED SILICONE-FILLED BREAST IMPLANTS	November 17, 2006
P030053/2006M–0492	Mentor Corp.	MENTOR MEMORYGEL SILICONE GEL-FILLED BREAST IMPLANTS	November 17, 2006
P060010/2006M–0529	AbbeyMoor Medical, Inc.	THE SPANNER TEMPORARY PROSTATIC STENT	December 14, 2006
P040025/2006M–0530	Olympic Medical	OLYMPIC COOL-CAP	December 20, 2006
P050033/2006M–0531	Anika Therapeutics, Inc.	COSMETIC TISSUE AUGMENTATION PRODUCT	December 20, 2006

II. Electronic Access

Persons with access to the Internet may obtain the documents at *http://www.fda.gov/cdrh/pmapage.html*.

Dated: March 22, 2007.

Linda S. Kahan,

Deputy Director, Center for Devices and Radiological Health.

[FR Doc. E7–6166 Filed 4–2–07; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

Oncologic Drugs Advisory Committee; Notice of Meeting

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

This notice announces a forthcoming meeting of a public advisory committee of the Food and Drug Administration (FDA). The meeting will be open to the public.

Name of Committee: Oncologic Drugs Advisory Committee.

General Function of the Committee: To provide advice and recommendations to the agency on FDA's regulatory issues.

Date and Time: The meeting will be held on May 9, 2007, from 8 a.m. to 4 p.m. and May 10, 2007, from 8 a.m. to 5 p.m.

Location: Hilton Washington DC/Silver Spring, 8727 Colesville Rd., Silver Spring, MD, 301–589–5200.

Contact Person: Johanna Clifford, Center for Drug Evaluation and Research (HFD–21), Food and Drug Administration, 5630 Fishers Lane (for express delivery, 5630 Fishers Lane, rm. 1093) Rockville, MD 20857, 301–827–6761, FAX: 301–827–6776, e-mail: *johanna.clifford@fda.hhs.gov*, or FDA Advisory Committee Information Line, 1–800–741–8138 (301–443–0572 in the Washington, DC area), code 3014512542. Please call the Information Line for up-to-date information on this meeting.

Agenda: On May 9, 2007, the committee will do the following: (1) Discuss new drug application (NDA) 022–092, proposed trade name JUNOVAN (mifamurtide), IDM Pharma, Inc., proposed indication for the treatment of newly diagnosed resectable high grade osteosarcoma following surgical resection in combination with multiple agent chemotherapy; and (2) discuss NDA 022–062, proposed trade name ORBEC (beclomethasone dipropionate), DOR BioPharma, Inc., proposed indication for the treatment of graft versus host disease (GvHD) involving the gastrointestinal tract in conjunction with an induction course of high-dose prednisone or prednisolone. On May 10, 2007, the committee will discuss updated information on risks of erythropoeisis-stimulating agents (ARANESP, Amgen, Inc., EPOGEN, Amgen, Inc., and PROCRIT, Amgen, Inc.) for use in the treatment of anemia due to cancer chemotherapy.

FDA intends to make background material available to the public no later than 1 business day before the meeting. If FDA is unable to post the background material on its Web site prior to the meeting, the background material will be made publicly available at the location of the advisory committee meeting, and the background material will be posted on FDA's Web site after the meeting. Background material is available at *http://www.fda.gov/ohrms/dockets/ac/acmenu.htm*, click on the year 2007 and scroll down to the appropriate advisory committee link.

Procedure: Interested persons may present data, information, or views, orally or in writing, on issues pending before the committee. Written submissions may be made to the contact person on or before April 25, 2007. Oral presentations from the public will be scheduled between approximately 10:30 a.m. to 11 a.m. and 3:30 p.m. to 4 p.m. on May 9 and from 10:45 a.m. to 11:45 a.m. on May 10. Those desiring to make formal oral presentations should notify the contact person and submit a brief statement of the general nature of the evidence or arguments they wish to present, the names and addresses of proposed participants, and an indication of the approximate time requested to make their presentation on or before April 19, 2007. Time allotted for each presentation may be limited. If the number of registrants requesting to speak is greater than can be reasonably accommodated during the scheduled open public hearing session, FDA may conduct a lottery to determine the speakers for the scheduled open public hearing session. The contact person will notify interested persons regarding their request to speak by April 18, 2007.

Persons attending FDA's advisory committee meetings are advised that the agency is not responsible for providing access to electrical outlets.

FDA welcomes the attendance of the public at its advisory committee meetings and will make every effort to accommodate persons with physical disabilities or special needs. If you require special accommodations due to a disability, please contact Johanna Clifford at least 7 days in advance of the meeting.

Notice of this meeting is given under the Federal Advisory Committee Act (5 U.S.C. app. 2).

Dated: March 28, 2007.

Randall W. Lutter,

Associate Commissioner for Policy and Planning.

[FR Doc. E7–6171 Filed 4–2–07; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 2003N–0573]

Draft Animal Cloning Risk Assessment; Proposed Risk Management Plan; Draft Guidance for Industry; Availability; Extension of Comment Period

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice; extension of comment period.

SUMMARY: The Food and Drug Administration (FDA) is extending to May 3, 2007, the comment period for the notice of availability that appeared in the **Federal Register** of January 3, 2007 (72 FR 136). In the notice, FDA requested comments on the draft risk assessment, the proposed risk management plan, and the draft guidance for industry on animal cloning. The agency is taking this action in response to requests for an extension to allow interested persons additional time to submit comments.

DATES: Submit written and electronic comments by May 3, 2007.

ADDRESSES: Submit written comments on the draft risk assessment, proposed risk management plan, or draft guidance for industry 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.fda.gov/dockets/ecomments*. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the documents.

FOR FURTHER INFORMATION CONTACT: Larisa Rudenko, Center for Veterinary Medicine (HFV–100), Food and Drug Administration, 7500 Standish Pl., Rockville, MD 20855, 240–453–6842, e-mail: *clones@cvm.fda.gov*.

SUPPLEMENTARY INFORMATION:

I. Background

In the **Federal Register** of January 3, 2007 (72 FR 136), FDA published a notice of availability with a 90-day comment period to request comments on a draft risk assessment to evaluate the health effects to animals involved in the process of cloning and to evaluate the food consumption risks that may result from edible products derived from animal clones or their progeny. FDA also announced the availability for public comment of a proposed risk management plan for animal clones and their progeny and a draft guidance for industry describing FDA's

recommendations regarding the use of edible products from animal clones and their progeny in human food or in animal feed.

The agency has received requests for an extension of the comment period for the draft risk assessment, proposed risk management plan, and draft guidance. These requests conveyed concern that the current 90-day comment period does not allow sufficient time to develop a meaningful or thoughtful response to the cloning documents.

FDA has considered the requests and is extending the comment period for the draft risk assessment, proposed risk management plan, and draft guidance until May 3, 2007. The agency believes this extension allows adequate time for interested persons to submit comments.

II. Request for Comments

Interested persons may submit to the Division of Dockets Management (see **ADDRESSES**) written or electronic comments on these documents. 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.

Dated: March 27, 2007.

Jeffrey Shuren,

Assistant Commissioner for Policy.

[FR Doc. E7–6170 Filed 4–2–07; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

Docket No. 2005D–0468

Guidance for Industry and Food and Drug Administration Staff; Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of the guidance document entitled ''Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays.'' This guidance document describes a means by which herpes simplex virus type 1 and 2 (HSV 1 and 2) serological assays may comply with the requirement of special controls for class II devices. Elsewhere in this issue of the **Federal Register**, FDA is publishing a final rule reclassifying these devices from class III (premarket approval) into class II (special controls).

DATES: Submit written or electronic comments on agency guidances at any time. General comments on agency guidance documents are welcome at any time.

ADDRESSES: Submit written requests for single copies of the guidance document entitled ''Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays'' to the Division of Small Manufacturers, International, and Consumer Assistance (HFZ–220), Center for Devices and Radiological Health, Food and Drug Administration, 1350 Piccard Dr., Rockville, MD 20850. Send one self-addressed adhesive label to assist that office in processing your request, or fax your request to 240–276–3151. See the **SUPPLEMENTARY INFORMATION** section for information on electronic access to the guidance.

Submit written comments concerning this guidance 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.fda.gov/dockets/ecomments*. Identify comments with the docket number found in brackets in the heading of this document.

FOR FURTHER INFORMATION CONTACT: Sally Hojvat, Center for Devices and Radiological Health (HFZ–440), Food and Drug Administration, 9200 Corporate Blvd., Rockville, MD 20850, 240–276–0496.

SUPPLEMENTARY INFORMATION:

I. Background

In the **Federal Register** of January 9, 2006 (71 FR 1399), FDA published a proposed rule to reclassify herpes simplex virus types 1 and 2 serological assays from class III (premarket approval) into class II (special controls). In addition, FDA issued a draft class II special controls guidance document entitled ''Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays'' to support the proposed reclassification. Herpes simplex virus types 1 and 2 serological assays are in vitro diagnostic devices that test for specific antibodies. In conjunction with other clinical laboratory findings, the detection of these HSV type 1 and/or 2 -specific antibodies aids in the clinical laboratory diagnosis of an acute or past infection by HSV type 1 and/or 2. FDA did not receive any comments on the proposed reclassification. FDA is now identifying the guidance document entitled ''Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays'' as the guidance document that will serve as the special control for these devices.

The guidance document provides a means by which herpes simplex virus types 1 and 2 serological assays may comply with the requirement of special controls for class II devices. Following the effective date of the final reclassification rule, any firm submitting a premarket notification (510(k)) for herpes simplex virus type 1 and 2 serological assays will need to address the issues covered in the special controls guidance document. However, the firm need only show that its device meets the recommendations of the guidance document or in some other way provides equivalent assurances of safety and effectiveness.

II. Significance of Guidance

This guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). The guidance represents the agency's current thinking on herpes simplex virus types 1 and 2 serological assays. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statute and regulations.

III. Electronic Access

Persons interested in obtaining a copy of the guidance may do so by using the Internet. To receive ''Class II Special Controls Guidance Document: Herpes Simplex Virus Types 1 and 2 Serological Assays'' you may either send an e-mail request to *dsmica@fda.hhs.gov* to receive an electronic copy of the document or send a fax request to 240–276–3151 to receive a hard copy. Please use the document number 1305 to identify the guidance you are requesting.

CDRH maintains an entry on the Internet for easy access to information including text, graphics, and files that may be downloaded to a personal computer with Internet access. Updated on a regular basis, the CDRH home page includes device safety alerts, **Federal Register** reprints, information on premarket submissions (including lists of approved applications and manufacturers' addresses), small manufacturer's assistance, information on video conferencing and electronic submissions, Mammography Matters,

and other device-oriented information. The CDRH Web site may be accessed at *http://www.fda.gov/cdrh*. A search capability for all CDRH guidance documents is available at *http://www.fda.gov/cdrh/guidance.html*. Guidance documents are also available on the Division of Dockets Management Internet site at *http://www.fda.gov/ohrms/dockets*.

IV. Paperwork Reduction Act of 1995

This guidance refers to previously approved collections of information found in FDA regulations. These collections of information are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). The collections of information in 21 CFR part 807 subpart E have been approved under OMB Control No. 0910–0120; and the collections of information in 21 CFR part 801 and 21 CFR 809.10 have been approved under OMB Control No. 0910–0485.

V. 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. The guidance and received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

Dated: March 23, 2007.

Linda S. Kahan,

Deputy Director, Center for Devices and Radiological Health.

[FR Doc. E7–6168 Filed 4–2–07; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Agency Information Collection Activities: Proposed Collection: Comment Request

In compliance with the requirement for opportunity for public comment on proposed data collection projects (section 3506(c)(2)(A) of Title 44, United States Code, as amended by the Paperwork Reduction Act of 1995, Public Law 104–13), the Health Resources and Services Administration (HRSA) publishes periodic summaries of proposed projects being developed for submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995. To request more information on the proposed project or to obtain a copy of the data collection plans and draft instruments, call the HRSA Reports Clearance Officer on (301) 443–1129.

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 shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (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 respondents, including through the use of automated collection techniques or other forms of information technology.

Proposed Project: Federally Qualified Health Centers (FQHC) Application Forms: (OMB No. 0915–0285 Revision)

HRSA's Bureau of Primary Health Care (BPHC) FQHCs are a major component of America's health care safety net, the Nation's ''system'' of providing health care to low-income and other vulnerable populations. Health centers care for people regardless of their ability to pay and whether or not they have health insurance. They provide primary and preventive health care, as well as services such as transportation and translation. Many health centers also offer dental, mental health, and substance abuse care. FQHCs are administered by HRSA's BPHC.

HRSA uses the following application forms to administer and manage FQHCs. These application forms are used by new and existing FQHCs to apply for grant and non-grant opportunities, renew their grant or non-grant opportunities, or change their scope of project.

Estimated of annualized reporting burden are as follows:

Type of application form	Number of respondents	Responses per respondent	Total number of responses	Hours per response	Total burden hours
General Information Worksheet	1,021	1	1,021	3.0	3,063
P12 Planning General Information Worksheet	300	1	300	12.0	3,600
BPHC Funding Request Summary	1,021	1	1,021	0.5	510
Institutional File Assurances	1,021	1	1,021	0.5	510
Proposed Staff Profile	1,021	1	1,021	6.0	6,126
Income Analysis Form	1,021	1	1,021	15.0	15,315
Community Characteristics	1,021	1	1,021	12.0	12,252
Services Provided	1,021	1	1,021	0.5	510
Sites Listing	1,021	1	1,021	1.0	1,021
Other Site Activities	700	1	700	0.5	350
Board Member Characteristics	1,021	1	1,021	1.0	1,021
Request for Waiver of Governance Requirements	150	1	150	1.0	150
Compliance Matrix	1,021	1	1,021	0.5	510
Health Center Affiliation Certification	250	1	250	0.5	125
Need for Assistance	900	1	900	6.0	5,400
Emergency Preparedness Form	1,021	1	1,021	1.0	1,021
FTCA Form	800	1	800	1.0	800
Points of Contact	800	1	800	0.5	400
Total	15,131	.....	15,131	.....	52,684

Send comments to Susan G. Queen, Ph.D., HRSA Reports Clearance Officer, Room 14–33, Parklawn Building, 5600 Fishers Lane, Rockville, MD 20857. Written comments should be received within 60 days of this notice.

Dated: March 27, 2007.

Alexandra Huttinger,

Acting Director, Division of Policy Review and Coordination.

[FR Doc. E7–6089 Filed 4–2–07; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Current List of Laboratories Which Meet Minimum Standards To Engage in Urine Drug Testing for Federal Agencies

AGENCY: Substance Abuse and Mental Health Services Administration, HHS.

ACTION: Notice.

SUMMARY: The Department of Health and Human Services (HHS) notifies Federal agencies of the laboratories currently certified to meet the standards of Subpart C of the Mandatory Guidelines for Federal Workplace Drug Testing Programs (Mandatory Guidelines). The Mandatory Guidelines were first published in the **Federal Register** on April 11, 1988 (53 FR 11970), and subsequently revised in the **Federal Register** on June 9, 1994 (59 FR 29908), on September 30, 1997 (62 FR 51118), and on April 13, 2004 (69 FR 19644).

A notice listing all currently certified laboratories is published in the **Federal Register** during the first week of each month. If any laboratory's certification is suspended or revoked, the laboratory will be omitted from subsequent lists until such time as it is restored to full certification under the Mandatory Guidelines.

If any laboratory has withdrawn from the HHS National Laboratory Certification Program (NLCP) during the past month, it will be listed at the end, and will be omitted from the monthly listing thereafter.

This notice is also available on the Internet at *http://workplace.samhsa.gov* and *http://www.drugfreeworkplace.gov.*

FOR FURTHER INFORMATION CONTACT: Mrs. Giselle Hersh or Dr. Walter Vogl, Division of Workplace Programs, SAMHSA/CSAP, Room 2–1035, 1 Choke Cherry Road, Rockville, Maryland 20857; 240–276–2600 (voice), 240–276–2610 (fax).

SUPPLEMENTARY INFORMATION: The Mandatory Guidelines were developed in accordance with Executive Order 12564 and section 503 of Public Law 100–71. Subpart C of the Mandatory Guidelines, ''Certification of Laboratories Engaged in Urine Drug Testing for Federal Agencies,'' sets strict standards that laboratories must meet in order to conduct drug and specimen validity tests on urine specimens for Federal agencies. To become certified, an applicant laboratory must undergo three rounds of performance testing plus an on-site inspection. To maintain that certification, a laboratory must participate in a quarterly performance testing program plus undergo periodic, on-site inspections.

Laboratories which claim to be in the applicant stage of certification are not to be considered as meeting the minimum requirements described in the HHS Mandatory Guidelines. A laboratory must have its letter of certification from HHS/SAMHSA (formerly: HHS/NIDA) which attests that it has met minimum standards.

In accordance with Subpart C of the Mandatory Guidelines dated April 13, 2004 (69 FR 19644), the following laboratories meet the minimum standards to conduct drug and specimen validity tests on urine specimens:

ACL Laboratories, 8901 W. Lincoln Ave., West Allis, WI 53227, 414–328–7840/800–877–7016, (*Formerly:* Bayshore Clinical Laboratory).

ACM Medical Laboratory, Inc., 160 Elmgrove Park, Rochester, NY 14624, 585–429–2264.

Advanced Toxicology Network, 3560 Air Center Cove, Suite 101, Memphis, TN 38118, 901–794–5770/888–290–1150.

Aegis Analytical Laboratories, Inc., 345 Hill Ave., Nashville, TN 37210, 615–255–2400.

Baptist Medical Center-Toxicology Laboratory, 9601 I–630, Exit 7, Little Rock, AR 72205–7299, 501–202–2783, (*Formerly:* Forensic Toxicology Laboratory Baptist Medical Center).

Clinical Reference Lab, 8433 Quivira Road, Lenexa, KS 66215–2802, 800–445–6917.

Diagnostic Services, Inc., dba DSI, 12700 Westlinks Drive, Fort Myers, FL 33913, 239–561–8200/800–735–5416.

Doctors Laboratory, Inc., 2906 Julia Drive, Valdosta, GA 31602, 229–671–2281.

DrugScan, Inc., P.O. Box 2969, 1119 Mearns Road, Warminster, PA 18974, 215–674–9310.

Dynacare Kasper Medical Laboratories,* 10150–102 St., Suite 200, Edmonton, Alberta, Canada T5J 5E2, 780–451–3702/800–661–9876.

ElSohly Laboratories, Inc., 5 Industrial Park Drive, Oxford, MS 38655, 662–236–2609.

Gamma-Dynacare Medical Laboratories,* A Division of the Gamma-Dynacare Laboratory Partnership, 245 Pall Mall Street, London, ONT, Canada N6A 1P4, 519–679–1630.

Kroll Laboratory Specialists, Inc., 1111 Newton St., Gretna, LA 70053, 504–361–8989/800–433–3823, (*Formerly:* Laboratory Specialists, Inc.).

Kroll Scientific Testing Laboratories, Inc., 450 Southlake Blvd., Richmond, VA 23236, 804–378–9130, (*Formerly:* Scientific Testing Laboratories, Inc.).

Laboratory Corporation of America Holdings, 7207 N. Gessner Road, Houston, TX 77040, 713–856–8288/800–800–2387.

Laboratory Corporation of America Holdings, 69 First Ave., Raritan, NJ 08869, 908–526–2400/800–437–4986, (*Formerly:* Roche Biomedical Laboratories, Inc.).

Laboratory Corporation of America Holdings, 1904 Alexander Drive, Research Triangle Park, NC 27709, 919–572–6900/800–833–3984. (*Formerly:* LabCorp Occupational Testing Services, Inc., CompuChem Laboratories, Inc.; CompuChem Laboratories, Inc., A Subsidiary of Roche Biomedical Laboratory; Roche CompuChem Laboratories, Inc., A Member of the Roche Group).

Laboratory Corporation of America Holdings, 10788 Roselle St., San Diego, CA 92121, 800–882–7272, (*Formerly:* Poisonlab, Inc.).

Laboratory Corporation of America Holdings, 550 17th Ave., Suite 300, Seattle, WA 98122, 206–923–7020/800–898–0180. (*Formerly:* DrugProof, Division of Dynacare/Laboratory of Pathology, LLC; Laboratory of Pathology of Seattle, Inc.; DrugProof, Division of Laboratory of Pathology of Seattle, Inc.).

Laboratory Corporation of America Holdings, 1120 Main Street, Southaven, MS 38671, 866–827–8042/800–233–6339, (*Formerly:* LabCorp Occupational Testing Services, Inc.; MedExpress/National Laboratory Center).

LabOne, Inc. d/b/a Quest Diagnostics, 10101 Renner Blvd., Lenexa, KS 66219, 913–888–3927/800–873–8845, (*Formerly:* Quest Diagnostics Incorporated; LabOne, Inc.; Center for Laboratory Services, a Division of LabOne, Inc.).

Marshfield Laboratories, Forensic Toxicology Laboratory, 1000 North Oak Ave., Marshfield, WI 54449, 715–389–3734/800–331–3734.

MAXXAM Analytics Inc.,* 6740 Campobello Road, Mississauga, ON, Canada L5N 2L8, 905–817–5700, (*Formerly:* NOVAMANN (Ontario), Inc.).

MedTox Laboratories, Inc., 402 W. County Road D, St. Paul, MN 55112, 651–636–7466/800–832–3244.
Meriter Laboratories, 36 South Brooks St., Madison, WI 53715, 608–267–6225, (*Formerly:* General Medical Laboratories).
MetroLab-Legacy Laboratory Services, 1225 NE 2nd Ave., Portland, OR 97232, 503–413–5295/800–950–5295.
Minneapolis Veterans Affairs Medical Center, Forensic Toxicology Laboratory, 1 Veterans Drive, Minneapolis, MN 55417, 612–725–2088.
National Toxicology Laboratories, Inc., 1100 California Ave., Bakersfield, CA 93304, 661–322–4250/800–350–3515.
One Source Toxicology Laboratory, Inc., 1213 Genoa-Red Bluff, Pasadena, TX 77504, 888–747–3774. (*Formerly:* University of Texas Medical Branch, Clinical Chemistry Division; UTMB Pathology-Toxicology Laboratory).
Oregon Medical Laboratories, 123 International Way, Springfield, OR 97477, 541–341–8092.
Pacific Toxicology Laboratories, 9348 DeSoto Ave., Chatsworth, CA 91311, 800–328–6942, (*Formerly:* Centinela Hospital Airport Toxicology Laboratory).
Pathology Associates Medical Laboratories, 110 West Cliff Dr., Spokane, WA 99204, 509–755–8991/800–541–7891x7.
Physicians Reference Laboratory, 7800 West 110th St., Overland Park, KS 66210, 913–339–0372/800–821–3627.
Quest Diagnostics Incorporated, 3175 Presidential Dr., Atlanta, GA 30340, 770–452–1590/800–729–6432, (*Formerly:* SmithKline Beecham Clinical Laboratories; SmithKline Bio-Science Laboratories).
Quest Diagnostics Incorporated, 400 Egypt Road, Norristown, PA 19403, 610–631–4600/877–642–2216, (*Formerly:* SmithKline Beecham Clinical Laboratories; SmithKline Bio-Science Laboratories).
Quest Diagnostics Incorporated, 506 E. State Pkwy., Schaumburg, IL 60173, 800–669–6995/847–885–2010, (*Formerly:* SmithKline Beecham Clinical Laboratories; International Toxicology Laboratories).
Quest Diagnostics Incorporated, 7600 Tyrone Ave., Van Nuys, CA 91405, 866–370–6699/818–989–2521, (*Formerly:* SmithKline Beecham Clinical Laboratories).
S.E.D. Medical Laboratories, 5601 Office Blvd., Albuquerque, NM 87109, 505–727–6300/800–999–5227.
South Bend Medical Foundation, Inc., 530 N. Lafayette Blvd., South Bend, IN 46601, 574–234–4176 x276.
Southwest Laboratories, 4645 E. Cotton Center Boulevard, Suite 177, Phoenix, AZ 85040, 602–438–8507/800–279–0027.
Sparrow Health System, Toxicology Testing Center, St. Lawrence Campus, 1210 W. Saginaw, Lansing, MI 48915, 517–364–7400, (*Formerly:* St. Lawrence Hospital & Healthcare System).
St. Anthony Hospital Toxicology Laboratory, 1000 N. Lee St., Oklahoma City, OK 73101, 405–272–7052.
Toxicology & Drug Monitoring Laboratory, University of Missouri Hospital & Clinics, 301 Business Loop 70 West, Suite 208, Columbia, MO 65203, 573–882–1273.
Toxicology Testing Service, Inc., 5426 N.W. 79th Ave., Miami, FL 33166, 305–593–2260.
U.S. Army Forensic Toxicology Drug Testing Laboratory, 2490 Wilson St., Fort George G. Meade, MD 20755–5235, 301–677–7085.

The following laboratory withdrew from the NLCP on March 31, 2007:

Quest Diagnostics Incorporated, 4230 South Burnham Ave., Suite 250, Las Vegas, NV 89119–5412, 702–733–7866/800–433–2750, (*Formerly:* Associated Pathologists Laboratories, Inc.).

*The Standards Council of Canada (SCC) voted to end its Laboratory Accreditation Program for Substance Abuse (LAPSA) effective May 12, 1998. Laboratories certified through that program were accredited to conduct forensic urine drug testing as required by U.S. Department of Transportation (DOT) regulations. As of that date, the certification of those accredited Canadian laboratories will continue under DOT authority. The responsibility for conducting quarterly performance testing plus periodic on-site inspections of those LAPSA-accredited laboratories was transferred to the U.S. HHS, with the HHS' NLCP contractor continuing to have an active role in the performance testing and laboratory inspection processes. Other Canadian laboratories wishing to be considered for the NLCP may apply directly to the NLCP contractor just as U.S. laboratories do.

Upon finding a Canadian laboratory to be qualified, HHS will recommend that DOT certify the laboratory (**Federal Register**, July 16, 1996) as meeting the minimum standards of the Mandatory Guidelines published in the **Federal Register** on April 13, 2004 (69 FR 19644). After receiving DOT certification, the laboratory will be included in the monthly list of HHS-certified laboratories and participate in the NLCP certification maintenance program.

Dated: March 27, 2007.

Elaine Parry,

Acting Director, Office Program Services, SAMHSA.

[FR Doc. E7–6119 Filed 4–2–07; 8:45 am]

BILLING CODE 4160–20–P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Proposed Collection; Comment Request; U.S./Israel Free Trade Agreement

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork and respondent burden, Customs and Border Protection (CBP) invites the general public and other Federal agencies to comment on an information collection requirement concerning the U.S./Israel Free Trade Agreement. This request for comment is being made pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3505(c)(2)).

DATES: Written comments should be received on or before June 4, 2007, to be assured of consideration.

ADDRESSES: Direct all written comments to U.S. Customs Service, Information Services Group, Room 3.2C, *Attn.:* Tracey Denning, 1300 Pennsylvania Avenue, NW., Washington, DC 20229.

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be directed to U.S. Customs Service, *Attn.:* Tracey Denning, Room 3.2C, 1300 Pennsylvania Avenue, NW., Washington, DC 20229, Tel. (202) 344–1429.

SUPPLEMENTARY INFORMATION: CBP invites the general public and other Federal agencies to comment on proposed and/or continuing information collections pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3505(c)(2)). The comments should address: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimates of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden including the use of automated collection techniques or the use of other forms of information technology; and (e)

estimates of capital or start-up costs and costs of operations, maintenance, and purchase of services to provide information. The comments that are submitted will be summarized and included in the Customs request for Office of Management and Budget (OMB) approval. All comments will become a matter of public record. In this document Customs is soliciting comments concerning the following information collection:

Title: U.S./Israel Free Trade Agreement.

OMB Number: 1651–0065.

Form Number: N/A.

Abstract: This collection is used to ensure conformance with the provisions of the U.S./Israel Free Trade Agreement for duty free entry status.

Current Actions: There are no changes to the information collection. This submission is being submitted to extend the expiration date.

Type of Review: Extension (without change).

Affected Public: Businesses, Individuals, Institutions.

Estimated Number of Respondents: 34,500.

Estimated Time per Respondent: 10 minutes.

Estimated Total Annual Burden Hours: 7,505.

Dated: March 26, 2007.

Tracey Denning,

Agency Clearance Officer, Information Services Group.

[FR Doc. E7–6113 Filed 4–2–07; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Proposed Collection; Comment Request; Importation of Ethyl Alcohol for Non-Beverage Purpose

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork and respondent burden, Bureau of Customs and Border Protection (CBP) invites the general public and other Federal agencies to comment on an information collection requirement concerning the Importation of Ethyl Alcohol for Non-Beverage Purpose. This request for comment is being made pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3505(c)(2)).

DATES: Written comments should be received on or before June 4, 2007, to be assured of consideration.

ADDRESS: Direct all written comments to Bureau of Customs and Border Protection, *Attn:* Tracey Denning, Information Services Group, Room 3.2.C, 1300 Pennsylvania Avenue, NW., Washington, DC 20229.

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be directed to Bureau of Customs and Border Protection, *Attn.:* Tracey Denning, Room 3.2.C, 1300 Pennsylvania Avenue, NW., Washington, DC 20229, Tel. (202) 344–1429.

SUPPLEMENTARY INFORMATION: CBP invites the general public and other Federal agencies to comment on proposed and/or continuing information collections pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3505(c)(2)). The comments should address: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimates of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden including the use of automated collection techniques or the use of other forms of information technology; and (e) estimates of capital or start-up costs and costs of operations, maintenance, and purchase of services to provide information. The comments that are submitted will be summarized and included in the CBP request for Office of Management and Budget (OMB) approval. All comments will become a matter of public record. In this document CBP is soliciting comments concerning the following information collection:

Title: Importation of Ethyl Alcohol for Non-Beverage Purpose.

OMB Number: 1651–0056.

Form Number: N/A.

Abstract: This collection is a declaration claiming duty-free entry. It is filed by the broker or their agent, and then is transferred with other documentation to the Bureau of Alcohol, Tobacco, and Firearms.

Current Actions: There are no changes to the information collection. This submission is being submitted to extend the expiration date.

Type of Review: Extension (without change).

Affected Public: Businesses, Individuals, Institutions.

Estimated Number of Respondents: 300.

Estimated Time per Respondent: 5 minutes.

Estimated Total Annual Burden Hours: 25.

Dated: March 26, 2007.

Tracey Denning,

Agency Clearance Officer, Information Services Group.

[FR Doc. E7–6114 Filed 4–2–07; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Proposed Collection; Comment Request; Application for Exportation of Articles Under Special Bond

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork and respondent burden, the Bureau of Customs and Border Protection (CBP) invites the general public and other Federal agencies to comment on an information collection requirement concerning the Application for Exportation of Articles under Special Bond. This request for comment is being made pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3505(c)(2)).

DATES: Written comments should be received on or before June 4, 2007, to be assured of consideration.

ADDRESSES: Direct all written comments to Bureau of Customs and Border Protection, Information Services Group, Room 3.2.C, 1300 Pennsylvania Avenue, NW., Washington, DC 20229.

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be directed to Bureau of Customs and Border Protection, *Attn.:* Tracey Denning, Room 3.2.C, 1300 Pennsylvania Avenue, NW., Washington, DC 20229, Tel. (202) 344–1429.

SUPPLEMENTARY INFORMATION: CBP invites the general public and other Federal agencies to comment on proposed and/or continuing information collections pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3505(c)(2)). The comments should address: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimates of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d)

ways to minimize the burden including the use of automated collection techniques or the use of other forms of information technology; and (e) estimates of capital or start-up costs and costs of operations, maintenance, and purchase of services to provide information. The comments that are submitted will be summarized and included in the CBP request for Office of Management and Budget (OMB) approval. All comments will become a matter of public record. In this document CBP is soliciting comments concerning the following information collection:

Title: Application for Exportation of Articles under Special Bond.

OMB Number: 1651–0004.

Form Number: Form CBP–3495.

Abstract: This collection is used by importers for articles to be entered temporarily into the United States. These articles are free of duty under bond, and are exported within one year from the date of importation.

Current Actions: There are no changes to the information collection. This submission is being submitted to extend the expiration date.

Type of Review: Extension (without change).

Affected Public: Businesses, Individuals, Institutions.

Estimated Number of Respondents: 15,000.

Estimated Time per Respondent: 8 minutes.

Estimated Total Annual Burden Hours: 2,000.

Dated: March 26, 2007.

Tracey Denning,

Agency Clearance Officer, Information Services Group.

[FR Doc. E7–6115 Filed 4–2–07; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Proposed Collection; Comment Request Transportation Entry and Manifest of Goods Subject to CBP Inspection and Permit

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork and respondent burden, Bureau of Customs and Border Protection (CBP) invites the general public and other Federal agencies to comment on an information collection requirement concerning the Transportation Entry and Manifest of Goods Subject to CBP Inspection and Permit. This request for comment is being made pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3505(c)(2)).

DATES: Written comments should be received on or before June 4, 2007, to be assured of consideration.

ADDRESSES: Direct all written comments to Bureau of Customs and Border Protection, Information Services Group, Room 3.2.C, 1300 Pennsylvania Avenue, NW., Washington, DC 20229.

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be directed to Bureau of Customs and Border Protection, *Attn.:* Tracey Denning, Room 3.2.C, 1300 Pennsylvania Avenue, NW., Washington, DC 20229, Tel. (202) 344–1429.

SUPPLEMENTARY INFORMATION: CBP invites the general public and other Federal agencies to comment on proposed and/or continuing information collections pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3505(c)(2)). The comments should address: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimates of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden including the use of automated collection techniques or the use of other forms of information technology; and (e) estimates of capital or start-up costs and costs of operations, maintenance, and purchase of services to provide information. The comments that are submitted will be summarized and included in the CBP request for Office of Management and Budget (OMB) approval. All comments will become a matter of public record. In this document CBP is soliciting comments concerning the following information collection:

Title: Transportation Entry and Manifest of Goods Subject to CBP Inspection and Permit.

OMB Number: 1651–0003.

Form Number: CBP 7512 and 7512–A.

Abstract: This collection involves the movement of imported merchandise from the port of importation to another CBP port prior to release of the merchandise.

Current Actions: There are no changes to the information collection. This submission is being submitted to extend the expiration date.

Type of Review: Extension of a currently approved information collection.

Affected Public: Business or other for-profit institutions.

Estimated Number of Respondents: 50,000.

Estimated Time per Respondent: 14 hours.

Estimated Total Annual Burden Hours: 700,000 hours.

Dated: March 26, 2007.

Tracey Denning,

Agency Clearance Officer, Information Services Group.

[FR Doc. E7–6116 Filed 4–2–07; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice and request for comments.

SUMMARY: The Federal Emergency Management Agency (FEMA), as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on a proposed revised information collection. In accordance with the Paperwork Reduction Act of 1995, this notice seeks comments concerning State Administrative Plan details on how the State will administer the Hazard Mitigation Grant Program.

SUPPLEMENTARY INFORMATION: The development of the State Administrative Plan is required as a condition of receiving Hazard Mitigation Grant Program (HMGP) funding under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. Section 404 mandates that FEMA must approve State Administrative Plan before awarding any project grant assistance to a community or State applicant. The plans must comply with administrative requirements in 44 CFR Parts 13 and 206 and provide information for environmental and floodplain management review in conformance with 44 CFR parts 9 and 10.

Collection of Information

Title: State Administrative Plan for the Hazard Mitigation Grant Program.

Type of Information Collection: Revision of a currently approved collection.

OMB Number: 1660–0026.

Form Numbers: None.

Abstract: The State Administrative Plan is a procedural guide that details how the State will administer the HMGP. The State must have a current administrative plan approved by the appropriate FEMA Regional Director before receiving HGMP funds. The administrative plan may take any form including a chapter within a comprehensive State mitigation program strategy. The State may forward an administrative plan to the Regional Director for approval at any time prior to or immediately after the request for a disaster declaration.

Affected Public: State, Local or Tribal Government.

Estimated Total Annual Burden Hours:

ANNUAL BURDEN HOURS

Project/activity (survey, form(s), focus group, worksheet, etc.)	Number of respondents (A)	Frequency of responses (B)	Burden hours per respondent (C)	Annual responses (D) = (A × B)	Total annual burden hours (E) = (C × D)
Review & Update State Administrative Plan	32	1.5	8	48	384
Total	32	1.5	8	48	384

Estimated Cost: The total annual estimated costs for Urban and regional planners or their equivalent State offices, to collect information at the State level, for information associated with the State Administrative Plans, is estimated to be $10,188. (384 burden hours × $26.53 per hour = $10,188.). The estimated cost to the Federal Government review and approve each State Administrative Plan is estimated to be $7,654 annually.

Comments: Written comments are solicited to (a) evaluate whether the proposed data collection is necessary for the proper performance of the agency, including whether the information shall have practical utility; (b) 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; (c) enhance the quality, utility, and clarity of the information to be collected; and (d) 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. Comments must be submitted on or before June 4, 2007.

ADDRESSES: Interested persons should submit written comments to Chief, Records Management and Privacy, Information Resources Management Branch, Information Technology Services Division, Federal Emergency Management Agency, 500 C Street, SW., Room 609, Washington, DC 20472.

FOR FURTHER INFORMATION CONTACT: Contact Cecelia Rosenberg, Chief, Grants Policy Section, Mitigation Division, (202) 646–3321 for additional information. You may contact the Records Management Branch for copies of the proposed collection of information at facsimile number (202) 646–3347 or e-mail address: *FEMA-Information-Collections@dhs.gov*.

Dated: March 15, 2007.

John A. Sharetts-Sullivan,

Chief, Records Management and Privacy, Information Resources Management Branch, Information Technology Services Division, Federal Emergency Management Agency, Department of Homeland Security.

[FR Doc. E7–6072 Filed 4–2–07; 8:45 am]

BILLING CODE 9110–11–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket Nos. FR–5030–FA–10, FR–5030–FA–13, FR–5030–FA–17, and FR–5030–FA–29]

Announcement of Funding Award—FY 2006; Office of Healthy Homes and Lead Hazard Control Grant Programs

AGENCY: Office of the Secretary, Office of Healthy Homes and Lead Hazard Control.

ACTION: Announcement of awards funded.

SUMMARY: In accordance with section 102(a)(4)(C) of the Department of Housing and Urban Development Reform Act of 1989, this announcement notifies the public of funding decisions made by the Department in competitions for funding under the Office of Healthy Homes Lead Hazard Control Grant Programs and the Reopened Lead Hazard Reduction Demonstration Grant Program Notices of Funding Availability (NOFAs). This announcement contains the name and address of the award recipients and the amounts awarded.

FOR FURTHER INFORMATION CONTACT: Jonnette Hawkins, Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control, Room 8236, 451 Seventh Street, SW., Washington, DC 20410, telephone (202) 755–1785, ext. 7593. Hearing- and speech-impaired persons may access the number above via TTY by calling the toll free Federal Information Relay Service at (800) 877–8339.

SUPPLEMENTARY INFORMATION: These awards were the result of competitions announced in **Federal Register** notices published on March 8, 2006 (71 FR 11814) and on September 15, 2006 (71 FR 54554). The purpose of the competitions was to award funding for grants and cooperative agreements for the Office of Healthy Homes and Lead Hazard Control Grant Programs and the Reopened Lead Hazard Reduction Demonstration Grant Program. Applications were scored and selected on the basis of selection criteria contained in these Notices. A total of approximately $149,690,673 was awarded.

In accordance with section 102(a)(4)(C) of the Department of Housing and Urban Development Reform Act of 1989 (103 Stat. 1987, 42 U.S.C. 3545), the Department is publishing the names, addresses, and amounts of these awards as follows:

A total of $81,653,722 was awarded to 30 grantees for the Lead Based Paint Hazard Control Grant Program. All of the funds have been awarded, except for $3,000,000 to one grantee where negotiations continue: Cochise County, Lead Hazard Control Program, P.O. Box

167, 100 Clawson Ave., Bisbee, AZ 85603, $1,971,253; State of California, Community Services & Development Programs, 700 North 10th St., Room 258, Sacramento, CA 95814, $3,000,000; San Bernardino County, Public Health, Child & Family Health Services, 120 Carousel Mall, San Bernardino, CA 92415–0475, $3,000,000; State of Connecticut, 25 Sigourney St., Hartford, CT 06106, $3,000,000; City of Hartford, 131 Coventry St., Hartford, CT 06112, $3,000,000; St. Clair County, Intergovernmental Grants, 19 Public Square, Suite 200, Belleville, IL 62220, $2,116,478; Madison County, Community Development, 130 Hillsboro, Edwardsville, IL 62025, $3,000,000; County of Peoria, Peoria City County Health Dept., 2116 N. Sheridan Road, Peoria, IL 61604–3457, $3,000,000; City of Fort Wayne, Room 800, City County Building, One Main St., Fort Wayne, IN 46802, $1,897,415; City of South Bend, 501 Alonzo Watson Drive, South Bend, IN 46601, $3,000,000; State of Kansas, 1000 SW Jackson, Suite 330, Topeka, KS 66612, $2,987,083; City of Boston, Neighborhood Development Home Owner Services, 26 Court St., 9th Floor, Boston, MA 02108, $3,000,000; City of Somerville, Strategic Planning & Community Development, 93 Highland Ave., City Hall, Somerville, MA 02143, $1,911,849; State of Michigan, Department of Community Health, Environmental and Occupational Epidemiology, P.O. Box 30195, Lansing, MI 48909, $3,000,000; County of St. Louis, Community Development/ Planning, 121 South Meramec, Suite 444, Clayton, MO 63105, $2,715,390; City of Charlotte, Neighborhood Development, Housing Services, 600 E. Trade St., Charlotte, NC 28202, $2,999,944; State of North Carolina, Lead Poisoning Prevention Program, 1632 Mail Service Center, Raleigh, NC 27699, $3,000,000; County of Orange, Community Development, 255 Main St., Goshen, NY 10924, $2,821,149; Monroe County, Public & Environmental Health, 111 Westfall Rd., P.O. Box 92832, Rochester, NY 14692, $2,998,283; Onondaga County, Community Development, 1100 Civic Center, Syracuse, NY 13202, $3,000,000; County of Westchester, Department of Planning, 148 Martine Ave., Room 114, White Plains, NY 10601, $3,000,000; City of Portland, Housing & Community Development, 421 S.W. Sixth Ave., Suite 1100, Portland, OR 97204, $3,000,000; Commonwealth of Pennsylvania, Department of Health, Seventh & Forster St., 7th Floor East Wing, Harrisburg, PA 17120, $3,000,000; County of Lawrence, 430 Court St., New Castle, PA 16101, $3,000,000; State of Rhode Island, Development Department, Lead, 44 Washington St., Providence, RI 02903, $3,000,000; City of Warwick, Planning Department, Office of Housing & Community, 3275 Post Road, City Hall Annex, Warwick, RI 02886, $2,125,992; Shelby County, Department of Housing, Planning and Development, 1075 Mullins Station Road, Memphis, TN 38134, $2,998,886; Salt Lake County, Human Services/Community Resources & Development, 2001 State St., S–2100, Salt Lake City, UT 84190, $2,010,000; County of Rock, Planning & Development, 51 South Main St., Janesville, WI 53545, $1,100,000, and negotiations continue with City of St. Louis, 1015 Locust St., Suite 1200, St. Louis, MO 63101, $3,000,000.

A total of $20,535,349 was awarded to 7 grantees for the Lead Hazard Reduction Demonstration Grant Program: State of Connecticut, 25 Sigourney St., Hartford, CT 06106, $4,000,000; City of Hartford, 131 Coventry St., Hartford, CT 06112, $3,416,713; City of Boston, Neighborhood Development Homeowner Services, 26 Court St., 9th Floor, Boston, MA 02108, $1,545,966; City of Somerville, SPCD Housing, City Hall, 93 Highland Ave., Somerville, MA 02143, $1,572,670; City of St. Louis, 1015 Locust St., Suite 1200, St. Louis, MO 63101, $4,000,000; County of Westchester, Department of Planning and Housing, 148 Martine Ave., Room 414, White Plains, NY 10601, $2,000,000; City of Cleveland, 1925 St. Clair Ave., Cleveland, OH 44114, $4,000,000.

A total of $5,999,823 was awarded to 3 grantees for the Operation Lead Elimination Action Program (LEAP): Environmental Education Associates, Inc., 346 Austin St., Buffalo, NY 14201, $1,999,997; Mahoning Valley Real Estate Investors Association, 2901 Market St., Suite 200, Youngstown, OH 44507, $2,000,000; Middle Tennessee State University, Engineering, Technical & Industrial Studies, Occupational Health and Safety, 1500 Greenland Drive, Campus P.O. Box 19, Murfreesboro, TN 37132, $1,999,826.

A total of $2,778,130 was awarded to 7 grantees for the Lead Technical Studies Program: University of Illinois Board of Trustees, 1901 S. First St., Suite A, Champaign, IL 61820, $369,114; University of Illinois at Chicago, School of Public Health, MB 502, M/C 551, 809 S. Marshfield Ave., Chicago, IL 60612–7205, $848,500; Phoenix Science & Technology, Inc., 27 Industrial Ave., Chelmsford, MA 01824, $375,207; St. Louis University, School of Public Health, Community Health, 211 North Grand Blvd., St. Louis, MO 63103, $495,732; Research Triangle Institute, 3040 Cornwallis Road, Research Triangle Park, NC 27709, $190,000; University of Cincinnati, Department of Environmental Health, Environmental and Occupational Hygiene, 47 Corry Blvd., Edwards One, Suite 7148, P.O. Box 210222, Cincinnati, OH 45221, $420,600; University of Cincinnati College of Medicine, Environmental Health, Epidemiology, 47 Corry Blvd., Edwards One, Suite 7148, P.O. Box 210222, Cincinnati, OH 45221, $78,977.

A total of $3,760,259 was awarded to 4 grantees for the Healthy Homes Demonstration Grant Program: Alameda County Lead Poisoning Prevention Program, Community Development Agency, Lead Poisoning Prevention, 2000 Embarcadero, Suite 300, Oakland, CA 94606, $1,000,000; City of Minneapolis Healthy Homes & Lead Hazard Control, Regulatory Services, Environmental Management & Safety, 250 S 4th St., Room 414, Minneapolis, MN 55415, $1,000,000; Cuyahoga County Board of Health Department, Community Health, 5550 Venture Drive, Parma, OH 44130, $1,000,000; Cook County Department of Public Health, Environmental Health Services, Prevention Services Unit, 1010 Lake St., Suite 300, Oak Park, IL 60301, $760,259.

A total of $2,000,000 was awarded to 8 grantees for the Lead Outreach Grants Program: Saint Francis Hospital & Medical Center, Pediatrics, 114 Woodland St., Hartford, CT, 06105, $298,058; Area Health Education Center of Southern Nevada, 1094 E. Sahara Ave., Las Vegas, NV 89104, $199,451; West Harlem Environmental Action, Inc., 271 West 125th St., Suite 206, New York, NY 10027, $282,960; Research Foundation of SUNY on behalf of SUNY Potsdam, P.O. Box 9, Potsdam, NY 12201–0009, $111,285; National Nursing Centers Consortium, U.S. HUD Lead Outreach Grant Program, 260 South Broad St., 18th Floor, Philadelphia, PA 19102, $200,000; Le Bonheur Community Outreach, 2400 Poplar Ave., Suite 318, Memphis, TN 38112, $250,332; Indiana Black Expo, Inc., Youth & Family Programs, 3145 N. Meridian St., Indianapolis, IN 46208, $357,914; Board of Regents, University of Nebraska—Lincoln, SE Research & Extension Center, IANR Cooperative Extension, 312 N. 14th St., Alexander Bldg., West, Lincoln, NE 68588, $300,000.

A total of $1,570,120 was awarded to 4 grantees for the Healthy Homes Technical Studies Grants Program:

National Center for Healthy Housing, 10227 Wincopin Circle, Suite 0200, Columbia, MD 21044, $150,120; University of Minnesota, Environmental Health Sciences, 200 Oak St., SE, Suite 450, McNamara Alumni Center, Minneapolis, MN 55455, $490,000; St. Louis University, School of Public Health, Community Health, 211 North Grand Blvd., St. Louis, MO 63103, $530,000; University of Cincinnati, Environmental Health, Epidemiology, 47 Corry Blvd., Edwards One, Suite 7148, Cincinnati, OH 45221, $400,000.

A total of $31,393,270 was awarded to 12 grantees for the re-opened Lead Hazard Reduction Demonstration Grants Program: City and County of San Francisco, 1 South Van Ness Avenue, 5th Floor, San Francisco, CA 94103, $3,350,000; Winnebago County, 401 Division Street, Rockford, IL 61104, $1,237,911; City of Lansing, 124 W. Michigan Avenue, 8th Floor, Lansing, MI 48933, $1,384,886; City of Detroit, 65 Cadillac Square, Suite 2300, Detroit, MI 48226, $3,996,680; City of Manchester, NH, One City Hall, Manchester, NH 031010, $1,800,000; City of Albany Community Development, 200 Henry Johnson, Albany, NY 12210, $3,000,000; Buffalo Office of Strategic Planning, 65 Niagara Square, Suite 214, Buffalo, NY 14202, $1,112,880; City of Schenectady, 105 Jay Street, Schenectady, NY 12305, $1,036,249; City of Woonsocket, 169 Main Street, Woonsocket, RI 02895, $2,816,074; City of Austin, 1000 E. 11th Street, Austin, TX 78702, $3,761,662; Kenosha County Department of Human Services, 8600 Sheridan Road, Suite 600, Kenosha, WI 53143, $3,996,928; City of Milwaukee, 841 N. Broadway, Room 118, Milwaukee, WI 53202, $3,900,000.

Dated: March 28, 2007.

Jon L. Gant,

Director, Office of Healthy Homes and Lead Hazard Control.

[FR Doc. E7–6163 Filed 4–2–07; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–5004–FA–03]

Announcement of Funding Awards for the Emergency Capital Repair Grant Program; Fiscal Year 2006

AGENCY: Office of the Assistant Secretary for Housing-Federal Housing Commissioner, HUD.

ACTION: Notice of funding awards.

SUMMARY: In accordance with section 102(a)(4)(C) of the Department of Housing and Urban Development Reform Act of 1989, this announcement notifies the public of Emergency Capital Repair Grant funding decisions made by the Department in Fiscal Year 2006. This announcement contains the names of the awardees and the amounts of the awards made available by HUD.

FOR FURTHER INFORMATION CONTACT: Mr. Willie Spearmon, Director, Office of Housing Assistance and Grant Administration, 451 7th Street, SW., Washington, DC 20410; telephone (202) 708–3000 (this is not a toll-free number). Hearing- and speech-impaired persons may access this number via TTY by calling the Federal Relay Service toll-free at (800) 877–8339. For general information on this and other HUD programs, visit the HUD Web site at *http://www.hud.gov.*

SUPPLEMENTARY INFORMATION: The Emergency Capital Repair Grants Program is authorized by Section 202(b) of the Housing Act of 1959 (12 U.S.C. 1701q–2). Section 202b was amended to provide grants for 'substantial capital repairs to eligible multifamily projects with elderly tenants that are needed to rehabilitate, modernize, or retrofit aging structures, common areas or individual dwelling units.' HUD accepted applications on a first-come, first-serve basis and awarded emergency capital repair grants until available amounts were expended.

The Catalog of Federal Domestic Assistance number for this program is 14.315.

The Emergency Capital Repair Grant is designed to provide funds to make emergency capital repairs to eligible multifamily projects owned by private nonprofit entities designated for occupancy by elderly tenants. The capital repair needs must relate to items that present an immediate threat to the health, safety, and quality of life of the tenants. The intent of these grants is to provide one-time assistance for emergency items that could not be absorbed within the project's operating budget and other project resources.

A total of $15,551,597 was awarded to 64 projects and 7,795 units. In accordance with section 102(a)(4)(C) of the Department of Housing and Urban Development Reform Act of 1989 (103 Stat. 1987. 42 U.S.C. 3545), the Department is publishing the grantees and amounts of the awards in Appendix A of this document.

Dated: March 19, 2007.

Brian Montgomery,

Assistant Secretary for Housing-Federal Housing Commissioner.

Appendix A—Emergency Capital Repair Grant Awardees FY 2006

Name of owner/sponsor	Name of development	City	State	Number of units	Dollar amount awarded	Repairs funded
Whatcom Council on Aging.	Birchwood Manor Apartments.	Seattle	WA	30	$76,282	Correct severe erosion problem.
Four Freedom House of Seattle.	Henry M. Jackson Apartments.	Seattle	WA	70	100,000	Replace elevator.
SJ Strauss Lodge of B'Nai B'rith Housing.	B'nai B'rith Apartments	Wilkes-Barre	PA	163	347,150	Replace two elevators, correct water flow systems, replace generator.
NNI Belltown Elderly HSNG.	Belltown Manor Apartments.	Stamford	CT	164	390,000	Replace windows and roof.
Council Apartments, Inc	Council Apartments	St. Louis	MO	131	336,169	Replace two elevators, replace cracked flue liner and boiler loop.
Ardmore Village Housing Corp.	Ardmore Village, Phase II.	Ardmore	OK	38	315,361	Correct structural failure of the foundation.
Evangelical Lutheran Good Samaritan.	Goldbeck Towers	Hastings	NE	105	361,979	Replace elevators and windows.
Hilltop House Inc	Hilltop House	Seattle	WA	124	180,740	Replace hydronic building heat domestic hot water exchanger.

Name of owner/sponsor	Name of development	City	State	Number of units	Dollar amount awarded	Repairs funded
Cogic Memorial Home for the Elderly, Inc.	Cogic High Rise Apartments.	Norfolk	VA	150	317,714	Replace two elevators.
Louttit Manor, Inc	Louttit Manor Apartments	Daytona Beach	FL	177	481,564	Replace boiler, 12 air conditioning units, fan coils, piping, cooling tower, and roof.
Independent Housing I, Inc.	Seniority House	Springfield	MA	167	150,811	Replace elevator systems, electrical buss bars.
Better Community HDFC, Inc.	Saugerties Senior Housing.	Saugerties	NY	63	69,811	Replace dangerous kitchen cabinets.
RLC Corp.	Lutheran Towers	Atlanta	GA	205	489,113	Replace fire alarm system, air conditioning and heating units.
Housing Authority of the City of Stockton.	Valley View	Stockton	KS	30	83,035	Replace air conditioning and heating units.
Cathedral Square Housing, Inc.	Cathedral Square Housing.	Trenton	NJ	100	128,200	Replace leaking roof.
Telacu Housing	Telacu Terrace	Hawthorne	CA	74	4,271	Replace elevator door protector.
Telacu Plaza-South Park	Telacu Plaza	Los Angeles	CA	39	316,288	Replace roof, walls, sewer system, cooling tower, fire pump.
Telacu Senior HSG, Inc	Telacu Senior Housing	Hawthorne	CA	75	341,014	Repair structural component of the roof truss system.
Clairmont Oaks, Inc	Clairmont Oaks	Decatur	GA	298	500,000	Correct concrete exterior walls, replace roof.
Converse County Senior Housing, Inc.	Payne Plaza	Douglas	WY	24	121,500	Replace existing lighting systems, replace chiller on air conditioning unit.
The Catholic Charities Housing, Inc..	Basilica Place Apartments.	Baltimore	MD	201	500,000	Restoration of the building's brick façade.
Vineville Christian Towers	Vineville Christian Towers.	Macon	GA	196	376,344	Replace windows, three water heaters, trash compactor.
Philip Towers, Decatur, Inc.	Phillips Towers	Decatur	GA	225	408,750	Replace windows.
Stephen Smith Towers, Inc.	Stephen Smith Towers	Philadelphia	PA	140	442,873	Replace HVAC and fan coil unit.
North 25 Housing	North 25 Housing Development.	Trenton	NJ	233	176,500	Repair the air circulation system.
Golden Manor, Inc	Golden Manor I	Torrington	WY	26	185,689	Replace windows, patio doors, walkways, and furnaces.
Brookdale Village Housing Corp.	Brookdale Village	Queens	NY	547	500,000	Replace four elevators.
Council Tower Association.	Council Towers	St. Louis	MO	225	500,000	Replace elevators.
Catholic Housing of Mobile, Inc.	Cathedral Place Apartments.	Mobile	AL	100	499,997	Repair elevators, replace emergency call system and three compressors.
Federation Towers, Inc	Lupica Towers	Cleveland	OH	278	321,900	Repair two elevators.
Bethel New Life, Inc	Anathoth Gardens	Chicago	IL	40	351,121	Replace windows.
Trinity Park Inc	Trinity Park Housing	Livonia	MI	40	165,363	Replace roof, repair drainage system and sidewalks.
Broadview Towers, Inc	Broadview Towers	Emporia	KS	60	120,276	Replace elevator and windows.
Council of Elders Housing Corporation.	Council Tower	Roxbury	MA	145	138,923	Replace two elevator doors.
Senior Citizens HDF of Steuben County.	Clyde F. Simon Apartments.	Bath	NY	151	235,382	Replace roofs, doors, and water heaters.
The Lesley Foundation	Bonnie Brae Terrace	Belmont	CA	164	73,518	Correct erosion problems.
Thomas Campbell Apartments, Inc.	Thomas Campbell Apartments.	Washington	PA	136	39,268	Correct erosion problems.
Marion Rotary Senior Citizens II, Inc.	Marion Rotary Senior Citizens, Inc.	Marion	OH	153	180,323	Replace windows.

Name of owner/sponsor	Name of development	City	State	Number of units	Dollar amount awarded	Repairs funded
Marion Rotary Senior Citizens II, Inc.	Marion Rotary Senior Citizens, Inc II.	Marion	OH	45	294,331	Replace windows.
St. Luke's Home Inc	St. Lukes	Middleton	CT	26	17,731	Replace windows.
Four Freedoms House of Philadelphia, Inc.	Four Freedoms House of Philadelphia.	Philadelphia	PA	281	500,000	Replace elevators, standpipes and fire systems.
Sacred Heart Retirement Community, Inc.	Rose Commons	Vernon	CT	31	37,879	Replace windows, thermostats, fire alarm systems, sidewalks and entrance ramp.
Pleasant View Village, Inc	Pleasant View Village	Madison	KS	16	44,300	Replace the roof, gutters and downspouts, windows and doors.
New Milford Interfaith Housing, Inc.	Butter Brook Hill Apartments.	New Milford	CT	102	357,779	Replace two roofs.
Ogden House Inc	Ogden House	Wilton	CT	85	160,092	Replace elevators.
Panorama West, Inc	Panorama West	Covington	KY	143	123,833	Replace central chiller.
North Haven Interfaith Housing, Inc.	Stevens Woods	North Haven	CT	60	280,811	Replace fire panel system, two boilers, sidewalks and parking lots.
River Park Elderly Housing Inc.	River Park Elderly	Milford	CT	39	91,207	Replace zone valves on heating system, correct water seepage in units and hallways, and repair window frames.
Good Shepherd Retirement Apartments, Inc.	Shalom Tower I	Mason City	IA	79	54,806	Replace tile liner in the chimney and tuckpoint chimney.
First Christian Church Apartments, Inc.	The First Christian Church Apartments.	Topeka	KS	120	83,500	Replace elevator cylinder.
The Salvation Army, A GA Corporation.	Booth Towers	Cumberland	MD	114	197,413	Replace two elevators and waterlines and wrap heater/chiller pipes.
Sunset Retirement Home	Sunset Retirement Home South.	Spencer	IA	38	195,153	Replace windows and undertake tuckpoint exterior walls.
Jennings Hall Senior Citizens H.D.F.C.	Jennings Hall Senior Citizen housing.	Brooklyn	NY	150	51,948	Replace ventilation system.
Temple Heights Manor, Inc.	Temple Heights Manor I	Raytown	MO	149	272,466	Replace elevators.
Temple Heights Manor II	Temple Heights Manor II	Raytown	MO	150	415,124	Replace elevator and two roofs.
Worthington Senior Housing.	The Maples	Worthington	MA	12	130,884	Repair water treatment system.
Salem Housing Development Corporation.	JC Wade Senior Villa	Omaha	NE	50	292,759	Replace elevator, replace heating/cooling systems, roof and windows.
Bishop Broderick Housing Development Fund Company.	Bishop Broderick Apartments.	Albany	NY	101	55,300	Replace roof.
Salem Lodge of B'nai Brith.	Abe Cramer Apartments	Harrisburg	PA	196	480,875	Repair two elevators, replace roof and generator.
Council for the Spanish Speaking.	Santa Cruz Apartments	Milwaukee	WI	33	14,396	Repair existing elevator controller and door operator.
Wenatchee Brethren-Baptist Homes Inc.	Garden Terrace	Wenatchee	WA	76	84,263	Repair elevator.
Four Freedoms House of Seattle, Inc.	Four Freedoms House of Seattle.	Seattle	WA	281	224,648	Repair fire alarm system.
St. Phillips on West 128th Street Corporation.	St. Philips-Harlem Hospital.	New York City	NY	21	500,000	Repair sanitary and storm sewer systems.
Flint Retirement Homes, Inc.	Kearsely Manor	Flint	MI	110	271,870	Replace heating units, roof, and electronic elevator door detectors.

[FR Doc. E7–6164 Filed 4–2–07; 8:45 am]
BILLING CODE 4210–67–P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Public Notice of Lands Previously Conveyed Into Trust and Proclaimed as Reservation For Mississippi Band of Choctaw Indians by Act of Congress

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice.

SUMMARY: The Bureau of Indian Affairs is giving public notice of the act of Congress which has conveyed certain fee properties into trust and proclaimed reservation status for the Mississippi Band of Choctaw Indians.

FOR FURTHER INFORMATION CONTACT: Ben Burshia, Bureau of Indian Affairs, Division of Real Estate Services, Mail Stop 4639–MIB, 1849 C Street, NW., Washington, DC 20240, Telephone (202) 208–7737.

SUPPLEMENTARY INFORMATION: The original reservation proclamation establishing the Mississippi Choctaw Indian Reservation was issued December 23, 1944 (9 FR 14907), by virtue of the authority of the Act of June 21, 1939 (53 Stat. 573), and section 7 of the Act of June 18, 1934 (48 Stat. 986). Pursuant to section 1(a)(2) of the Act of June 29, 2000, Public Law 106–228 (114 Stat. 228), certain lands then held in fee by the Mississippi Band of Choctaw Indians were placed into federal trust status. The Act provided:

''All land held in fee by the Mississippi Band of Choctaw Indians located within the boundaries of the State of Mississippi, as shown in the report entitled ''Report of Fee Lands owned by the Mississippi Band of Choctaw Indians,'' dated September 28, 1999, on file in the Office of the Superintendent, Choctaw Agency, Bureau of Indian Affairs, Department of the Interior, is hereby declared to be held by the United States in trust for the benefit of the Mississippi Band of Choctaw Indians; * * *.''

Section 1(a)(1) of Public Law 106–228 also provided that ''all lands taken in trust by the United States for the benefit of the Mississippi Band of Choctaw Indians on or after December 23, 1944, shall be part of the Mississippi Choctaw Indian Reservation.'' This Act was amended by section 811 of the Act of December 27, 2000, Public Law 106–568 (114 Stat. 2868), which provided:

Section 1(a)(2) of Pub. L. 106–228 (an Act to make technical corrections to the status of certain land held in trust for the Mississippi Band of Choctaw Indians, to take certain land into trust for that Band, and for other purposes) is amended by striking ''September 28, 1999'' and inserting ''February 7, 2000.''

The February 7, 2000, report referenced in section 811 of Public Law 106–568 added lands to those originally identified in the September 28, 1999, report referenced in section 1(a)(2) of Public Law 106–228. All of those lands were placed into trust and made a part of the reservation. Revised legal descriptions for some of those lands were approved by Congress by section 107 of the Act of March 2, 2004, Public Law 108–204 (118 Stat. 542), as reflected in a Report of May 17, 2002, on file at the Choctaw Agency, Bureau of Indian Affairs. Legal descriptions for all parcels initially placed into trust and reservation status for the Mississippi Band of Choctaw Indians by Public Law 106–228, as amended by Public Law 106–568, as amended by Public Law 108–204, are referenced in Appendix I to this Notice.

Additional lands have been taken into trust by the United States for the Mississippi Band of Choctaw Indians pursuant to 25 U.S.C. 465 after December 23, 1944, and before June 29, 2000. All such lands were made part of the Mississippi Choctaw Indian Reservation by section 1(a)(1) of Public Law 106–228. The legal descriptions for those other tracts are not set out in this notice.

Pursuant to section 1(a)(1) of Public Law 106–228, if and when additional lands are taken into trust by the United States for the Mississippi Band of Choctaw Indians, pursuant to 25 U.S.C. 465 or by other authority, each such additional land parcel shall automatically become a part of the Mississippi Choctaw Indian Reservation without the need for any other formal declaration to that effect pursuant to 25 U.S.C. 467.

All of the Choctaw reservation lands referenced in this notice constitute Indian Country under 18 U.S.C. 1151(a).

Dated: March 24, 2007.

Carl J. Artman,

Assistant Secretary—Indian Affairs.

APPENDIX I

Lands placed into trust and reservation status for the Mississippi Band of Choctaw Indians within the State of Mississippi by Public Law 106–228, 114 Stat. 462, Act of June 29, 2000, as amended by Title VIII, Sec. 811 of Public Law 106–568, Act of December 27, 2000, 114 Stat. 2868 and Sec. 107 of Public Law 108–204, Act of March 2, 2004, 118 Stat 542. The reference numbers shown below are from Exhibit A to the report of May 17, 2002, on file at the Choctaw Agency, Bureau of Indian Affairs, Philadelphia, Mississippi, as referenced in Sec. 107 of Public Law 108–204, Act of March 2, 2004, 118 Stat. 542.

Reference Nos.	Choctaw reservation community	Township	Range	Section	County	Book & page from county records
1	Bogue Chitto	14N	15E	16	NOXUBEE	553/503
2	Bogue Chitto	11N	14E	7	KEMPER	268/220
3	Bogue Chitto	11N	14E	18	KEMPER	280/193
4	Bogue Chitto	12N	14E	32	KEMPER	A222/845
5	Bogue Chitto	12N	13E	2	NESHOBA	A223/6
6	Bogue Chitto	11N	14E	17	KEMPER	280/193
7	Bogue Chitto	11N	14E	7	KEMPER	270/71
8	Bogue Chitto	11N	14E	5	KEMPER	A222/845
9	Bogue Chitto	11N	14E	7	KEMPER	274/14
10	Bogue Chitto	11N	13E	10	NESHOBA	A221/258
11	Bogue Chitto	12N	13E	36	NESHOBA	A217/346
12	Bogue Chitto	12N	14E	30	KEMPER	A222/845
13	Bogue Chitto	11N	13E	1	NESHOBA	A217/343
14	Bogue Chitto	11N	13E	2	NESHOBA	A219/269
15	Bogue Chitto	11N	13E	13	NESHOBA	A221/258
16	Bogue Chitto	11N	13E	12	NESHOBA	A217/343
17	Bogue Chitto	11N	13E	1	NESHOBA	A217/346
18	Bogue Chitto	12N	13E	25	NESHOBA	A222/845
19	Bogue Chitto	11N	14E	27	KEMPER	228/47
22	Bogue Chitto	11N	14E	28	KEMPER	228/47

Reference Nos.	Choctaw reservation community	Township	Range	Section	County	Book & page from county records
23	Bogue Chitto	12N	13E	1	NESHOBA	A223/6
24	Bogue Chitto	11N	14E	21	KEMPER	228/47
25	Bogue Chitto	12N	14E	31	KEMPER	A222/845
26	Conehatta	07N	10E	28	NEWTON	262/692
27	Conehatta	07N	10E	3	NEWTON	267/474
28	Conehatta	07N	10E	9	NEWTON	266/167
29	Conehatta	07N	10E	9	NEWTON	252/33
32	Conehatta	07N	10E	10	NEWTON	252/33
35	Conehatta	07N	10E	21	NEWTON	262/692
36	Crystal Ridge	14N	13E	35	WINSTON	218/220
37	Bogue Chitto	12N	13E	3	WINSTON	238/375
38	Bogue Chitto	12N	13E	2	WINSTON	230/206
39	Bogue Chitto	11N	12E	30	NESHOBA	A228/897
41	Bogue Chitto	11N	12E	30	NESHOBA	A93/144
43	Pearl River	11N	10E	28	NESHOBA	A217/90
44	Pearl River	11N	11E	20	NESHOBA	A239/448
45	Pearl River	11N	10E	33	NESHOBA	A239/779
46	Pearl River	11N	11E	29	NESHOBA	A239/270
47	Pearl River	11N	11E	2	NESHOBA	A227/100
48	Pearl River	11N	10E	34	NESHOBA	A226/879
49	Pearl River	11N	10E	33	NESHOBA	A239/777
50	Pearl River	11N	10E	28	NESHOBA	A239/779
51	Pearl River	11N	11E	29	NESHOBA	A230/823
52	Pearl River	11N	11E	1	NESHOBA	A227/100
53	Pearl River	11N	11E	9	NESHOBA	A227/100
54	Pearl River	11N	11E	4	NESHOBA	A227/100
55	Pearl River	11N	11E	3	NESHOBA	A227/100
56	Pearl River	11N	11E	10	NESHOBA	A227/100
57	Pearl River	11N	11E	28	NESHOBA	A230/823
58	Pearl River	11N	10E	14	NESHOBA	A223//650
59	Pearl River	11N	11E	30	NESHOBA	A146/501
60	Pearl River	11N	11E	29	NESHOBA	A238/406
61	Pearl River	11N	10E	18	NESHOBA	A228/465
62	Pearl River	11N	09E	13	LEAKE	A228/465
64	Pearl River	11N	11E	29	NESHOBA	A151/704
65	Pearl River	11N	11E	29	NESHOBA	A150/577
66	Pearl River	11N	11E	6	NESHOBA	A235/124
67	Pearl River	11N	11E	29	NESHOBA	A151/22
68	Pearl River	11N	11E	29	NESHOBA	A151/24
69	Pearl River	11N	11E	20	NESHOBA	A220/842
70	Pearl River	11N	10E	28	NESHOBA	A217/255
71	Pearl River	11N	11E	30	NESHOBA	A216/716
72	Pearl River	11N	11E	30	NESHOBA	A239/270
73	Pearl River	11N	10E	36	NESHOBA	A161/528
74	Pearl River	11N	11E	29	NESHOBA	A150/581
75	Pearl River	11N	11E	29	NESHOBA	A232/764
76	Pearl River	11N	11E	30	NESHOBA	A201/138
77	Pearl River	11N	11E	18	NESHOBA	A140/142
78	Pearl River	11N	11E	19	NESHOBA	A140/142
79	Pearl River	11N	11E	31	NESHOBA	A239/270
80	Pearl River	11N	11E	29	NESHOBA	A231/15
81	Pearl River	11N	11E	29	NESHOBA	A238/408
83	Pearl River	11N	10E	11	NESHOBA	A223/650
84	Pearl River	11N	11E	20	NESHOBA	A219/550
85	Pearl River	11N	11E	30	NESHOBA	A146/221
86	Pearl River	11N	11E	32	NESHOBA	A239/270
87	Red Water	10N	07E	2	LEAKE	228/627
88	Red Water	10N	07E	2	LEAKE	228/630
89	Red Water	11N	07E	36	LEAKE	235/549
90	Red Water	11N	07E	35	LEAKE	235/696
91	Red Water	11N	07E	36	LEAKE	163/440
92	Red Water	11N	07E	26	LEAKE	233/424
93	Red Water	10N	08E	6	LEAKE	235/483
96	Standing Pine	10N	08E	34	LEAKE	154/624
97	Standing Pine	10N	09E	29	LEAKE	221/614
98	Standing Pine	09N	08E	2	LEAKE	143/726
99	Standing Pine	10N	09E	30	LEAKE	221/614
100	Standing Pine	09N	08E	3	LEAKE	221/633
101	Standing Pine	10N	09E	9	LEAKE	221/616
102	Tucker	10N	12E	28	NESHOBA	A229/665
103	Tucker	10N	12E	21	NESHOBA	A229/665
105	Red Water	13N	7E	36	ATTALA	607/612

Reference Nos.	Choctaw reservation community	Township	Range	Section	County	Book & page from county records
106	Red Water	13N	7E	25	ATTALA	607/612
107	Red Water	12N	7E	1	LEAKE	607/612
108	Red Water	12N	7E	2	LEAKE	607/612
109	Red Water	13N	7E	35	ATTALA	607/612
110	Bogue Chitto	11N	14E	5	KEMPER	294/568

[FR Doc. E7–6143 Filed 4–2–07; 8:45 am]
BILLING CODE 4310–W7–P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Amendment to the Chippewa Cree Tribe of the Rocky Boy's Indian Reservation Liquor Ordinance

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice.

SUMMARY: This notice publishes an amendment to the Liquor Ordinance of the Chippewa Cree Tribe of the Rocky Boy's Indian Reservation of Montana (Tribe). This amendment brings the existing Liquor Ordinance of the Tribe which regulates and controls the possession, sale and consumption of liquor within the Tribe's reservation into conformance with state law. The Liquor Ordinance allows for possession and sale of alcoholic beverages within the Tribe's Indian reservation, and increases the ability of the tribal government to control the Tribe's liquor distribution and possession. At the same time it will provide an important source of revenue for the continued operation and strengthening of the tribal government and the delivery of tribal services.

DATES: *Effective Date:* This Ordinance is effective on April 9, 2007.

FOR FURTHER INFORMATION CONTACT: Louise Reyes, Indian Services Officer, Bureau of Indian Affairs, Rocky Mountain Regional Office, 316 North 26th St., Billings, MT 59101, Telephone: (406) 247–7988, Telefax: (406) 247–7566; or Ralph Gonzales, Office of Indian Services, 1849 C Street, NW., Mail Stop 4513–MIB, Washington, DC 20240; Telephone No. (202) 513–7629.

SUPPLEMENTARY INFORMATION: Pursuant to the Act of August 15, 1953, Public Law 83–277, 67 Stat. 586, 18 U.S.C. 1161, as interpreted by the Supreme Court in *Rice* v. *Rehner*, 463 U.S. 713 (1983), the Secretary of the Interior shall certify and publish in the **Federal Register** notice of adopted liquor ordinances for the purpose of regulating liquor transactions in Indian country. The Chippewa Cree Business Committee adopted this amendment to their Liquor Ordinance by Resolution No. 27–06 on March 9, 2006. The purpose of this amendment is to bring their current Liquor Control Ordinance into conformance with State law.

This notice is published in accordance with the authority delegated by the Secretary of the Interior to the Principal Deputy Assistant Secretary—Indian Affairs. I certify that this Amendment to the Liquor Ordinance of the Chippewa Cree Tribe of the Rocky Boy's Indian Reservation was duly adopted by the Chippewa Cree Business Committee on March 9, 2006.

Dated: March 28, 2007.

Michael D. Olsen,

Principal Deputy Assistant Secretary—Indian Affairs.

The Amendment to the Chippewa Cree Tribe of the Rocky Boy's Indian Reservation Liquor Ordinance reads as follows:

Chippewa Cree Law and Order Code Alcoholic Beverage Control Ordinance

Chapter 1 General Provisions

Section 1.1 *Title*—This Ordinance shall be known as the ''Alcoholic Beverage Control Ordinance.'' The Tribe previously passed Ordinance I–70 which was certified by the Commissioner of Indian Affairs on June 16, 1970, and published in the **Federal Register** on June 25, 1970, authorizing the introduction, sale or possession of intoxicating beverages on the Rocky Boy's Reservation (35 FR 10384, 1970). This Ordinance replaces Ordinance I–70 to include the following provisions as adopted by the Chippewa Cree Tribal Business Committee.

Section 1.2 *Purpose*—This Ordinance regulates the consumption, delivery and sale of alcoholic beverages within the exterior boundaries of the Rocky Boy's Reservation and other lands subject to Tribal jurisdiction for the purpose of protecting the health, safety and welfare of the Chippewa Cree Tribe and its members as well as the general public.

Section 1.3 *Authority*—This Alcoholic Beverage Control Ordinance is enacted pursuant to Article VI, Section 1(p) of the Constitution and Bylaws of the Chippewa Cree Tribe. Federal law currently prohibits the introduction of alcoholic beverage into Indian Country (18 U.S.C. 1154), and expressly delegates to tribes the decision regarding when and to what extent alcoholic beverage transactions shall be permitted (18 U.S.C. 1161). Unless otherwise provided in this Ordinance, standards for the sale and transaction of alcoholic beverages shall be in conformity with the laws of the State of Montana, as required by, and in accordance with 18 U.S.C. 1161.

Section 1.4 *Declaration of Public Policy*

(a) The introduction, possession, and sale of alcoholic beverage on the Rocky Boy's Reservation are a matter of special concern to the Chippewa Cree Tribe.

(b) Compliance with this ordinance shall be in addition to, and not a substitute for, compliance with the laws of the State of Montana.

(c) In 1970, the Chippewa Cree Tribe passed Ordinance I–70, authorizing the introduction, sale or possession of alcoholic beverages on the Rocky Boy's Reservation. This Ordinance replaces Ordinance I–70 recognizing that a need still exists for strict regulation and control over alcoholic beverages transactions within the Rocky Boy's Reservation because of the many potential problems associated with the unregulated or inadequately regulated sale, possession, distribution, and consumption of alcoholic beverages. The Chippewa Cree Tribal Business Committee finds that Tribal control and regulation of alcoholic beverages necessary to achieve maximum economic benefit to the Tribe, to protect the health and welfare of Tribal members, and to address specific concerns relating to alcohol use on the Rocky Boy's Reservation.

(d) It is in the best interests of the Chippewa Cree Tribe to enact a Tribal ordinance governing alcoholic beverage sales on the Rocky Boy's Reservation, which provides for purchase, distribution, and sale of alcoholic beverages only on specific Tribal lands within the exterior boundaries of the Rocky Boy's Reservation, as designated

by this Ordinance. Further, the Tribe has determined that said purchase, distribution, sale, and consumption shall take place only at a Tribally-owned gaming facility complex or at such other location duly licensed by the Chippewa Cree Tribe.

Section 1.5 *Limited Application*—The consumption, delivery and sale of alcoholic beverages shall be limited solely to Tribally designated entities located within the exterior boundaries of the Rocky Boy's Reservation as designated by the Chippewa Cree Tribal Business Committee.

Section 1.6 *Definitions*

(a) ''Alcohol'' means ethyl alcohol, also called ethanol, or the hydrated oxide of ethyl.

(b) ''Alcoholic beverage'' means a compound produced and sold for human consumption as a drink that contains more than one-half of one percent (0.5%) of alcohol by volume.

(c) ''Beer'' means any beverage obtained by alcoholic fermentation of an infusion or decoction of barley, malt, hops or any similar products or any combination thereof.

(d) ''Liquor'' means an alcoholic beverage except beer and wine.

(e) ''Rocky Boy's Reservation'' means all lands held in trust by the United States for the Tribe or its members and all lands owned by the Tribe, wherever located.

(f) ''Sell'' or ''sold'' means any transfer of alcoholic beverages with consideration, any transfer without consideration if knowingly made for the purposes of evading the law relating to the sale of alcoholic beverages, the soliciting or receiving an order to sell or keep for future delivery alcoholic beverages, the peddling of alcoholic beverages, or the keeping with intent to sell any alcoholic beverages.

(g) ''Sale'' includes every act of selling as defined in subsection (f) of this section.

(h) ''State'' means the State of Montana.

(i) ''Tribally Designated Entity'' means the Chippewa Cree Tribally-owned gaming facility complex operated on Tribally owned land, also known as North Winds Casino, or other such Tribal entity designated by the Chippewa Cree Tribal Business Committee by resolution as the proper entity to sale alcoholic beverages.

(j) ''Wine'' means a beverage made from or containing the alcoholic fermentation of the juice of sound, ripe fruit or other agricultural products without addition or abstraction, except as may occur in the usual cellar treatment of clarifying and aging, and that contains not more than twenty-four percent (24%) of alcohol by volume. Other alcoholic beverages not defined in this subsection but made in the manner of wine and labeled and sold as wine in accordance with federal regulations are also wine.

Chapter 2 Sale of Alcoholic Beverages

Section 2.1 *Tribal Alcoholic Beverage License Required*—No sales of alcoholic beverages shall be made within the exterior boundaries of the Rocky Boy's Reservation, except at a Tribally licensed, Tribally designated entity. Nothing in this section shall prohibit a Tribal licensee or the Tribe from purchasing alcoholic beverages from an off-Reservation source for resale on the Reservation nor prohibit the delivery of alcoholic beverages purchased from off-Reservation sources to the Reservation for a Tribal licensee of alcoholic beverages to resale on the Reservation.

Section 2.2 *Limited to Tribally Designated Entities*—The consumption, delivery and/or sale of alcohol or alcoholic beverages is confined to location(s) of the Tribally designated entities.

Section 2.3 *Sales for Personal Use; Resale Prohibited*—All sales allowed under this Ordinance shall be for personal use of the individual purchaser. Resale of any alcoholic beverage is prohibited and violators shall be prosecuted and subject to penalties under this Ordinance.

Section 2.4 *Sales Limited to Adults*—All handling, stocking, possession, and sale of alcoholic beverage shall be made by persons twenty-one (21) years of age or older. Proof of age must be shown by a current and valid state driver's license or other federal, state, or tribal government issued identification that contains birth date and photo of the holder of the license or identification.

Section 2.5 Right to Refuse Sale—Any person or entity authorized to sell alcoholic beverages under this Ordinance shall have the authority to refuse to sell alcoholic beverage to any person unable to produce proof of age and identity.

Section 2.6 *Liability Insurance*—Any entity authorized to dispense, sell, serve or deliver alcohol under this Ordinance shall obtain general liability insurance in the amount not less than $1,000,000 per occurrence.

Chapter 3 Jurisdiction, Licensing and Fees

Section 3.1 *Jurisdiction*—The Chippewa Cree Tribal Court is vested with original jurisdiction to hear and decide all matters arising pursuant to this Ordinance.

Section 3.2 *License Applications*

(a) Alcoholic beverage license applications shall be filed with the Secretary/Treasurer of the Chippewa Cree Tribe containing the following information:

(1) The name of the Tribally designated entity where the sale and consumption of alcoholic beverages would take place. Such entity shall be the applicant. No individual or private entity may apply for or receive a license under this Ordinance.

(2) A copy of the Tribal resolution under which the applicant was created or approved by the Chippewa Cree Tribe.

(3) Physical address or description of the land where sale and consumption of alcoholic beverages would take place.

(b) Upon receipt of proper application, the Tribal Business Committee shall issue an alcoholic beverage license under this Ordinance if the Tribal Business Committee finds, in its sound discretion, on the basis of facts disclosed by the application that such issuance is in the interest of the Tribe.

Section 3.3 *Scope of License*—A license issued under this Ordinance shall permit the licensee to dispense, sell, serve or deliver alcohol only at the Tribally designated entity approved by the Tribal Business Committee and subject to any conditions on the license.

Each license shall specify the following:

(a) Particular alcoholic beverages that the licensee is authorized to dispense, sell, serve or deliver;

(b) Licensee's mailing and physical address and business or trade name; and

(c) Purpose for which the alcoholic beverages shall be dispensed, sold, served or delivered.

(d) Each license shall explicitly state that its continued validity is dependent upon the compliant of its holder with all the provisions of this Ordinance and other applicable law.

Section 3.4 *Expiration/Renewal of License*—Every license expires annually, measured from the date of issuance and a licensee must renew the license annually.

(a) A licensee who fails to renew the license on or before the due date shall pay a penalty of one hundred dollars ($100) with their application for renewal along with the renewal fee;

(b) A license renewal application that is properly addressed, postage provided, and deposited in an official depository of the United States on or before the due date shall be deemed filed and received by the Tribe on the date shown by the

postmark or other official mark of the United States postal service;

(c) A licensee who fails to renew the license on or before the due date shall not dispense, sell, serve or deliver or otherwise deal in alcoholic beverage until the license is renewed; and

(d) A license not renewed within twenty (20) working days after the due date shall be deemed terminated.

Section 3.5 *Fees*—All applications for alcoholic beverage licenses shall include full payment of the fees paid to the Tribe's Treasurer's office and deposited in the Chippewa Cree Tribe's general fund.

(a) Application fees for a Tribal Alcoholic Beverage License—one thousand dollars ($1000.00);

(b) Annual renewal fee—one hundred dollars ($100.00); or

(c) As set by Tribal resolution of the Tribal Business Committee.

Chapter 4 Prohibited Activity

Section 4.1 It shall be unlawful for any person or entity to dispense, sell, serve, deliver, or otherwise deal in alcoholic beverages on the Rocky Boy's Reservation except as provided for in this Ordinance.

Section 4.2 Except for a licensed Tribally designated entity, it shall be unlawful for any business establishment or person on the Rocky Boy's Reservation to possess with the intent to sell, distribute, barter, or trade to another any alcoholic beverage; provided, however, that a person or entity may transport alcoholic beverages from off the reservation to the licensed Tribally designated entity, consistent with the terms of the license.

Section 4.3 It shall be unlawful for any person to publicly consume any alcoholic beverage at any community function, or at or near any place of business, celebration grounds, recreational areas, ballparks, public camping areas, Tribal offices, Tribal headquarters, schools, and any other area where minors gather for meetings or recreation, except within a Tribal licensed establishment where alcohol is sold.

Section 4.4 It shall be unlawful for any person under the age of twenty-one (21) years old to buy, to attempt to buy, to misrepresent their age in attempting to buy, to transport, to possess, to consume, or to be under the influence any alcoholic beverage. It shall be unlawful for any person under the age of twenty-one (21) years old to be at an establishment where alcoholic beverages are dispensed, sold, served or delivered, except as provided under Section 4.7 of this Ordinance.

Section 4.5 It shall be unlawful for any person to sell or furnish alcoholic beverage to any person under the age of twenty-one (21) years old.

Section 4.6 Alcoholic beverages may not be given as a prize, premium or consideration for a lottery, contest, game of chance or skill, or competition of any kind.

Section 4.7 The licensee under this Ordinance may employ persons eighteen (18), nineteen (19) and twenty (20) years of age who may take orders for, serve and sell alcoholic beverages in any part of the licensed premises when that activity is incidental to the serving of food except in those areas classified as prohibited to the use of minors.

(a) However, no person who is 18, 19 or 20 years of age shall be permitted to mix, pour or draw alcoholic beverages except when pouring is done as a service to the patron at the patron's table or drawing is done in a portion of the premises not prohibited to minors; and

(b) Except as stated in this section, it shall be unlawful to hire any person to work in connection with the sale and service of alcoholic beverages in a Tribally licensed alcoholic beverage establishment if such person is under the age of twenty-one (21) years.

Chapter 5 Violations

Section 5.1 *Jurisdiction*—Any person or entity who violates the provisions of this Ordinance may be subject to a civil penalty in Tribal Court for a civil infraction.

Section 5.2 *Penalty*—Upon a determination by the Chippewa Cree Tribal Court that a licensee has violated any provision of this Ordinance, any or all of the following sanctions may be imposed:

a. Suspension of alcoholic beverage license;

b. Revocation of alcoholic beverage license; or

c. Civil fine in amount established by the Court which shall not exceed the sum of $1,000 for each infraction, provided, however, that the full fine shall not exceed $5,000 if it involves minors.

Chapter 6 Taxes

[Reserved]

Chapter 7 Severability and Miscellaneous

Section 7.1 *Severability*—If the Chippewa Cree Tribal Court finds any provision of this Ordinance to be invalid or illegal under applicable Federal or Tribal law, such provision shall be severed from this Ordinance and the remainder of this Ordinance shall remain in full force and effect.

Section 7.2 *Conformance with Tribal, State and Federal Law*—This Ordinance shall conform with all Tribal laws. All provisions and transactions under this Ordinance shall be in conformity with any applicable State laws regarding alcohol to the extent required by 18 U.S.C. 1161 and with all Federal laws regarding alcohol in Indian Country.

Section 7.3 *Enforcement*—All actions brought by the Chippewa Cree Tribe to enforce the provisions of this Ordinance shall be filed in the Chippewa Cree Tribal Court.

Section 7.4 *Effective Date*—This Ordinance becomes effective as a matter of Tribal law upon approval by the Chippewa Cree Tribal Business Committee and effective as a matter of Federal law on such date as the Assistant Secretary of Indian Affairs or his/her designee certifies the Ordinance and publishes it in the **Federal Register**.

Chapter 8 Amendment

This Ordinance may be amended or repealed by a majority vote of the Chippewa Cree Tribal Business Committee.

Chapter 9 Sovereign Immunity

Nothing in this Ordinance is intended to nor does it in any way limit, alter, restrict or waive the Tribe's sovereign immunity from unconsented suit or action.

[FR Doc. E7–6106 Filed 4–2–07; 8:45 am]

BILLING CODE 4310–4J–P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Advisory Board for Exceptional Children

AGENCY: Bureau of Indian Education, Interior.

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, the Bureau of Indian Education is announcing that the Advisory Board for Exceptional Children will hold its next meeting in Miami, FL. The purpose of the meeting is to meet the mandates of the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA) on Indian children with disabilities.

DATES: The Board will meet on Sunday, April 29, 2007, from 9 a.m. to 9 p.m.; Monday, April 30, 2007, from 8 a.m. to

5 p.m.; and Tuesday, May 1, 2007, from 8 a.m. to 5 p.m. Local Time.

ADDRESSES: The meetings will be held at the Miccosukee Indian School, U.S. HWY 41 Mile Marker 70, P.O. Box 440021, Tamiami Station, Miami, FL 33144.

Written statements may be submitted to Mr. Thomas M. Dowd, Director, Bureau of Indian Education, 1849 C Street, NW., Mail Stop 3609–MIB, Washington, DC 20240; Telephone (202) 208–6123; Fax (202) 208–3312.

FOR FURTHER INFORMATION CONTACT: Dr. Sherry Allison, Designated Federal Official, Bureau of Indian Education, Albuquerque Service Center, Division of Performance and Accountability, P.O. Box 1088, Suite 332, Albuquerque, NM 87103; Telephone (505) 563–5277.

SUPPLEMENTARY INFORMATION: The Advisory Board was established to advise the Secretary of the Interior, through the Assistant Secretary—Indian Affairs, on the needs of Indian children with disabilities, as mandated by the Individuals with Disabilities Education Improvement Act of 2004 (Pub. L. 108–446).

The following items will be on the agenda:

- Special Education Director's Report.
- Status of Annual Performance Report.
- Dispute Resolution Activities.
- Albuquerque Service Center Update.

The meetings are open to the public.

Dated: March 20, 2007.

Michael D. Olsen,

Principal Deputy Assistant Secretary, Indian Affairs.

[FR Doc. E7–6134 Filed 4–2–07; 8:45 am]

BILLING CODE 4310–6W–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[MT–926–07–1910–BJ–5RED]

Montana: Filing of Plat of Survey

AGENCY: Bureau of Land Management, Montana State Office, Interior.

ACTION: Notice of Filing of Plat of Survey.

SUMMARY: The Bureau of Land Management (BLM) will file the plat of survey of the lands described below in the BLM Montana State Office, Billings, Montana, (30) days from the date of publication in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: Steve Toth, Cadastral Surveyor, Branch of Cadastral Survey, Bureau of Land Management, 5001 Southgate Drive, Billings, Montana 59101–4669, telephone (406) 896–5121 or (406) 896–5009.

SUPPLEMENTARY INFORMATION: This survey was executed at the request of the Northern Cheyenne Agency, through the Rocky Mountain Regional Director, Bureau of Indian Affairs, and was necessary to determine Trust and Tribal lands. *The lands we surveyed are:*

Principal Meridian, Montana

T. 3 S., R. 44 E.

The plat, in 5 sheets, representing the dependent resurvey of a portion of the south boundary, the corrective dependent resurvey of the line between sections 32 and 33, the dependent resurvey of a portion of the subdivisional lines, the corrective dependent resurvey of a portion of the subdivision of section 32, the dependent resurvey of a portion of the subdivision of sections 32 and 33, the adjusted original meanders of the former right bank and a portion of the adjusted original meanders of the former left bank of the Tongue River, downstream, through sections 32 and 33, and the subdivision of section 33, and the survey of certain meanders of the present right and left banks of the Tongue River, downstream, through sections 32 and 33, and certain division of accretion lines, in Township 3 South, Range 44 East, Principal Meridian, Montana, was accepted March 21, 2007.

We will place a copy of the plat, in 5 sheets, and related field notes we described in the open files. They will be available to the public as a matter of information.

If BLM receives a protest against this survey, as shown on this plat, in 5 sheets, prior to the date of the official filing, we will stay the filing pending our consideration of the protest.

We will not officially file this plat, in 5 sheets, until the day after we have accepted or dismissed all protests and they have become final, including decisions or appeals.

Dated: March 28, 2007.

Heidi L. Pfosch,

Acting Chief Cadastral Surveyor, Division of Resources.

[FR Doc. E7–6120 Filed 4–2–07; 8:45 am]

BILLING CODE 4310–$$–P

DEPARTMENT OF THE INTERIOR

Bureau of Reclamation

Red River Valley Water Supply Project, ND

AGENCY: Bureau of Reclamation, Interior.

ACTION: Notice for extension of the public comment period for the Supplemental Draft Environmental Impact Statement (SDEIS).

SUMMARY: The Bureau of Reclamation is announcing an extension of the public comment period for the Red River Valley Water Supply Project SDEIS. The previously announced comment period for the SDEIS was published in the **Federal Register** on February 9, 2007 (72 FR, 6285–6286) informing the public that the comment period would end on March 26, 2007. We are now notifying the public that Reclamation and the State of North Dakota are extending the comment period for an additional 30 days. Accordingly, the public comment period is extended to April 25, 2007.

DATES: All comments on the Supplemental DEIS must be received by Reclamation on or before April 25, 2007, at the address provided below.

ADDRESSES: Send comments on the Supplemental DEIS to: Red River Valley Water Supply Project EIS, Bureau of Reclamation, Dakotas Area Office, P.O. Box 1017, Bismarck, ND 58502.

FOR FURTHER INFORMATION CONTACT: Ms. Signe Snortland, telephone: (701) 250–4242 extension 3619, or Fax to (701) 250–4326. You may submit e-mail comments to *ssnortland@gp.usbr.gov* or through the Red River Valley Water Supply Project Web site at *http://www.rrvwsp.com.*

SUPPLEMENTARY INFORMATION: Our practice is to make comments, including names, home addresses, home phone numbers, and e-mail addresses of respondents, available for public review. Individual respondents may request that we withhold their names and/or home addresses, etc., but if you wish us to consider withholding this information you must state this prominently at the beginning of your comments. In addition you must present a rationale for withholding this information. The rationale must demonstrate that the disclosure would constitute a clearly unwarranted invasion of privacy. Unsupported assertions will not meet this burden. In the absence of exceptional, documentable circumstances, this information will be released. We will always make submissions for organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Dated: March 26, 2007.

Donald E. Moomaw,

Assistant Regional Director, Great Plains Region.

[FR Doc. E7–6176 Filed 4–2–07; 8:45 am]

BILLING CODE 4310–MN–P

DEPARTMENT OF JUSTICE

[OMB Number 1105–NEW]

Justice Management Division, Office of Attorney Recruitment and Management; Agency Information Collection Activities: Proposed Collection; Comments Requested

ACTION: 60-Day Notice of Information Collection Under Review: Applications for the Attorney Student Loan Repayment Program.

The Department of Justice (DOJ), Justice Management Division, Office of Attorney Recruitment and Management (OARM), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection is published to obtain comments from the public and affected agencies. Comments are encouraged and will be accepted for 60 days until June 4, 2007. This process is conducted in accordance with 5 CFR 1320.10.

Written comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time, should be directed to the Office of Management and Budget, Office of Information and Regulatory Affairs, Attention: Department of Justice Desk Officer, Washington, DC 20530. Additionally, comments may be submitted to OMB via facsimile to 202–395–7285. Comments may also be submitted to the Department Clearance Officer, United States Department of Justice, Suite 1600, 601 D Street, NW., Washington, DC 20530.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

(1) 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;

(2) 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;

(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 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.

Overview of this information collection:

(1) *Type of information collection:* Proposed New Collection.

(2) *The title of the collection:* Applications for the Attorney Student Loan Repayment Program.

(3) *The agency form number, if any, and the applicable component of the department sponsoring the collection: Form Number:* None. Office of Attorney Recruitment and Management, Justice Management Division, U.S. Department of Justice.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract: Primary:* Individuals or households. *Other:* None. The Department of Justice Attorney Student Loan Repayment Program (ASLRP) is an agency recruitment and retention incentive program based on 5 U.S.C. 5379, as amended, and 5 CFR part 537. The Department selects participants during an annual open season each spring. Anyone currently employed as an attorney or hired to serve in an attorney position within the Department may request consideration for the ASLRP. The Department selects new attorneys each year for participation on a competitive basis and renews current beneficiaries who remain qualified for these benefits, subject to availability of funds. There are two types of application forms: one is for new requests, and the other for renewal requests. There are also two service agreement forms: an initial three-year service agreement form, and a one-year service extension form.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond/reply:* The Department anticipates that on a yearly basis, about 175 respondents will complete the application for a new request. In addition, each year the Department expects to receive approximately 300 applications from attorneys and law clerks requesting renewal of the benefits they received in previous years. It is estimated that each new application will take one (1) hour to complete, and each renewal application approximately 30 minutes to complete.

(6) *An estimate of the total public burden (in hours) associated with the collection:* The total estimated annual public burden associated with this collection is 325 hours.

If additional information is required, contact Lynn Bryant, Department Clearance Officer, United States Department of Justice, Suite 1600, 601 D Street, NW., Washington, DC 20530.

Dated: March 28, 2007.

Lynn Bryant,

Department Clearance Officer, PRA, Department of Justice.

[FR Doc. E7–6110 Filed 4–2–07; 8:45 am]

BILLING CODE 4410–PB–P

DEPARTMENT OF JUSTICE

[OMB Number 1103–0066]

Office of Community Oriented Policing Services; Agency Information Collection Activities: Proposed Collection; Comments Requested

ACTION: 60-Day Notice of Information Collection Under Review: Revision of a Currently Approved Collection; National Center for Victims of Crime: Service Referral Questionnaire.

The Department of Justice (DOJ) Office of Community Oriented Policing Services (COPS), has submitted the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection is published to obtain comments from the public and affected agencies. Comments are encouraged and will be accepted for ''sixty days'' until June 4, 2007. This process is conducted in accordance with 5 CFR 1320.10.

If you have comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Rebekah Dorr, Department of Justice Office of Community Oriented Policing Services, 1100 Vermont Avenue, NW., Washington, DC 20530.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

• 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 agencies 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 submission of responses.

Overview of this information collection:

1. *Type of Information Collection:* Revision of a currently approved collection.

2. *Title of the Form/Collection:* National Center for Victims of Crime: Service Referral Questionnaire.

3. *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection: Form Number:* None. U.S. Department of Justice Office of Community Oriented Policing Services (COPS).

4. *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Non-Profit and For-Profit Crime Victim Service Providers and government agencies.

5. *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* It is estimated that 12,000 respondents annually will complete the form within 15 minutes.

6. An estimate of the total public burden (in hours) associated with the collection: There are an estimated 3,000 total annual burden hours associated with this collection.

If additional information is required contact: Lynn Bryant, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Patrick Henry Building, Suite 1600, 601 D Street, NW., Washington, DC 20530.

Dated: March 28, 2007.

Lynn Bryant,

Department Clearance Officer, PRA, Department of Justice.

[FR Doc. E7–6111 Filed 4–2–07; 8:45 am]

BILLING CODE 4410–AT–P

DEPARTMENT OF JUSTICE

[AAG/A Order No. 011–2007]

Justice Management Division; Privacy Act of 1974; System of Records

AGENCY: Office of Attorney Recruitment and Management, Justice Management Division, Department of Justice.

ACTION: Modification to a system of records.

SUMMARY: The Department of Justice (DOJ) proposes to modify the Privacy Act notice on ''Federal Bureau of Investigation Whistleblower Case Files, JMD–023,'' last published on September 7, 2005, at 70 FR 53253. The modifications are made in the ''Categories of Records in the System'' and in the ''Retention and Disposal'' sections of the notice.

DATES: In accordance with the requirements of 5 U.S.C. 552a(e)(4) and (11), the public is given a 30-day period in which to comment. The Office of Management and Budget (OMB), which has oversight responsibility under the Act, has 40 days in which to conclude its review of the modifications to the system notice. Therefore, please submit any comments by May 14, 2007.

ADDRESSES: The public, OMB, and the Congress are invited to submit any comments to Mary E. Cahill, Management and Planning Staff, Justice Management Division, Department of Justice, Washington, DC 20530 (Room 1400, National Place Building), Facsimile number (202) 307–1853.

FOR FURTHER INFORMATION CONTACT: Louis DeFalaise, Director, Office of Attorney Recruitment and Management, Justice Management Division, Department of Justice, Washington, DC 20530 (Suite 5100, 20 Massachusetts Ave., NW.) on (202) 514–8900.

SUPPLEMENTARY INFORMATION: 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.access.gpo.gov/nara/index.html.*

In accordance with 5 U.S.C. 552a(r), the Department has provided a report to OMB and the Congress.

Dated: March 22, 2007.

Lee J. Lofthus,

Assistant Attorney General for Administration.

Justice/JMD–023

SYSTEM NAME:

Federal Bureau of Investigation Whistleblower Case Files.

* * * * *

CATEGORIES OF RECORDS IN THE SYSTEM:

The records in the system relate to OARM's adjudication of FBI whistleblower cases, and customarily include: requests or recommendations for corrective action brought pursuant to 28 CFR Part 27; the parties' written comments, pleadings, and/or motions, correspondence between OARM and the parties and OARM and the Conducting Offices; lists of witnesses, evidence and exhibits (to include written documentation, audiotapes, and/or videotapes); deposition and hearing transcripts; OARM's Opinions and Orders; and any directive and/or decision by the Deputy Attorney General.

* * * * *

RETENTION AND DISPOSAL:

Temporary. Transfer to the Washington National Records Center two years after closing. Destroy six years after closing.

* * * * *

[FR Doc. E7–6108 Filed 4–2–07; 8:45 am]

BILLING CODE 4410–PB–P

DEPARTMENT OF JUSTICE

Office of Justice Programs

[OMB Number 1121–0219]

Office of Juvenile Justice and Delinquency Prevention; Agency Information Collection Activities: Proposed Collection; Comments Requested

ACTION: 60-Day Notice of Information Collection Under Review; Extension, without change, of a previously approved collection; Juvenile Residential Facility Census.

The Department of Justice (DOJ), Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection is published to

obtain comments from the public and affected agencies. Comments are encouraged and will be accepted for ''sixty days'' until June 4, 2007. This process is conducted in accordance with 5 CFR 1320.10.

If you have comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Janet Chiancone, (202) 353–9258, Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, U.S. Department of Justice, 810 Seventh Street, NW., Washington, DC 20531.

Request written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

—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 agencies 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 submission of responses.

Overview of this information collection:

(1) *Type of information collection:* Extension of a currently approved collection.

(2) *The title of the form/collection:* Juvenile Residential Facility Census.

(3) *The agency form number, if any, and the applicable component of the Department sponsoring the collection:* The form number is CJ–15, Office of Juvenile Justice and Delinquency Prevention, United States Department of Justice.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract: Primary:* Federal Government, State, Local or Tribal.

Other: Not-for-profit institutions; business or other for-profit. This collection will gather information necessary to routinely monitor the types of facilities into which the juvenile justice system places young persons and the services available in these facilities.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond/reply:* It is estimated that 3,500 respondents will complete a 2-hour questionnaire.

(6) *An estimate of the total public burden (in hours) associated with the collection:* The total hour burden to complete the nominations is 7,000 annual burden hours.

If additional information is required contact: Lynn Bryant, Department Clearance Officer, Policy and Planning Staff, Justice Management Division, Department of Justice, Patrick Henry Building, Suite 1600, 601 D Street, NW., Washington, DC 20530.

Dated: March 28, 2007.

Lynn Bryant,

Department Clearance Officer, PRA, Department of Justice.

[FR Doc. E7–6109 Filed 4–2–07; 8:45 am]

BILLING CODE 4410–18–P

DEPARTMENT OF LABOR

Office of the Secretary

[Secretary's Order 3–2007]

Delegation of Authority and Assignment of Responsibility to the Assistant Secretary for Employment and Training

1. *Purpose and Scope.* The purpose of this Secretary's Order is to delegate and assign to the Assistant Secretary for Employment and Training (ASET) the authorities and responsibilities of the Secretary of Labor for organizing, implementing, and putting into operation employment and training policies, programs, and activities.

2. *Authority and Directives Affected.*

A. *Authorities.* This Order is issued under 5 U.S.C. 301 (Departmental Regulations); 29 U.S.C. 551 (Establishment of the Department; Secretary; Seal); Reorganization Plan No. 6 of 1950 (U.S.C. Appendix 1).

B. *Directives Affected.* Secretary's Orders 4–75 (Manpower Programs), 2–79 (Targeted Jobs Tax Credit), 3–81 (Trade Act of 1974), and 2–85 (Job Training Partnership Act) are hereby superseded and cancelled by this Order. All Secretary's Orders and other DOL documents (including policies and guidance) which reference Secretary's Orders 4–75, 2–79 and 2–85, and the delegation of authority and assignment of responsibility of the ASET under Secretary's Order 3–81, are deemed to refer to this Order instead.

3. *Background.* This Order, which repeals and supersedes Secretary's Orders 4–75, 2–79, 3–81, and 2–85, constitutes the primary Secretary's Order for the Employment and Training Administration (ETA). This Order consolidates all of the authority delegated and the responsibilities assigned for the employment and training policies, programs, and activities of ETA to the ASET. The ASET is responsible for overseeing and managing a budget that funds the nation's publicly-funded workforce investment system. This system contributes to the more efficient functioning of the U.S. labor market by providing a wide array of employment and training services to employers, job seekers, and youth, including job training, employment services, labor market information, and income maintenance services. The ASET manages the agency responsible for carrying out these responsibilities.

4. *Delegation of Authority and Assignment of Responsibilities.*

A. The Assistant Secretary for Employment and Training is hereby delegated authority and assigned responsibility for carrying out the standards, policies, programs, and activities of the Department of Labor, including grant making and contract procurement activities in accordance with existing governmental and Departmental regulations, relating to workforce development activities such as employment services, benefit assistance, and training, including those functions to be performed by the Secretary of Labor under the designated provisions of the following statutes, except as provided in paragraph 5 of this Order.

(1) American Competitiveness and Workforce Improvement Act, Section 414(c), Public Law 105–277, as amended by Division J, Section 428, Public Law 108–447, 29 U.S.C. 2916a.

(2) Appalachian Regional Development Act of 1965, as amended, 40 U.S.C. 14101 *et seq.*

(3) Federal Unemployment Tax Act, as amended, 26 U.S.C. 3301–3311, including the Federal-State Extended Unemployment Compensation Act of 1970, as amended, 26 U.S.C. 3304 note.

(4) Health Coverage Tax Credit, section 31 of the Internal Revenue Code of 1986, 26 U.S.C. 31.

(5) Immigration and Nationality Act of 1952, as amended, 8 U.S.C. 1101 *et seq.* and related laws, subject to (i) Secretary's Order 4–2001 which remains in effect, which in relevant part,

delegates authority and assigns responsibility to the Assistant Secretary for Employment Standards for the enforcement of alien labor certification, attestation, and labor condition application programs, and (ii) Secretary's Order 18–2006 which remains in effect, which in relevant part, delegates authority and assigns responsibility to the Deputy Undersecretary for International Affairs for assisting the Secretary of Homeland Security in the preparation of immigration reports and assisting in the coordination of information on immigration and migration policy within the Department and coordinating the Department's participation in international forums on discussions of migration and immigration.

(6) Intergovernmental Cooperation Act of 1968, as amended, 31 U.S.C. 6501 *et seq.*

(7) National Apprenticeship Act (Fitzgerald Act), as amended, 29 U.S.C. 50 *et seq.*

(8) Older Americans Act of 1965, as amended, 42 U.S.C. 3056 *et seq.*

(9) Public Works Acceleration Act, Public Law 87–658, 42 U.S.C. 2641 *et seq.*

(10) Rehabilitation Act of 1973, as amended, 29 U.S.C. 795.

(11) Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, sections 410 and 423, 42 U.S.C. 5177 and 5189a.; Executive Order 12381, ''Delegation of Emergency Management Functions'' (September 8, 1982), which delegates the authority of the President to exercise powers of the President with respect to Federal disaster assistance to the Federal Emergency Management Agency; ''Delegation of Authority to the Department of Labor,'' from the Federal Emergency Management Agency to provide Federal disaster assistance (January 30, 1986).

(12) Rural Development Act of 1972, as amended, 7 U.S.C. 1932(d)(4).

(13) Small Business Act, as amended, 15 U.S.C. 644(n).

(14) Social Security Act of 1935, as amended, Title III-Grants to States for Unemployment Compensation Administration, 42 U.S.C. 501–504; Title IX-Unemployment Security Administration Financing, 42 U.S.C. 1101–1110; Title XI, Section 1137-Income and Eligibility Verification System, 42 U.S.C. 1320b-7; Title XII-Advances to State Unemployment Funds, 42 U.S.C. 1321–1324.

(15) Trade Act of 1974, as amended, 19 U.S.C. 2101–2321 and 2395; North American Free Trade Agreement Transitional Adjustment Assistance Program (NAFTA-TAA), Public Law 103–182, Title V, 19 U.S.C. 2331, repealed by section 123(c) of the Trade Reform Act of 2002, Public Law 107–210, except with respect to workers eligible for NAFTA-TAA under petitions filed before November 4, 2002.

(16) Unemployment Compensation for Federal Civilian Employees Program, 5 U.S.C. 8501–8509; and Unemployment Compensation for Ex-Servicemembers Program, 5 U.S.C. 8521–8525.

(17) Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, 38 U.S.C. 3689, 3694, 4106, 4107(c), 4110, and 4212(a)(2)(B) and (C). **Note:** Secretary's Order 4–2001 remains in effect, which in part, delegates authority and assigns responsibility to the Assistant Secretary for Employment Standards for affirmative action provisions of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, including 38 U.S.C. 4212(a)(1), 4212(a)(2)(A), and 4212(b)(2004) and 38 U.S.C. 4212(a) and (b) (2002). Subject to the above delegation to ETA, Secretary's Order 3–2004 remains in effect, which in part, delegates authority and assigns responsibility to the Assistant Secretary of Labor for Veterans' Employment and Training for administering the Federal Contractor Veteran's Employment Report (VETS–100), 38 U.S.C. 4212(d) and determining compliance pursuant to 20 CFR 1001.130 regarding Federal contractor priority of employment referral and employment listings under 38 U.S.C. 4212(a)(2)(B) and (C).

(18) Vocational Education Act of 1963, as amended, the Carl D. Perkins Vocational and Applied Technology Act, 20 U.S.C. 2301 *et seq.*

(19) Wagner-Peyser Act, as amended, 29 U.S.C. 49 *et seq.*

(20) Welfare-to-Work Tax Credit, section 51A of the Internal Revenue code of 1986, 26 U.S.C. 51A.

(21) Work Opportunity Tax Credit, section 51 of the Internal Revenue Code of 1986, 26 U.S.C. 51.

(22) Worker Adjustment and Retraining Notification Act, as amended, 29 U.S.C. 2101 *et seq.*

(23) Workforce Investment Act of 1998, title I and title V, Public Law 105–220, 29 U.S.C. 2801–2945, 20 U.S.C. 9271–9276 except for title I, subtitle D section 168 which pertains to the Veterans' Workforce Investment Program, 29 U.S.C. 2913, and title I, subtitle C which pertains to the Job Corps program, 29 U.S.C. 2881–2901.

(24) Executive Order 10582, ''Prescribing Uniform Procedures for Certain Determinations under the Buy American Act'' (December 17, 1954), as amended by Executive Order 11051, ''Prescribing Responsibilities of the Office of Emergency Planning in the Executive Office of the President'' (September 27, 1962), and Executive Order 12148, ''Federal Emergency Management'' (July 20, 1979).

(25) Executive Order 12656, ''Assignment of Emergency Preparedness Responsibilities'' (November 18, 1988).

(26) Executive Order 12789, ''Delegation of Reporting Functions under the Immigration Reform and Control Act of 1986'' (February 10, 1992), as amended by Executive Order 13286, ''Amendment of Executive Orders, and Other Actions, in Connection With the Transfer of Certain Functions to the Secretary of Homeland Security'' (February 28, 2003).

(27) Executive Order 12073, ''Federal Procurement in Labor Surplus Areas'' (August 16, 1978).

(28) Executive Order 13198, ''Agency Responsibilities With Respect to Faith-Based and Community Initiatives'' (January 29, 2001).

(29) Executive Order 13279, ''Equal Protection of the Laws for Faith-Based and Community Organizations'' (December 12, 2002).

(30) Such additional Federal Acts, Executive Orders, or regulations that may assign to the Secretary or the Department duties and responsibilities relating to workforce development activities including employment services, benefit assistance and training, similar to those listed under subparagraphs (1)–(29) of this paragraph, including, but not limited to, the extension of unemployment compensation provided under Federal law.

B. The Assistant Secretary for Employment and Training is delegated authority for making organizational changes in accordance with policies established by the Secretary.

C. The Assistant Secretary for Employment and Training is also delegated the authority and assigned responsibility to carry out departmental liaison and committee representative duties as provided in the relevant authorities listed in paragraph 4(A) above, except as provided in paragraph 5 of this Order.

D. The Solicitor of Labor is delegated authority and assigned responsibility for providing legal advice and assistance to officials of the Department relating to the administration of this Order and the statutory provisions, regulations, and Executive Orders listed above.

5. *Reservation of Authority.*

A. No delegation of authority or assignment of responsibility under this Order will be deemed to affect the Secretary's authority to continue to

exercise or further delegate such authority or responsibility.

B. The submission of reports and recommendations to the President and Congress concerning the administration of the statutory provisions and Executive Orders listed above is reserved to the Secretary.

C. Nothing in this Order shall limit or modify the delegation of authority and assignment of responsibility to the Administrative Review Board by Secretary's Order 1–2002 (September 24, 2002).

D. Nothing in this Order shall limit or modify the provision of any other Order, including Secretary's Order 04–2006 (February 21, 2006), Office of the Inspector General, except as expressly provided.

E. The Secretary reserves the authority to enter into and terminate an agreement with any state or state agency to act as an agent of the United States under section 239(a) of the Trade Act of 1974, as amended, 19 U.S.C. 2311(a), in the administration of the Trade Adjustment Assistance and NAFTA-Transitional Adjustment Assistance programs; under 5 U.S.C. 8502 in the administration of the Unemployment Compensation for Federal Employees and Unemployment Compensation for Ex-servicemembers programs; under section 410(a) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5177(a) in the administration of the Disaster Unemployment Assistance program; as well as under any federal program providing for the extension of unemployment compensation.

6. *Redelegation of Authority.* The Assistant Secretary for Employment and Training may further redelegate, unless otherwise prohibited, the authority and responsibilities herein delegated by this Order.

7. *Effective Date.* This Order is effective immediately.

Dated: March 28, 2007.

Elaine L. Chao,

Secretary of Labor.

[FR Doc. E7–6135 Filed 4–2–07; 8:45 am]

BILLING CODE 4510–23–P

DEPARTMENT OF LABOR

Employment and Training Administration

Proposed Collection; Comment Request

ACTION: Notice.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden conducts a pre-clearance 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 Job Corps Enrollee Allotment Determination. 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 at this Web site: *http://www.doleta.gov/OMBCN/OMBControlNumber.cfm*

DATES: Written comments must be submitted to the office listed in the addressee section below on or before June 4, 2007.

ADDRESSES: Send comments to Chris Conboy, Office of Job Corps, U.S. Department of Labor, 200 Constitution Ave., NW., Washington, DC 20210. Phone (202) 693–3093 (this is not a toll-free number), fax (202) 693–2767 or e-mail *Conboy.chris@dol.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

The Job Corps program, as authorized by the Workforce Investment Act (WIA) of 1998, is designed to serve low-income young women and men, 16 through 24, who are in need of additional career technical, educational and social skills training, and other support services in order to gain meaningful employment, return to school or enter the Armed Forces. Job Corps is operated by the Department of Labor through a nationwide network of 122 Job Corps centers. The program is primarily a residential program operating 24 hours per day, 7 days per week, with non-resident enrollees limited by legislation to 20 percent of national enrollment. These centers presently accommodate more than 60,000 students. To ensure that the centers are filled with youth who are low-income as well as capable of and committed to doing the work necessary to achieve the benefits of Job Corps, certain eligibility requirements have been established by the legislation.

The purpose of this collection is to gather information about a student's training and subsequent placement in a job, higher education or the military. It is used to evaluate overall program effectiveness. This form is critical to the program's effectiveness evaluation process. It is the only form which documents a student's post-center status. This form is completed by either the Job Corps center records staff or a career transition specialist for each student.

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

Type of Review: Extension of Currently Approved Collection.

Agency: Employment and Training Administration.

Title: Job Corps Placement and Assistance Record.

OMB Number: 1205–0035.

Agency Number: ETA–678.

Recordkeeping: The student is not required to retain records; career transition specialist or contractor main offices are required to retain records of students who separate from the program for three years from the date of separation.

Frequency: on occasion.

Affected Public: Individuals or households.

Total Respondents: 48,318.

Average Time per Response: 7.43 minutes.

Estimated Total Burden Hours: 5,979 hours.

Total Burden Cost (capital/startup): $0.

Total Burden Cost (operating/maintaining): $0.

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: March 26, 2007.

Esther R. Johnson,

National Director, Office of Job Corps.

[FR Doc. E7–6131 Filed 4–2–07; 8:45 am]

BILLING CODE 4510–30–P

DEPARTMENT OF LABOR

Employment and Training Administration

Proposed Collection; Comment Request

ACTION: Notice.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden conducts a pre-clearance 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 Job Corps Enrollee Allotment Determination. 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 at this Web site: *http://www.doleta.gov/OMBCN/OMBControlNumber.cfm*

DATES: Written comments must be submitted to the office listed in the addressee section below on or before June 4, 2007.

ADDRESSES: Send comments to Chris Conboy, Office of Job Corps, U.S. Department of Labor, 200 Constitution Ave., NW., Washington, DC 20210. Phone (202) 693–3093 (This is not a toll-free number.), fax (202) 693–2767 or e-mail *Conboy.chris@dol.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

The Job Corps program, as authorized by the Workforce Investment Act (WIA) of 1998, is designed to serve low-income young women and men, 16 through 24, who are in need of additional career technical, educational and social skills training, and other support services in order to gain meaningful employment, return to school or enter the Armed Forces. Job Corps is operated by the Department of Labor through a nationwide network of 122 Job Corps centers. The program is primarily a residential program operating 24 hours per day, 7 days per week, with non-resident enrollees limited by legislation to 20 percent of national enrollment. These centers presently accommodate more than 60,000 students. To ensure that the centers are filled with youth who are low-income as well as capable of and committed to doing the work necessary to achieve the benefits of Job Corps, certain eligibility requirements have been established by the legislation.

The purpose of this collection is to provide a vehicle to make allotments available to students who both desire an allotment and have a qualifying dependent. The is completed by the Job Corps admissions counselors or center staff and signed by the student during a personal interview.

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

Type of Review: Extension of Currently Approved Collection.

Agency: Employment and Training Administration.

Title: Job Corps Enrollee Allotment Determination.

OMB Number: 1205–0030.

Agency Number: ETA–658.

Recordkeeping: The applicant is not required to retain records; admissions counselors or contractor main offices are required to retain records of applicants who enroll in the program for three years from the date of application.

Frequency: Annually.

Affected Public: Individuals or households, Federal Government.

Total Respondents: 1,100.

Average Time per Response: 3 minutes.

Estimated Total Burden Hours: 55 hours.

Total Burden Cost (capital/startup): 0.

Total Burden Cost (operating/maintaining): $283.25.

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: March 26, 2007.

Esther R. Johnson,

National Director, Office of Job Corps.

[FR Doc. E7–6132 Filed 4–2–07; 8:45 am]

BILLING CODE 4510–30–P

DEPARTMENT OF LABOR

Employment and Training Administration

Proposed Information Collection Request Submitted for Public Comment and Recommendations; Job Corps Health Questionnaire

ACTION: Notice.

SUMMARY: The 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 Office of Job Corps is soliciting comments concerning Health Questionnaire, Form ETA 6–53. The following are the major changes in the revised ETA 6–53 Form and Instructions:

Expanded Purpose—The purpose of this form has been expanded to include

questions to determine whether an otherwise-eligible applicant offered enrollment may pose a direct threat to self or others.

Added information to Instructions—To comply with regulatory requirements, language has been added to the instructions to ensure that applicants are provided with appropriate information before medical or disability. (Instructions)

Added direct threat questions—To determine whether an otherwise-eligible applicant offered enrollment may pose a direct threat to self or others. The purpose of these questions is to prevent illness, injury, or death on centers. (Question 8 l–w)

Added new conditions—To better determine the health and accommodation/ modification needs of the applicant who has been offered enrollment, several new conditions have been added. (Question 9)

Added authorization to provide basic oral care—This will eliminate the need for the student to sign a separate authorization to receive basic oral care and provides a description of what is included in basic oral care. (Authorization Section)

Added requirement for AC to provide information—To ensure all applicants are informed of the health care to be provided by Job Corps, the AC is now required to provide each applicant a copy of the types of care that are considered ''basic routine health care'' from the Job Corps Policy and Requirements Handbook (currently Exhibit 6–4) before the ETA 6–53 is signed. (General Instructions)

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 at this Web site: *http://www.doleta.gov/OMBCN/OMBControlNumber.cfm.*

DATES: Written comments must be submitted to the office listed in the addressee section below on or before June 4, 2007.

ADDRESSES: Barbara J. Grove, RN, National Nurse Consultant, Office of Job Corps, Room N–4456, 200 Constitution Avenue, NW., Washington, DC 20210. Phone (202) 693–3116 (this is not a toll-free number), fax number (202) 693–3850 or e-mail: *grove.barbara@dol.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

The Job Corps Program is described in its enabling legislation under Public Law 105–220, Workforce Investment Act of 1998, as amended by Public Law 105–277. Section 145 establishes standards and procedures for obtaining data from each applicant relating to their needs. The Department of Labor's regulation at 20 CFR 670.410 further details the recruitment and screening of applicants.

Individuals who wish to enroll in the Job Corps Program must first be determined to be eligible and selected for enrollment. This process is carried out by admissions agencies, including state employment services, contracted to recruit young people for the Job Corps Program. The admission process ensures that applicants meet all the admission criteria as defined in the *Policy and Requirement Handbook (PRH) Chapter 1, Outreach and Admissions, July 2001.* Nonmedical personnel in the admissions office (admissions counselors) conduct the admission interview and complete the required application forms. The ETA 6–53 is completed on all applicants that have been determined to be eligible and selected for the Job Corps Program.

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 a 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

Type Of Review: Revision of a Currently Approved Collection.

Agency: Employment and Training Agency.

Title: Job Corps Health Questionnaire: form ETA 6–53.

OMB Number: 1205–0033.

Agency Number: ETA 6–53.

Recordkeeping: The applicant is not required to retain the records; admissions counselors or contractor's main offices are required to retain records of applicants who are enrolled in the program for three years from the date of application.

Affected Public: Individuals or households.

Total Responses: 87,943.

Estimated Total Burden Hours: 7,329.

Total Burden Cost: $821,399.

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: March 26, 2007.

Esther R. Johnson,

Administrator, Office of Job Corps.

[FR Doc. E7–6133 Filed 4–2–07; 8:45 am]

BILLING CODE 4510–30–P

DEPARTMENT OF LABOR

Employment and Training Administration

Workforce Investment Act; Native American Employment and Training Council

AGENCY: Employment and Training Administration, Labor.

ACTION: Notice of meeting.

SUMMARY: Pursuant to Section 10(a)(2) of the Federal Advisory Committee Act (FACA) (Pub. L. 92–463), as amended, and Section 166(h)(4) of the Workforce Investment Act (WIA) [29 U.S.C. 2911(h)(4)], notice is hereby given of the next meeting of the Native American Employment and Training Council (NAETC), as constituted under WIA.

Time and Date: The meeting will begin at 10:30 a.m. Eastern Daylight Savings Time (DST) on Wednesday, April 18, 2007, and continue until 5 p.m. that day. The meeting will reconvene at 10:30 a.m. (DST) on Thursday, April 19, 2007, and adjourn at approximately 4:30 p.m. on that day. The period from 2:30 p.m. to 4:30 p.m. on April 19, 2007, will be reserved for participation and presentations by members of the public.

Place: All sessions will be held at the Hyatt Regency Newport, Vanderbilt Room, 1 Goat Island, Newport, Rhode Island 02840.

Status: The meeting will be open to the public. Persons who need special accommodations should contact the Designated Federal Official (DFO), Mr. Craig Lewis, at (202) 693–3384 by April 12, 2007.

Matters To Be Considered: The formal agenda will focus on the following topics: (1) The Employment and Training Administration's Workforce

Innovation in Regional Economic Development initiative and other relevant issues; (2) Indian and Native American Program Update; (3) Workgroup Structures and Activities; (4) Fiscal Year 08 Funding; and (5) Council Recommendations.

FOR FURTHER INFORMATION CONTACT: Mr. Craig Lewis, DFO, Indian and Native American Programs, Employment and Training Administration, U.S. Department of Labor, Room S–4206, 200 Constitution Avenue, NW., Washington, DC 20210. Telephone: (202) 693–3384 (VOICE) (this is not a toll-free number).

Signed at Washington, DC, this 30th day of March 2007.

Emily Stover DeRocco,

Assistant Secretary, Employment and Training Administration.

[FR Doc. E7–6222 Filed 4–2–07; 8:45 am]

BILLING CODE 4510–FN–P

NATIONAL SCIENCE FOUNDATION

Agency Information Collection Activities: Comment Request

AGENCY: National Science Foundation.

ACTION: Submission for OMB review; comment request.

SUMMARY: The National Science Foundation (NSF) has submitted the following information collection requirement to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104–13. This is the second notice for public comment; the first was published in the **Federal Register** at 72 FR 3167, and no substantial comments were received. NSF is forwarding the proposed renewal submission to the Office of Management and Budget (OMB) for clearance simultaneously with the publication of this second notice. Comments regarding (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 burden including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility and clarity of the information to be collected; (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 technological collection techniques or other forms of information technology should be addressed to: Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for National Science Foundation, 725–17th Street, NW., Room 10235, Washington, DC 20503, and to Suzanne H. Plimpton, Reports Clearance Officer, National Science Foundation, 4201 Wilson Boulevard, Suite 295, Arlington, Virginia 22230 or send e-mail to *splimpto@nsf.gov.* Comments regarding these information collections are best assured of having their full effect if received within 30 days of this notification. Copies of the submission(s) may be obtained by calling 703–292–7556.

NSF may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

SUPPLEMENTARY INFORMATION:

Title of Collection: International Cover Page Addendum.

OMB Control No.: 3145–New.

Expiration Date of Approval: Not applicable.

Abstract: The Office of International Science and Engineering within the Office of the NSF Director will use the International Cover Page Addendum. Principal Investigators submitting proposals to this Office will be asked to complete an electronic version of the International Cover Page Addendum. The Addendum requests foreign counterpart investigator/host information and participant demographics not requested elsewhere in NSF proposal documents.

The information gathered with the International Cover Page Addendum serves four purposes. The first is to enable proposal assignment to the program officer responsible for activity with the primary countries involved. No current component of a standard NSF proposal requests this information. (The international cooperative activities box on the standard NSF Cover Page applies only to one specific type of activity, not the wide range of activities supported by OISE.) NSF proposal assignment applications are program element-based and therefore can not be used to determine assignment by country. The second use of the information is program management. OISE is committed to investing in activities in all regions of the world. With data from this form, the Office can determine submissions by geographic region. Thirdly, funding decisions can not be made without details for the international partner not included in any other part of the submission process. The fourth section, counts of scientists and students to be supported by the project, are also not available elsewhere in the proposal since OISE budgets do not include participant support costs. These factors are all important for OISE program management.

Estimated Number of Annual Respondents: 600.

Burden on the Public: 150 hours (15 minutes per respondent).

Dated: March 28, 2007.

Suzanne H. Plimpton,

Reports Clearance Officer, National Science Foundation.

[FR Doc. E7–6095 Filed 4–2–07; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–305]

Dominion Energy Kewaunee, Inc.; Notice of Withdrawal of Application for Amendment to Facility Operating License

The U.S. Nuclear Regulatory Commission (the Commission) has granted the request of Dominion Energy Kewaunee, Inc. (the licensee) to withdraw its April 6, 2006, application for proposed amendment to Facility Operating License No. DPR–43 for the Kewaunee Power Station, located in Kewaunee County, Wisconsin.

The proposed amendment would have revised the facility Updated Safety Analysis Report to allow the use of a different methodology for determining the design requirements necessary for protecting safety-related equipment from damage by tornado generated missiles.

The Commission had previously issued a Notice of Consideration of Issuance of Amendment published in the **Federal Register** on May 23, 2006 (71 FR 29673). However, by letter dated March 19, 2007, the licensee withdrew the proposed change.

For further details with respect to this action, see the application for amendment dated April 6, 2006, and the licensee's letter dated March 19, 2007, which withdrew the application for license amendment. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the Agencywide Documents Access and

Management Systems (ADAMS) Public Electronic Reading Room on the internet at the NRC Web site, *http://www.nrc.gov/reading-rm.html.* Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1–800–397–4209, or 301–415–4737 or by e-mail to *pdr@nrc.gov.*

Dated at Rockville, Maryland, this 26th day of March 2007.

For the Nuclear Regulatory Commission.

Robert F. Kuntz,

Project Manager, Plant Licensing Branch III–1, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. E7–6138 Filed 4–2–07; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 52–011–ESP; ASLBP No. 07–850–01–ESP–BD01]

Atomic Safety and Licensing Board Panel; Before the Licensing Board: G. Paul Bollwerk, III, Chairman, Nicholas G. Trikouros, Dr. James F. Jackson; In the Matter of Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site); Notice of Hearing (Application for Early Site Permit)

March 28, 2007.

This proceeding concerns the August 15, 2006 application of Southern Nuclear Operating Company (SNC) for a 10 CFR Part 52 early site permit (ESP). The ESP application seeks approval for use of the existing Vogtle Electric Generating Plant site near Waynesboro, Georgia, for the possible construction of two new nuclear reactors. In response to an October 5, 2006 notice of hearing and opportunity to petition for leave to intervene, 71 FR 60,195 (Oct. 12, 2006), on December 11, 2006, the Center for a Sustainable Coast, Savannah Riverkeeper, Southern Alliance for Clean Energy, Atlanta Women's Action for New Directions, and Blue Ridge Environmental Defense League (collectively the Joint Petitioners) filed a timely request for hearing and petition to intervene contesting the SNC ESP application. On December 13, 2006, the Commission referred the petition to the Atomic Safety and Licensing Board Panel to conduct any subsequent adjudication. On December 15, 2006, a three-member Atomic Safety and Licensing Board was established to adjudicate this ESP proceeding. *See* 71 FR 77,071 (Dec. 22, 2006).

On February 13, 2007, the Board conducted a one-day initial prehearing conference in Waynesboro, Georgia, during which it heard oral presentations regarding the standing of the Joint Petitioners and the admissibility of their seven proffered contentions. Thereafter, in a March 12, 2007 issuance, finding that each of the Joint Petitioners had established the requisite standing to intervene in this proceeding and that they had submitted two admissible contentions concerning the SNC ESP application, the Board admitted them as parties to this proceeding. *See Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP–07–03, 65 NRC (Mar. 12, 2006).

In light of the foregoing, please take notice that a hearing will be conducted in this proceeding. Subject to any Board determination regarding any request to utilize formal hearing procedures under 10 CFR part 2, Subpart G, *see* 10 CFR 2.310(d), the hearing on contested matters will be governed by the informal hearing procedures set forth in 10 CFR part 2, subparts C and L, 10 CFR 2.300–2.390, 2.1200–12.1213. Further, in accordance with the October 2006 notice regarding the SNC ESP application, 71 FR at 60,195, and 10 CFR 52.21, in the context of a hearing on uncontested matters, the Licensing Board will:

(1) Consider whether the issuance of an ESP will not be inimical to the common defense and security or to the health and safety of the public (Safety Issue 1);

(2) Determine whether, taking into consideration the site criteria contained in 10 CFR part 100, a reactor, or reactors, having characteristics that fall within the parameters for the site, can be constructed and operated without undue risk to the health and safety of the public (Safety Issue 2); and

(3) Consider whether, in accordance with the requirements of subpart A of 10 CFR part 51, the ESP should be issued as proposed.

Additionally, in accord with the October 2006 notice, the Board will:

(1) Determine whether the requirements of sections 102(2)(A), (C), and (E) of the National Environmental Policy Act of 1969 and 10 CFR Part 51, Subpart A, have been complied with in the proceeding;

(2) Independently consider the final balance among conflicting factors contained in the record of proceeding with a view to determining the appropriate action to be taken; and

(3) Determine, after considering reasonable alternatives, whether a license should be issued, denied, or appropriately conditioned to protect environmental values.

During the course of this proceeding, the Board may conduct an oral argument, as provided in 10 CFR 2.331, may hold additional prehearing conferences pursuant to 10 CFR 2.329, and may conduct evidentiary hearings in accordance with 10 CFR 2.327–2.328, 2.1206–2.1208. The public is invited to attend any oral argument, prehearing conference, or evidentiary hearing. Notices of those sessions will be published in the **Federal Register** and/or made available to the public at the NRC Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and through the NRC Web site, *http://www.nrc.gov.*

Additionally, as provided in 10 CFR 2.315(a), any person not a party to the proceeding may submit a written limited appearance statement. Limited appearance statements, which are placed in the docket for the hearing, provide members of the public with an opportunity to make the Board and/or the participants aware of their concerns about matters at issue in the proceeding. A written limited appearance statement can be submitted at any time and should be sent to the Office of the Secretary using one of the methods prescribed below:

Mail to: Office of the Secretary, Rulemakings and Adjudications Staff, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

Fax to: (301) 415–1101 (verification (301) 415–1966).

E-mail to: hearingdocket@nrc.gov.

In addition, a copy of the limited appearance statement should be sent to the Licensing Board Chairman using the same method at the address below:

Mail to: Administrative Judge G. Paul Bollwerk, III, Atomic Safety and Licensing Board Panel, Mail Stop T–3F23, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

Fax to: (301) 415–5599 (verification (301) 415–7550).

E-mail to: gpb@nrc.gov.

At a later date, the Board may entertain oral limited appearance statements at a location, or locations, in the vicinity of the proposed Vogtle ESP site. Notice of any oral limited appearance sessions will be published in the **Federal Register** and/or made available to the public at the NRC PDR and on the NRC Web site, *http://www.nrc.gov.*

Documents relating to this proceeding are available for public inspection at the Commission's PDR or electronically from the publicly available records

component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at *http://www.nrc.gov/reading-rm/adams.html* (the Public Electronic Reading Room). Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the NRC PDR Reference staff by telephone at 1–800–397–4209, 301–415–4737, or by e-mail to *pdr@nrc.gov.*

It is so ordered.

March 28, 2007.

For The Atomic Safety and Licensing Board.*

G. Paul Bollwerk, III,

Chairman, Rockville, Maryland.

[FR Doc. E7–6130 Filed 4–2–07; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–498 and 50–499]

STP Nuclear Operating Company; Notice of Withdrawal of Application for Amendments to Facility Operating Licenses

The U.S. Nuclear Regulatory Commission (the Commission) has granted the request of STP Nuclear Operating Company (the licensee) to withdraw its January 31, 2006, application for proposed amendments to Facility Operating Licenses numbered NPF–76 and NPF–80, respectively, for the South Texas Project, Units 1 and 2, located in Matagorda County. The proposed amendments would have revised the Technical Specification 3.8.3.1, ''Onsite Power Distribution—Operating.''

The Commission had previously issued a Notice of Consideration of Issuance of Amendments published in the **Federal Register** on February 28, 2006 (71 FR 10077). However, by letter dated March 26, 2007, the licensee withdrew the proposed change.

For further details with respect to this action, see the application for amendment dated January 31, 2006, and the licensee's letter dated March 26, 2007, which withdrew the application for license amendment. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the Agencywide Documents Access and Management Systems (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, *http://www.nrc.gov/reading-rm.html*. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1–800–397–4209, or 301–415–4737 or by e-mail to *pdr@nrc.gov*.

Dated at Rockville, Maryland, this 27th day of March 2007.

For the Nuclear Regulatory Commission.

Mohan C. Thadani,

Senior Project Manager, Plant Licensing Branch IV, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. E7–6086 Filed 4–2–07; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards (ACRS); Subcommittee Meeting on Thermal-Hydraulic Phenomena; Notice of Meeting

The ACRS Subcommittee on Thermal-Hydraulic Phenomena will hold a meeting on April 19–20, 2007, 11545 Rockville Pike, Rockville, Maryland in Room T–2B3.

The entire meeting will be open to public attendance, with the exception of portions that may be closed to discuss General Electric proprietary information pursuant to 5 U.S.C. 552b(c)(4).

The agenda for the subject meeting shall be as follows:

Thursday, April 19, 2007—8:30 a.m. until the conclusion of business.

Friday, April 20, 2007—8:30 a.m. until the conclusion of business.

The Subcommittee will review the staff evaluation of the MELLLA+, GE Methods, and GE DSS–CD Topical Reports. The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the full Committee.

Members of the public desiring to provide oral statements and/or written comments should notify the Designated Federal Official, Mr. Ralph Caruso (Telephone: 301–415–8065) five days prior to the meeting, if possible, so that appropriate arrangements can be made. Electronic recordings will be permitted.

Further information regarding this meeting can be obtained by contacting the Designated Federal Official between 7:30 a.m. and 4:15 p.m. (ET). Persons planning to attend this meeting are urged to contact the above named individual at least two working days prior to the meeting to be advised of any potential changes to the agenda.

Dated: March 27, 2007.

Cayetano Santos,

Acting Branch Chief, ACRS.

[FR Doc. E7–6077 Filed 4–2–07; 8:45 am]

BILLING CODE 7590–01–P

POSTAL REGULATORY COMMISSION

[Docket No. R2006–1; Order No. 8]

Reconsideration of Rate Recommendations

AGENCY: Postal Regulatory Commission.

ACTION: Notice and order.

SUMMARY: This document addresses several procedural and legal matters related to the Postal Service Governors' request for reconsideration of three aspects of the Commission's recent rate recommendations in Docket No. R2006–1. The recommendations in issue involve the Priority Mail Flat Rate Box, the nonmachinable surcharge for First-Class Mail letters, and Standard Mail flats (including catalogs). The document discusses the procedures the Commission adopts to effectuate reconsideration and identifies several key deadlines. Issuance of this document provides rate case participants and the public with information on the Commission's intended course of action in terms of procedural steps and informs them of their rights and responsibilities.

DATES:

1. April 4, 2007: Deadline for filing motions to reopen the record.

2. April 11, 2007: Deadline for replies to motions to reopen the record.

3. April 12, 2007: Deadline for filing initial comments.

4. April 19, 2007: Deadline for filing reply comments.

ADDRESSES: Submit comments electronically via the Commission's Filing Online system at *http://www.prc.gov*.

FOR FURTHER INFORMATION CONTACT: Stephen L. Sharfman, General Counsel, 202–789–6820 and *stephen.sharfman@prc.gov*.

SUPPLEMENTARY INFORMATION:

Regulatory History

71 FR 27436 (May 11, 2006)

On March 19, 2007, the Governors of the United States Postal Service issued a decision approving the Commission's

* Copies of this notice of hearing were sent this date by Internet e-mail transmission and the agency's E-Submittal system to counsel for (1) applicant SNC.; (2) the Joint Petitioners; and (3) the NRC staff.

February 26, 2007 Opinion and Recommended Decision in Docket No. R2006–1 while requesting reconsideration of three matters.[1] The three issues involve the Priority Mail Flat Rate Box, the nonmachinable surcharge for First-Class Mail letters, and Standard Mail flats. *Id.* at 2.

The Governors request the Commission ''to move as expeditiously as possible'' to enable mailers to plan effectively for future mailings. *Id.* Concomitant with the Decision, the Board of Governors set May 14, 2007 as the effective date for changes in rates and fees with the exception of Periodicals, for which the implementation date has been deferred until July 15, 2007.[2]

In a related pleading filed on March 28, 2007, the Postal Service offers procedural suggestions on the reconsideration process in general, and proposes specific resolutions of the three issues identified in the Governors' Decision.[3]

By this order, the Commission establishes procedures affording participants (and other interested parties) an opportunity to provide their views on each of the issues on which reconsideration is sought. Participants should address each issue separately since the substance of each issue differs. Initial comments are due April 12, 2007; reply comments may be filed not later than April 19, 2007.

In its Initial Statement, the Postal Service anticipates that ''reconsideration in this instance can be conducted without the need to reopen the record.'' *Id.* at 1. Any participant who believes that the record needs to be reopened and supplemented to address any matter on which reconsideration is sought must file a motion to that effect no later than April 4, 2007. Answers to any such motion are due no later than April 11, 2007. Each participant, if any, seeking to reopen the record must provide thorough justification for its request, including specific identification of the purported deficiencies in the current record for purposes of reconsideration and an explanation why that participant did not proffer the purportedly necessary materials during the hearing. Any such movant must also provide an estimate of the time needed to supplement the record.[4]

I. Flat Rate Box

The Governors contend that the Commission erred in setting the Flat Rate Box rate at $9.15, suggesting that inconsistent cost estimates may have been used to develop the recommended rate. Decision at 14. More specifically, the Governors opine that when calculating the savings that would accrue as a result of dim-weighting Priority Mail, the Commission incorrectly used the Postal Service's attributable cost estimates instead of its own, thereby causing the savings to be understated. The Governors conclude that if the Commission had used its own cost estimates consistently in the pricing model, the resulting recommended Flat Rate Box rate would have been closer to that proposed by the Postal Service, $8.80. *Id.*

In its Initial Statement, the Postal Service reiterates the Governors' critique, and advances additional technical arguments against the soundness of the Commission's recommended rate of $9.15. According to the Service, adherence to the methodology and pricing model for the Flat Rate Box established on the record justifies a rate of $8.95. Initial Statement at 5–9.

Participants are invited to comment on the merits of the Governors' and Postal Service's technical arguments, as well as the appropriate pricing objective for the Priority Mail Flat Rate Box.

II. Nonmachinable Surcharge

The Governors advocate extending the nonmachinable surcharge to letter-shaped First-Class Mail pieces of two and three ounces. *Id.* at 5. The Governors observe that the Postal Service proposed to charge nonmachinable one-ounce letters the rate proposed for one-ounce flats, $0.62. At the recommended one-ounce rate for flats, $0.80, the Commission found (and the Governors concur) that application of the one-ounce flats rate to nonmachinable one-ounce letters would be excessive. Thus, the Commission recommended retention of a separate nonmachinable surcharge for one-ounce letters, setting the rate at $0.17, equivalent to the recommended First-Class Mail additional ounce rate. The Governors endorse the $0.17 nonmachinable surcharge for one-ounce letters. *Id.*

The Governors note that the recommended rate for two- and three-ounce letters, $0.58 and $0.75, respectively, is identical regardless of machinability. To rectify this situation, the Governors propose that section 221.26 of the Domestic Mail Classification Schedule be revised to eliminate application of the nonmachinable surcharge only to pieces weighing one ounce or less. *Id.* at 5–6.

In its Initial Statement, the Postal Service repeats the criticism that the Commission's recommended rates fail to include a machinability-based price differential for First-Class letters weighing over one ounce, and argues that the Commission's rationale for a surcharge at the one-ounce level applies equally to the heavier tiers, particularly in view of the sizeable recommended reduction in the additional ounce rate. The Service submits that this gap in rate design and pricing could be filled by recommending the mail classification amendment suggested by the Governors, and calculates estimates of the consequent revenue impact, which it characterizes as *de minimis*. *Id.* at 2–5.

Participants commenting on this issue should, among other matters, specify any alternative proposed outcome, and identify record evidence supporting their position.

III. Standard Mail Flats

The Governors express concern that the rates recommended for Standard Mail flats may be too high relative to those proposed by the Postal Service and may result in some dislocation, particularly within the catalog industry. *Id.* at 8–10.[5] Thus, the Governors request that the Commission reconsider ''whether some rebalancing between Standard Mail letter and flat rates might be appropriate.'' *Id.* at 10.[6]

In summarizing their position, the Governors are careful to note that both the Postal Service's proposed Standard Mail rates and the Commission's

[1] Decision of the Governors of the United States Postal Service on the Opinion and Recommended Decision of the Postal Regulatory Commission on Changes in Postal Rates and Fees, Docket No. R2006–1, March 19, 2007 at 2 (Decision).

[2] Resolution of the Board of Governors of the United States Postal Service No. 07–3, March 19, 2007.

[3] Initial Statement of the United States Postal Service on Reconsideration, March 28, 2007 (Initial Statement).

[4] The Commission recognizes that reopening the record may preclude resolving one or more issues prior to May 14, 2007, the date for implementing most changes in rates and fees. Nonetheless, the Commission concludes that the process is best served if participants are provided an opportunity to demonstrate that the record should be reopened. Participants should recognize, however, that reopening the record may compromise mailers' ability to plan effectively for future mailings, as the Governors note in requesting expedited reconsideration.

[5] In addition, the Governors cite concern over mailers' ability to convert pieces to less costly shapes, and the potential for increased financial risks to the Postal Service at the recommended rate levels. *Id.* at 9–10.

[6] This request appears to apply to only Standard Regular and Standard Nonprofit Regular for two reasons. First, the quoted line appears under a caption titled ''*Standard Regular and Nonprofit Regular Subclasses*.'' Second, in the next section titled ''*Standard ECR and Nonprofit ECR*,'' the Governors do not request reconsideration for ECR/NECR flats.

recommended rates achieve the Postal Service's test year revenue target. However, the concerns noted above, particularly potential challenges to the vitality of the catalog industry, prompt the Governors to request reconsideration, focused on the appropriateness of rebalancing Standard Mail letter and flat rates. Unlike the other issues on which reconsideration is sought, the Governors do not suggest any specific ''rebalancing'' relief. *Id.*

In its Initial Statement, the Postal Service explicitly recognizes that, ''in order to mitigate rates for flats, it would be necessary to make upward adjustments in other rates, namely, the rates for letters.'' Initial Statement at 9. Further, because the Governors do not challenge the cost or cost differential estimates on which the Commission's recommended Standard Mail rate design is based, the Service anticipates that, ''it would likewise be necessary to depart to some extent from the specific passthrough levels initially chosen by the Commission.'' *Id.* at 10.

Without suggesting specific adjustments, the Postal Service submits that there are opportunities for providing rate relief to flats mailers while generating approximately the same net revenue by ''impos[ing] only a modest additional rate burden on letter mailers.'' *Id.* In doing so, the Service asks that the Commission's recommendations comply with two rate design criteria: (1) Ensuring that the revised Regular/Nonprofit Regular 5-digit Automation Letters rate remain below the Basic ECR/NECR letters rates to continue efforts to support the letters automation program; and (2) retaining the initially-recommended dropship discounts for Regular and Nonprofit Regular letters and flats rates. Additionally, because any such flats/letters rate rebalancing would be based essentially on policy grounds, the Service submits that it is especially important to solicit the views of potentially affected Standard Mail users whose rates would be affected. In particular, the Service suggests that mailers may wish to address ''their perceptions of the relative trade-offs between possible benefits of further rate adjustments, and the potential costs of further disruptions associated with any additional rate changes (which, at this point, would be of uncertain magnitude and would be implemented at an unknown date).'' *Id.* at 11.

In their Decision, the Governors note that reconsideration may enable ''individual mailers and their associations to address unique problems created by the Commission's [Standard Mail rate] recommendations.'' Decision at 12. Participants commenting in favor of any rebalancing of Standard Mail letter and flat rates should specify with particularity the relief requested. Such comments should include, at a minimum, citations to the record in support of the requested relief and, if possible, specific rates consistent with the proposed relief.[7] Participants advocating retention of the recommended rates are advised to file initial comments to that effect, explaining the basis for their position.

While the procedures adopted herein provide an opportunity for comments, the Commission reminds potential commenters of the need to rely on record evidence.[8] Anecdotal comments unconnected to the record, particularly from persons not parties to the proceeding, are problematic and cannot be relied on by the Commission in resolving issues raised on reconsideration.[9]

IV. Ordering Paragraphs

It is ordered:

1. Initial comments on matters for which reconsideration has been requested are due no later April 12, 2007.

2. Reply comments are due no later than April 19, 2007.

3. Motions to reopen the record are due no later than April 4, 2007. As required by the Commission's Rules of Practice and Procedure, answers are due no later than April 11, 2007.

4. The Secretary shall arrange for publication of this notice and order in the **Federal Register**.

By the Commission.

Steven W. Williams,

Secretary.

[FR Doc. E7–6191 Filed 4–2–07; 8:45 am]

BILLING CODE 7710–FW–P

SECURITIES AND EXCHANGE COMMISSION

Proposed Collection; Comment Request

Upon written request, copies available from: Securities and Exchange Commission, Office of Filings and Information Services, Washington, DC 20549.

Extension: Rule 15c2–3; SEC File No. 270–539; OMB Control No. 3235–0599.

Notice is hereby given that, pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') has submitted to the Office of Management and Budget (''OMB'') a request for extension of the previously approved collection of information discussed below.

Proposed rule 15c2–3 (17 CFR 240.15c2–3) under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*) would require brokers, dealers and municipal securities dealers to provide point of sale disclosure to investors prior to effecting transactions in mutual fund shares, UIT interests and college savings plan interests. The disclosure would provide investors with targeted material information about distribution-related costs and remuneration that lead to conflicts of interest for their brokers, dealers or municipal securities dealers. The collection of information under proposed rule 15c2–3 would require some of the disclosure that is also required under rule 15c2–2. However, in contrast to the confirmation disclosure required under proposed rule 15c2–2, which a customer will not receive in writing until after a transaction has been effected, the point of sale disclosure that would be required under rule 15c2–3 would specifically require that investors be provided with information that they can use at the time they determine whether to enter into a transaction to purchase one of the covered securities.

In addition, the Commission, the self-regulatory organizations, and other securities regulatory authorities would be able to use records of point of sale disclosure delivered pursuant to proposed rule 15c2–3 in the course of examinations, and investigations, as well as enforcement proceedings against brokers, dealers and municipal securities dealers. However, no governmental agency would regularly receive any of the information described above.

Proposed rule 15c2–2 potentially would apply to all of the approximately 5,338 brokers, dealers and municipal securities dealers that are registered with the Commission and that are members of NASD. It would also potentially apply to approximately 62 additional municipal securities dealers. It is important to note, however, that the confirmation is a customary document used by the industry.

Proposed rule 15c2–3(d) would require brokers, dealers and municipal securities dealers to make records of their disclosure sufficient to

[7] In addition, such comments should include, if possible, annual volumes of flats and catalogs by rate cell. If these data are not available, commenters should so indicate.

[8] Alternatively, judicial notice may be appropriate in some circumstances. *See* 39 CFR 3001.31(i).

[9] Comments from persons not parties to the proceeding will be included in the public comments file by the Commission.

demonstrate compliance with the delivery requirements of paragraphs (a) and (b) of proposed rule 15c2–3. The brokers, dealers or municipal securities dealers would have to preserve those records for the period specified in Exchange Act rule 17a–4(b) (17 CFR 240.17a–4(b)), or, in the case of records of oral communications or the disclosures, for the period specified in Exchange Act rule 17a–4(b) with regard to similar written communications and records. While this requirement often can be satisfied by maintaining a copy of the disclosure document that was provided to the customer, in the case of disclosure solely by means of oral communications, this provision would require the broker, dealer or municipal securities dealer to have compliance procedures in place that are adequate to demonstrate that it provided the required disclosure. Based on discussions with industry participants, the Commission staff estimates that the annual burden to brokers, dealers and municipal securities dealers to develop and implement such compliance procedures would be approximately 2 million hours.[1]

Based on discussions with industry representatives, the Commission staff estimates that there are 1 billion confirmations delivered annually to customers in connection with securities transactions involving mutual fund shares, UIT interests and college savings plan interests. Proposed rule 15c2–3 would require brokers, dealers and municipal securities dealers to provide disclosure to customers about costs and conflicts at the point of sale for each of these transactions. The information that would be required to be delivered pursuant to proposed rule 15c2–3 would be derived from information that brokers, dealers and municipal securities dealers would otherwise prepare in order to fulfill their confirmation disclosure requirements under proposed rule 15c2–2.

The Commission staff further estimates from information provided by industry participants that it will take, on average, about one minute to deliver to customers the point of sale disclosure required under proposed rule 15c2–3. The Commission staff also estimates from information provided by industry participants that the annual burden to brokers, dealers and municipal securities dealers to deliver at the point of sale the disclosure that would be required under proposed rule 15c2–3, and to maintaining systems that would permit such disclosure, would be 16.7 million hours.[2] As a result, the Commission staff estimates that the total annual burden to brokers, dealers and municipal securities dealers to comply with the requirements of proposed rule 15c2–3, would be 18.7 million hours.[3]

Based on discussions with industry participants, the Commission staff estimates that the annual cost to brokers, dealers and municipal securities dealers for call center services and other service providers which would assist with development and implementation of procedures sufficient to demonstrate compliance with the delivery requirements of paragraphs (a) and (b) of proposed rule 15c2–3 would be approximately $40 million.[4]

In summary, the Commission staff estimates that the annual burden for complying with the requirements of proposed rule 15c2–3 would be 18.7 million hours and that the annual costs of complying with the requirements of proposed rule 15c2–3, including call center services, and recordkeeping and compliance costs, would be $40 million.

Direct your written comments to R. Corey Booth, Director/Chief Information Officer, Securities and Exchange Commission, C/O Shirley Martinson, 6432 General Green Way, Alexandria, VA 22312 or send an e-mail to: *PRA_Mailbox@sec.gov*. Comments must be submitted to OMB within 60 days of this notice.

Dated: March 21, 2007.

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6126 Filed 4–2–07; 8:45 am]

BILLING CODE 8010–01–P

[1] The staff estimates that the burden to the 10 vendors to maintain their systems would be 500,000 hours annually, or 50,000 hours per vendor. The staff estimates that the burden allocated to each client on a pro rata basis would be 100 hours annually per broker, dealer or municipal security dealer that uses vendors' services (500,000 hours/5,000 = 100 hours). The staff estimates, based on discussions with industry representatives, that the 400 brokers, dealers and municipal securities dealers that use proprietary confirmation delivery systems, on average, would have a burden of 3,750 hours annually for maintaining systems. Thus, the annual burden for maintaining systems is estimated to be 2 million hours ((5,000 × 100) + (400 × 3,750) = 2,000,000).

[2] (1 billion transactions at one minute per point of sale disclosure = 1 billion minutes; 1 billion minutes/60 minutes per hour = 16.7 million hours.)

[3] (16.7 million hours per point of sale disclosure + 2 million hours to develop and implement compliance procedures = 18.7 million hours.)

[4] Based on discussions with industry representatives, the staff estimates that the annual cost would be $7,400 per broker, dealer or municipal securities dealer. (5,400 brokers, dealers and municipal securities dealers × $7,400 = $39,996,000.)

SECURITIES AND EXCHANGE COMMISSION

Proposed Collection; Comment Request

Upon written request, copies available from: Securities and Exchange Commission, Office of Filings and Information Services, Washington, DC 20549.

Extension: Rule 15c2–2; SEC File No. 270–538; OMB Control No. 3235–0598.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') is soliciting comments on the collection of information summarized below. The Commission plans to submit this existing collection of information to the Office of Management and Budget for extension and approval.

Proposed rule 15c2–2 (17 CFR 240.15c2–2) under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*) would provide investors in mutual fund shares, UIT interests and college savings plan interests with information in transaction confirmations, including information about certain distribution-related costs and certain distribution arrangements that create conflicts of interest for brokers, dealers, municipal securities dealers, and their associated persons. Proposed rule 15c2–2 specifically would require confirmation disclosure of information about loads and other distribution-related costs that directly impact the returns earned by investors in those securities. It also would require brokers, dealers and municipal securities dealers to disclose their compensation for selling those securities, and to disclose information about revenue sharing arrangements and portfolio brokerage arrangements that create conflicts of interest for them. Moreover, the proposed rule would require brokers, dealers and municipal securities dealers to inform customers about whether their salespersons or other associated persons receive extra compensation for selling certain covered securities.

In addition, the Commission, the self-regulatory organizations, and other securities regulatory authorities would be able to use records of confirmations delivered pursuant to proposed rule 15c2–2 in the course of examinations, and investigations, as well as enforcement proceedings against brokers, dealers and municipal securities dealers. However, no governmental agency would regularly receive any of the information described above.

The Commission anticipates on-going burdens for complying with the requirements of proposed rule 15c2–2, including calculating revenue sharing and portfolio brokerage amounts required under rule 15c2–2. Based upon discussions with industry representatives, the Commission staff understands that, once completed, this reprogramming and systems updating would permit brokers, dealers, and municipal securities dealers to have automated access to the information that would be required to be disclosed in confirmations delivered pursuant to proposed rule 15c2–2. As a result, the burden associated with obtaining data to be included in confirmations would be *de minimis*. The Commission staff estimates from information provided by industry participants that the annual burden to brokers, dealers and municipal securities dealers, and their vendors, to comply with the requirements under proposed rule 15c2–2 to calculate revenue sharing and portfolio brokerage amounts and to maintain and further update the confirmation delivery systems, would be 2 million hours.[1]

Brokers, dealers and municipal securities dealers also would have a burden for generating and sending confirmations to investors. The Commission staff estimates from information provided by industry participants that it takes about one minute to generate and send a confirmation. Based on the estimate that there are 1 billion transactions annually in the covered securities, the Commission staff estimates that the annual burden to brokers, dealers and municipal securities dealers to generate and send confirmations to customers pursuant to proposed rule 15c2–2 would be 16.7 million hours.[2] It is important to note, however, that confirmations for transactions in covered securities are currently required to be delivered pursuant to rule 10b–10 (17 CFR 240.10b–10) or MSRB rule G–15, as applicable. As a result, the burden for generating and sending confirmations would not be entirely new, but would reflect a shift of burdens from rule 10b–10 to proposed rule 15c2–2. In addition, brokers, dealers and municipal securities dealers routinely send customers account statements pursuant to self-regulatory organizations' requirements and for reasons of prudent business practice. Nonetheless, the Commission staff estimates that the total annual burden for complying with the requirements of proposed rule 15c2–2 would be 18.7 million hours.[3] The number of confirmations sent and the cost of the confirmations vary from firm to firm. Smaller firms typically send fewer confirmations than larger firms because they effect fewer transactions.

As stated earlier, the Commission staff estimates that there are 1 billion securities transactions annually involving mutual fund shares, UIT interests and college savings plan interests. According to information provided by industry participants, the Commission staff estimates that the average cost, including postage and printing, for a two-page confirmation is about $1.05. As a result, the Commission staff estimates that the annual costs of complying with the requirements of proposed rule 15c2–2, including the printing and postal costs for generating and sending confirmations, would be $1.05 billion,[4] reflecting an increase of $160 million over the cost of the confirmations had they been delivered pursuant to rule 10b–10.[5]

In summary, proposed rule 15c2–2 potentially would apply to all of the approximately 5,338 brokers, dealers and municipal securities dealers that are registered with the Commission and that are members of NASD. It would also potentially apply to approximately 62 additional municipal securities dealers. The staff estimates that the annual burden for complying with the requirements of proposed rule 15c2–2 would be 18.7 million hours and that the annual costs of complying with the requirements of proposed rule 15c2–2, including the printing and postal costs for generating and sending confirmations, would be $1.05 billion. We note that, as stated above, many of these costs and burdens, including the majority of the annual costs and burdens, would be shifted from rule 10b–10 to proposed rule 15c2–2.

Written 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 shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (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 respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication.

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 control number.

Direct your written comments to R. Corey Booth, Director/Chief Information Officer, Securities and Exchange Commission, c/o Shirley Martinson, 6432 General Green Way, Alexandria, VA 22312 or send an e-mail to: *PRA_Mailbox@sec.gov*. Comments must be submitted to OMB within 60 days of this notice.

Dated: March 21, 2007.

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6127 Filed 4–2–07; 8:45 am]

BILLING CODE 8010–01–P

[1] The staff estimates that the burden to the 10 vendors to maintain their systems would be 500,000 hours annually, or 50,000 hours per vendor. The staff estimates that the burden allocated to each client on a pro rata basis would be 100 hours annually per broker, dealer or municipal security dealer that uses vendors' services (500,000 hours/5,000 = 100 hours). The staff estimates, based on discussions with industry representatives, that the 400 brokers dealers and municipal securities dealers that use proprietary confirmation delivery systems, on average, would have a burden of 3,750 hours annually for maintaining systems. Thus, the annual burden for maintaining systems is estimated to be 2 million hours ((5,000 × 100) + (400 × 3,750) = 2,000,000 hours).

[2] (1 billion confirmations at one minute per confirmation = 1 billion minutes; 1 billion minutes/60 minutes per hour = 16.7 million hours.)

[3] (16.7 million hours to generate and send confirmations to customers + 2 million hours to calculate revenue sharing and portfolio brokerage amounts and to maintain and further update the confirmation delivery systems = 18.7 million hours.)

[4] (1 billion confirmations at $1.05 per confirmation = $1.05 billion.) As noted above, confirmations for transactions in covered securities are currently required to be delivered pursuant to rule 10b–10 or MSRB rule G–15, as applicable. As a result, this estimated cost is not entirely a new cost, but reflects a shift of costs from rule 10b–10 to proposed rule 15c2–2. This estimated cost also reflects an incremental increase in the cost of generating confirmations from 89 cents under rule 10b–10 to $1.05 under proposed rule 15c2–2. This incremental cost is associated with generating the two-page confirmation that would be required under proposed rule 15c2–2, as compared to a half-page or one-page confirmation that is currently permitted under rule 10b–10.

[5] (1 billion confirmations delivered pursuant to rule 10b–10 at $0.89 per confirmation = $890 million; $1.05 billion − $890 million = $160 million.)

SECURITIES AND EXCHANGE COMMISSION

[Investment Company Act Release No. 27770; 813–264]

Silas Partners I, LLC et al.; Notice of Application

March 27, 2007.

AGENCY: Securities and Exchange Commission (SEC).

ACTION: Notice of an application for an order under sections 6(b) and 6(e) of the Investment Company Act of 1940 (the ''Act'') granting an exemption from all provisions of the Act, except section 9 and sections 36 and 53, and the rules and regulations under the Act. With respect to sections 17 and 30 of the Act, and the rules and regulations thereunder, and rule 38a–1 under the Act, the exemption is limited as set forth in the application.

SUMMARY OF APPLICATION: Applicants request an order to exempt certain investment funds formed for the benefit of eligible current and former employees of Winston & Strawn LLP and its affiliates from certain provisions of the Act. Each fund will be an ''employees'' securities company'' as defined in section 2(a)(13) of the Act.

APPLICANTS: Silas Partners I, LLC (the ''Investment Fund'') and Winston & Strawn LLP (together with any business organization that results from a reorganization of Winston & Strawn LLP into a different type of business organization or into an entity organized under the laws of another jurisdiction, the ''Firm'').

FILING DATES: The application was filed on April 24, 2000 and amended on March 16, 2007. Applicants have agreed to file an amendment during the notice period, the substance of which is reflected in this notice.

HEARING OR NOTIFICATION OF HEARING: An order granting the application will be issued unless the Commission orders a hearing. Interested persons may request a hearing by writing to the Commission's Secretary and serving applicants with a copy of the request, personally or by mail. Hearing requests should be received by the Commission by 5:30 p.m. on April 23, 2007 and should be accompanied by proof of service on applicants, in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the Commission's Secretary.

ADDRESSES: Secretary, Securities and Exchange Commission, 100 F St., NE., Washington, DC 20549–1090. Applicants, 35 West Wacker Drive, Chicago, IL 60601.

FOR FURTHER INFORMATION CONTACT: Jean Minarick, Senior Counsel, at (202) 551–6811, or Nadya Roytblat, Assistant Director, at (202) 551–6821, (Division of Investment Management, Office of Investment Company Regulation).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. The complete application may be obtained for a fee at the Commission's Public Reference Branch, 100 F St., NE., Washington, DC 20549–0102 (tel. 202–551–5850).

Applicants' Representations

1. The Firm is a law firm organized as an Illinois limited liability partnership. The Firm and its ''affiliates,'' as defined in rule 12b–2 under the Securities Exchange Act of 1934 (the ''Exchange Act''), are referred to collectively as the ''Winston Group'' and individually as a ''Winston Entity.'' The shareholders of the Firm are referred to as ''Partners.''

2. The Investment Fund is a Delaware limited liability company. The applicants may in the future offer additional pooled investment vehicles identical in all material respects to the Investment Fund (other than investment objectives and strategies) (the ''Subsequent Funds'') (together, the Investment Fund and the Subsequent Funds are referred to as the ''Funds''). The applicants anticipate that each Subsequent Fund will also be structured as a limited liability company, although a Subsequent Fund could be structured as a limited partnership, corporation, trust or other business organization formed as an ''employees'' securities company'' within the meaning of the section 2(a)(13) of the Act. The Funds will operate as non-diversified, closed-end management investment companies. The Funds will be established to enable the Partners and certain employees of Winston Group to participate in certain investment opportunities that come to the attention of Winston Group. Participation as investors in the Funds will allow the Eligible Investors, as defined below, to diversify their investments and to have the opportunity to participate in investments that might not otherwise be available to them or that might be beyond their individual means.

3. A group of Eligible Investors, as defined below, appointed by the Firm, who are current or retired Partners of the Firm (the ''Managers'') will manage the Funds. The Funds will have one or more investment committees (''Investment Committees''), each member of which shall be a current Partner. The Managers shall appoint the members of each Investment Committee. The Managers or any person involved in the operation of the Funds will register as investment advisers if required under the Investment Advisers Act of 1940, or the rules under that Act.

4. Interests in the Funds (''Interests'') will be offered without registration in reliance on section 4(2) of the Securities Act of 1933 (the ''Securities Act'') or Regulation D under the Securities Act, or any successor rule, and will be sold solely to Eligible Investors. Eligible Investors consist of ''Eligible Employees,'' ''Qualified Investment Vehicles,'' ''Immediate Family Members,'' each as defined below, and Winston Entities. The term ''Fund Investors'' refers to Eligible Investors who invest in the Funds. Prior to offering Interests in a Fund to an individual, the Managers must reasonably believe that the individual is a sophisticated investor capable of understanding and evaluating the risks of participating in the Fund without the benefit of regulatory safeguards. An ''Eligible Employee'' is a person who is, at the time of investment, a current or former Partner of the Firm or an employee of the Winston Group who (a) meets the standards of an ''accredited investor'' set forth in rule 501(a)(5) or rule 501(a)(6) of Regulation D under the Securities Act, or (b) is one of 35 or fewer Partners or employees of the Winston Group who meets certain requirements (''Category 2 investors'').

5. Each Category 2 investor will be a Partner or an employee of the Winston Group, who meets the sophistication requirements set forth in rule 506(b)(2)(ii) of Regulation D under the Securities Act and who (a) has a graduate degree, has a minimum of 3 years of business and/or professional experience, has had compensation of at least $150,000 in the preceding 12 month period, and has a reasonable expectation of compensation of at least $150,000 in each of the 2 immediately succeeding 12 month periods, or (b) is a ''knowledgeable employee,'' as defined in rule 3c–5 under the Act, of the Fund (with the Fund treated as though it were a ''Covered Company'' for purposes of the rule). In addition, a Category 2 investor qualifying under (a) above will not be permitted to invest in any calendar or fiscal year (as determined by the Firm) more than 10% of his or her income from all sources for the immediately preceding calendar or fiscal year in one or more Funds.

6. A Qualified Investment Vehicle is a trust or other entity the sole beneficiaries of which are Eligible Employees or their Immediate Family Members or the settlors and trustees of which consist of Eligible Employees or Eligible Employees together with Immediate Family Members. Immediate Family Members include any parent, child, spouse of a child, spouse, brother or sister, and includes any step and adoptive relationships. A Qualified Investment Vehicle must be either (a) an accredited investor as defined in rule 501(a) of Regulation D or (b) an entity for which an Eligible Employee is a settlor and principal investment decision-maker and counted toward the 35 non-accredited Fund Investors.[1]

7. Each Fund may issue its Interests in series (each, a ''Series'' and collectively, the ''Series'') with new Series of Interests being offered from time to time. Each Series will represent an interest in some or all of those Fund investments made by the Fund during a specified period of time (the ''Investment Period'').

8. The terms of a Fund will be fully disclosed in the private placement memorandum of the Fund, and each Eligible Investor will receive a private placement memorandum and the Fund's limited liability company agreement (or other organizational documents) prior to his or her investment in the Fund. Each Fund will send its Fund Investors annual reports, which will contain audited financial statements with respect to those Series in which the Fund Investor has Interests, as soon as practicable after the end of each fiscal year. In addition, as soon as practicable after the end of each fiscal year, the Funds will send a report to each Fund Investor setting forth such tax information as shall be necessary for the preparation by the Fund Investor of his or her federal and state tax returns.

9. Fund Investors will be permitted to transfer their Interests only with the express consent of the Managers. The Managers do not anticipate giving such consent. Any such transfer must be to another Eligible Investor. No fee of any kind will be charged in connection with the sale of Interests.

10. The Managers may require a Fund Investor to withdraw from a Fund if: (a) A Fund Investor ceases to be an Eligible Investor; (b) a Fund Investor is no longer deemed to be able to bear the economic risk of investment in a Fund; (c) adverse tax consequences were to inure to the Fund were a particular Fund Investor to remain; or (d) the continued membership of the Fund Investor would violate applicable law or regulations. In addition, the Firm reserves the right to impose vesting provisions on a Fund Investor's investments in a Fund. In an investment program that provides for vesting provisions, all or a portion of a Fund Investor's Interests will be treated as unvested, and vesting will occur through the passage of a specified period of time. After the end of a Series' Investment Period, to the extent a Fund Investor's Interests become ''vested,'' the termination of such Fund Investor's association or employment with the Firm will not affect the Fund Investor's rights with respect to the vested Interests. Following the Investment Period, any portion of a Fund Investor's Interests that are unvested at the time of the termination of a Fund Investor's association or employment with the Firm may be subject to repurchase or cancellation by the Fund. Upon any repurchase or cancellation of all or a portion of a Fund Investor's Interests, a Fund will at a minimum pay to the Fund Investor the lesser of (a) the amount actually paid by the Fund Investor to acquire the Interests less the amount of any distributions received by that Fund Investor from the Fund (plus interest at or above the prime rate, as determined by the Managers) and (b) the fair market value of the Interests determined at the time of repurchase or cancellation, as determined in good faith by the Managers. Any interest owed to a Fund Investor pursuant to (a) above will begin to accrue at the end of the Investment Period.

11. The Firm may be reimbursed by a Fund for reasonable and necessary out-of-pocket costs directly associated with the organization and operation of the Funds, including administrative and overhead expenses. There will be no allocation of any of the Firm's operating expenses to a Fund. In addition, the Firm may allocate to a Series any out-of-pocket expenses specifically attributable to the organization and operation of that Series. No separate management fee will be charged to a Fund by the Managers for their services.

12. The Funds may borrow from Winston Group, a Partner, or a bank or other financial institution, provided that a Fund will not borrow from any person if the borrowing would cause any person not named in section 2(a)(13) of the Act to own outstanding securities of the Fund (other than short-term paper). Any borrowings by a Fund will be non-recourse other than to the Winston Group. If a Winston Entity or a Partner makes a loan to the Funds, the interest rate on the loan will be no less favorable to the Funds than the rate that could be obtained on an arm's length basis.

13. No Fund will acquire any security issued by a registered investment company if immediately after the acquisition the Fund would own more than 3% of the outstanding voting stock of the registered investment company.

Applicants' Legal Analysis

1. Section 6(b) of the Act provides, in part, that the Commission will exempt employees' securities companies from the provisions of the Act to the extent that the exemption is consistent with the protection of investors. Section 6(b) provides that the Commission will consider, in determining the provisions of the Act from which the company should be exempt, the company's form of organization and capital structure, the persons owning and controlling its securities, the price of the company's securities and the amount of any sales load, how the company's funds are invested, and the relationship between the company and the issuers of the securities in which it invests. Section 2(a)(13) defines an employees' securities company as any investment company all of whose securities (other than short-term paper) are beneficially owned (a) by current or former employees, or persons on retainer, of one or more affiliated employers, (b) by immediate family members of such persons, or (c) by such employer or employers together with any of the persons in (a) or (b).

2. Section 7 of the Act generally prohibits investment companies that are not registered under section 8 of the Act from selling or redeeming their securities. Section 6(e) provides that, in connection with any order exempting an investment company from any provision of section 7, certain provisions of the Act, as specified by the Commission, will be applicable to the company and other persons dealing with the company as though the company were registered under the Act. Applicants request an order under sections 6(b) and 6(e) of the Act exempting the Funds from all provisions of the Act, except section 9 and sections 36 through 53, and the rules and regulations under the Act. With respect to sections 17 and 30 of the Act, and the rules and regulations thereunder, and rule 38a–1 under the Act, the exemption is limited as set forth in the application.

3. Section 17(a) generally prohibits any affiliated person of a registered investment company, or any affiliated person of an affiliated person, acting as

[1] If a Qualified Investment Vehicle is an entity other than a trust, (a) the reference to ''settlor'' shall be construed to mean a person who created the vehicle, alone or together with others, and who contributed funds or other assets to the vehicle, and (b) the reference to ''trustee'' shall be construed to mean a person who performs functions similar to those of a trustee.

principal, from knowingly selling or purchasing any security or other property to or from the company. Applicants request an exemption from section 17(a) to permit a Fund to: (a) Purchase, from the Firm or any affiliated person thereof, securities or interests in properties previously acquired for the account of the Firm or any affiliated person thereof; (b) sell, to the Firm or any affiliated person thereof, securities or interests in properties previously acquired by the Funds; (c) invest in companies, partnerships or other investment vehicles offered, sponsored or managed by the Firm or any affiliated person thereof; and (d) purchase interests in any company or other investment vehicle (i) in which the Firm owns 5% or more of the voting securities, or (ii) that otherwise is an affiliated person of the Fund (or an affiliated person of such a person) or an affiliated person of the Firm.

4. Applicants state that an exemption from section 17(a) is consistent with the protection of investors and the purposes of the Act. Applicants state that the Fund Investors will be informed in the Fund's private placement memorandum of the possible extent of the Fund's dealings with the Firm or any affiliated person thereof. Applicants also state that, as financially sophisticated professionals, Fund Investors will be able to evaluate the attendant risks. Applicants assert that the community of interest among the Fund Investors and the Firm will provide the best protection against any risk of abuse.

5. Section 17(d) of the Act and rule 17d–1 under the Act prohibit any affiliated person or principal underwriter of a registered investment company, or any affiliated person of an affiliated person or principal underwriter, acting as principal, from participating in any joint arrangement with the company unless authorized by the Commission. Applicants request relief to permit affiliated persons of each Fund, or affiliated persons of any of these persons, to participate in any joint arrangement in which the Fund is a participant. Joint transactions in which a Fund may participate could include the following: (a) An investment by one or more Funds in a security in which the Firm or its affiliated person, or another Fund, is a participant, or with respect to which the Firm or an affiliated person is entitled to receive fees (including, but not limited to, legal fees, placement fees, investment banking fees, brokerage commissions, or other economic benefits or interests); (b) an investment by one or more Funds in an investment vehicle sponsored, offered or managed by the Firm; and (c) an investment by one or more Funds in a security in which an affiliate is or may become a participant.

6. Applicants state that compliance with section 17(d) would cause the Funds to forego investment opportunities simply because a Fund Investor, the Firm or other affiliates of the Fund also had made or contemplated making a similar investment. In addition, because investment opportunities of the types considered by the Funds often require that each participant make available funds in an amount that may be substantially greater than that available to the investor alone, there may be certain attractive opportunities of which a Fund may be unable to take advantage except as a co-participant with other persons, including affiliates. Applicants note that, in light of the Firm's purpose of establishing the Funds so as to reward Eligible Investors and to attract highly qualified personnel to the Firm, the possibility is minimal that an affiliated party investor will enter into a transaction with a Fund with the intent of disadvantaging the Fund. Finally, applicants contend that the possibility that a Fund may be disadvantaged by the participation of an affiliate in a transaction will be minimized by compliance with the lockstep procedures described in condition 4 below. Applicants assert that the flexibility to structure co-investments and joint investments will not involve abuses of the type section 17(d) and rule 17d–1 were designed to prevent.

7. Section 17(f) of the Act designates the entities that may act as investment company custodians, and rule 17f–2 allows an investment company to act as self-custodian, subject to certain requirements. Applicants request an exemption from section 17(f) and rule 17f–2 to permit the following exceptions from the requirements of rule 17f–2: (a) A Fund's investments may be kept in the locked files of the Firm or of a Partner; (b) for purposes of paragraph (d) of the rule, (i) employees of the Firm will be deemed employees of the Funds, (ii) the Managers of a Fund will be deemed to be officers of the Fund; and (iii) the Managers of a Fund will be deemed to be the board of directors of the Fund; and (c) in place of the verification procedures under paragraph (f) of the rule, verification will be effected quarterly by two employees of the Firm. Applicants assert that the securities held by the Funds are most suitably kept in the Firm's files, where they can be referred to as necessary.

8. Section 17(g) and rule 17g–1 generally require the bonding of officers and employees of a registered investment company who have access to its securities or funds. Rule 17g–1 requires that a majority of directors who are not interested persons (''disinterested directors'') take certain actions and give certain approvals relating to fidelity bonding. Paragraph (g) of rule 17g–1 sets forth certain materials relating to the fidelity bond that must be filed with the Commission and certain notices relating to the fidelity bond that must be given to each member of the investment company's board of directors. Paragraph (h) of rule 17g–1 provides that an investment company must designate one of its officers to make the filings and give the notices required by paragraph (g). Paragraph (j) of rule 17g–1 exempts a joint insured bond provided and maintained by an investment company and one or more other parties from section 17(d) of the Act and the rules thereunder. Rule 17g–1(j)(3) requires that the board of directors of an investment company satisfy the fund governance standards defined in rule 0–1(a)(7).

9. Applicants request an exemption from section 17(g) and rule 17g–1 to the extent necessary to permit each Fund to comply with rule 17g–1 without the necessity of having a majority of the disinterested directors take such action and make such approvals as are set forth in the rule. Specifically, each Fund will comply by having the Managers take such actions and make such approvals as are set forth in rule 17g–1. Applicants state that, because the Managers will be interested persons of the Fund, a Fund could not comply with rule 17g–1 without the requested relief. Applicants also request an exemption from the requirements of rule 17g–1(g) and (h) relating to the filing of copies of fidelity bonds and related information with the Commission and the provision of notices to the board of directors and from the requirements of rule 17g–1(j)(3). Applicants believe the filing requirements are burdensome and unnecessary as applied to the Funds. The Managers will maintain the materials otherwise required to be filed with the Commission by rule 17g–1(g) and agree that all such material will be subject to examination by the Commission and its staff. The Managers will designate a person to maintain the records otherwise required to be filed with the Commission under paragraph (g) of the rule. Applicants also state that the notices otherwise required to be given to the board of directors would be unnecessary as the Funds will not have boards of directors. The Funds will

comply with all other requirements of rule 17g–1.

10. Section 17(j) and paragraph (b) of rule 17j–1 make it unlawful for certain enumerated persons to engage in fraudulent or deceptive practices in connection with the purchase or sale of a security held or to be acquired by a registered investment company. Rule 17j–1 also requires that every registered investment company adopt a written code of ethics and that every access person of a registered investment company report personal securities transactions. Applicants request an exemption from the requirements of rule 17j–1, except for the anti-fraud provisions of paragraph (b), because they are unnecessarily burdensome as applied to the Funds.

11. Applicants request an exemption from the requirements in sections 30(a), 30(b) and 30(e), and the rules under those sections, that registered investment companies prepare and file with the Commission and mail to their shareholders certain periodic reports and financial statements. Applicants contend that the forms prescribed by the Commission for periodic reports have little relevance to the Funds and would entail administrative and legal costs that outweigh any benefit to the Fund Investors. Applicants request exemptive relief to the extent necessary to permit each Fund to report annually to its Fund Investors. Applicants also request an exemption from section 30(h) to the extent necessary to exempt the Managers of each Fund and any other persons who may be deemed members of an advisory board of a Fund from filing Forms 3, 4 and 5 under section 16 of the Exchange Act with respect to their ownership of Interests in the Fund. Applicants assert that, because there will be no trading market and the transfers of Interests will be severely restricted, these filings are unnecessary for the protection of investors and burdensome to those required to make them.

12. Rule 38a–1 requires investment companies to adopt, implement and periodically review written policies and procedures reasonably designed to prevent violation of the federal securities laws and to appoint a chief compliance officer. The Funds will comply with rule 38a–1(a), (c) and (d), except that (a) since the Funds do not have boards of directors, the Managers will fulfill the responsibilities assigned to a Fund's board of directors under the rule, and (b) since the Managers are not disinterested persons of the Funds, approval by a majority of the disinterested board members required by rule 38a–1 will not be obtained.

Applicants' Conditions

The applicants agree that any order granting the requested relief will be subject to the following conditions:

1. Each proposed transaction to which a Fund is a party otherwise prohibited by section 17(a) or section 17(d) and rule 17d–1 (each, a ''Section 17 Transaction'') will be effected only if the Managers determine that: (a) The terms of the Section 17 Transaction, including the consideration to be paid or received, are fair and reasonable to the Fund Investors of the participating Fund and do not involve overreaching of the Fund or its Fund Investors on the part of any person concerned; and (b) the Section 17 Transaction is consistent with the interests of the Fund Investors of the participating Fund, the Fund's organizational documents and the Fund's reports to its Fund Investors.

In addition, the Managers will record and preserve a description of such Section 17 Transactions, their findings, the information or materials upon which their findings are based and the basis therefor. All such records will be maintained for the life of a Fund and at least six years thereafter, and will be subject to examination by the Commission and its staff. All such records will be maintained in an easily accessible place for at least the first two years.

2. If purchases or sales are made by a Fund from or to an entity affiliated with the Fund by reason of a Partner or employee of the Winston Group (a) serving as an officer, director, general partner or investment adviser of the entity, or (b) having a 5% or more investment in the entity, such individual will not participate in the Fund's determination of whether or not to effect the purchase or sale.

3. The Managers will adopt, and periodically review and update, procedures designed to ensure that reasonable inquiry is made, prior to the consummation of any Section 17 Transaction, with respect to the possible involvement in the transaction of any affiliated person or promoter of or principal underwriter for the Funds, or any affiliated person of such a person, promoter, or principal underwriter.

4. The Managers will not make on behalf of a Fund any investment in which a Co-Investor, as defined below, has or proposes to acquire the same class of securities of the same issuer, where the investment involves a joint enterprise or other joint arrangement within the meaning of rule 17d–1 in which the Fund and the Co-Investor are participants, unless any such Co-Investor, prior to disposing all or part of its investment, (a) gives the Managers sufficient, but not less than one day's, notice of its intent to dispose of its investment, and (b) refrains from disposing of its investment unless the participating Fund holding such investment has the opportunity to dispose of its investment prior to or concurrently with, on the same terms as, and on a *pro rata* basis with the Co-Investor. The term ''Co-Investor'' with respect to any Fund means any person who is (a) an ''affiliated person'' (as defined in section 2(a)(3) of the Act) of the Fund; (b) the Winston Group; (c) a Partner, lawyer, or employee of the Winston Group; (d) an investment vehicle offered, sponsored, or managed by the Firm or an affiliated person of the Firm; or (e) an entity in which a Winston Entity acts as a general partner or has a similar capacity to control the sale or other disposition of the entity's securities.

The restrictions contained in this condition, however, shall not be deemed to limit or prevent the disposition of an investment by a Co-Investor: (a) To its direct or indirect wholly-owned subsidiary, to any company (a ''parent'') of which the Co-Investor is a direct or indirect wholly-owned subsidiary, or to a direct or indirect wholly-owned subsidiary of its parent; (b) to Immediate Family Members of the Co-Investor or a trust established for any such Immediate Family Member; (c) when the investment is comprised of securities that are listed on a national securities exchange registered under section 6 of the Exchange Act; or (d) when the investment is comprised of securities that are national market system securities pursuant to section 11A(a)(2) of the Exchange Act and rule 11Aa2–1 thereunder.

5. The Managers of each Fund will send to each person who was a Fund Investor in such Fund at any time during the fiscal year then ended audited financial statements of the Fund and with respect to those Series in which the Fund Investor held Interests. At the end of each fiscal year, the Managers will make a valuation or have a valuation made of all of the assets of the Series as of the fiscal year end in a manner consistent with customary practice with respect to the valuation of assets of the kind held by the Fund. In addition, as soon as practicable after the end of each fiscal year of each Fund, the Managers of the Fund shall send a report to each person who was a Fund Investor at any time during the fiscal year then ended, setting forth such tax information as shall be necessary for the preparation by the Fund Investor of his

or her federal and state income tax returns and a report of the investment activities of such Fund during such year.

6. Each Fund and the Managers of each Fund will maintain and preserve, for the life of each Series of that Fund and at least six years thereafter, such accounts, books and other documents as constitute the record forming the basis for the audited financial statements and annual reports of such Series to be provided to its Fund Investors, and agree that all such records will be subject to examination by the Commission and its staff. All such records will be maintained in an easily accessible place for at least the first two years.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6081 Filed 4–2–07; 8:45 am]

BILLING CODE 8010–01–P

SECURITIES AND EXCHANGE COMMISSION

Sunshine Act Meeting

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Public Law 94–409, that the Securities and Exchange Commission will hold the following meeting during the week of April 2, 2007:

An Open Meeting will be held on Wednesday, April 4, 2007 at 10 a.m. in the Auditorium, Room L–002.

The subject matter of the Open Meeting scheduled for Wednesday, April 4, 2007 will be:

The Commission will consider its staff's approach to (1) the Public Company Accounting Oversight Board's (''PCAOB'') Proposed Auditing Standard—An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements; and (2) the PCAOB's Proposed Auditing Standard—Considering and Using the Work of Others in an Audit.

Commissioner Casey, as duty officer, determined that no earlier notice thereof was possible.

At times, changes in Commission priorities require alterations in the scheduling of meeting items.

For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact:

The Office of the Secretary at (202) 551–5400.

Dated: March 29, 2007.

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6124 Filed 4–2–07; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55544; File No. SR–Amex–2007–07]

Self-Regulatory Organizations; American Stock Exchange LLC; Order Approving a Proposed Rule Change Revising Existing Rules for Portfolio Depositary Receipts and Index Fund Shares

March 27, 2007.

I. Introduction

On January 11, 2007, the American Stock Exchange LLC (''Amex'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission''), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'')[1] and Rule 19b–4 thereunder,[2] a proposal to revise its existing rules for portfolio depositary receipts (Amex Rule 1000–AEMI) and index fund shares (Amex Rule 1000A–AEMI) to eliminate the methodology standards for eligible indexes. On January 25, 2007, the Amex submitted Amendment No. 1 to the proposed rule change. The proposed rule change, as modified by Amendment No. 1, was published for comment in the **Federal Register** on February 12, 2007 for a 15-day comment period.[3] The Commission received no comments regarding the proposal. On March 14, 2007, Amex filed Amendment No. 2 to the proposed rule change.[4] This order approves the proposed rule change, as amended.

II. Description of the Proposal

The purpose of this proposed rule change is to amend Amex's existing generic listing standards pursuant to Rule 19b–4(e) under the Act[5] for portfolio depositary receipts (''PDRs'') and index fund shares[6] to eliminate the requirement that an eligible index be calculated and weighted following a specified methodology.

The Exchange currently has generic listing standards (within the meaning of Rule 19b–4(e) under the Act[7]), which permit the listing and trading of various qualifying ETFs subject to the procedures contained in Rule 19b–4(e). The existence of generic listing standards allows qualifying ETFs to list or trade without the need to file a rule change for each security. The generic listing standards for ETFs presently provide that eligible indexes be calculated based on the market capitalization, modified market capitalization, price, equal-dollar, or modified equal-dollar weighting methodology.[8] The proposed rule change would eliminate this standard, and, as a result, the Exchange would no longer consider index methodology in its review of an ETF's eligibility for listing and trading pursuant to Rule 19b–4(e) under the Act.[9]

III. Discussion

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[10] and, in particular, the requirements of Section 6 of the Act.[11] Specifically, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act,[12] which requires, among other things, that the rules of a national securities exchange be 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.

As the market for ETFs has grown, the variety of weighting and calculation methodologies for underlying indexes has also expanded, limiting the applicability of Amex's current generic ETF listing standards. The Commission believes that the proposed elimination of index methodology from its generic

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 55240 (February 5, 2007), 72 FR 6624.

[4] Amendment No. 2 is a technical amendment, which revises the proposal to reflect the implementation of Amex's Auction and Electronic Market Integration (''AEMI'') platform and corresponding adoption of Rules 1000–AEMI and 1000A–AEMI, which replace former Amex rules 1000 and 1000A. As such, it is not subject to notice and comment.

[5] 17 CFR 240.19b–4(e).

[6] PDRs and index fund shares are registered investment companies under the Investment Company Act of 1940 and are referred to in this filing as exchange traded funds (''ETFs'').

[7] 17 CFR 240.19b–4(e).

[8] *See* Commentary .03(b)(i) to Amex Rule 1000–AEMI and Commentary .02(b)(i) to Amex Rule 1000A–AEMI.

[9] 17 CFR 240.19b–4(e).

[10] In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

[11] 15 U.S.C. 78f.

[12] 15 U.S.C. 78f(b)(5).

listing standards for ETFs would potentially reduce the time frame for bringing ETFs based on indexes with nontraditional weighting techniques to the market, thereby reducing the burdens on issuers and other market participants and promoting competition, without compromising investor protection.

The Commission notes that the generic listing standards for domestic indexes will continue to require, without limitation, that the most heavily weighted component stock of an index not exceed 30% of the weight of the index, and the five most heavily weighted component stocks of an index not exceed 65% of the weight of the index,[13] and that an index include a minimum of 13 component stocks.[14] Similarly, the generic listing standards for international or global indexes require, without limitation, that the most heavily weighted component stock of an index not exceed 25% of the weight of the index, and the five most heavily weighted component stocks of an index not exceed 60% of the weight of the index,[15] and that an index include a minimum of 20 component stocks.[16] Therefore, the Commission believes that indexes underlying ETFs will continue to be sufficiently broad-based in scope to minimize potential manipulation.

The Commission believes that the proposed rule change will enable the Exchange and issuers to benefit from the expected efficiencies resultant from this proposed rule change while at the same time still ensuring adequate protection for investors and the public in general.

IV. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[17] that the proposed rule change (SR–Amex–2007–07), as amended, be, and is hereby approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[18]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6083 Filed 4–2–07; 8:45 am]

BILLING CODE 8010–01–P

[13] *See* Commentary .03(a)(A)(3) to Amex Rule 1000–AEMI and Commentary .02(a)(A)(3) to Amex Rule 1000A–AEMI.

[14] *See* Commentary .03(a)(A)(4) to Amex Rule 1000–AEMI and Commentary .02(a)(A)(4) to Amex Rule 1000A–AEMI.

[15] *See* Commentary .03(a)(B)(3) to Amex Rule 1000–AEMI and Commentary .02(a)(B)(3) to Amex Rule 1000A–AEMI.

[16] *See* Commentary .03(a)(B)(4) to Amex Rule 1000–AEMI and Commentary .02(a)(B)(4) to Amex Rule 1000A–AEMI.

[17] 15 U.S.C. 78s(b)(2).

[18] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55538; File No. SR–NASD–2007–018]

Self-Regulatory Organizations: National Association of Securities Dealers, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend the NASD Rule 7000 Series To Delete References To Systems and Services That Will No Longer Be Provided by NASD

March 27, 2007.

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 March 1, 2007, the National Association of Securities Dealers, Inc. (''NASD'') 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 prepared substantially by NASD. NASD has designated this proposal as ''establishing or changing a due, fee, or other charge'' under Section 19(b)(3)(A)(ii) 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 the Substance of the Proposed Rule Change

NASD is proposing to amend the NASD Rule 7000 Series (Charges for Services and Equipment) to delete references to systems and services that will no longer be provided by NASD upon the operation of NASD's Alternative Display Facility (the ''ADF'') for non-Nasdaq exchange-listed securities, which is anticipated to be March 5, 2007. The Rule 7000 Series only will apply to NASD's OTC Bulletin Board Service, OTC Reporting Facility (''ORF'') and Trade Reporting and Compliance Engine (''TRACE''). In this proposed rule change, NASD also is providing notice relating to the calculation of fees under Rule 7010 for use of NASD's Intermarket Trading System/Computer Assisted Execution Service (the ''ITS/CAES System'') on March 1 and 2, 2007, which will apply if the changes proposed herein are implemented on March 5, 2007 as anticipated. The text of the proposed rule change is available at NASD, the Commission's Public Reference Room, and www.nasd.com.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b-4.

[3] 15 U.S.C. 78s(b)(3)(A)(ii).

[4] 17 CFR 240.19b–4(f)(2).

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, NASD 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. NASD 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

On June 30, 2006, the Commission approved SR–NASD–2005–087, which, among other things, proposed an implementation strategy for the operation of the Nasdaq Stock Market LLC (the ''Nasdaq Exchange'') as a national securities exchange for Nasdaq-listed securities during a transitional period.[5] On November 21, 2006, the Commission approved SR–NASD–2006–104, which, among other things, proposed amendments necessary to reflect the complete separation of The Nasdaq Stock Market Inc. (''Nasdaq'') from NASD upon the operation of the Nasdaq Exchange as a national securities exchange for non-Nasdaq exchange-listed securities.[6] As described in SR–NASD–2006–135, for a transitional period, Nasdaq has continued to operate the SuperIntermarket (SiM) trading platform on NASD's behalf via the Transitional System and Regulatory Services Agreement, even upon commencement of the Nasdaq Exchange's operation as an exchange for non-Nasdaq exchange-listed securities on February 12, 2007.[7] Upon the operation of the ADF for non-Nasdaq exchange-listed securities, SiM

[5] *See* Securities Exchange Act Release No. 54084 (June 30, 2006), 71 FR 38935 (July 10, 2006) (order approving SR–NASD–2005–087).

[6] *See* Securities Exchange Act Release No. 54798 (November 21, 2006), 71 FR 69156 (November 29, 2006) (order approving SR–NASD–2006–104).

[7] *See* Securities Exchange Act Release Nos. 54984 (December 20, 2006), 71 FR 78245 (December 28, 2006) (notice of filing and immediate effectiveness of SR–NASD–2006–135) and 55274 (February 12, 2007), 72 FR 7785 (February 20, 2007) (notice of filing and immediate effectiveness of SR–NASD–2007–012).

will no longer be operated as a facility of NASD.

Currently, the NASD Rule 7000 Series addresses, among other things, the pricing schedule for the Consolidated Quotation Service and ITS/CAES System, which operate as part of, or in conjunction with, the SiM platform. Once the ADF becomes operational for non-Nasdaq exchange-listed securities, these systems will no longer be operated as NASD facilities and as such, the pricing schedule for use of these systems, as well as associated equipment and other fees, must be deleted from NASD's rules. Accordingly, NASD is proposing to rename the Rule 7000 Series as ''Charges For OTC Reporting Facility, OTC Bulletin Board and Trade Reporting and Compliance Engine Services'' and delete from the Rule 7000 Series all fee provisions that are no longer applicable. The current pricing schedule for members' use of the OTC Bulletin Board Service, ORF and TRACE will be retained and renumbered. Specifically, current Rule 7010(g) will be renumbered as Rule 7010 (OTC Reporting Facility) and amended to apply only to the ORF; current Rule 7010(j) will be renumbered as Rule 7020 (OTC Bulletin Board Service); current Rule 7010(k) will be renumbered as Rule 7030 (Trade Reporting and Compliance Engine (TRACE)); and paragraphs (3) and (4) of current Rule 7010(p) will be renumbered as paragraphs (a) and (b) of Rule 7040 (Historical Research and Administrative Reports). NASD is not proposing to modify any of the fees relating to such services in this proposed rule change; it is only deleting those fee provisions that are no longer applicable.[8]

NASD also notes that the fee schedule currently set forth in Rule 7010 relating to the use of the ITS/CAES System varies based upon the member's monthly volume. Assuming implementation of the changes proposed herein on March 5, 2007, the fees in Rule 7010 will apply only to two trading dates in March. Thus, NASD is clarifying that the fees charged for use of the ITS/CAES System on March 1 and 2, 2007 will be based on the member's volume for February 2007. In other words, the fee rates charged to a member for March 1 and 2, 2007 will be the same rates charged to the member for February 2007.

NASD has filed the proposed rule change for immediate effectiveness. The operative date of the proposed rule change will be the date upon which the ADF begins operating for non-Nasdaq exchange-listed securities, currently scheduled for March 5, 2007.

2. Statutory Basis

NASD believes that the proposed rule change is consistent with the provisions of Section 15A of the Act,[9] in general, and with Section 15A(b)(5) of the Act,[10] in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using any facility or system which the NASD operates or controls. NASD is proposing to delete references to fees for systems and services that NASD will no longer provide and is not proposing to modify the fees for use of any of the systems and services that NASD will continue to provide.

B. Self-Regulatory Organization's Statement on Burden on Competition

NASD 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

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change establishes or changes a member due, fee, or other charge imposed by the Exchange, it has become effective pursuant to Section 19(b)(3)(A) of the Act[11] and subparagraph (f)(2) of Rule 19b–4[12] thereunder. 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–NASD–2007–018 on the subject line.

Paper Comments

- Send paper comments in triplicate to Nancy M. Morris, Secretary, Securities and Exchange Commission, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NASD–2007–018. 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. Copies of such filing also will be available for inspection and copying at the principal office of NASD. 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-NASD–2007–018 and should be submitted on or before April 24, 2007.

[8] NASD notes that NASD members will continue to access the OTC Bulletin Board, which Nasdaq operates on NASD's behalf, via the Nasdaq Workstation. The Nasdaq Workstation also provides access to a variety of Nasdaq Exchange systems and services. Pursuant to the proposed rule change, the fees relating to access to and use of the Nasdaq Workstation will be deleted from NASD's rules as NASD does not charge for this service. However, NASD members are nonetheless required to pay all fees for access to and use of the Nasdaq Workstation pursuant to the applicable rules of the Nasdaq Exchange (*see, e.g.*, Rules 7011 and 7015), which apply to members and non-members of the Nasdaq Exchange.

[9] 15 U.S.C. 78o–3.

[10] 15 U.S.C. 78o–3(b)(5).

[11] 15 U.S.C. 78s(b)(3)(A).

[12] 17 CFR 240.19b–4(f)(2).

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[13]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6125 Filed 4–2–07; 8:45 am]

BILLING CODE 8010–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55543; File No. SR–NYSE–2007–31]

Self-Regulatory Organizations; New York Stock Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend Rule 60 To Allow the Exchange To Identify Its Quotation as Slow Non-Firm During the Manual Reporting of a Block-Sized Transaction

March 27, 2007.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the ''Act'') and Rule 19b–4 thereunder,[2] notice is hereby given that on March 20, 2007, the New York Stock Exchange LLC (''NYSE'' 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. NYSE has designated the proposed rule change as constituting a ''non-controversial'' rule change under Section 19(b)(3)(A) 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 Exchange is proposing to amend Rule 60 to provide that when the Exchange quotation is not available for automatic execution due to the manual reporting of a block-sized transaction, the Exchange will identify such quotes with an indicator signifying that they are non-firm within the context of Regulation National Market System (''Reg. NMS'').[5] The text of the rule proposal is available on the Exchange's Web site (*http://www.nyse.com*), at the Exchange, 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 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

The NYSE proposes to amend Rule 60 to specify that when a specialist manually reports a block-sized transaction[6] that involves orders in the Display Book® system (''block-sized transaction''), the Exchange will use an indicator to signify that the NYSE quote is non-firm. During the brief moment it takes a specialist to manually report a block-sized transaction in a security, autoquoting of the highest bid/lowest offer is suspended in that stock.[7] In addition, during that same period of time, automatic executions against the displayed quotation are not available.[8] After the specialist has completed the report of a block-sized transaction, autoquote will resume immediately,[9] and the NYSE quotation will similarly again be available for automatic executions.[10]

In the NYSE Hybrid Market℠ (''Hybrid Market''), autoquote and the availability of the Exchange quotation for automatic executions are likewise both disengaged for limited periods in connection with two other specific auction market activities: (1) When the specialist gaps the quotation in accordance with Exchange policies and procedures,[11] and (2) when trading on the Exchange reaches a Liquidity Replenishment Point (''LRP'').[12] For both of these situations, as provided in Rule 60(c)(2)(b), the Exchange identifies its quotation as unavailable for automatic execution in accordance with Reg. NMS.

Through this filing, the Exchange proposes to specify in Rule 60(c)(2)(b) that in addition to the two situations described in the preceding paragraph, the NYSE will identify its quotation as non-firm as soon as the report template is opened by the specialist to report a block-sized transaction, and will continue to do so until the trade has been reported. This change is necessary because the quotation that is disseminated when a block-sized transaction is being manually reported may not reflect the current state of the market in the stock, given the temporary suspension of autoquoting of the highest bid/lowest offer that occurs during the reporting of a block-sized transaction. Thus, identifying the quotation as non-firm when autoquote and automatic executions are suspended by a block-sized transaction will provide market participants with more accurate information about the state of the NYSE quotation. Moreover, identifying the NYSE quotation as non-firm will bring the dissemination of the quotation during block-sized transactions more in line with the way in which they are identified during other Exchange manual auction market activities that similarly cause the suspension of autoquote and automatic executions—*i.e.*, gap quotes and LRPs.

The Exchange completed Phase IV of the Hybrid Market℠ rollout on February 28, 2007. However, the Phase IV software does not contain the coding necessary to properly identify the Exchange quotation as non-firm during the manual report of a block-sized transaction that involves orders in the Display Book. The NYSE has made the software changes required and is currently rolling it out as part of the post-Phase IV software in phases through March 30, 2007, the date by which it currently expects the rollout to be completed.

In addition, the NYSE notes that it has requested from the Commission limited no-action relief from the requirement that the NYSE enforce compliance by its specialist members with NYSE Rule 19 (Locking or Crossing Protected Quotations in NMS Stocks), with respect only to the display of a quotation when a block-sized transaction is being manually reported,

[13] 17 CFR 200.30–3(a)(12).

[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)(6).

[5] *See* Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

[6] NYSE Rule 127.10 defines a ''block'' size as at least 10,000 shares or a quantity of stock having a market value of $200,000 or more, whichever is less.

[7] *See* NYSE Rule 60(e)(i)(B).

[8] *See* NYSE Rule 1000(a)(v).

[9] *See* NYSE Rule 60(e)(ii)(B).

[10] *See* NYSE Rule 1000(b).

[11] *See* NYSE Rule 60(e)(i)(A). For a description of gapped quotations, *see* Securities Exchange Act Release No. 53539 (March 22, 2006), 71 FR 16353 (March 31, 2006) (SR–NYSE–2004–05) (the ''Hybrid Market℠ Approval Order'').

[12] *See* NYSE Rule 60(e)(i)(C). For a description of LRPs, *see* Hybrid Market℠ Approval Order, *supra* note 11.

beginning on the Trading Phase Date until April 5, 2007.[13]

2. Statutory Basis

The basis under the Act for this proposed rule change is the requirement under Section 6(b)(5) of the Act[14] that an Exchange have rules that are 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.

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

The Exchange has neither solicited nor received written comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act[15] and Rule 19b–4(f)(6) thereunder[16] because the proposal 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 from the date on which it was filed, or such shorter time as the Commission may if consistent with the protection of investors and the public interest.[17]

Normally, a proposed rule change filed under 19b–4(f)(6) may not become operative prior to 30 days after the date of filing. However, Rule 19b–4(f)(6)(iii)[18] permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day operative delay and designate an operative date of March 30, 2007 for the proposal. In its filing, the Exchange noted that, given the temporary suspension of autoquoting of the highest bid/lowest offer that occurs during the reporting of a block-sized transaction, the quotation that is disseminated when a block-sized transaction is being manually reported may not reflect the current state of the market in the subject stock. Moreover, identifying the NYSE quotation as non-firm during the manual reporting of block transactions will bring the dissemination of the quotation more in line with the way in which quotes are identified during other Exchange manual auction market activities that similarly cause the suspension of autoquote and automatic executions—*i.e.*, gap quotes and LRPs (discussed above). Accordingly, the Exchange believes that this proposed rule change does not significantly affect the protection of investors or the public interest and does not impose any significant burden on competition.

The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest because the proposed rule change will allow the NYSE to accurately identify the status of the NYSE quotation during the manual reporting of block transactions in line with the way in which quotes are identified during other Exchange manual auction market activities that similarly cause the suspension of autoquote and automatic executions—*i.e.*, gap quotes and LRPs.[19] Accordingly, consistent with the protection of investors and the public interest, the Commission designates the proposed rule change to be operative on March 30, 2007, as requested by the Exchange.[20]

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–NYSE–2007–31 on the subject line.

Paper Comments

- Send paper comments in triplicate to Nancy M. Morris, Secretary, Securities and Exchange Commission, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSE–2007–31. 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. Copies of the filing will also be available for inspection and copying at the principal office of the NYSE. 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–NYSE–2007–31 and should be submitted on or before April 24, 2007.

[13] *See* Letter from Mary Yeager, Assistant Secretary, NYSE, to Nancy M. Morris, Secretary, Commission, dated March 2, 2007. In the letter, the NYSE requested that the no action relief be granted through April 5, 2007, rather than through March 30, 2007, because at the time of the request it was contemplated that the post-Phase IV rollout would not conclude until April 5, 2007.

[14] 15 U.S.C. 78f(b)(5).

[15] 15 U.S.C. 78s(b)(3)(A).

[16] 17 CFR 240.19b–4(f)(6).

[17] Rule 19b–4(f)(6)(iii) under the Act requires that a self-regulatory organization submit to the Commission 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, or such shorter time as designated by the Commission. NYSE has satisfied the pre-filing requirement.

[18] 17 CFR 240.19b–4(f)(6)(iii).

[19] The Commission notes that the Exchange must continue to conduct surveillance with respect to manual auction market activities, including the manual reporting of block transactions addressed in this proposed rule change, in order to monitor for abuse.

[20] For the 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).

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[21]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6082 Filed 4–2–07; 8:45 am]

BILLING CODE 8010–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55545; File No. SR–NYSE–2007–12]

Self-Regulatory Organizations; New York Stock Exchange LLC; Order Granting Accelerated Approval to a Proposed Rule Change as Modified by Amendment No. 1 To Amend Section 703.16 of the NYSE Listed Company Manual To Eliminate Requirement Regarding Index Weighting and Calculation Methodology

March 27, 2007.

I. Introduction

On February 5, 2007, the New York Stock Exchange LLC (''NYSE'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission''), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'')[1] and Rule 19b–4 thereunder,[2] a proposal to amend Section 703.16 of the NYSE Listed Company Manual (''NYSE Manual''), the Exchange's generic listing standard for investment company units (''ICUs''),[3] to eliminate the requirement that the weighting and calculation methodology for the index underlying a series of ICUs must be one of those specified in Section 703.16(C)(4)(a). On February 15, 2007, the NYSE submitted Amendment No. 1 to the proposed rule change. The proposed rule change was published for comment in the **Federal Register** on March 5, 2007 for a 15-day comment period.[4] The Commission received no comments regarding the proposal. This order approves the proposed rule change, as modified by Amendment No. 1, on an accelerated basis.

II. Description of the Proposal

The Exchange has proposed to amend its ''generic'' listing standard pursuant to Rule 19b–4(e) under the Act[5] for ICUs (which include exchange-traded funds) to eliminate the requirement that an eligible index be calculated and weighted according to a specific methodology.

The Exchange currently has listing and trading standards, which permit the Exchange either to list and trade ICUs or trade such ICUs on the Exchange on an unlisted trading privileges (''UTP'') basis, subject to the procedures contained in Rule 19b–4(e) under the Act.[6] The existence of generic listing standards allows qualifying ICUs to list or trade without the need to file a rule change for each security. Section 703.16(C)(4)(a) of the NYSE Manual requires that, if a series of ICUs is listed for trading on the Exchange in reliance upon Rule 19b–4(e) under the Act,[7] the index underlying the series must follow a market capitalization, modified market capitalization, price, equal-dollar, or modified equal-dollar weighting methodology, or alternately, a methodology weighting components of the index based on any, some or all of the following: Sales, cash flow, book value and dividends. The proposed rule change would eliminate this standard, and, as a result, the Exchange would no longer consider index methodology in its review of an ICU's eligibility for listing and trading pursuant to Rule 19b–4(e) under the Act.[8]

III. Discussion

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[9] and, in particular, the requirements of Section 6 of the Act.[10] Specifically, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act,[11] which requires, among other things, that the rules of a national securities exchange be 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.

As the market for ICUs has expanded, the variety of weighting and calculation methodologies for underlying indexes has grown, limiting the applicability of NYSE's current generic listing standards for ICUs. The Commission believes that eliminating the index methodology requirement from the Exchange's generic listing standards for ICUs will facilitate bringing ICUs based on indexes with nontraditional weighting techniques to the market, encourage innovation in index construction, reduce costs to issuers and other market participants, and promote competition.

The Commission believes that these goals may be furthered without compromising investor protection. The Commission notes that the numerical criteria in Section 703.16(C) of the NYSE Manual addressing concentration, diversity, and liquidity of an underlying index's components would continue to apply. For example, the generic listing standards for domestic indexes will continue to require, without limitation, that the most heavily weighted component stock of an index not exceed 30% of the weight of the index, and the five most heavily weighted component stocks of an index not exceed 65% of the weight of the index,[12] and that an index include a minimum of 13 component stocks.[13] In addition, component stocks that in the aggregate account for at least 90% of the weight of the index must have a market value of at least $75 million and minimum monthly trading volume of at least 250,000 shares for each of the last six months.[14] Similarly, the generic listing standards for international or global indexes require, without limitation, that the most heavily weighted component stock of an index not exceed 25% of the weight of the index, and the five most heavily weighted component stocks of an index not exceed 60% of the weight of the index,[15] and that an index include a minimum of 20 component stocks.[16] Component stocks that in the aggregate account for at least 90% of the weight of the index must have a market value of at least $100 million and minimum monthly trading volume of at least 250,000 shares for each of the last

[21] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] An ICU is defined in Section 703.16 of the NYSE Manual as a security that represents an interest in a registered investment company that could be organized as a unit investment trust, an open-end management investment company, or a similar entity. A registered investment company is registered under the Investment Company Act of 1940, 15 U.S.C. 80a *et seq.*

[4] *See* Securities Exchange Act Release No. 55343 (February 23, 2007), 72 FR 9814.

[5] 17 CFR 240.19b–4(e).

[6] *See* Section 703.16 of the NYSE Manual.

[7] 17 CFR 240.19b–4(e).

[8] 17 CFR 240.19b–4(e).

[9] In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

[10] 15 U.S.C. 78f.

[11] 15 U.S.C. 78f(b)(5).

[12] *See* Section 703.16(C)(2)(a)(iii) of the NYSE Manual.

[13] *See* Section 703.16(C)(2)(a)(iv) of the NYSE Manual.

[14] *See* Section 703.16(C)(2)(a)(i) and (a)(ii) of the NYSE Manual.

[15] *See* Section 703.16(C)(2)(b)(iii) of the NYSE Manual.

[16] *See* Section 703.16(C)(2)(b)(iv) of the NYSE Manual.

six months.[17] Therefore, the Commission believes that indexes underlying ICUs will continue to be sufficiently broad-based in scope to minimize potential manipulation. Additionally, ICUs and their underlying indexes would continue to be subject to all other requirements of Section 703.16 of the NYSE Manual.

The Commission believes that accelerating approval of the proposed rule change would enable the Exchange and issuers to immediately benefit from the expected efficiencies resultant from this proposed rule change without delay while at the same time still ensuring adequate protection for investors and the public in general. The Commission notes that NYSE's proposal substantively tracks a recently approved rule change by the American Stock Exchange LLC[18] and raises no new regulatory issues. Thus, the Commission finds good cause, consistent with Section 19(b)(2) of the Act,[19] to grant accelerated approval of the proposed rule change, as amended, prior to the thirtieth day after the notice is published for comment in the **Federal Register**.

IV. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[20] that the proposed rule change (SR–NYSE–2007–12), as modified by Amendment No. 1, be, and is hereby approved on an accelerated basis.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[21]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6084 Filed 4–2–07; 8:45 am]

BILLING CODE 8010–01–P

[17] *See* Section 703.16(C)(2)(b)(i) and (b)(ii) of the NYSE Manual.

[18] *See* Securities Exchange Act Release No. 55544 (March 27, 2007). NYSE Arca, Inc. has also proposed a parallel rule change, which the Commission is approving concurrently with this one. *See* Securities Exchange Act Release No. 55546 (March 27, 2007).

[19] 15 U.S.C. 78s(b)(2).

[20] 15 U.S.C. 78s(b)(2).

[21] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55546; File No. SR–NYSEArca–2007–14]

Self-Regulatory Organizations; NYSE Arca, Inc.; Order Granting Accelerated Approval To a Proposed Rule Change to Amend Existing Rules for Investment Company Units To Eliminate Requirement Regarding Index Weighting and Calculation Methodology

March 27, 2007.

I. Introduction

On February 8, 2007, NYSE Arca, Inc. (''NYSE Arca'' or ''Exchange''), through its wholly owned subsidiary NYSE Arca Equities, Inc. (''NYSE Arca Equities''), filed with the Securities and Exchange Commission (''Commission''), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'')[1] and Rule 19b–4 thereunder,[2] a proposal to revise its generic listing standards applicable to Investment Company Units (''Investment Company Units'' or ''ICUs'')[3] to eliminate the requirement that the weighting and calculation methodology for the index underlying a series of ICUs must be one of those specified in Commentary .01(b)(1) to NYSE Arca Equities Rule 5.2(j)(3). The proposed rule change was published for comment in the **Federal Register** on March 5, 2007 for a 15-day comment period.[4] The Commission received no comments regarding the proposal. This order approves the proposed rule change on an accelerated basis.

II. Description of the Proposal

The Exchange has proposed to amend its ''generic'' listing standard pursuant to Rule 19b–4(e) under the Act[5] for ICUs (which include exchange-traded funds) to eliminate the requirement that an eligible index be calculated and weighted according to a specific methodology.

The Exchange currently has listing and trading standards, which permit the Exchange either to list and trade ICUs or trade such ICUs on the Exchange on an unlisted trading privileges (''UTP'') basis, subject to the procedures contained in Rule 19b–4(e) under the Act.[6] The existence of generic listing standards allows qualifying ICUs to list or trade without the need to file a rule change for each security. Commentary .01(b)(1) to NYSE Arca Equities Rule 5.2(j)(3) currently requires that, if a series of ICUs is listed for trading (or traded pursuant to UTP) on the Exchange in reliance upon Rule 19b–4(e) under Rule 19b–4 under the Act,[7] the index underlying the series must follow the market capitalization, modified market capitalization, price, equal-dollar or modified equal-dollar weighting methodology, or alternately, a methodology weighting components of the index based on any, some or all of the following: sales, cash flow, book value, and dividends. The proposed rule change would eliminate this standard, and, as a result, the Exchange would no longer consider index methodology in its review of an ICU's eligibility for listing and trading pursuant to Rule 19b–4(e) under the Act.[8]

III. Discussion

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[9] and, in particular, the requirements of Section 6 of the Act.[10] Specifically, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act,[11] which requires, among other things, that the rules of a national securities exchange be 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.

As the market for ICUs has expanded, the variety of weighting and calculation methodologies for underlying indexes has grown, limiting the applicability of NYSE Arca's current generic listing standards for ICUs. The Commission believes that eliminating the index methodology requirement from the Exchange's generic listing standards for ICUs will facilitate bringing ICUs based

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] An ICU is defined in NYSE Arca Equities Rule 5.1(b)(15) as a security representing an interest in a registered investment company that could be organized as a unit investment trust, an open-end management investment company, or a similar entity. A registered investment company is registered under the Investment Company Act of 1940, 15 U.S.C. 80a *et seq.*

[4] *See* Securities Exchange Act Release No. 55339 (February 23, 2007), 72 FR 9820.

[5] 17 CFR 240.19b–4(e).

[6] *See* NYSE Arca Equities Rule 5.2(j)(3).

[7] 17 CFR 240.19b–4(e).

[8] 17 CFR 240.19b–4(e).

[9] In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

[10] 15 U.S.C. 78f.

[11] 15 U.S.C. 78f(b)(5).

on indexes with nontraditional weighting techniques to the market, encourage innovation in index construction, reduce costs to issuers and other market participants, and promote competition.

The Commission believes that these goals may be furthered without compromising investor protection. The Commission notes that the numerical criteria in Commentary .01 to NYSE Arca Equities Rule 5.2(j)(3) addressing concentration, diversity, and liquidity of an underlying index's components would continue to apply. For example, the generic listing standards for domestic indexes will continue to require, without limitation, that the most heavily weighted component stock of an index not exceed 30% of the weight of the index, and the five most heavily weighted component stocks of an index not exceed 65% of the weight of the index,[12] and that an index include a minimum of 13 component stocks.[13] In addition, component stocks that in the aggregate account for at least 90% of the weight of the index must have a market value of at least $75 million and minimum monthly trading volume of at least 250,000 shares for each of the last six months.[14] Therefore, the Commission believes that indexes underlying ICUs will continue to be sufficiently broad-based in scope to minimize potential manipulation. Additionally, ICUs and their underlying indexes would continue to be subject to all other requirements of NYSE Arca Equities Rule 5.2(j)(3).

The Commission believes that accelerating approval of the proposed rule change would enable the Exchange and issuers to immediately benefit from the expected efficiencies resultant from this proposed rule change without delay while at the same time still ensuring adequate protection for investors and the public in general. The Commission notes that NYSE Arca's proposal substantively tracks a recently approved rule change by the American Stock Exchange LLC[15] and raises no new regulatory issues. Thus, the Commission finds good cause, consistent with Section 19(b)(2) of the Act,[16] to grant accelerated approval of the proposed rule change, as amended, prior to the thirtieth day after the notice is published for comment in the **Federal Register**.

IV. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[17] that the proposed rule change (SR–NYSEArca–2007–14) be, and is hereby approved on an accelerated basis.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[18]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–6085 Filed 4–2–07; 8:45 am]

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[12] *See* Commentary .01(a)(3) to NYSE Arca Equities Rule 5.2(j)(3).

[13] *See* Commentary .01(a)(4) to NYSE Arca Equities Rule 5.2(j)(3).

[14] *See* Commentary .01(a)(1) and (2) to NYSE Arca Rule 5.2(j)(3).

[15] *See* Securities Exchange Act Release No. 55544 (March 27, 2007). The New York Stock Exchange LLC has also proposed a parallel rule change, which the Commission is approving concurrently with this one. *See* Securities Exchange Act Release No. 55545 (March 27, 2007).

[16] 15 U.S.C. 78s(b)(2).

[17] 15 U.S.C. 78s(b)(2).

[18] 17 CFR 200.30–3(a)(12).

DEPARTMENT OF STATE

[Public Notice 5739]

Additional Designation of Entity Pursuant to Executive Order 13382

AGENCY: Department of State.

ACTION: Designation of the Defense Industries Organization Under Executive Order 13382.

SUMMARY: Pursuant to the authority in section 1(ii) of Executive Order 13382, ''Blocking Property of Weapons of Mass Destruction Proliferators and Their Supporters'', the Assistant Secretary of State, acting under the authorities delegated to him by the Secretary of State, in consultation with the Secretary of the Treasury and the Attorney General, has determined that an Iranian entity, the Defense Industries Organization (''DIO''), has engaged, or attempted to engage, in activities or transactions that have materially contributed to, or pose a risk of materially contributing to, the proliferation of weapons of mass destruction or their means of delivery.

DATES: The designation by the Secretary of State of the entity identified in this notice pursuant to Executive Order 13382 is effective on March 30, 2007.

FOR FURTHER INFORMATION CONTACT: Director, Office of Counterproliferation Initiatives, Bureau of International Security and Nonproliferation, Department of State, Washington, DC 20520, *tel.:* 202/647–7895.

Background

On June 28, 2005, the President, invoking the authority, inter alia, of the International Emergency Economic Powers Act (50 U.S.C. 1701–1706) (''IEEPA''), issued Executive Order 13382 (70 FR 38567, July 1, 2005) (the ''Order''), effective at 12:01 a.m. eastern daylight time on June 29, 2005. In the Order the President took additional steps with respect to the national emergency described and declared in Executive Order 12938 of November 14, 1994, regarding the proliferation of weapons of mass destruction and the means of delivering them.

Section 1 of the Order blocks, with certain exceptions, all property and interests in property that are in the United States, or that hereafter come within the United States or that are or hereafter come within the possession or control of United States persons, of: (1) The persons listed in the Annex to the Order; (2) any foreign person determined by the Secretary of State, in consultation with the Secretary of the Treasury, the Attorney General, and other relevant agencies, to have engaged, or attempted to engage, in activities or transactions that have materially contributed to, or pose a risk of materially contributing to, the proliferation of weapons of mass destruction or their means of delivery (including missiles capable of delivering such weapons), including any efforts to manufacture, acquire, possess, develop, transport, transfer or use such items, by any person or foreign country of proliferation concern; (3) any person determined by the Secretary of the Treasury, in consultation with the Secretary of State, the Attorney General, and other relevant agencies, to have provided, or attempted to provide, financial, material, technological or other support for, or goods or services in support of, any activity or transaction described in clause (2) above or any person whose property and interests in property are blocked pursuant to the Order; and (4) any person determined by the Secretary of the Treasury, in consultation with the Secretary of State, the Attorney General, and other relevant agencies, to be owned or controlled by, or acting or purporting to act for or on behalf of, directly or indirectly, and person whose property and interests in property are blocked pursuant to the Order.

On March 28, 2007, the Secretary of State, in consultation with the Secretary of the Treasury, the Attorney General, and other relevant agencies, designated a person whose property and interests in property are blocked pursuant to Executive Order 13382.

Information on the additional designee is as follows:

1. Defense Industries Organization (a.k.a. Defence Industries Organisation; a.k.a. DIO; a.k.a. Saseman Sanaje Defa;

a.k.a. Sazemane Sanaye Defa; a.k.a. ''Sasadja''), P.O. Box 19585–777, Pasdaran Street, Entrance of Babaie Highway, Permanent Expo of Defence Industries Organization, Tehran, Iran [NPWMD].

Dated: March 28, 2007.

John C. Rood,

Assistant Secretary, International Security and Nonproliferation, Department of State.

[FR Doc. E7–6152 Filed 4–2–07; 8:45 am]

BILLING CODE 4710–27–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Docket No. FAA–2007–27758]

Known Icing Conditions

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of draft letter of interpretation.

SUMMARY: This draft letter of interpretation addresses a request by the Aircraft Owners and Pilots Association (AOPA) that the FAA rescind a letter of interpretation dated June 6, 2006 regarding ''known icing conditions''. Because of the controversy surrounding this issue, the FAA is publishing a draft of its response to seek public comment.

DATES: Send your comments on or before May 3, 2007.

ADDRESSES: You may send comments, identified by docket number, using any of the following methods:

1. *DOT Docket Web site:* Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.

2. *Mail:* Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Room PL–401, Washington, DC 20590–0001.

3. *Facsimile:* (202) 493–2251.

4. *Hand delivery:* Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Room PL–401, 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://dms.dot.gov,* including any personal information you provide.

FOR FURTHER INFORMATION CONTACT: Bruce Glendening, Regulations Division, Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Ave., Washington, DC 20591; telephone (202) 267–3073.

SUPPLEMENTARY INFORMATION: On November 17, 2006, Luis Gutierrez, Director of Regulatory and Certification Policy for AOPA, requested the FAA's Office of the Chief Counsel rescind a letter of interpretation issued by the FAA's Office of the Regional Counsel, Eastern Region, regarding flight in known icing conditions. The letter of interpretation, dated June 6, 2006, responded to a request by Robert Miller that the FAA clarify when ''known ice'' exists for purposes of enforcement action.

The FAA recognizes that the term ''known icing condition'', the term addressed in the June 2006 letter of interpretation, could be misconstrued. Based on one's interpretation of the term, the FAA's prohibitions against flying into known icing conditions under certain circumstances could either have the effect of placing severe constraints on when individuals in aircraft without deicing equipment could fly or allowing these individuals to fly in conditions where there is a real risk of ice accretion with no means of removing the ice. Because the FAA has been asked to rescind the June 6, 2006 letter of interpretation, we have decided to publish a draft of our response in the **Federal Register** and seek comment on it. Based upon comments received in the docket, the FAA may decide to reevaluate its position on known icing conditions. The text of the draft response is as follows:

Luis M. Gutierrez, Director, Regulatory and Certification Policy, Aircraft Owners and Pilots Association, 421 Aviation Way, Frederick, MD 21701–4798.

Re: Legal Interpretation of Known Icing Conditions

Dear Mr. Gutierrez:

In a letter dated November 21, 2006, to the FAA Chief Counsel's Office, you requested the rescission of a letter of interpretation regarding flight in known icing conditions, issued by this office on June 6, 2006. The Chief Counsel's Office has referred your letter to us for response. After considering the points you and other stakeholders have raised, we are replacing our June 6 letter through the issuance of this revision.

Our letter of June 6, 2006, responded to a request by Robert J. Miller for a legal interpretation of ''known ice'' as it relates to flight operations. We construed the request as seeking clarification of the meaning of ''known icing conditions'' as that term appears in the Airplane Flight Manuals (AFM) or Pilot Operating Handbooks for many general aviation aircraft. That is also the term addressed in legal proceedings involving violations of FAA safety regulations that relate to in-flight icing. The NTSB has held that known icing conditions exist when a pilot knows or reasonably should know of weather reports in which icing conditions are reported or forecast.[1]

While various FAA regulations contain limitations on flight in known icing conditions, the regulatory provision that most commonly affects general aviation operators in this respect applies the term only indirectly. 14 CFR 91.9 precludes pilots from operating contrary to the operating limitations in their aircraft's approved AFM. The operating limitations identify whether the aircraft is equipped to operate in known icing conditions and may prohibit or restrict such flights for many general aviation aircraft. 14 CFR 91.103 requires pilots to become familiar with all available information concerning their flights before undertaking them.

Permutations on the type, combination, and strength of meteorological elements that signify or negate the presence of known icing conditions are too numerous to describe exhaustively in this letter. Any assessment of known icing conditions is necessarily fact-specific. However, the NTSB's decisionmaking reflects the common understanding that the formation of structural ice requires two elements: visible moisture and an aircraft surface temperature at or below zero degrees Celsius. Even in the presence of these elements, there are many variables that influence whether ice will actually form on and adhere to an aircraft. The size of the water droplets, the shape of the airfoil, or the speed of the aircraft, among other factors, can make a critical difference in the initiation and growth of structural ice.

Whether a pilot has operated into known icing conditions contrary to any limitation will depend upon the information available to the pilot, and his or her proper analysis of that information in connection with the particular operation (e.g., route of flight, altitude, time of flight, airspeed, and aircraft performance characteristics), in evaluating the risk of encountering known icing conditions. The FAA, your own association, and other aviation- or weather-oriented organizations offer considerable information on the phenomenon of aircraft icing. Pilots are encouraged to use this information for a greater appreciation of the risks that flying in potential icing conditions can present. Likewise, a variety of sources

[1] *See e.g., Administrator* v. *Boger,* N.T.S.B. Order No. EA–4525 (Feb. 14, 1997); *Administrator* v. *Groszer,* NTSB Order No. EA–3770 (Jan. 5, 1993); *Administrator* v. *Bowen,* 2 N.T.S.B. 940, 943 (1974).

provide meteorological information that relates to forecast and actual conditions that are conducive to in-flight icing. Pilots should carefully evaluate all of the available meteorological information relevant to the proposed flight, including applicable surface observations, temperatures aloft, terminal and area forecasts, AIRMETs, SIGMETs, and pilot reports. As new technology becomes available, pilots should incorporate use of that technology into their decision-making process.

The ultimate decision whether, when, and where to make the flight rests with the pilot. A pilot also must continue to reevaluate changing weather conditions. If the composite information indicates to a reasonable and prudent pilot that he or she will encounter visible moisture at freezing or near freezing temperatures and that ice will adhere to the aircraft along the proposed route and altitude of flight, then known icing conditions likely exist. If the AFM prohibits flight in known icing conditions and the pilot operates in such conditions, the FAA could take enforcement action.[2]

Pilots should also remain aware that 14 CFR § 91.13(a) prohibits the operation of an aircraft for the purpose of air navigation in a careless or reckless manner so as to endanger the life or property of another. Meteorological information that does not evidence known icing conditions, or the extent thereof, may regardless support a finding that a pilot's operation under the circumstances was careless.

This response constitutes an interpretation of the Chief Counsel's Office and was coordinated with the FAA's Flight Standards Service.

Issued in Washington, DC, on March 27, 2007.

Rebecca MacPherson,

Assistant Chief Counsel for Regulations.

[FR Doc. 07–1620 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2007–26852]

Notice of Request To Revise a Currently-Approved Information Collection: Request for Revocation of Authority Granted

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice; and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (PRA), FMCSA announces its plan to submit to the Office of Management and Budget (OMB) its request to revise a currently-approved information collection (IC) entitled, ''Request for Revocation of Authority Granted,'' docketed as OMB Control Number 2126–0018. This information collection notifies the FMCSA of a voluntary request by a motor carrier, freight forwarder, or property broker to amend or revoke its registration of authority granted. FMCSA will seek OMB's review and approval of this revised IC and invites public comment on this request. The Paperwork Reduction Act requires the publication of this notice.

DATES: We must receive your comments on or before June 4, 2007.

ADDRESSES: You may submit comments identified by any of the following methods. Please identify your comments by the FMCSA Docket Number FMCSA–2007–26852.

- *Web site: http://dms.dot.gov.* Follow instructions for submitting comments to the Docket.
- *Fax:* 202–493–2251.
- *Mail:* U.S. Department of Transportation, Docket Management Facility, 400 Seventh Street, SW., Plaza level, Washington, DC 20590–0001.
- *Hand Delivery:* Plaza level of the Nassif Bulding, 400 Seventh Street, SW., Washington, DC 20590–0001, between 9 a.m. and 5 p.m., e.t., Monday through Friday, except Federal holidays.

Docket: For access to the Docket Management System (DMS) to read background documents or comments received, go to *http://dms.dot.gov* at any time or to the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC 20590–0001, between 9 a.m. and 5 p.m., e.t., Monday through Friday, except Federal holidays. The DMS is available electronically 24 hours each day, 365 days each year. If you desire notification of receipt of your comments, please include a self-addressed, stamped envelope, or postcard or print the acknowledgement page that appears after submitting comments online.

Privacy Act: Anyone is able to 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 DOT's complete Privacy Act Statement in the **Federal Register** on April 11, 2000 (65 FR 19477), or you may visit *http://dms.dot.gov.*

FOR FURTHER INFORMATION CONTACT: Ms. Stephanie Haller, Supervisory Transportation Specialist, Commercial Enforcement Division, Department of Transportation, Federal Motor Carrier Safety Administration, 400 Seventh Street, SW., Washington, DC 20590–0001. *Telephone Number:* (202) 385–2362; *E-mail Address: Stephanie.haller@dot.gov.* Office hours are from 8 a.m. to 5 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Title: Request for Revocation of Authority Granted.

OMB Approval Number: 2126–0018.

Type of Request: Revision of a currently-approved information collection. This IC is being revised due to an increase in the number of Form OCE–46s filings from 1,000 to 3,250 per year.

Form Number: OCE–46.

Respondents: Motor carriers, freight forwarders and property brokers.

Estimated Number of Respondents: 3,250.

Estimated Time Per Response: 15 minutes.

Expiration Date: June 30, 2007.

Frequency of Response: On occasion.

Estimated Total Annual Burden: 813 hours [3,250 annual Form OCE–46 filers × 15 minutes/60 minutes per filing = 812.5 hours, rounded to 813 hours].

Background: Title 49 of the United States Code (U.S.C.) authorizes the Secretary of Transportation (Secretary) to promulgate regulations governing the registration of for-hire motor carriers of regulated commodities (49 U.S.C. 13902), surface transportation freight forwarders (49 U.S.C. 13903), and property brokers (49 U.S.C. 13904). The FMCSA carries out this registration program under authority delegated by the Secretary. Under 49 U.S.C. 13905, each registration is effective from the date specified and remains in effect for such period as the Secretary determines appropriate by regulation. Section 13905(c) of title 49, U.S.C., grants the Secretary the authority to amend or revoke a registration at the registrant's request. On complaint, or on the Secretary's own initiative, the Secretary may also suspend, amend, or revoke any part of the registration of a motor carrier, broker, or freight forwarder for willful failure to comply with the regulations, an order of the Secretary, or a condition of its registration.

Form OCE–46 is used by transportation entities to voluntarily apply for revocation of their registration authority in whole or in part. FMCSA

[2] Enforcement action could also be taken for operation of an aircraft into icing conditions that exceed the certification limitations of the aircraft.

uses the form to seek information concerning the registrant's docket number, name and address, and the reasons for the revocation request.

Public Comments Invited: You are asked to comment on any aspect of this revised information collection request, including: (1) The necessity and usefulness of the information collection for the FMCSA to meet its goal in reducing truck crashes; (2) the accuracy of the estimated burdens; (3) ways to enhance the quality, usefulness, and clarity of the collected information; and (4) ways to minimize the collection burden without reducing the quality of the collected information. The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

Authority: 49 U.S.C. 13902, 13903, 13904 and 13905; and 49 CFR 1.73.

Issued on: March 28, 2007.

Rose A. McMurray,

Chief Safety Officer, Assistant Administrator.

[FR Doc. E7–6140 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2003–14652]

Commercial Driver's License (CDL) Standards; Isuzu Motors America, Inc.'s Exemption Application

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice of final disposition.

SUMMARY: FMCSA previously announced its decision to renew Isuzu Motors America, Inc.'s (Isuzu) exemption for 19 of its drivers to enable them to test-drive commercial motor vehicles (CMVs) in the United States without a commercial driver's license (CDL) issued by one of the States. Following the renewal one comment to the public docket was received. The Agency has considered the comment and continues to believe the knowledge and skills testing and training program that drivers must undergo to obtain a Japanese CDL ensures that each of these 19 drivers will achieve a level of safety that is equivalent to, or greater than, the level of safety achieved without the exemption. The Agency therefore declines to rescind or change the terms of the exemption.

DATES: This exemption is effective from June 21, 2006 through June 20, 2008.

FOR FURTHER INFORMATION CONTACT: Mr. Thomas Yager, Chief, Driver and Carrier Operations Division, Office of Bus and Truck Standards and Operations, MC–PSD, Federal Motor Carrier Safety Administration, 400 Seventh Street, SW., Washington, DC 20590–0001. Telephone: 202–366–4009. E-mail: *MCPSD@dot.gov*.

SUPPLEMENTARY INFORMATION:

Background

Under 49 U.S.C. 31315 and 31136(e), FMCSA may grant or renew an exemption from the CDL requirements in 49 CFR 383.23 for a maximum 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'' (49 CFR 381.305 (a)). FMCSA evaluated Isuzu's application on its merits and decided to grant the renewal of the exemption for 19 of Isuzu's engineers and technicians for a two-year period, effective June 21, 2006 as previously announced in the **Federal Register** (71 FR 35726, June 21, 2006).

Isuzu Application for Renewal of Exemption

Isuzu applied for renewal of an exemption from the 49 CFR 383.23 requirement that the operator of a CMV obtain a CDL. This section sets forth the standards that States must employ in issuing CDLs to drivers operating in commerce. In the United States, an individual must be a resident of a State in order to qualify for a CDL; [1] the Isuzu drivers for whom this exemption was sought are all residents of Japan. A copy of the Isuzu request for exemption from section 383.23 is in the docket identified at the beginning of this notice.

Japanese Drivers

The exemption granted in 2006 enables 19 drivers to test-drive in the United States Isuzu CMVs that are assembled, sold or primarily used in the U.S.

Collectively, these drivers form a team of mechanics, vehicle test engineers, technicians and other employees.

Comments

The Agency received one comment in response to its request for public comments on this renewal (71 FR 35726, June 21, 2006). The commenter objected to the renewal based on the Japanese drivers' potential lack of familiarity with United States highway and traffic conditions, and the operation of vehicles with steering wheels on the left side.

FMCSA Response

FMCSA does not agree with the objection. This is a renewal of a 2-year exemption. These drivers operated in the U.S. during the original exemption period, and Isuzu reported in its application for renewal that none of them received any traffic citations or was involved in any accidents from the time of the original exemption on October 16, 2003, through the date of its application for renewal.

FMCSA Decision

The FMCSA decision to grant the request to renew the exemption from section 383.23 was based on the merits of the application for exemption and the rigorous knowledge and skills testing of Japanese drivers concerning the safe operation of CMVs. All available evidence indicates that the 19 drivers covered by the exemption continue to operate as safely as they would have by complying with U.S. CDL regulations.

Unless these drivers fail to maintain the conditions specified in the June 21, 2006, decision, the exemption will remain in effect through June 20, 2008.

Issued on: March 28, 2007.

Rose A. McMurray,

Chief Safety Officer, Assistant Administrator.

[FR Doc. E7–6141 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–EX–P

[1] Although 49 CFR 393.23 indicates that these drivers could obtain a Nonresident CDL, very few States are currently issuing Nonresident CDLs due to security concerns.

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

[FTA Docket No. ITA–2007–27772]

Notice of Request for the Extension of Currently Approved Information Collection

AGENCY: Federal Transit Administration, DOT.

ACTION: Notice and request for comments.

SUMMARY: The Federal Transit Administration invites public comments about our intention to request the Office of Management and Budget's (OMB) approval to renew the following information collection: Pre-Award and Post-Delivery Review Requirements.

The information to be collected for this program is necessary to certify that pre-award and post-delivery reviews will be conducted when using FTA funds to purchase revenue service vehicles.

DATES: Comments must be submitted before June 4, 2007.

ADDRESSES: You may mail or hand deliver comments to the U.S. Department of Transportation, Dockets Management Facility, Room PL–401, 400 Seventh Street, SW., Washington, DC 20590. Comments may also be faxed to (202) 493–2251; or submitted electronically at *http://dms.dot.gov*. All comments should include the docket number in this notice's heading. All comments may be examined and copied at the above address from 9 a.m. to 5 p.m., Monday through Friday, except federal holidays. If you desire a receipt, you must include a self-addressed, stamped envelope or postcard or, if you submit your comments electronically, you may print the acknowledgement page.

FOR FURTHER INFORMATION CONTACT: *Pre-Award and Post-Delivery Review Requirements*—John Bell, Office of Program Management, Federal Transit Administration, U.S. DOT, 400 Seventh Street, SW., Washington, DC 20590; *phone:* (202) 366-4977; or *e-mail: john.bell@dot.gov*.

SUPPLEMENTARY INFORMATION: Interested parties are invited to send comments regarding any aspect of this information collection, including: (1) The necessity and utility of the information collection for the proper performance of the functions of the FTA; (2) the accuracy of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the collected information; and (4) ways to minimize the collection burden without reducing the quality of the collected information. Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection.

Title: Pre-Award and Post-Delivery Review Requirements. (*OMB Number:* 2132–0544).

Background: Under the Federal Transit Laws, at 49 U.S.C. Section 5323(m), grantees must certify that pre-award and post-delivery reviews will be conducted when using FTA funds to purchase rolling stock and maintain on file these certifications. FTA implements this requirement in 49 CFR Part 663 by describing the certificates that must be submitted by each bidder to assure compliance with the Buy America contract specification and vehicle safety requirements for rolling stock. The information collected on the certification forms is necessary for FTA grantees to meet the requirements of 49 U.S.C. Section 5323(m).

Respondents: State and local government, business or other for-profit institutions, non-profit institutions, and small business organizations.

Estimated Annual Burden on Respondents: 4.32 hours for each of the 700 Respondents.

Estimated Total Annual Burden: 3,024 hours.

Frequency: Annual.

Issued: March 28, 2007.

Ann M. Linnertz,

Associate Administrator for Administration.

[FR Doc. E7–6153 Filed 4–2–07; 8:45 am]

BILLING CODE 4910–57–P

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[STB Finance Docket No. 35005]

Chicago Terminal Railroad—Acquisition and Operation Exemption—Rail Lines of Union Pacific Railroad Company and Canadian Pacific Rail System at Elk Grove Village, Cook and DuPage Counties, IL

Chicago Terminal Railroad (CTM), a Class III rail carrier, has filed a verified notice of exemption under 49 CFR 1150.41 to acquire by lease and to operate rail lines owned by Union Pacific Railroad Company (UP) and Canadian Pacific Rail System (CP) in the Centex Industrial Park and adjacent Elk Grove Yard in Elk Grove Village in Cook and DuPage Counties, IL. The subject rail lines, owned by UP, or jointly by UP and CP, include approximately 25 miles of rail lines in the Centex Industrial Park and approximately 11,500 feet of rail line in the adjacent Elk Grove Yard, originating at the west end of UP's approximate 800-foot Elk Grove Lead track extending from its Milwaukee Subdivision at milepost 7.8.

CTM certifies that its projected annual revenues as a result of this transaction will not result in the creation of a Class II or Class I rail carrier, and further certifies that its projected annual revenues will not exceed $5 million.

The transaction is scheduled to be consummated on April 15, 2007.

If the notice contains false or misleading information, the exemption is void *ab initio*. Petitions to revoke the exemption under 49 U.S.C. 10502(d) may be filed at any time. The filing of a petition to revoke will not automatically stay the transaction.

An original and 10 copies of all pleadings, referring to STB Finance Docket No. 35005, must be filed with the Surface Transportation Board, 395 E Street, SW., Washington, DC 20423–0001. In addition, one copy of each pleading must be served on Fritz R. Kahn, Fritz R. Kahn, PC, 1920 N Street, NW., Eighth Floor, Washington, DC 20036–1601.[1]

Board decisions and notices are available on our Web site at *http://www.stb.dot.gov*.

Decided: March 28, 2007.

By the Board, David M. Konschnik, Director, Office of Proceedings.

Vernon A. Williams,

Secretary.

[FR Doc. E7–6122 Filed 4–2–07; 8:45 am]

BILLING CODE 4915–01–P

DEPARTMENT OF THE TREASURY

Office of the Secretary

List of Countries Requiring Cooperation With an International Boycott

In order to comply with the mandate of section 999(a)(3) of the Internal Revenue Code of 1986, the Department of the Treasury is publishing a current list of countries which require or may require participation in, or cooperation with, an international boycott (within the meaning of section 999(b)(3) of the Internal Revenue Code of 1986).

On the basis of the best information currently available to the Department of the Treasury, the following countries require or may require participation in, or cooperation with, and international boycott (within the meaning of section 999(b)(3) of the Internal Revenue Code of 1986).

Kuwait

Lebanon

Libya

Qatar

Saudi Arabia

Syria

United Arab Emirates

Yemen, Republic of

Iraq is not included in this list, but its status with respect to future lists remains under review by the Department of the Treasury.

Dated: March 28, 2007.

John L. Harrington,

Acting International Tax Counsel (Tax Policy).

[FR Doc. 07–1630 Filed 4–2–07; 8:45 am]

BILLING CODE 4810–25–M

[1] By letter filed March 21, 2007, CTM's original counsel submitted a notice of withdrawal of counsel. By facsimile received on March 28, 2007, Fritz R. Kahn entered his appearance as counsel for CTM.

DEPARTMENT OF THE TREASURY

Fiscal Service

Surety Companies Acceptable on Federal Bonds: Markel Insurance Company

AGENCY: Financial Management Service, Fiscal Service, Department of the Treasury.

ACTION: Notice.

SUMMARY: This is Supplement No. 9 to the Treasury Department Circular 570, 2006 Revision, published June 30, 2006, at 71 FR 37694.

FOR FURTHER INFORMATION CONTACT: Surety Bond Branch at (202) 874–6850.

SUPPLEMENTARY INFORMATION: A Certificate of Authority as an acceptable surety on Federal bonds is hereby issued under 31 U.S.C. 9305 to the following company: *Markel Insurance Company* (NAIC #38970). *Business Address:* 4600 Cox Road, Glen Allen, Virginia 23060. *Phone:* (800) 431–1270. *Underwriting Limitation b/:* $13,019,000. *Surety Licenses c/o:* AL, AK, AZ, AR, CA, CO, CT, DE, DC, FL, GA, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY. *Incorporated in:* Illinois.

Federal bond-approving officers should annotate their reference copies of the Treasury Circular 570 (''Circular''), 2006 Revision, to reflect this addition.

Certificates of Authority expire on June 30th each year, unless revoked prior to that date. The Certificates are subject to subsequent annual renewal as long as the companies remain qualified (*see* 31 CFR part 223). A list of qualified companies is published annually as of July 1 in the Circular, which outlines details as to underwriting limitations, areas in which companies are licensed to transact surety business, and other information.

The Circular may be waived and downloaded through the Internet at *http://www.fms.treas.gov/c570*.

Questions concerning this Notice may be directed to the U.S. Department of the Treasury, Financial Management Service, Financial Accounting and Services Division, Surety Bond Branch, 3700 East-West Highway, Room 6F01, Hyattsville, MD 20782.

Dated: March 22, 2007.

Vivian L. Cooper,

Director, Financial Accounting and Services Division, Financial Management Service.

[FR Doc. 07–1617 Filed 4–2–07; 8:45 am]

BILLING CODE 4810–35–M

DEPARTMENT OF THE TREASURY

United States Mint

Notification of 2007 American Buffalo Gold Proof One-Ounce Coin Pricing

Summary: The United States Mint is establishing prices for the 2007 American Buffalo Gold Proof One-Ounce Coin.

Pursuant to the authority that 31 U.S.C. 5111(a) and 5112(q) grant the Secretary of the Treasury to mint and issue gold coins, and to prepare and distribute numismatic items, the United States Mint will mint and issue 2007 American Buffalo Gold Proof One-Ounce Coins. In accordance with 31 U.S.C. 9701(b)(2)(B), the United States Mint is changing the price of these coins to reflect the increase in value of the precious metal content of the coins—the result of increases in the market price of gold.

Accordingly, effective upon the introduction of the 2007 American Buffalo Gold Proof One-Ounce Coin, the United States Mint will sell these coins at the following price:

Description	Price
American Buffalo Gold Proof One Ounce Coin	$825.95

For Further Information Contact: Gloria C. Eskridge, Associate Director for Sales and Marketing; United States Mint; 801 Ninth Street, NW.; Washington , DC 20220; or call 202–354–7500.

Authority: 31 U.S.C. 5111, 5112 & 9701

Dated: March 28, 2007.

Edmund C. Moy,

Director, United States Mint.

[FR Doc. E7–6112 Filed 4–2–07; 8:45 am]

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Tuesday,
April 3, 2007

Part II

Environmental Protection Agency

40 CFR Parts 92, 94, 1033, et al.
Control of Emissions of Air Pollution From Locomotive Engines and Marine Compression-Ignition Engines Less Than 30 Liters per Cylinder; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 92, 94, 1033, 1039, 1042, 1065 and 1068

[EPA–HQ–OAR–2003–0190; FRL–8285–5]

RIN 2006–AM06

Control of Emissions of Air Pollution From Locomotive Engines and Marine Compression-Ignition Engines Less Than 30 Liters per Cylinder

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: Locomotives and marine diesel engines are important contributors to our nation's air pollution today. These sources are projected to continue to generate large amounts of particulate matter (PM) and nitrogen oxides (NO_X) emissions that contribute to nonattainment of the National Ambient Air Quality Standards (NAAQS) for $PM_{2.5}$ and ozone across the United States. The emissions of PM and ozone precursors from these engines are associated with serious public health problems including premature mortality, aggravation of respiratory and cardiovascular disease, aggravation of existing asthma, acute respiratory symptoms, chronic bronchitis, and decreased lung function. In addition, emissions from locomotives and marine diesel engines are of particular concern, as diesel exhaust has been classified by EPA as a likely human carcinogen.

EPA is proposing a comprehensive program to dramatically reduce emissions from locomotives and marine diesel engines. It would apply new exhaust emission standards and idle reduction requirements to diesel locomotives of all types—line-haul, switch, and passenger. It would also set new exhaust emission standards for all types of marine diesel engines below 30 liters per cylinder displacement. These include marine propulsion engines used on vessels from recreational and small fishing boats to super-yachts, tugs and Great Lakes freighters, and marine auxiliary engines ranging from small gensets to large generators on ocean-going vessels. The proposed program includes a set of near-term emission standards for newly-built engines. These would phase in starting in 2009. The near-term program also contains more stringent emissions standards for existing locomotives. These would apply when the locomotive is remanufactured and would take effect as soon as certified remanufacture systems are available (as early as 2008), but no later than 2010 (2013 for Tier 2 locomotives). We are requesting comment on an alternative under consideration that would apply a similar requirement to existing marine diesel engines when they are remanufactured. We are also proposing long-term emissions standards for newly-built locomotives and marine diesel engines based on the application of high-efficiency catalytic aftertreatment technology. These standards would phase in beginning in 2015 for locomotives and 2014 for marine diesel engines. We estimate PM reductions of 90 percent and 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 would reduce annual emissions of NO_X and PM by 765,000 and 28,000 tons, respectively. These reductions are estimated to annually prevent 1,500 premature deaths, 170,000 work days lost, and 1,000,000 minor restricted-activity days. The estimated annual monetized health benefits of this rule in 2030 would be approximately $12 billion, assuming a 3 percent discount rate (or $11 billion assuming a 7 percent discount rate). These estimates would be increased substantially if we were to adopt the remanufactured marine engine program concept. The annual cost of the proposed program in 2030 would be significantly less, at approximately $600 million.

DATES: Comments must be received on or before July 2, 2007. Under the Paperwork Reduction Act, comments on the information collection provisions must be received by OMB on or before May 3, 2007.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2003–0190, by one of the following methods:

- *www.regulations.gov*: Follow the on-line instructions for submitting comments.
- *Fax:* (202) 566–1741
- *Mail:* Air Docket, Environmental Protection Agency, *Mailcode:* 6102T, 1200 Pennsylvania Ave., NW., Washington, DC 20460. 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.
- *Hand Delivery:* EPA Docket Center, (EPA/DC) EPA West, Room 3334, 1301 Constitution Ave., NW, Washington DC, 20004. 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 Docket ID No. EPA–HQ–OAR–2003–0190. 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 additional instructions on submitting comments, go to section I.A. of the **SUPPLEMENTARY INFORMATION** section of this document, and also go to section VIII.A. of the Public Participation section of this document.

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 EPA–EQ–OAR–2003–0190 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 EPA–EQ–OAR–2003–0190 is (202) 566–1742.

Hearing: Two hearings will be held, at 10 a.m. on Tuesday, May 8, 2007 in Seattle, WA, and at 10 a.m. on Thursday, May 10, 2007 in Chicago, IL. For more information on these hearings or to request to speak, see section VIII.C. ''WILL THERE BE A PUBLIC HEARING.''

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:

General Information

♦ *Does This Action Apply to Me?*

♦ Locomotive

Entities potentially regulated by this action are those which manufacture, remanufacture and/or import locomotives and/or locomotive engines; and those which own and 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.

[1] North American Industry Classification System (NAICS).

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 sections 92.1, 92.801, 92.901, 92.1001, 1065.1, 1068.1, 85.1601, 89.1, and the proposed regulations. If you have questions, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

♦ Marine

This proposed action would affect 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:

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	336612	Boat building (watercraft not built in shipyards and typically of the type suitable or intended for personal use).

[1] North American Industry Classification System (NAICS).

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, 1065.1, 1068.1, and the proposed regulations. If you have questions, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

♦ *Additional Information About This Rulemaking*

♦ Locomotive

The current emission standards for locomotive engines were adopted by EPA in 1998 (see 63 FR 18978, April 16, 1998). This notice of proposed rulemaking relies in part on information that was obtained for that rule, which can be found in Public Docket A–94–31. That docket is incorporated by reference into the docket for this action, OAR–2003–0190.

♦ Marine

The current emission standards for new commercial marine diesel engines were adopted in 1999 and 2003 (see 64 FR 73300, December 29, 1999 and 66 FR 9746, February 28, 2003). The current emission standards for new recreational marine diesel engines were adopted in 2002 (see 67 FR 68241, November 8, 2002). The current emission standards for marine diesel engines below 37 kW (50 hp) were adopted in 1998 (see 63 FR 56967, October 23, 1998). This notice of proposed rulemaking relies in part on information that was obtained for those rules, which can be found in Public Dockets A–96–40, A–97–50, A–98–01, A–2000–01, and A–2001–11. Those dockets are incorporated by reference into the docket for this action, OAR–2003–0190.

♦ Other Dockets

This notice of proposed rulemaking relies in part on information that was obtained for our recent highway diesel and nonroad diesel rulemakings, which can be found in Public Dockets A–99–06 and A–2001–28 (see also OAR 2003–

0012).[1 2] Those dockets are incorporated by reference into the docket for this action, OAR–2003–0190.

Outline of This Preamble

I. Overview
A. What Is EPA Proposing?
B. Why Is EPA Making This Proposal?
II. Air Quality and Health Impacts
A. Overview
B. Public Health Impacts
C. Other Environmental Effects
D. Other Criteria Pollutants Affected by This NPRM
E. Emissions From Locomotive and Marine Diesel Engines
III. Emission Standards
A. What Locomotives and Marine Engines Are Covered?
B. Existing EPA Standards
C. What Standards Are We Proposing?
D. Are the Proposed Standards Feasible?
E. What Are EPA's Plans for Diesel Marine Engines on Large Ocean-Going Vessels?
IV. Certification and Compliance Program
A. Issues Common to Locomotives and Marine
B. Compliance Issues Specific to Locomotives
C. Compliance Issues Specific to Marine Engines
V. Costs and Economic Impacts
A. Engineering Costs
B. Cost Effectiveness
C. EIA
VI. Benefits
A. Overview
B. Quantified Human Health and Environmental Effects of the Proposed Standards
C. Monetized Benefits
D. What Are the Significant Limitations of the Benefit-Cost Analysis?
E. Benefit-Cost Analysis
VII. Alternative Program Options
A. Summary of Alternatives
B. Summary of Results
VIII. Public Participation
A. How Do I Submit Comments?
B. How Should I Submit CBI to the Agency?
C. Will There Be a Public Hearing?
D. Comment Period
E. What Should I Consider as I Prepare My Comments for EPA?
IX. Statutory and Executive Order Reviews
A. *Executive Order 12866:* Regulatory Planning and Review
B. Paperwork Reduction Act
C. Regulatory Flexibility Act
D. Unfunded Mandates Reform Act
E. *Executive Order 13132:* (Federalism)
F. *Executive Order 13175:* (Consultation and Coordination With Indian Tribal Governments)
G. *Executive Order 13045:* Protection of Children From Environmental Health and Safety Risks
H. *Executive Order 13211:* Actions That Significantly Affect Energy Supply, Distribution, or Use
I. National Technology Transfer Advancement Act
X. Statutory Provisions and Legal Authority

I. Overview

This proposal is an important step in EPA's ongoing National Clean Diesel Campaign (NCDC). In recent years, we have adopted major new programs designed to reduce emissions from highway and nonroad diesel engines.[3] When fully implemented, these new programs would largely eliminate emissions of harmful pollutants from these sources. This Notice of Proposed Rulemaking (NPRM) sets out the next step in this ambitious effort by addressing two additional diesel sectors that are major sources of air pollution nationwide: locomotive engines and marine diesel engines below 30 liters per cylinder displacement.[4] This addresses 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 collectively called ''marine diesel engines.''). These include marine propulsion engines used on vessels from recreational and small fishing boats to super-yachts, tugs and Great Lakes freighters, and marine auxiliary engines ranging from small gensets to large generators on ocean-going vessels.[5]

Emission levels for locomotive and marine diesel engines remain at high levels—comparable to the emissions standards for highway trucks in the early 1990s—and emit high level of pollutants that contribute to unhealthy air in many areas of the U.S. Nationally, in 2007 these engines account for about 20 percent of mobile source NO_X emissions and 25 percent of mobile source diesel $PM_{2.5}$ emissions. Absent new emissions standards, we expect overall emissions from these engines to remain relatively flat over the next 10 to 15 years due to existing regulations such as lower fuel sulfur requirements and the phase-in of locomotive and marine diesel Tier 1 and Tier 2 engine standards but starting in about 2025 emissions from these engines would begin to grow. Under today's proposed program, by 2030, annual NO_X emissions from locomotive and marine diesel engines would be reduced by 765,000 tons and $PM_{2.5}$ and 28,000 tons. Without new controls, by 2030, these engines would become a large portion of the total mobile source emissions inventory constituting 35 percent of mobile source NO_X emissions and 65 percent of diesel PM emissions.

We followed certain principles when developing the elements of this proposal. First, the program must achieve sizeable reductions in PM and NO_X emissions as early as possible. Second, as we did in the 2007 highway diesel and clean nonroad diesel programs, we are considering engines and fuels together as a system to maximize emissions reductions in a highly cost-effective manner. The groundwork for this systems approach was laid in the 2004 nonroad diesel final rule which mandated that locomotive and marine diesel fuel comply with the 15 parts per million sulfur cap for ultra-low sulfur diesel fuel (ULSD) by 2012, in anticipation of this rulemaking (69 FR 38958, June 29, 2004). The costs, benefits, and other impacts of the locomotive and marine diesel fuel regulation are covered in the 2004 rulemaking and are not duplicated here. Lastly, we are proposing standards and implementation schedules that take full advantage of the efforts now being expended to develop advanced emissions control technologies for the highway and nonroad sectors. As discussed throughout this proposal, the proposed standards represent a feasible progression in the application of advanced technologies, providing a cost-effective program with very large public health and welfare benefits.

The proposal consists of a three-part program. First, we are proposing more stringent standards for existing locomotives that would apply when they are remanufactured. The proposed remanufactured locomotive program would take effect as soon as certified remanufacture systems are available (as early as 2008), but no later than 2010 (2013 for Tier 2 locomotives). We are also requesting comment on an alternative under consideration that would apply a similar requirement to existing marine diesel engines when

[1 2] Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, 66 FR 5002 (January 18, 2001); Control of Emissions of Air Pollution From Nonroad Diesel Engines and Fuel, 69 FR 38958 (June 29, 2004).

[3] See 65 FR 6698 (February 10, 2000), 66 FR 5001 (January 18, 2001), and 69 FR 38958 (June 29, 2004) for the final rules regarding the light-duty Tier 2, clean highway diesel (2007 highway diesel) and clean nonroad diesel (nonroad Tier 4) programs, respectively. EPA has also recently promulgated a clean stationary diesel engine rule containing standards similar to those in the nonroad Tier 4 rule. See 71 FR 39153. See also *http://www.epa.gov/diesel/* for information on all EPA programs that are part of the NCDC.

[4] In this NPRM, ''marine diesel engine'' refers to compression-ignition marine engines below 30 liters per cylinder displacement unless otherwise indicated. Engines at or above 30 liters per cylinder are being addressed in separate EPA actions, including a planned rulemaking, participation on the U.S. delegation to the International Maritime Organization's standard-setting work, and EPA's new Clean Ports USA Initiative (*http://www.epa.gov/cleandiesel/ports/index.htm*).

[5] Marine diesel engines at or above 30 l/cyl displacement are not included in this program. See Section III.E, below.

they are remanufactured. Second, we are proposing a set of near-term emission standards, referred to as Tier 3, for newly-built locomotives and marine engines, that reflect the application of technologies to reduce engine-out PM and NO_X. Third, we are proposing longer-term standards, referred to as Tier 4, that reflect the application of high-efficiency catalytic aftertreatment technology enabled by the availability of ULSD. These standards phase in over time, beginning in 2014. We are also proposing provisions to eliminate emissions from unnecessary locomotive idling.

Locomotives and marine diesel engines designed to these proposed standards would achieve PM reductions of 90 percent and NO_X reductions of 80 percent, compared to engines meeting the current Tier 2 standards. The proposed standards would 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 proposed standards compared to today's (Tier 2) emission standards or, in the case of remanufactured locomotives, compared to the current standards for each tier of locomotives covered.

TABLE I.–1.—REDUCTIONS FROM LEVELS OF EXISTING STANDARDS

Sector	Proposed standards tier	PM	NO_X
Locomotives	Remanufactured Tier 0	60%	15–20%
	Remanufactured Tier 1	50	
	Remanufactured Tier 2	50	
	Tier 3	50	
	Tier 4	90	80
Marine Diesel Engines [a]	Remanufactured Engines [b]	25–60	up to 20
	Tier 3	50	20
	Tier 4	90	80

[a] Existing and proposed standards vary by displacement and within power categories. Reductions indicated are typical.
[b] This proposal asks for comment on an alternative under consideration that would reduce emissions from existing marine diesel engines. See section VII.A(2).

Combined, these reductions would result in substantial benefits to public health and welfare and to the environment. We project that by 2030 this program would reduce annual emissions of NO_X and PM by 765,000 and 28,000 tons, respectively, and the magnitude of these reductions would continue to grow well beyond 2030. We estimate that these annual emission reductions would prevent 1,500 premature mortalities in 2030. These annual emission reductions are also estimated to prevent 1,000,000 minor restricted-activity days, 170,000 work days lost, and other quantifiable benefits. All told, the estimated monetized health benefits of this rule in 2030 would be approximately $12 billion, assuming a 3 percent discount rate (or $11 billion assuming a 7 percent discount rate). The annual cost of the program in 2030 would be significantly less, at approximately $600 million.

A. What Is EPA Proposing?

This proposal is a further step in EPA's ongoing program to control emissions from diesel engines, including those used in marine vessels and locomotives. EPA's current standards for newly-built and remanufactured locomotives were adopted in 1998 and were implemented in three tiers (Tiers 0, 1, and 2) over 2000 through 2005. The current program includes Tier 0 emission limits for existing locomotives originally manufactured in 1973 or later, that apply when they are remanufactured. The standards for marine diesel engines were adopted in 1998 for engines under 37 kilowatts (kW), in 1999 for commercial marine engines, and in 2002 for recreational marine engines. These various Tier 1 and Tier 2 standards phase in from 1999 through 2009, depending on engine size and application. The most stringent of these existing locomotive and marine diesel engine standards are similar in stringency to EPA's nonroad Tier 2 standards that are now in the process of being replaced by Tier 3 and 4 standards.

The major elements of the proposal are summarized below. We are also proposing revised 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 and in the draft Regulatory Impact Analysis (RIA). Section VII of this preamble describes a number of alternatives that we considered in developing this proposal, including a more simplistic approach that would introduce aftertreatment-based standards earlier. Our analysis shows that such an approach would result in higher emissions and fewer health and welfare benefits than we project will be realized from the program we are proposing today. After evaluating the alternatives, we believe that our proposed program provides the best opportunity for achieving timely and very substantial emissions reductions from locomotive and marine diesel engines. It best takes into account the need for appropriate lead time to develop and apply the technologies necessary to meet these emission standards, the goal of achieving very significant emissions reductions as early as possible, the interaction of requirements in this proposal with existing highway and nonroad diesel engine programs, and other legal and policy considerations.

Overall, this comprehensive three-part approach to setting standards for locomotives and marine diesel engines would 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 would be achieved in a manner that: (1) Is very cost-effective, (2) leverages technology developments in other diesel sectors, (3) aligns well with the clean diesel fuel requirements already being implemented, and (4) provides the lead time needed to deal with the significant engineering design workload that is involved. We are asking for comments on all aspects of the proposal, including standards levels and implementation dates, and on the alternatives discussed in this proposal.

(1) Locomotive Emission Standards

We are proposing stringent exhaust emissions standards for newly-built and remanufactured locomotives, furthering 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.[6]

In the Advance Notice of Proposed Rulemaking (ANPRM) for this proposal (69 FR 39276, June 29, 2004), we suggested a program for comment that would bring about the introduction of high-efficiency exhaust aftertreatment to this sector in a single step. Although it has taken longer than expected to develop, the proposal we are issuing today is far more comprehensive than we envisioned in 2004. Informed by extensive analyses documented in the draft RIA and numerous discussions with stakeholders since then, this proposal goes significantly beyond that vision. It sets out standards for locomotives in three steps to more fully leverage the opportunities provided by both the already-established clean fuel programs, and the migration of clean diesel technology from the highway and nonroad sectors. It also addresses the large and long-lived existing locomotive fleet with stringent new emissions requirements at remanufacture starting in 2008. Finally, it sets new requirements for idle emissions control on newly-built and remanufactured locomotives.

Briefly, for newly-built line-haul locomotives we are proposing 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 would take effect in 2012. We are also proposing 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 would take effect in 2015 and 2017 for PM and NO_X, respectively. We are proposing 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 also propose 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 proposed new standards, and section IV details improvements being proposed 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. In light of these trends, we are establishing new standards and special certification provisions for newly-built and remanufactured switch locomotives that take these trends into account.

Locomotives spend a substantial amount of time idling, during which they emit harmful pollutants and consume fuel. Two ways that idling time can be reduced are through the use of automated systems to stop idling locomotive engines (restarting them on an as-needed basis), and through the use of small low-emitting auxiliary engines to provide essential accessory power. Both types of systems are installed in a number of U.S. locomotives today for various reasons, including to save fuel, to help meet current Tier 0 emissions standards, and to address complaints from railyard neighbors about noise and pollution from idling locomotives.

We are proposing that idle control systems be required on all newly-built Tier 3 and Tier 4 locomotives. We also propose that they be installed on all existing locomotives that are subject to the proposed remanufactured engine standards, at the point of first remanufacture under the proposed standards, unless already equipped with idle controls. We are proposing that automated stop/start systems be required, but encourage the use of auxiliary power units by allowing their emission reduction to be factored into the certification test program as appropriate.

Taken together, the proposed elements described above constitute a comprehensive program that would address the problems caused by locomotive emissions from both a near-term and long-term perspective, and do so more completely than would have occurred under the concept described in the ANPRM. It would do this while providing for an orderly and cost-effective implementation schedule for the railroads, builders, and remanufacturers.

(2) Marine Engine Emission Standards

We are also proposing emissions standards for newly-built marine diesel engines with displacements under 30 liters per cylinder (referred to as Category 1 and 2, or C1 and C2, engines). This would include engines used in commercial, recreational, and auxiliary power applications, and those below 37 kW (50 hp) that were previously regulated separately in our nonroad diesel program. As with locomotives, our ANPRM described a one-step marine diesel program that would bring about the introduction of high-efficiency exhaust aftertreatment in this sector. Just as for locomotives, our subsequent extensive analyses (documented in the draft RIA) and numerous discussions with stakeholders since then have resulted in this proposal for standards in multiple steps, with the longer-term implementation of advanced technologies focused especially on the engines with the greatest potential for large PM and NO_X emission reductions.

The proposed 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 proposed Tier 3 and Tier 4 standards vary by engine sub-groupings. Although this results in a somewhat complicated array of emissions standards, it will ensure the most stringent standards feasible for each group of newly-built marine engines, and will help engine and vessel manufacturers to implement the program in a cost effective manner that also emphasizes early emission reductions. The proposed standards and implementation schedules, as well as their technological feasibility, are described in detail in section III of this preamble.

We are also requesting comment on an alternative we are considering to address the considerable impact of emissions from large marine diesel

[6] We are not proposing any change to the current definition of a ''new locomotive'' in 40 CFR § 92.2. The terms ''new locomotive'', ''new locomotive engine'', ''freshly manufactured locomotive'', ''freshly manufactured locomotive engine'', ''repower'', ''remanufacture'', ''remanufactured locomotive'', and ''remanufactured locomotive engine'' all have formal definitions in 40 CFR 92.2. In this notice, the term ''newly-built locomotive'' is synonymous with ''freshly manufactured locomotive''.

engines installed in vessels currently in the fleet. We have in the past considered but not finalized a program to regulate such engines as ''new'' engines at the time of remanufacture, similar to the approach taken in the locomotive program. We are again considering such a program in the context of this rulemaking and are soliciting comments on this alternative.

Briefly summarized, it would consist of two parts. In the first part, which could begin as early as 2008, vessel owners and rebuilders would be required to install a certified emissions control system when the engine is remanufactured, if such a system were available. Initially, we would expect the systems installed on remanufactured marine engines to be those certified for the remanufactured locomotive program, although this alternative would not limit the program to only those engines. Eventually manufacturers would be expected to provide systems for other large engines as well. In the second part, to take effect in 2013, marine diesel engines identified by EPA as high-sales volume engine models would have to meet specified emissions standards when remanufactured. The rebuilder or owner would be required to either use a system certified to meet the standards or, if no certified systems were available, to either retrofit an emission reduction technology for the engine that demonstrates at least a 25 percent reduction or to repower (replace the engine with a new one). The alternative under consideration is described in more detail in section VII.A(2). We request comment on the elements of this alternative as well as other possible approaches to achieve this goal, with the view that EPA may adopt a remanufacture program in the final rule if appropriate.

B. Why Is EPA Making This Proposal?

(1) Locomotives and Marine Diesels Contribute to Serious Air Pollution Problems

Locomotive and marine diesel engines subject to today's proposal generate significant emissions of fine particulate matter ($PM_{2.5}$) and nitrogen oxides (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. Emissions from locomotive and marine diesel engines also cause harm to public welfare, including contributing to visibility impairment and other harmful environmental impacts across the US.

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 to society are not reflected in the costs of those using these engines and equipment. The market system itself cannot correct this externality because firms in the market are rewarded for minimizing their production costs, including the costs of pollution control. 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. To correct this market failure and reduce the negative externality from these emissions, it is necessary to give producers the signals for the social costs generated from the emissions. The standards EPA is proposing will accomplish this by mandating that locomotives and marine diesel engines reduce their emissions to a technologically feasible limit. In other words, with this proposed rule the costs of the transportation services produced by these engines and equipment will account for social costs more fully.

Emissions from locomotive and marine diesel engines account for substantial portions of the country's ambient $PM_{2.5}$ and NO_X levels. We estimate that today hese 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 today's proposed standards, by 2030, annual NO_X emissions from these diesel engines would be reduced by 765,000 tons and $PM_{2.5}$ emissions by 28,000 tons, and those reductions would continue to grow beyond 2030 as fleet turnover to the clean engines is completed.

EPA has already taken steps to bring emissions levels from light-duty and heavy-duty highway, and nonroad diesel vehicles and engines to very low levels over the next decade, as well as certain stationary diesel engines also subject to these standards, while the 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, lost 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 it as likely to be carcinogenic to humans by inhalation at environmental exposures.[7] Recent studies are showing that populations living near large diesel emission sources such as major roadways,[8] rail yards, and marine ports [9] are likely to experience greater diesel exhaust exposure levels than the overall U.S. population, putting them at greater health risks. We are currently studying the size of the U.S. population living near a sample of approximately 60 marine ports and rail yards, and will place the information in the docket upon completion prior to the final rule.

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 2006 there are approximately 157 million people living in 116 areas (461 full or partial counties) designated as not in attainment with the 8-hour ozone NAAQS. These numbers do not include people living in areas where there is a potential that the area may fail to maintain or achieve the 8-hour ozone NAAQS. With regard to $PM_{2.5}$ nonattainment, EPA has recently finalized nonattainment designations

[7] 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*.

[8] 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.

[9] 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*.

(70 FR 943, Jan 5, 2005), and as of October 2006 there are 88 million people living in 39 areas (which include all or part of 208 counties) that either do not meet the $PM_{2.5}$ NAAQS or contribute to violations in other counties. These numbers do not include individuals living in areas that may fail to maintain or achieve the $PM_{2.5}$ NAAQS in the future.

In addition to public health impacts, there are public welfare and environmental impacts associated with ozone and $PM_{2.5}$ emissions which are also serious. Specifically, 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 substantial impairment of visibility in many part 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 articles 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 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 the standards proposed in this action would assist states in attaining and maintaining the Ozone and the $PM_{2.5}$ NAAQS 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 Agency will undergo the process of designating areas that are not able to 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, annual, or both standards for $PM_{2.5}$ 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 proposal will be needed by states to both attain and maintain the revised $PM_{2.5}$ NAAQS.

State and local governments are 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,[10] while also seeking Agency action, including the setting of stringent new locomotive and marine diesel engine standards being proposed today.[11] The emission reductions in this proposal will play a critical part in state efforts to attain and maintain the NAAQS through the next two decades.

While the program we are proposing today will help many states and communities achieve cleaner air, for some areas, the reductions will not be large enough or early enough to assist them in meeting near term ozone and PM air quality goals. More can be done, beyond what we are proposing today, to address the emissions from locomotive and marine diesel engines. For example, as part of this proposal we are requesting comment on a concept to set emission standards for existing large marine diesel engines when they are remanufactured. Were we to finalize such a concept, it could provide substantial emission reductions, beginning in the next few years, from some of the large legacy fleets of dirtier diesel engines.

[10] 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.

[11] For example, see letter dated September 23, 2006 from Northeast States for Coordinated Air Use Management to Administrator Stephen L. Johnson; September 7, 2006 letter from Executive Officer of the California Air Resources Board to Acting Assistant Administrator William L. Wehrum; August 9, 2006 letter from State and Territorial Air Pollution Program Administrators and Association of Local Air Pollution Control Officials (and other organizations) to Administrator Stephen L. Johnson; January 20, 2006 letter from Executive Director, Puget Sound Clean Air Agency to Administrator Stephen L. Johnson; June 30, 2005 letter from Western Regional Air Partnership to Administrator Stephen L. Johnson.

At the time of our previous locomotive rulemaking, the State of California worked with the railroads operating in southern California to develop and implement a corollary program, ensuring that the cleanest technologies are expeditiously introduced in these areas with greatest air quality improvement needs. Today's proposal includes provisions, such as streamlined switcher locomotive certification using clean nonroad engines, that are well-suited to encouraging early deployment of cleaner technologies through the development of similar programs.

In addition to regulatory programs, the Agency has a number of voluntary programs that partner government, industry, and local communities together to help address challenging air quality problems. The EPA SmartWay program has initiatives to reduce unnecessary locomotive idling and to encourage the use of 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 strategies today through education, incentives, and financial assistance for diesel emissions reductions at ports. Part of these efforts involves voluntary retrofit programs that can further reduce emissions from the existing fleet of diesel engines. Finally, many of the companies operating in states and communities suffering from poor air quality have voluntarily entered into Memoranda of Understanding (MOUs) designed to ensure that the cleanest technologies are used first in regions with the most challenging air quality issues.

Together, these approaches can augment the regulations being proposed today helping states and communities achieve larger reductions sooner in the areas of our country that need them the most. The Agency remains committed to furthering these programs and others so that all of our citizens can breathe clean healthy air.

(2) Advanced Technology Solutions

Air pollution from locomotive and marine diesel exhaust is a challenging problem. However, we believe it can be addressed effectively through the use of existing technology to reduce engine-out emissions combined with high-efficiency catalytic aftertreatment technologies. As discussed in greater detail in section III.D, the development of these aftertreatment technologies for

highway and nonroad diesel applications has advanced rapidly in recent years, so that very large emission reductions in PM and NO_X (in excess of 90 and 80 percent, respectively) can be achieved.

High-efficiency PM control technologies are being broadly used in many parts of the world, and in particular to comply with EPA's heavy-duty truck standards now taking effect with the 2007 model year. These technologies are highly durable and robust in use, and have also proved extremely effective in reducing exhaust hydrocarbon (HC) emissions. However, as discussed in detail in section III.D, these emission control technologies are very sensitive to sulfur in the fuel. For the technology to be viable and capable of controlling an engine's emissions over the long term, we believe it will require diesel fuel with sulfur content capped at the 15 ppm level.

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, as well as in many stationary source applications throughout the world. These technologies are also sensitive to sulfur.

Section III.D 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 proposed application of advanced technology to locomotives and marine diesels will proceed at a reasonable rate of progress and will result in systems capable of achieving the proposed standards on the proposed schedule.

(3) Basis for Action Under the Clean Air Act

Authority for the actions promulgated in this documents is granted to the Environmental Protections Agency (EPA) by sections 114, 203, 205, 206, 207, 208, 213, 216, and 301(a) of the Clean Air Act as amended in 1990 (CAA or ''the Act'') (42 U.S.C. 7414, 7522, 7524, 7525, 7541, 7542, 7547, 7550 and 7601(a)).

EPA is promulgating emissions standards for new marine diesel engines pursuant to its authority under section 213(a)(3) and (4) of the Clean Air Act (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.

CAA section 213(a)(3) directs the Administrator to set NO_X, VOCs, or carbon monoxide, standards for classes or categories of engines that contribute to ozone or carbon monoxide concentrations in more than one nonattainment area, like marine diesel engines. 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, like diesel marine engines.

Finally, 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 proposal. As described in section III of this Preamble and in Chapter 4 of the draft RIA, EPA has evaluated the available information to determine the technology the will be available for locomotives and engines proposed to be subject to EPA standards.

EPA is also acting under its authority to implement and enforce both the marine diesel emission standards and the locomotive emissions 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.

As required under section 213(a)(3), (4), and (5) we believe the evidence provided in section III.D of this Preamble and in Chapter 4 of draft RIA indicates that the stringent emission standards proposed today for newly-built and remanufactured locomotive engines and newly-built 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 also believe this may be the case for the alternative identified for existing marine engines in section VII.A(2) of this preamble. We have given appropriate consideration to costs in proposing 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 have been required. 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 proposed standards.

The information in section II of this Preamble and Chapter 2 of the draft 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 (CO) 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 standards for PM from marine diesel engines under section 213(a)(4), and the additional information on diesel exhaust carcinogenicity 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 propose to find here, based on the information in section II of this preamble and Chapters 2 and 3 of the draft 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 the standards proposed in this action would be 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 would be significantly reduced by the standards proposed today.

II. Air Quality and Health Impacts

The locomotive and marine diesel engines subject to today's proposal 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 which are associated with serious adverse health effects. Finally, emissions from locomotive and marine diesel engines cause harm to the public welfare, contribute to visibility impairment, and contribute to other harmful environmental impacts across the U.S.

By 2030, the proposed standards are expected to reduce annual locomotive and marine diesel engine $PM_{2.5}$ emissions by 28,000 tons; NO_X emissions by 765,000 tons; and volatile organic compound (VOC) emissions by 42,000 tons as well as reductions in carbon monoxide (CO) and toxic compounds known as air toxics.[12]

We estimate that reductions of $PM_{2.5}$, NO_X, and VOC emissions from locomotive and marine diesel engines would produce nationwide air quality improvements. According to air quality modeling performed in conjunction with this proposed rule, if finalized, all 39 current $PM_{2.5}$ nonattainment areas would experience a decrease in their 2020 and 2030 design values. Likewise all 116 mandatory class I federal areas would see improvements in their visibility. This rule would also result in substantial nationwide ozone benefits. The air quality modeling conducted for ozone estimates that in 2020 and 2030, 114 of the current 116 ozone nonattainment areas would see improvements in ozone air quality as a result of this proposed rule.

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, and 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 emissions accounting for approximately 20 percent of mobile source NO_X and 25 percent of mobile source diesel $PM_{2.5}$. These proportions are even higher in some urban areas. 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 further emissions controls beyond those already adopted for these engines, locomotive and marine diesel engines nationally will emit more than 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 2006 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 157 million people living in 116 areas (which include all or part of 461 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 $PM_{2.5}$ 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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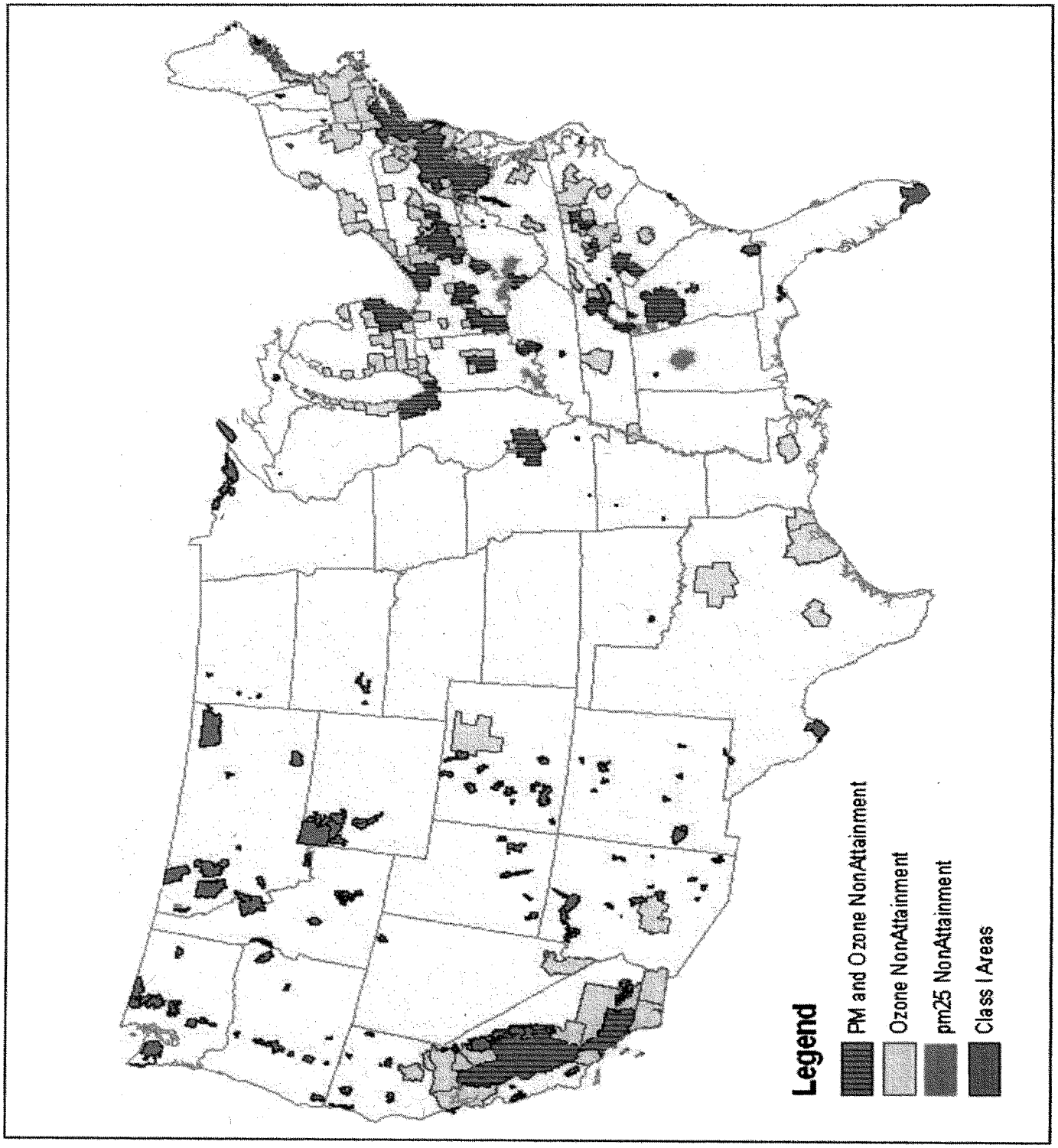
[12] Nationwide locomotive and marine diesel engines comprise approximately 3 percent of the nonroad mobile sources hydrocarbon inventory. EPA National Air Quality and Emissions Trends Report 1999. March 2001, Document Number: EPA 454/R–0–004. This document is available electronically at:*http://www.epa.gov/air/airtrends/aqtrnd99/.*

Figure II-1 Air Quality Problems are Widespread



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The engine standards proposed in this rule would 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 proposed today would become effective as early as 2008 making the expected $PM_{2.5}$, NO_X, and VOC inventory reductions from this rulemaking critical to 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 emanating from these engines are also of particular concern since diesel exhaust is classified as a likely human carcinogen.[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. We are currently studying the size of the U.S. population living near a sample of approximately 60 marine ports and rail yards, and will place that information in the docket upon completion prior to the final rule. The diesel $PM_{2.5}$ reductions which occur as a result of this proposed rule would benefit the population near these sources and also assist state and local governments as they work to meet the NAAQS.

In the following three sections we review important public health effects linked to pollutants emitted from locomotive and marine diesel engines first describing the human health effects and the current and expected future ambient levels of direct or indirectly caused pollution. Following the discussion of health effects, we will discuss the modeled air quality benefits which are estimated to result from regulating these engines. We also discuss a number of other welfare effects associated with emissions from diesel engines. These effects include visibility impairment, ecological and property damage caused by acid deposition, eutrophication and nitrification of surface waters, environmental threats posed by polycyclic organic matter (POM) deposition, and plant and crop damage from ozone.

Finally, in section E we describe the locomotive and marine engine emission inventories for the primary pollutants affected by the proposal. We present current and projected future levels of emissions for the base case, including anticipated reductions from control programs already adopted by EPA and the States, but without the controls proposed today. Then we identify expected emission reductions from nonroad locomotive and marine diesel engines. These reductions would make important contributions 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 describe the need for tightening emission standards from both locomotive and marine diesel engines and the air quality and public health benefits we expect as a result of this proposed rule. 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 of the Draft Regulatory Impact Analysis (RIA) accompanying this proposal.

B. Public Health Impacts

(1) Particulate Matter

The proposed locomotive and marine engine standards would result in significant reductions of primary $PM_{2.5}$ emissions from these sources. In addition, locomotive and marine diesel engines emit high levels of NO_X which react in the atmosphere to form secondary $PM_{2.5}$, ammonium nitrate. Locomotive and marine diesel engines also emit SO_2 and HC which react in the atmosphere to form secondary $PM_{2.5}$ composed of sulfates and organic carbonaceous $PM_{2.5}$. This proposed rule would reduce both the directly emitted diesel PM and secondary PM emissions.

(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). $PM_{2.5}$ refers to fine particles, those 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). 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 VOCs) 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 through the atmosphere 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. (This air quality statistic compared to the standard is referred to as the ''design value.'') The annual standard specifies an expected annual arithmetic mean not to exceed 15 $\mu g/m^3$ averaged over three years. EPA has recently finalized $PM_{2.5}$ nonattainment designations for the 1997 standard (70 FR 943, Jan 5, 2005).[18] All areas currently in nonattainment for

[13] See section II.B.(1)(d) and II.B.(2)(d) 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 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. [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. This document is available electronically at:*http://www.arb.ca.gov/regact/marine2005/portstudy0406.pdf*.

[18] US 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/*.

$PM_{2.5}$ will be required to meet these 1997 standards between 2009 and 2014.

As can be seen in Figure II–1 ambient $PM_{2.5}$ levels exceeding the 1997 $PM_{2.5}$ NAAQS are widespread throughout the country. As of October 2006 there were approximately 88 million people living in 39 areas (which include all or part of 208 counties) that either do not meet the 1997 $PM_{2.5}$ NAAQS or contribute to violations in other counties. These numbers do not include the people living in areas where there is a significant future risk of failing to maintain or achieve the $PM_{2.5}$ NAAQS.

EPA has recently amended the NAAQS for $PM_{2.5}$ (71 FR 61144, October 17, 2006). The final rule, signed on September 21, 2006 and published in the **Federal Register** on October 17, 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 $\mu g/m^3$ to provide increased protection against health effects associated with short-term exposures to fine particles. The current form of the 24-hour $PM_{2.5}$ standard was retained (e.g., based on the 98th percentile concentration averaged over three years). The level of the annual $PM_{2.5}$ NAAQS was retained at 15 $\mu g/m^3$, continuing protection against health effects associated with long-term exposures. The current form of the annual $PM_{2.5}$ standard was retained as an annual arithmetic mean averaged over three years, however, the following two aspects of the spatial averaging criteria were narrowed: (1) The annual mean concentration at each site shall be within 10 percent of the spatially averaged annual mean, and (2) the daily values for each monitoring site pair shall yield a correlation coefficient of at least 0.9 for each calendar quarter.

With regard to the secondary $PM_{2.5}$ standards, EPA has revised these standards to be identical in all respects to the revised primary standards. Specifically, EPA has revised the current 24-hour $PM_{2.5}$ secondary standard by making it identical to the revised 24-hour $PM_{2.5}$ primary standard and retained the annual $PM_{2.5}$ secondary standard. This suite of secondary $PM_{2.5}$ standards is intended to provide protection against PM-related public welfare effects, including visibility impairment, effects on vegetation and ecosystems, and material damage and soiling.

The 2006 standards became effective on December 18, 2006. As a result of the 2006 $PM_{2.5}$ standard, EPA will designate new nonattainment areas in early 2010. The timeframe for areas attaining the 2006 PM NAAQS will likely extend from 2015 to 2020.

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 which have monitored data that is violating the 2006 $PM_{2.5}$ NAAQS. In total more than 106 million U.S. residents, in 257 counties are living in areas which either violate either the 1997 $PM_{2.5}$ standard or the 2006 $PM_{2.5}$ standard.

TABLE II–1.—FINE PARTICLE STANDARDS: CURRENT NONATTAINMENT AREAS AND 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

[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.

EPA has already adopted many emission control programs that are expected to reduce ambient $PM_{2.5}$ levels and as a result of these programs, the number of areas that fail to achieve the 1997 $PM_{2.5}$ NAAQS is expected to decrease. Even so, EPA modeling projects that in 2015, with all current controls, up to 52 counties with 53 million population may not attain some combination of the current annual standard of 15 $\mu g/m^3$ and the revised daily standard of 35 $\mu g/m^3$, and that even in 2020 up to 48 counties with 54 million population will still not be able to attain either the annual, daily, or both the annual and daily $PM_{2.5}$ standards.[19] This does not account for additional areas that have air quality measurements within 10 percent of the 2006 $PM_{2.5}$ standard. These areas, although not violating the standards, would also benefit from the additional reductions from this rule ensuring long term maintenance of the PM NAAQS.

States have told EPA that they need the reductions this proposed rule would provide in order to meet and maintain both the current 1997 $PM_{2.5}$ NAAQS and the 2006 $PM_{2.5}$ NAAQS. Based on the final rule designating and classifying $PM_{2.5}$ nonattainment areas, most $PM_{2.5}$ nonattainment areas will be required to attain the 1997 $PM_{2.5}$ NAAQS in the 2009 to 2015 time frame, and then be required to maintain the NAAQS thereafter. The emissions standards for engine remanufacturing being proposed in this action would become effective as early as 2008, but no later than 2010, and states would rely on these expected $PM_{2.5}$ reductions to help them to either attain or maintain the 1997 $PM_{2.5}$ NAAQS. In the long term, the emission reductions resulting from the proposed locomotive and marine diesel engine standards would be important to states efforts to attain and maintain the 2006 $PM_{2.5}$ NAAQS.

(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) for PM, and the 2005 PM Staff Paper.[20] [21] [22] Further discussion of health effects associated

[19] Final RIA PM NAAQS, Chapter 2: Defining the $PM_{2.5}$ Air Quality Problem. October 17, 2006.

[20] U.S. EPA (1996) Air Quality Criteria for Particulate Matter, EPA 600–P–95–001aF, EPA 600–P–95–001bF. This document is available in Docket EPA–HQ–OAR.

[21] 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.

[22] 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.

with PM can also be found in the draft RIA for this proposal.

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 cardio respiratory mortality.[23] In addition, a reanalysis of the American Cancer Society Study shows an association between fine particle and sulfate concentrations and lung cancer mortality.[24] The locomotive and marine diesel engines, covered in this proposal contribute to both acute and chronic $PM_{2.5}$ exposures. Additional information on acute exposures is available in Chapter 2 of the draft RIA for this proposal.

These 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.[25] Taking account of all air pollution sources, including both spark-ignition (gasoline) and diesel powered vehicles, these latter studies indicate that exposure to $PM_{2.5}$ emissions near roadways, 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 constituents of fine particles 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 proposal differ with 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. The proposed controls would help to reduce exposure, and specifically exposure near marine ports and rail yard related $PM_{2.5}$ sources.

Recently, new studies [30] from the State of California provide evidence that $PM_{2.5}$ emissions within marine ports and rail yards contribute significantly to elevated ambient concentrations near these sources. A substantial number of people experience exposure to locomotive and marine diesel engine emissions, raising potential health concerns. Additional information on marine port and rail yard emissions and ambient exposures can be found in section.B.3 of this preamble.

(c) $PM_{2.5}$ Air Quality Modeling Results

Air quality modeling performed for this proposal shows that in 2020 and 2030 all 39 current $PM_{2.5}$ nonattainment areas would experience decreases in their $PM_{2.5}$ design values. For areas with $PM_{2.5}$ design values greater than 15 $\mu g/m^3$ the modeled future-year $PM_{2.5}$ design values are expected to decrease on average by 0.06 $\mu g/m^3$ in 2020 and 0.14 $\mu g/m^3$ in 2030. The maximum decrease for future-year $PM_{2.5}$ design values in 2020 would be 0.35 $\mu g/m^3$ and 0.90 $\mu g/m^3$ in 2030. The reductions are discussed in more detail in Chapter 2 of the draft RIA.

The geographic impact of the proposed locomotive and marine diesel engine controls in 2030 on $PM_{2.5}$ design values (DV) in counties across the US, can be seen in Figure II–2.

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[23] 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.

[24] Pope Ca, III; Thun, MJ; Namboodiri, MM; Docery, DW; Evans, JS; Speizer, FE; Heath, CW. 1995. Particulate air pollution as a predictor of mortality in a prospective study of U.S. adults. Am J Respir Crit Care Med 151:669–674.

[25] Riekider, M.; Cascio, W.E.; Griggs, T.R..; Herbst, M.C.; Bromberg, P.A.; Neas, L.; Williams, R.W.; Devlin, R.B. (2003) Particulate Matter Exposures in Cars is Associated with Cardiovascular Effects in Healthy Young Men. Am. J. Respir. Crit. Care Med. 169: 934–940.

[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 electronically at: *http://www.arb.ca.gov/diesel/documents/rrstudy.htm* and State of California Air Resources Board 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: *ftp://ftp.arb.ca.gov/carbis/msprog/offroad/marinevess/documents/portstudy0406.pdf.*

Figure II-2 Impact of Proposed Locomotive/Marine controls on annual $PM_{2.5}$ Design Values (DV) in 2030

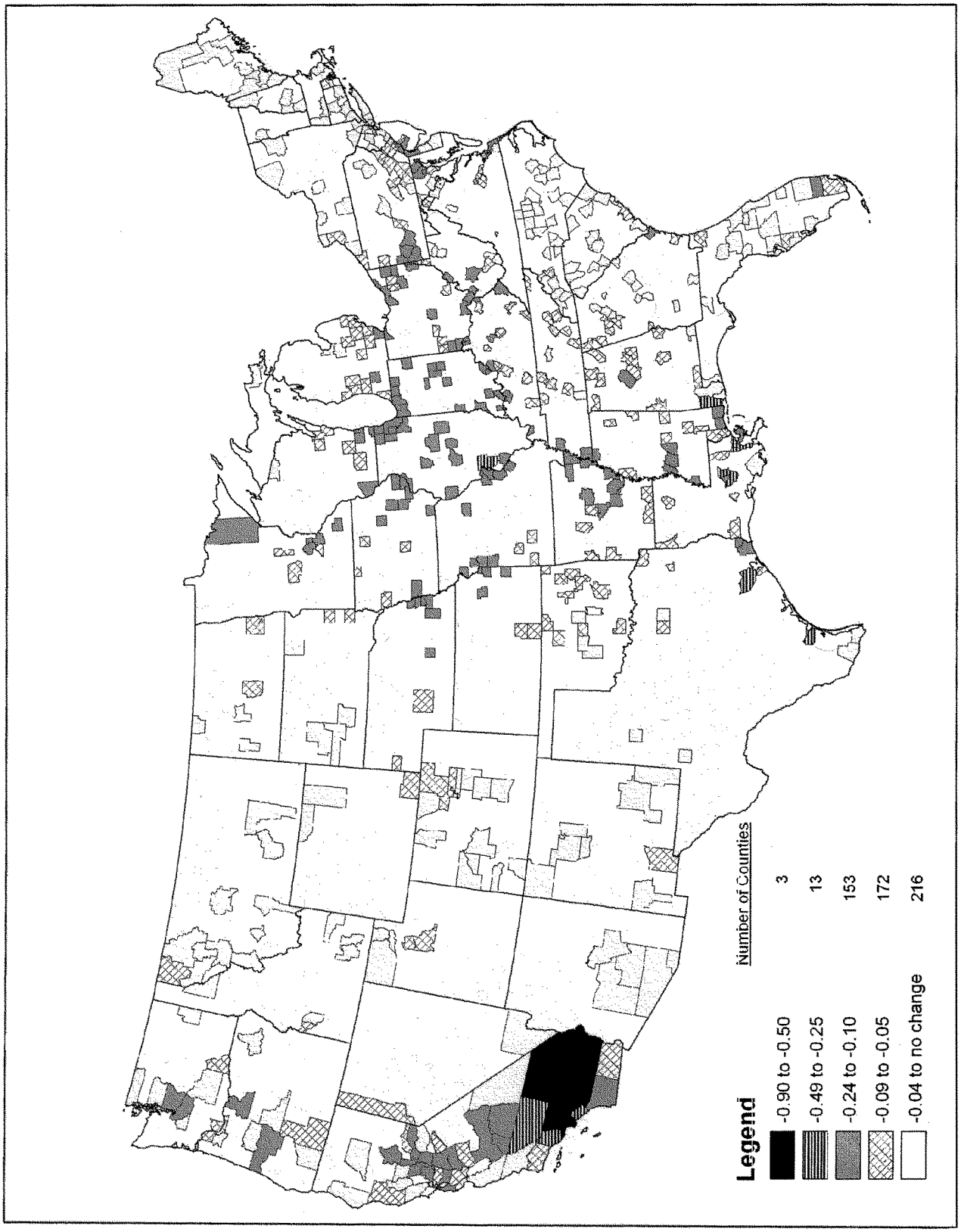

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Figure II–2 illustrates that the greatest emission reductions in 2030 are projected to occur in Southern California where 3 counties would experience reductions in their $PM_{2.5}$ design values of -0.50 to -0.90 $\mu g/m^3$. The next level of emission reductions would occur among 13 counties geographically dispersed in the southeastern U.S., southern Illinois, and southern California. An additional 325 counties spread across the U.S. would see a decrease in their $PM_{2.5}$ DV ranging from -0.05 to -0.24 $\mu g/m^3$.

(d) PM Air Quality Modeling Methodology

A national scale air quality modeling analysis was performed to estimate future year annual and daily $PM_{2.5}$ concentrations and visibility for this proposed rule. To model the air quality benefits of this rule we used the Community-Scale Air Quality (CMAQ) model. CMAQ simulates the numerous physical and chemical processes involved in the formation, transport, and destruction of ozone and particulate matter. In addition to the CMAQ model, the modeling platform includes the emissions, meteorology, and initial and boundary condition data which are inputs to this model. Consideration of the different processes that affect primary directly emitted and secondary PM at the regional scale in different locations is fundamental to understanding and assessing the effects of pollution control measures that affect PM, ozone and deposition of pollutants to the surface. A complete description of the CAMQ model and methodology employed to develop the future year impacts of this proposed rule are found in Chapter 2.1 of the draft RIA.

It should be noted that the emission control scenarios used in the air quality and benefits modeling are slightly different than the emission control program being proposed. 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 draft RIA describes the changes in the inputs and resulting emission inventories between the preliminary assumptions used for the air quality modeling and the final proposed regulatory scenario. These refinements to the proposed program would not significantly change the results summarized here or our conclusions drawn from this analysis.

(2) Ozone

The proposed locomotive and marine engine standards 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 formed by the reaction of volatile organic compounds (VOCs) and nitrogen oxides (NO_X) in the atmosphere in the presence of heat and sunlight. These two 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.[31] 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 would occur on a single high-temperature day. Ozone also can be transported from pollution sources into areas hundreds of miles upwind, resulting in elevated ozone levels even in areas with low local VOC or NO_X emissions.

The highest levels of ozone are produced when both VOC and NO_X emissions are present in significant quantities on clear summer days. Relatively small amounts of NO_X enable ozone to form rapidly when VOC levels are relatively high, but ozone production is quickly limited by removal of the NO_X. Under these conditions NO_X reductions are highly effective in reducing ozone while VOC reductions have little effect. Such conditions are called ''NO_X-limited.'' Because the contribution of VOC emissions from biogenic (natural) sources to local ambient ozone concentrations can be significant, even some areas where man-made VOC emissions are relatively low can be NO_X-limited.

When NO_X levels are relatively high and VOC levels relatively low, NO_X forms inorganic nitrates (i.e., particles) but relatively little ozone. Such conditions are called ''VOC-limited.'' Under these conditions, VOC reductions are effective in reducing ozone, but NO_X reductions can actually increase local ozone under certain circumstances. Even in VOC-limited urban areas, NO_X reductions are not expected to increase ozone levels if the NO_X reductions are sufficiently large.

Rural areas are usually NO_X-limited, due to the relatively large amounts of biogenic VOC emissions in many rural areas. Urban areas can be either VOC- or NO_X-limited, or a mixture of both, in which ozone levels exhibit moderate sensitivity to changes in either pollutant.

Ozone concentrations in an area also can be lowered by the reaction of nitric oxide with ozone, forming nitrogen dioxide (NO_2); as the air moves downwind and the cycle continues, the NO_2 forms additional ozone. The importance of this reaction depends, in part, on the relative concentrations of NO_X, VOC, and ozone, all of which change with time and location.

The current ozone National Ambient Air Quality Standards (NAAQS) has an 8-hour averaging time.[32] The 8-hour ozone NAAQS, established by EPA in 1997, is based on well-documented science demonstrating that more people were experiencing adverse health effects at lower levels of exertion, over longer periods, and at lower ozone concentrations than addressed by the previous one-hour ozone NAAQS. The current ozone NAAQS addresses ozone exposures of concern for the general population and populations most at risk, including children active outdoors, outdoor workers, and individuals with pre-existing respiratory disease, such as asthma. 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.

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.[33] As of October 2006 there are approximately 157 million people living in 116 areas (which include all or part

[31] U.S. EPA Air Quality Criteria for Ozone and Related Photochemical Oxidants (Final). U.S. Environmental Protection Agency, Washington, D.C., EPA 600/R– 05/004aF–cF, 2006. This document may be accessed electronically at: *http://www.epa.gov/ ttn/naaqs/standards/ ozone/s_o3_cr_cd.html.*

[32] EPA's review of the ozone NAAQS is underway and a proposal is scheduled for May 2007 with a final rule scheduled for February 2008.

[33] A listing of the 8-hour ozone nonattainment areas is included in the draft RIA for this proposed rule.

of 461 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 achieve the 8-hour ozone NAAQS.

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 recent ozone modeling performed for the CAIR analysis,[34] which does not include any additional local ozone precursor controls, we estimate that in 2010, 24 million people are projected to live in 37 Eastern counties exceeding the 8-hour ozone NAAQS. An additional 61 million people are projected to live in 148 Eastern counties expected to be within 10 percent of violating the 8-hour ozone NAAQS in 2010.

States with 8-hour ozone nonattainment areas will be 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 8-hour ozone NAAQS in the 2007 to 2013 time frame and then be required to maintain the 8-hour ozone NAAQS thereafter.[35] We expect many of the 8-hour ozone nonattainment areas will need to adopt additional emission reduction programs. The expected NO_X and VOC reductions from the standards proposed in this action would be important to states as they seek to either attain or maintain the 8-hour ozone NAAQS.

(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 papers. [36] [37] [38]

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, and breathing may 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 a doctor's attention and/or the use of additional medication. 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 include children, the elderly, and individuals with respiratory disease such as asthma. There is also suggestive evidence that certain people may have greater genetic susceptibility. People can also have heightened vulnerability to ozone due to greater exposures (e.g., children and outdoor workers).

The recent ozone AQCD also examined relevant new scientific information which has emerged in the past decade, including the impact of ozone exposure on such health effect indicators 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. In addition to supporting and building further on conclusions from the 1996 AQCD, the 2006 AQCD included new information on the health effects of ozone. 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.

EPA typically quantifies ozone-related health impacts in its regulatory impact analyses (RIAs) when possible. In the analysis of past air quality regulations, ozone-related benefits have included morbidity endpoints and welfare effects such as damage to commercial crops. EPA has not recently included a separate and additive mortality effect for ozone, independent of the effect associated with fine particulate matter. For a number of reasons, including (1) advice from the Science Advisory Board (SAB) Health and Ecological Effects Subcommittee (HEES) that EPA consider the plausibility and viability of including an estimate of premature mortality associated with short-term ozone exposure in its benefits analyses and (2) conclusions regarding the scientific support for such relationships in EPA's 2006 Air Quality Criteria for Ozone and Related Photochemical Oxidants (the CD), EPA is in the process of determining how to appropriately characterize ozone-related mortality benefits within the context of benefits analyses for air quality regulations. As part of this process, we are seeking advice from the National Academy of Sciences (NAS) regarding how the ozone-mortality literature should be used to quantify the reduction in premature mortality due to diminished exposure to ozone, the amount of life expectancy to be added and the monetary value of this increased life expectancy in the context of health benefits analyses associated with regulatory assessments. In addition, the Agency has sought advice on characterizing and communicating the uncertainty associated with each of these aspects in health benefit analyses.

Since the NAS effort is not expected to conclude until 2008, the agency is currently deliberating how best to characterize ozone-related mortality benefits in its rulemaking analyses in the interim. For the analysis of the proposed locomotive and marine standards, we do not quantify an ozone mortality benefit. So that we do not provide an incomplete picture of all of the benefits associated with reductions in emissions of ozone precursors, we have chosen not to include an estimate of total ozone benefits in the proposed RIA. By omitting ozone benefits in this proposal, we acknowledge that this analysis underestimates the benefits associated with the proposed standards. For more information regarding the quantified benefits included in this analysis, please refer to Chapter 6 of this RIA.

[34] Technical Support Document for the Final Clean Air Interstate Rule Air Quality Modeling. This document is available in Docket EPA–HQ–OAR–2003–0190.

[35] The Los Angeles South Coast Air Basin 8-hour ozone nonattainment area will have to attain before June 15, 2021.

[36] U.S. EPA Air Quality Criteria for Ozone and Related Photochemical Oxidants (Final). U.S. Environmental Protection Agency, Washington, D.C., EPA 600/R–05/004aF–cF, 2006. This document may be accessed electronically at:*http://www.epa.gov/ttn/naaqs/standards/ozone/s_o3_cr_cd.html.*

[37] U.S. EPA (1996) Review of National Ambient Air Quality Standards for Ozone, Assessment of Scientific and Technical Information. OAQPS Staff Paper First Draft. EPA–452/R–96–007. This document is available electronically at: *http:www.epa.gov/ ttn/naaqs/ standards/ ozone/ s_o3_ cr_sp. html.*

[38] U.S. EPA (2006) Review of the National Ambient Air Quality Standards for Ozone, Policy Assessment of Scientific and Technical Information. OAQPS Staff Paper Second Draft. EPA–452/D–05–002. This document is available electronically at: *http:www.epa.gov/ttn/naaqs/standards/ozone/s_o3_cr_sp.html.*

(c) Air Quality Modeling Results for Ozone

This proposed rule would result in substantial nationwide ozone benefits. The air quality modeling conducted for ozone as part of this proposed rulemaking projects that in 2020 and 2030, 114 of the current 116 ozone nonattainment areas would see improvements in ozone air quality as a result of this proposed rule.

Results from the air quality modeling conducted for this rulemaking indicates that the average and population-weighted average concentrations over all U.S. counties would experience broad improvement in ozone air quality. The decrease in average ozone concentration in current nonattainment counties shows that the proposed rule would help bring these counties into attainment. The decrease in average ozone concentration for counties below the standard, but within ten percent, shows that the proposed rule would also help those counties to maintain the standard. All of these metrics show a decrease in 2020 and a larger decrease in 2030, indicating in four different ways the overall improvement in ozone air quality. For example, in nonattainment counties, on a population-weighted basis, the 8-hour ozone design value would decrease by 0.29 ppb in 2020 and 0.87 ppb in 2030.

The impact of the proposed reductions has also been analyzed with respect to those areas that have the highest design values at or above 85 ppb in 2030. We project there would be 27 U.S. counties with design values at or above 85 ppb in 2030. After implementation of this proposed action, we project that 3 of these 27 counties would drop below 85 ppb. Further, 17 of the 27 counties would be at least 10 percent closer to a design value of less than 85 ppb, and on average all 27 counties would be about 30 percent closer to a design value of less than 85 ppb.

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Figure II-3 Impact of Proposed Locomotive/Marine controls on annual Ozone Design Values (DV) on U.S. Counties in 2030

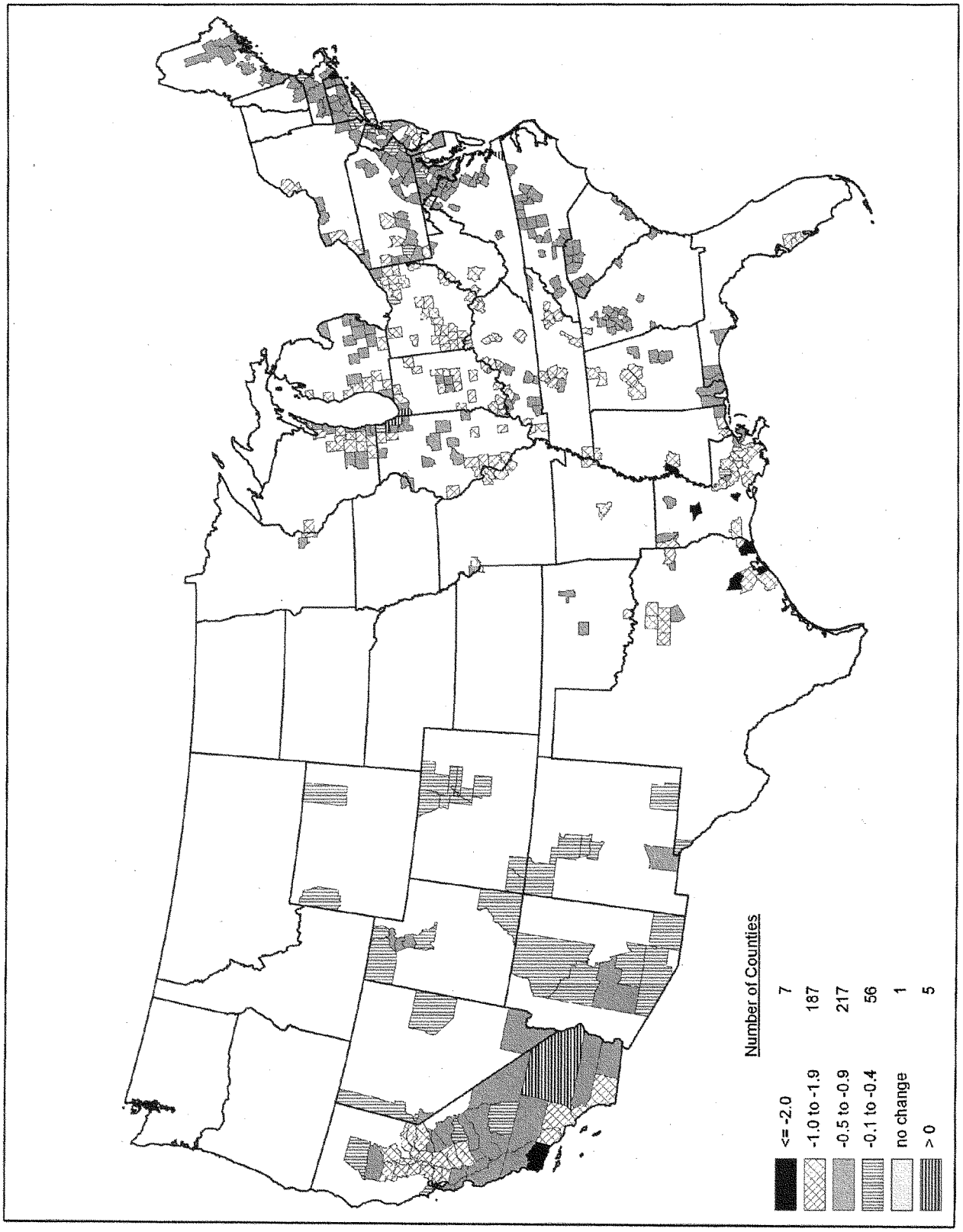

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Figure II–3 shows those U.S. counties in 2030 which are projected to experience a change in their ozone design values as a result of this

proposed rule. The most significant decreases, equal or greater than −2.0 ppb, would occur in 7 counties across the U.S. including: Grant (−2.1 ppb) and Lafayette (−2.0 ppb) Counties in Louisiana; Montgomery (−2.0 ppb), Galveston (−2.0 ppb), and Jefferson (−2.0 ppb) Counties in Texas; Warren County (−2.9 ppb) in Mississippi; and Santa Barbara County (−2.7 ppb) in California. One hundred eighty-seven (187) counties would see annual ozone design value reductions from −1.0 to −1.9 ppb while an estimated 217 additional counties would see annual design value reductions from −0.5 to −0.9 ppb. Note that 5 counties including: Suffolk (+1.5 ppb) and Hampton (+0.8 ppb) Counties in Virginia; Cook County (+0.7 ppb) in Illinois; Lake County (+0.2 ppb) in Indiana; and San Bernardino County (+0.1 ppb) in California are projected to experience an increase in ozone design values because of the NO_X disbenefit that occurs under certain conditions.[39] It is expected that future local and national controls that decrease VOC, CO, and regional ozone will mitigate any localized disbenefits.

EPA's review of the ozone NAAQS is currently underway and a proposed decision in this review is scheduled for May 2007 with a final rule scheduled for February 2008. If the ozone NAAQS is revised then new nonattainment areas could be designated. While EPA is not relying on it for purposes of justifying this proposal, the emission reductions from this rulemaking would also be helpful to states if there is an ozone NAAQS revision.

(d) Ozone Air Quality Modeling Methodology

A national scale air quality modeling analysis was performed to estimate future year ozone concentrations for this proposed rule. To model the air quality benefits of this rule we used the Community-Scale Air Quality (CMAQ) model. CMAQ simulates the numerous physical and chemical processes involved in the formation, transport, and destruction of ozone and particulate matter. In addition to the CMAQ model, the modeling platform includes the emissions, meteorology, and initial and boundary condition data which are inputs to this model. Consideration of the different processes that affect primary directly emitted and secondary PM at the regional scale in different locations is fundamental to understanding and assessing the effects of pollution control measures that affect PM, ozone and deposition of pollutants to the surface. A complete description of the CAMQ model and methodology employed to develop the future year impacts of this proposed rule are found in Chapter 2.1 of the draft RIA.

It should be noted that the emission control scenarios used in the air quality and benefits modeling are slightly different than the emission control program being proposed. 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 draft RIA describes the changes in the inputs and resulting emission inventories between the preliminary assumptions used for the air quality modeling and the final proposed regulatory scenario. These refinements to the proposed program would not significantly change the results summarized here or our conclusions drawn from this analysis.

(3) Air Toxics

People experience elevated risk of cancer and other noncancer health effects from exposure to air toxics. Mobile sources are responsible for a significant portion of this risk. According to the National Air Toxic Assessment (NATA) for 1999, mobile sources were responsible for 44 percent of outdoor toxic emissions and almost 50 percent of the cancer risk. Benzene is the largest contributor to cancer risk of all 133 pollutants quantitatively assessed in the 1999 NATA. Mobile sources were responsible for 68 percent of benzene emissions in 1999. Although the 1999 NATA did not quantify cancer risks associated with exposure to this diesel exhaust, EPA has concluded that diesel exhaust ranks with the other air toxic substances that the national-scale assessment suggests pose the greatest relative risk.

According to 1999 NATA, nearly the entire U.S. population was exposed to an average level of air toxics that has the potential for adverse respiratory health effects (noncancer). Mobile sources were responsible for 74 percent of the noncancer (respiratory) risk from outdoor air toxics in 1999. The majority of this risk was from acrolein, and formaldehyde also contributed to the risk of respiratory health effects. Although not included in NATA's estimates of noncancer risk, PM from gasoline and diesel mobile sources contribute significantly to the health effects associated with ambient PM.

It should be noted that 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 Web site.[40] 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 engine emissions include 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 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.[41]

[39] NO_X reductions can at certain times and in some areas cause ozone levels to increase. Such ''disbenefits'' are predicted in our modeling for this proposed rule. For a discussion of the phenomenon see the draft RIA Chapter 2.2. In spite of this disbenefit, the air quality modeling we conducted makes clear that the overall effect of this proposed rule is positive with 456 counties experiencing a decrease in both their 2020 and 2030 ozone design value.

[40] U.S. EPA (2006) National-Scale Air Toxics Assessment for 1999. *http://www.epa.gov/ttn/atw/nata1999.*

[41] U.S. EPA (2002) Health Assessment Document for Diesel Engine Exhaust. EPA/600/8–90/057F Office of Research and Development, Washington, DC. Pp 1–1, 1–2. This document is available

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 Effect of Diesel Exhaust

In EPA's 2002 Diesel Health Assessment Document (Diesel HAD),[42] diesel exhaust was classified as likely to be carcinogenic to humans by inhalation at 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 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 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.[43] [44] [45]

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 diesel exhaust is a likely human carcinogen. 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.

(ii) Diesel Exhaust: Other Health Effects

Noncancer health effects of acute and chronic exposure to diesel exhaust emissions are also of concern to the Agency. EPA derived an RfC from consideration of four well-conducted chronic rat inhalation studies showing adverse pulmonary effects. [46] [47] [48] [49] 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 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).

Diesel exhaust has been shown to cause serious noncancer effects in occupational exposure studies. One study of railroad workers and electricians, cited in the Diesel HAD,[50] 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 [51] 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.

electronically at *http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060*.

[42] 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*.

[43] U.S. EPA (2002) Health Assessment Document for Diesel Engine Exhaust. EPA/6008–90/057F Office of Research and Development, Washington, DC. 9–11.

[44] Bhatia, R., Lopipero, P., Smith, A. (1998) Diesel exposure and lung cancer. Epidemiology 9(1):84–91.

[45] Lipsett, M: Campleman, S; (1999) Occupational exposure to diesel exhaust and lung cancer: a meta-analysis. Am J Public Health 80(7): 1009–1017.

[46] 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.

[47] 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.

[48] 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.

[49] 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.

[50] Kilburn (2000). See HAD Chapter 5–7.

[51] 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.

(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 National Ambient Air Quality Standard (NAAQS) of 15 $\mu g/m^3$. 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, of which diesel PM is a constituent.

(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.

1. Occupational Exposures

Occupational exposures to diesel exhaust from mobile sources, including 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 resulting in a wide range of exposures from 2 to 1,280 $\mu g/m^3$ 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).[52] 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.

2. 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 recent 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 rail facility in the western United States. [53] 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 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 $\mu g/m^3$ 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 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.[54] Like the earlier rail yard study, the port study employed the ISCST3 dispersion model. Also 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 $\mu g/m^3$ of port-related diesel PM in ambient air, about 360,000 people lived in areas with at least 0.6 $\mu g/m^3$ of diesel PM, and about 50,000 people lived in areas with at least 1.5 $\mu g/m^3$ of ambient diesel PM directly from the port.

Overall, while these studies focus on only two large marine port and railroad facilities, they highlight the substantial contribution these facilities make to elevated ambient concentrations in populated areas.

We have recently initiated a study to better understand the populations that are living near rail yards and marine ports nationally. As part of the study, a computer geographic information system (GIS) is being used to identify the locations and property boundaries of these facilities nationally, and to determine the size and demographic characteristics of the population living near these facilities. We anticipate that the results of this study will be complete in 2007 and we intend to add this report to the public docket.

(a) Gaseous Air Toxics—Benzene, 1,3-butadiene, Formaldehyde, Acetaldehyde, Acrolein, POM, Naphthalene

Locomotive and marine diesel engine exhaust emissions contribute to ambient levels of other air toxics known or suspected as human or animal carcinogens, or that have non-cancer health effects. These other compounds 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 risk 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 proposed in this rulemaking would help reduce exposure to these harmful substances.

Air toxics can cause a variety of cancer and noncancer health effects. A number of the mobile source air toxic pollutants described in this section are known or likely to pose a cancer hazard in humans. Many of these compounds also cause adverse noncancer health effects resulting from chronic,[55]

[52] 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.

[53] 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*].

[54] Di, P.; Servin, A.; Rosenkranz, K.; Schwehr, B.; Tran, H. (2006) Diesel particulate matter exposure assessment study for the Ports of Los Angeles and Long Beach. California Air Resources Board. [Online at *http://www.arb.ca.gov/msprog/offroad/marinevess/marinevess.htm*].

[55] Chronic exposure is defined in the glossary of the Integrated Risk Information (IRIS) database (*http://www.epa.gov/iris*) as repeated exposure by

subchronic,[56] or acute [57] inhalation exposures. These include neurological, cardiovascular, liver, kidney, and respiratory effects as well as effects on the immune and reproductive systems.

Benzene: The EPA's Integrated Risk Information (IRIS) database lists benzene as a known human carcinogen (causing leukemia) by all routes of exposure, and that exposure is associated with additional health effects, including genetic changes in both humans and animals and increased proliferation of bone marrow cells in mice.[58] [59] [60] 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. 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.[61] [62] The most sensitive noncancer effect observed in humans, based on current data, is the depression of the absolute lymphocyte count in blood.[63] [64] 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.[65] [66] [67] [68] 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.[69] [70] The specific mechanisms of 1,3-butadiene-induced carcinogenesis are unknown. However, it is virtually certain that the carcinogenic effects are mediated by genotoxic metabolites of 1,3-butadiene. Animal data suggest that females may be more sensitive than males for cancer effects; 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.[71]

Formaldehyde: Since 1987, EPA has classified formaldehyde as a probable human carcinogen based on evidence in humans and in rats, mice, hamsters, and monkeys.[72] EPA is currently reviewing recently published epidemiological data. For instance, recently released 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.[73] [74] NCI is currently performing an update of 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.[75] Based on the developments of the last decade, in 2004, the working group of the International Agency for Research on Cancer (IARC) concluded that formaldehyde is carcinogenic to humans (Group 1), on the basis of sufficient evidence in humans and sufficient evidence in experimental animals—a higher classification than previous IARC evaluations.

Formaldehyde exposure also causes a range of noncancer health effects, including irritation of the eyes (tearing of the eyes and increased blinking) and mucous membranes.

Acetaldehyde: Acetaldehyde is classified in EPA's IRIS database as a probable human carcinogen, based on nasal tumors in rats, and is considered toxic by the inhalation, oral, and intravenous routes.[76] The primary acute effect of exposure to acetaldehyde vapors is irritation of the eyes, skin, and respiratory tract.[77] The agency is currently conducting a reassessment of the health hazards from inhalation exposure to acetaldehyde.

Acrolein: Acrolein is intensely irritating to humans when inhaled, with acute exposure resulting in upper respiratory tract irritation and congestion. EPA determined in 2003 using the 1999 draft cancer guidelines that the human carcinogenic potential of acrolein could not be determined because the available data were inadequate. No information was

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the oral, dermal, or inhalation route for more than approximately 10 percent of the life span in humans (more than approximately 90 days to 2 years in typically used laboratory animal species).

[56] Defined in the IRIS database as exposure to a substance spanning approximately 10 percent of the lifetime of an organism.

[57] Defined in the IRIS database as exposure by the oral, dermal, or inhalation route for 24 hours or less.

[58] 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*.

[59] International Agency for Research on Cancer, IARC monographs on the evaluation of carcinogenic risk of chemicals to humans, Volume 29, Some industrial chemicals and dyestuffs, International Agency for Research on Cancer, World Health Organization, Lyon, France, p. 345–389, 1982.

[60] Irons, R.D.; Stillman, W.S.; Colagiovanni, D.B.; Henry, V.A. (1992) Synergistic action of the benzene metabolite hydroquinone on myelopoietic stimulating activity of granulocyte/macrophage colony-stimulating factor in vitro, Proc. Natl. Acad. Sci. 89:3691–3695.

[61] Aksoy, M. (1989). Hematotoxicity and carcinogenicity of benzene. Environ. Health Perspect. 82:193–197.

[62] Goldstein, B.D. (1988). Benzene toxicity. Occupational medicine. State of the Art Reviews. 3:541–554.

[63] Rothman, N., G.L. Li, M. Dosemeci, W.E. Bechtold, G.E. Marti, Y.Z. Wang, M. Linet, L.Q. Xi, W. Lu, M.T. Smith, N. Titenko-Holland, L.P. Zhang, W. Blot, S.N. Yin, and R.B. Hayes (1996) Hematotoxicity among Chinese workers heavily exposed to benzene. Am. J. Ind. Med. 29:236–246.

[64] U.S. EPA 2002 Toxicological Review of Benzene (Noncancer Effects). Environmental Protection Agency, Integrated Risk Information System (IRIS), Research and Development, National Center for Environmental Assessment, Washington, DC. This material is available electronically at *http://www.epa.gov/iris/subst/0276.htm*.

[65] Qu, O.; Shore, R.; Li, G.; Jin, X.; Chen, C.L.; Cohen, B.; Melikian, A.; Eastmond, D.; Rappaport, S.; Li, H.; Rupa, D.; Suramaya, R.; Songnian, W.; Huifant, Y.; Meng, M.; Winnik, M.; Kwok, E.; Li, Y.; Mu, R.; Xu, B.; Zhang, X.; Li, K. (2003). HEI Report 115, Validation & Evaluation of Biomarkers in Workers Exposed to Benzene in China.

[66] Qu, Q., R. Shore, G. Li, X. Jin, L.C. Chen, B. Cohen, et al. (2002). Hematological changes among Chinese workers with a broad range of benzene exposures. Am. J. Industr. Med. 42: 275–285.

[67] Lan, Qing, Zhang, L., Li, G., Vermeulen, R., et al. (2004). Hematotoxically in Workers Exposed to Low Levels of Benzene. Science 306: 1774–1776.

[68] Turtletaub, K.W. and Mani, C. (2003). Benzene metabolism in rodents at doses relevant to human exposure from Urban Air. Research Reports Health Effect Inst. Report No.113.

[69] 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*.

[70] 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*.

[71] Bevan, C.; Stadler, J.C.; Elliot, G.S.; *et al.* (1996) Subchronic toxicity of 4-vinylcyclohexene in rats and mice by inhalation. Fundam. Appl. Toxicol. 32:1–10.

[72] U.S. EPA (1987). Assessment of Health Risks to Garment Workers and Certain Home Residents from Exposure to Formaldehyde, Office of Pesticides and Toxic Substances, April 1987.

[73] Hauptmann, M.; Lubin, J.H.; Stewart, P.A.; Hayes, R.B.; Blair, A. 2003. Mortality from lymphohematopoietic malignancies among workers in formaldehyde industries. Journal of the National Cancer Institute 95: 1615–1623.

[74] Hauptmann, M..; Lubin, J.H.; Stewart, P.A.; Hayes, R.B.; Blair, A. 2004. Mortality from solid cancers among workers in formaldehyde industries. American Journal of Epidemiology 159: 1117–1130.

[75] Pinkerton, L.E. 2004. Mortality among a cohort of garment workers exposed to formaldehyde: an update. Occup. Environ. Med. 61: 193–200.

[76] U.S. EPA. 1988. Integrated Risk Information System File of Acetaldehyde. Research and Development, National Center for Environmental Assessment, Washington, DC. This material is available electronically at *http://www.epa.gov/iris/subst/0290.htm*.

[77] U.S. EPA. 1988. Integrated Risk Information System File of Acetaldehyde. Research and Development, National Center for Environmental Assessment, Washington, DC. This material is available electronically at *http://www.epa.gov/iris/subst/0290.htm*.

available on the carcinogenic effects of acrolein in humans and the animal data provided inadequate evidence of carcinogenicity.[78]

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.

Recent studies have found that maternal exposures to PAHs 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.[79] [80] 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.[81] The draft reassessment recently completed external peer review.[82] Based on external peer review comments, additional analyses are being considered. 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.[83] Naphthalene also causes a number of chronic non-cancer effects in animals, including abnormal cell changes and growth in respiratory and nasal tissues.[84]

In addition to reducing substantial amounts of NO_X and $PM_{2.5}$ emissions from locomotive and marine diesel engines, the standards being proposed today would also reduce air toxics emitted from these engines. This will help mitigate some of the adverse health effects associated with operation of these engines.

C. Other Environmental Effects

There is a number of public welfare effects associated with the presence of ozone and $PM_{2.5}$ in the ambient air. In this section we discuss the impact of $PM_{2.5}$ on visibility 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.[85] Visibility impairment manifests in two principal ways: as local visibility impairment and as regional haze.[86] Local visibility impairment may take the form of a localized plume, a band or layer of discoloration appearing well above the terrain as a result of complex local meteorological conditions. Alternatively, local visibility impairment may manifest as an urban haze, sometimes referred to as a ''brown cloud''. This urban haze is largely caused by emissions from multiple sources in the urban areas and is not typically attributable to only one nearby source or to long-range transport. The second type of visibility impairment, regional haze, usually results from multiple pollution sources spread over a large geographic region. Regional haze can impair visibility in large regions and across states.

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.[87] [88]

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[78] 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 electronically at *http://www.epa.gov/iris/subst/0364.htm.*

[79] 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.

[80] 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.

[81] U.S. EPA. 2004. Toxicological Review of Naphthalene (Reassessment of the Inhalation Cancer Risk), 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.*

[82] Oak Ridge Institute for Science and Education. (2004). External Peer Review for the IRIS Reassessment of the Inhalation Carcinogenicity of Naphthalene. August 2004. *http://cfpub2.epa.gov/ncea/cfm/recordisplay.cfm?deid=86019.*

[83] International Agency for Research on Cancer (IARC). (2002). Monographs on the Evaluation of the Carcinogenic Risk of Chemicals for Humans. Vol. 82. Lyon, France.

[84] 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.*

[85] National Research Council, 1993. Protecting Visibility in National Parks and Wilderness Areas. National Academy of Sciences Committee on Haze in National Parks and Wilderness Areas. National Academy Press, Washington, DC. This document is available in Docket EPA-HQ-OAR–2005–0036. This book can be viewed on the National Academy Press Web site at *http://www.nap.edu/books/0309048443/html/.*

[86] See discussion in U.S. EPA, National Ambient Air Quality Standards for Particulate Matter; Proposed Rule; January 17, 2006, Vol 71 p 2676. This information is available electronically at *http://epa.gov/fedrgstr/EPA-AIR/2006/January/Day-17/a177.pdf.*

[87] 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–2005–0036.

[88] 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–2005–0036.

Fine particles are the major cause of reduced visibility in parts of the United States. EPA is pursuing a two-part strategy to address visibility. First, to address the welfare effects of PM on visibility, EPA set secondary $PM_{2.5}$ standards which would act in conjunction with the establishment of a regional haze program. In setting this secondary standard EPA 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).[89] 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.[90]

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

Recently designated $PM_{2.5}$ nonattainment areas indicate that, as of March 2, 2006, almost 90 million people live in nonattainment areas for the 1997 $PM_{2.5}$ NAAQS. Thus, at least these populations would likely be experiencing visibility impairment, as well as many thousands of individuals who travel to these areas. 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. In summary, visibility impairment is experienced throughout the U.S., in multi-state regions, urban areas, and remote mandatory class I federal areas.[91] [92] The mandatory federal class I areas are listed in Chapter 2 of the draft RIA for this action. The areas that have design values above the 1997 $PM_{2.5}$ NAAQS are also listed in Chapter 2 of the draft RIA for this action.

Future Visibility Impairment

Recent modeling for this proposed rule was used to project visibility conditions in the 116 mandatory class I federal areas across the U.S. in 2020 and 2030 resulting from the proposed locomotive and marine diesel engine standards. The results suggest that improvement in visibility would occur in all class I federal areas although areas would continue to have annual average deciview levels above background in 2020 and 2030. Table II–2 groups class I federal areas by regions and illustrates that regardless of geographic area, reductions in $PM_{2.5}$ emissions from this rule would benefit visibility in each region of the U.S. in mandatory class I federal areas.

TABLE II–2.—SUMMARY OF MODELED 2030 VISIBILITY CONDITIONS IN MANDATORY CLASS I FEDERAL AREAS

[Annual average deciview]

Region	Predicted 2030 visibility baseline w/o rule rule	Predicted 2030 visibility with rule control	Change in annual average deciview
Eastern			
Southeast	17.52	17.45	.07
Northeast/Midwest	14.85	14.80	.05
Western			
Southwest	9.36	9.32	.04
West (CA–NV–UT)	9.99	9.92	.07
Rocky Mountain	8.37	8.33	.04
Northwest	9.11	9.05	.06
National Class I Area Average	10.97	10.91	.06

Notes:

(a) Background visibility conditions differ by regions: Eastern natural background is 9.5 deciview (or visual range of 150 kilometers) and the West natural background is 5.3 deciview (or visual range of 230 kilometers).

(b) The results average visibility conditions for mandatory Class I Federal areas in the regions.

(c) The results illustrate the type of visibility improvements for the primary control options. The proposal differs based on updated information; however, we believe that the net results would approximate future PM emissions.

(2) Plant and Ecosystem Effects of Ozone

Ozone contributes to many 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 lower 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

[89] 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.

[90] As mentioned above, the EPA has recently proposed to amend the PM NAAQS (71 FR 2620, Jan. 17, 2006). The proposal would set the secondary NAAQS equal to the primary standards for both $PM_{2.5}$ and $PM_{10-2.5}$. EPA also is taking comment on whether to set a separate $PM_{2.5}$ standard, designed to address visibility (principally in urban areas), on potential levels for that standard within a range of 20 to 30 $\mu g/m^3$, and on averaging times for the standard within a range of four to eight daylight hours.

[91] US 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/*.

[92] US EPA. Regional Haze Regulations, July 1, 1999. (64 FR 35714, July 1, 1999).

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 proposed NO_X standards will help reduce crop damage and stress on vegetation from ozone.

(3) Acid Deposition

Acid deposition, or acid rain as it is commonly known, occurs when NO_X and SO_2 react in the atmosphere with water, oxygen and oxidants to form various acidic compounds that later fall to earth in the form of precipitation or dry deposition of acidic particles. It contributes to damage of trees at high elevations and in extreme cases may cause lakes and streams to become so acidic that they cannot support aquatic life. In addition, acid deposition accelerates the decay of building materials and paints, including irreplaceable buildings, statues, and sculptures that are part of our nation's cultural heritage.

The proposed NO_X standards would help reduce acid deposition, thereby helping to reduce acidity levels in lakes and streams throughout the country and helping accelerate the recovery of acidified lakes and streams and the revival of ecosystems adversely affected by acid deposition. Reduced acid deposition levels will also help reduce stress on forests, thereby accelerating reforestation efforts and improving timber production. Deterioration of historic buildings and monuments, vehicles, and other structures exposed to acid rain and dry acid deposition also will be reduced, and the costs borne to prevent acid-related damage may also decline. While the reduction in nitrogen acid deposition will be roughly proportional to the reduction in NO_X emissions, the precise impact of this rule will differ across different areas.

(4) Eutrophication and Nitrification

The NO_X standards proposed in this action will help reduce the airborne nitrogen deposition that contributes to eutrophication of watersheds, particularly in aquatic systems where atmospheric deposition of nitrogen represents a significant portion of total nitrogen loadings.

Eutrophication is the accelerated production of organic matter, particularly algae, in a water body. This increased growth can cause numerous adverse ecological effects and economic impacts, including nuisance algal blooms, dieback of underwater plants due to reduced light penetration, and toxic plankton blooms. Algal and plankton blooms can also reduce the level of dissolved oxygen, which can adversely affect fish and shellfish populations. In recent decades, human activities have greatly accelerated nutrient impacts, such as nitrogen and phosphorus, causing excessive growth of algae and leading to degraded water quality and associated impairment of fresh water and estuarine resources for human uses.[93]

Severe and persistent eutrophication often directly impacts human activities. For example, losses in the nation's fishery resources may be directly caused by fish kills associated with low dissolved oxygen and toxic blooms. Declines in tourism occur when low dissolved oxygen causes noxious smells and floating mats of algal blooms create unfavorable aesthetic conditions. Risks to human health increase when the toxins from algal blooms accumulate in edible fish and shellfish, and when toxins become airborne, causing respiratory problems due to inhalation. According to the NOAA report, more than half of the nation's estuaries have moderate to high expressions of at least one of these symptoms '' an indication that eutrophication is well developed in more than half of U.S. estuaries.[94]

(5) 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.[95] 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 proposed in this action will help reduce the airborne particles that contribute to materials damage and soiling.

D. Other Criteria Pollutants Affected by This NPRM

Locomotive and marine diesel engines account for about 1 percent of the mobile sources 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 2006, there are 15.5 million people living in 6 areas (10 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

[93] Deposition of Air Pollutants to the Great Waters, Third Report to Congress, June 2000, EPA–453/R–00–005. This document can be found in Docket No. OAR–2002–0030, Document No. OAR–2002–0030–0025. It is also available at *www.epa.gov/oar/oaqps/gr8water/3rdrpt/obtain.html.*

[94] Bricker, Suzanne B., et al. National Estuarine Eutrophication Assessment, Effects of Nutrient Enrichment in the Nation's Estuaries, National Ocean Service, National Oceanic and Atmospheric Administration, September, 1999.

[95] 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–2005–0036.

can be found in the Air Quality Criteria for Carbon Monoxide.[96]

E. Emissions From Locomotive and Marine Diesel Engines

(1) Overview

The engine standards being proposed in this rule would affect emissions of particulate matter ($PM_{2.5}$), oxides of nitrogen (NO_X), volatile organic compounds (VOCs), and air toxics. Carbon monoxide is not specifically targeted in this proposal although the technologies applied to control these other pollutants are expected to also reduce CO emissions.

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. In the absence of new emissions standards, we expect overall emissions from these engines to decrease modestly over the next ten to fifteen years than 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 Tier 0 locomotive remanufacturing requirements. Beginning thereafter, emission inventories from these engines would once again begin increasing due to growth in the locomotive and marine sectors. Under today's proposed standards, by 2030, annual NO_X emissions from these engines would be reduced by 765,000 tons, $PM_{2.5}$ emissions by 28,000 tons, and VOC emissions by 42,000 tons.

In this section we first present base case emissions inventory contributions for locomotive and marine diesel engines and other mobile sources assuming no further emission controls beyond those already in place. The 2001 inventory numbers were developed and used as an input into our air quality modeling. Individual sub-sections which follow discuss $PM_{2.5}$, NO_X, and VOC pollutants, in terms of expected emission reductions associated with the proposed standards. The tables and figures illustrate the Agency's analysis of current and future emissions contributions from locomotive and marine diesel engines.

(2) Estimated Inventory Contribution

Locomotive and marine diesel engine emissions contribute to nationwide PM, NO_X, VOC, CO, and air toxics inventories. Our current baseline and future year estimates for NO_X and $PM_{2.5}$ inventories (50-state) are set out in Tables II–3 and II–4. Based on our analysis undertaken for this rulemaking, we estimate that in 2001 locomotives 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 proposed today, these engines would 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.

The national locomotives and marine diesel engine $PM_{2.5}$ and NO_X inventories in 2030 would be roughly twice as large as the combined $PM_{2.5}$ and NO_X inventories from on-highway diesel and land-based nonroad diesel engines. In absolute terms—locomotives and marine diesel engines, in 2030, would annually emit 22,000 more tons of $PM_{2.5}$ and 890,000 more tons of NO_X than all highway and nonroad diesels combined. This occurs because EPA has already taken steps to bring engine emissions from both on-highway and nonroad diesels to near-zero levels, while locomotives and marine diesel engines continue to meet relatively modest emission requirements. Table II–4 shows that in 2001 the land-based nonroad diesel category contributed about 160,000 tons of $PM_{2.5}$ emissions and by 2030 they drop to under 18,000 tons. Likewise, in 2001, annual $PM_{2.5}$ emissions from highway diesel engines totaled about 110,000 tons falling in 2030 to about 10,000 tons. Table II–3 shows a similar downward trend occurring for annual NO_X emissions. In 2001, NO_X emissions from highway diesel engines' amounted to over 3.7 million tons but by 2030 they fall to about 260,000 tons. Finally, land-based nonroad diesels in 2001 emitted over 1.5 million tons of NO_X but by 2030 these emissions drop to approximately 430,000 tons.

Marine diesel engine and locomotive inventories were developed using multiple methodologies. Chapter 3 of the draft RIA provides a detailed explanation of our approach. In summary, the quality of data available for locomotive inventories made it possible to develop more detailed estimates of fleet composition and emission rates than we have previously done. Locomotive emissions were calculated based on estimated current and projected fuel consumption rates. Emissions were calculated separately for the following locomotive categories: line-haul locomotives in large railroads, switching locomotives in large railroads (including Class II/III switch railroads owned by Class I railroads), other line-haul locomotives (i.e., local and regional railroads), other switch/terminal locomotives, and passenger locomotives. Our inventories for marine diesel engines were created using the inventory for marine diesel engines up to 30 liters per cylinder displacement including recreational, commercial, and auxiliary applications was developed by using a methodology based on engine population, hours of use, average engine loads, and in-use emissions factors.

TABLE II–3.—NATIONWIDE ANNUAL NO_X BASELINE EMISSION LEVELS

Category	2001			2030		
	NO_X short tons	Percent of mobile source	Percent of total	NO_X	Percent of mobile source	Percent of total short tons
Locomotive	1,118,786	9.0	5.1	854,226	19.0	8.1
Recreational Marine Diesel	40,437	0.3	0.2	48,155	1.1	0.5
Commercial Marine (C1 & C2)	833,963	6.7	3.8	679,973	15.1	6.4
Land-Based Nonroad Diesel	1,548,236	12.5	7.1	434,466	9.7	4.1
Commercial Marine (C3)*	224,100	1.8	1.0	531,641	11.8	5.0
Small Nonroad SI	100,319	0.8	0.5	114,287	2.5	1.1
Recreational Marine SI	42,252	0.3	0.2	92,188	2.1	0.9
SI Recreational Vehicles	5,488	0.0	0.0	20,136	0.4	0.2
Large Nonroad SI (>25hp)	321,098	2.6	1.5	46,253	1.0	0.4

[96] U.S. EPA (2000). Air Quality Criteria for Carbon Monoxide, EPA/600/P–99/001F. This document is available in Docket EPA–HQ–OAR–2004–0008.

TABLE II–3.—NATIONWIDE ANNUAL NO_X BASELINE EMISSION LEVELS—Continued

Category	2001			2030		
	NO_X short tons	Percent of mobile source	Percent of total	NO_X	Percent of mobile source	Percent of total short tons
Aircraft	83,764	0.7	0.4	118,740	2.6	1.1
Total Off Highway	4,318,443	34.8	19.8	2,940,066	65.5	27.7
Highway Diesel	3,750,886	30.2	17.2	260,915	5.8	2.5
Highway non-diesel	4,354,430	35.0	20.0	1,289,780	28.7	12.2
Total Highway	8,105,316	65.2	37.2	1,550,695	34.5	14.6
Total Diesel (distillate) Mobile	7,292,308	58.7	33.5	2,277,735	50.7	21.5
Total Mobile Sources	12,423,758	100	57.0	4,490,761	100	42.4
Stationary Point and Area Sources	9,355,659	-	43.0	6,111,866	-	57.6
Total Man-Made Sources	21,779,418	-	100	10,602,627	-	100

*This category includes emissions from Category 3 (C3) propulsion engines and C2/3 auxiliary engines used on ocean-going vessels.

TABLE II–4.—NATIONWIDE ANNUAL $PM_{2.5}$ BASELINE EMISSION LEVELS

Category	2001			2030		
	$PM_{2.5}$ short tons	Percent of diesel mobile	Percent of mobile source	$PM_{2.5}$ short tons	Percent of diesel mobile	Percent of mobile source
Locomotive	29,660	8.9	6.36	25,109	32.2	10.01
Recreational Marine Diesel	1,096	0.3	0.24	1,141	1.5	0.45
Commercial Marine (C1 & C2)	28,728	8.6	6.16	23,758	30.5	9.47
Land-Based Nonroad Diesel	164,180	49.2	35.2	17,934	23.0	7.1
Commercial Marine (C3)	20,023	.....	4.30	52,682	.....	20.99
Small Nonroad SI	25,575	.....	5.5	35,761	.....	14.3
Recreational Marine SI	17,101	.....	3.7	6,378	.....	2.5
SI Recreational Vehicles	12,301	.....	2.6	9,953	.....	4.0
Large Non road SI (>25hp)	1,610	.....	0.3	2,844	.....	1.1
Aircraft	5,664	.....	1.22	8,569	.....	3.41
Total Off Highway	305,939	.....	65.6	184,129	.....	73.4
Highway Diesel	109,952	33.0	23.6	10,072	12.9	4.0
Highway non-diesel	50,277	.....	10.8	56,734	.....	22.6
Total Highway	160,229	.....	34.4	66,806	.....	26.6
Total Diesel (distillate) Mobile	333,618	100	71.6	78,014	100	31.1
Total Mobile Sources	466,168	.....	100	250,934	.....	100
Stationary Point and Area Sources Diesel	3,189	.....	.....	2,865	.....	.....
Stationary Point and Areas Sources non-diesel	1,963,264	.....	.....	1,817,722	.....	.....
Total Stationary Point and Area Sources	1,966,453	.....	.....	1,820,587	.....	.....
Total Man-Made Sources	2,432,621	.....	.....	2,071,521	.....	.....

(3) $PM_{2.5}$ Emission Reductions

In 2001 annual emissions from locomotive and marine diesel engines totaled about 60,000 tons. Table II–4 shows the distribution of these $PM_{2.5}$ emissions: locomotives contributed about 30,000 tons, recreational marine diesel roughly 1,000 tons, and commercial marine diesel (C1 and C2) 29,000 tons. Due to current standards, annual $PM_{2.5}$ emissions from these engines drop to 50,000 tons in 2030 with roughly proportional emission reductions occurring in both the locomotive and commercial marine diesel categories while the recreational marine diesel category experiences a slight increase in $PM_{2.5}$ emissions. Both Tables II–5 and Figure II–4 show $PM_{2.5}$ emissions nearly flat through 2030 before beginning to rise again due to growth in these sectors.

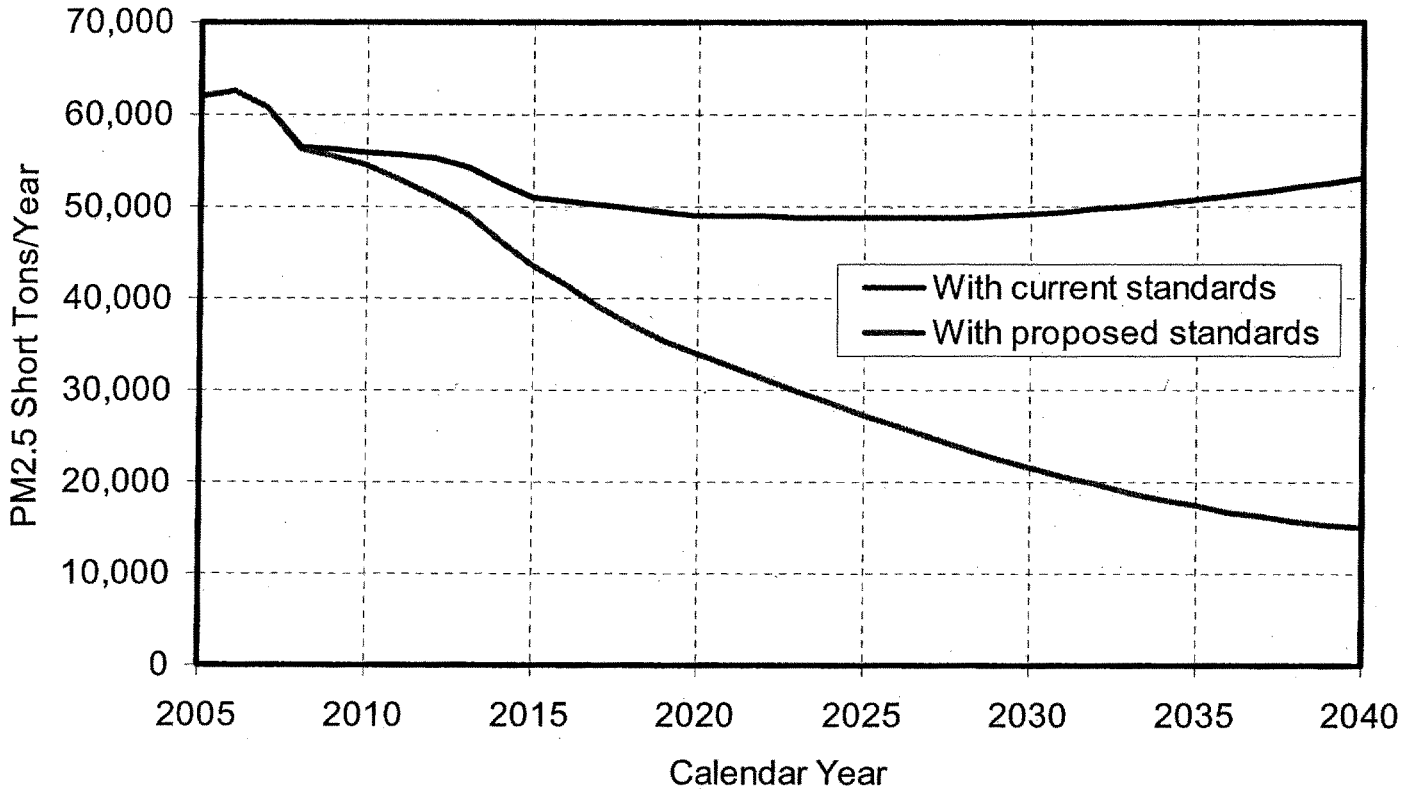
Table II–5 shows how the proposed rule would begin reducing $PM_{2.5}$ emissions from the current national inventory baseline starting in 2015 when annual reductions of 7,000 tons would occur. By 2020 that number would grow to 15,000 tons of $PM_{2.5}$, by 2030 to 28,000 annual tons, and reductions would continue to grow through 2040 to about 39,000 tons of $PM_{2.5}$ annually.

TABLE II–5.—LOCOMOTIVE AND MARINE DIESEL $PM_{2.5}$ EMISSIONS

[Short tons/year]

	2015	2020	2030	2040
Without Proposed Rule	51,000	50,000	50,000	54,000
With Proposed Rule	44,000	35,000	22,000	15,000
Reductions From Proposed Rule	7,000	15,000	28,000	39,000

Figure II-4 $PM_{2.5}$ Reductions from Proposal



Although this proposed rule results in large nationwide $PM_{2.5}$ inventory reductions, it would also help urban areas that have significant locomotive and marine diesel engine emissions in their inventories. Table II–6 shows the percent these engines contribute to the mobile source diesel $PM_{2.5}$ inventory in a variety of urban areas in 2001 and 2030. In 2001, a number of metropolitan areas saw locomotives and marine diesel engines contribute a much larger share to their local inventories than the national average including Houston (42 percent), Los Angeles (32 percent), and Baltimore (23 percent). In 2030, each of these metropolitan areas would continue to see locomotive and marine diesel engines comprise a larger portion of their mobile source diesel $PM_{2.5}$ inventory than the national average as would other communities including Cleveland (72 percent), Chicago (70 percent) and Chattanooga (70 percent).

TABLE II–6.—LOCOMOTIVE AND MARINE DIESEL CONTRIBUTION TO MOBILE SOURCE DIESEL $PM_{2.5}$ INVENTORIES IN SELECTED METROPOLITAN AREAS IN 2001 AND 2030

Metropolitan area (MSA)	2001 Percent	2030 Percent
National Average	18	65
Los Angeles, CA	32	73
Houston, TX	42	85
Chicago, IL	25	70
Philadelphia, PA	20	64
Cleveland-Akron-Lorain, OH	26	72
St. Louis, MO	22	68
Seattle, WA	17	61
Kansas City, MO	21	68
Baltimore, MD	23	68
Cincinnati, OH	24	70
Boston, MA	8	41
Huntington-Ashland WV-KY-OH	53	91
New York, NY	4	21
San Joaquin Valley, CA	9	39
Minneapolis-St. Paul, MN	11	48
Atlanta, GA	6	30
Phoenix-Mesa, AZ	5	27
Birmingham, AL	17	58
Detroit, MI	5	26
Chattanooga, TN	22	70
Indianapolis, IN	5	30

(4) NO_X Emissions Reductions

In 2001 annual emissions from locomotive and marine diesel engines totaled about 2.0 million tons. Table II–3 shows the distribution of these NO_X emissions: locomotives contributed about 1.1 million tons, recreational marine diesel roughly 40,000 tons, and commercial marine diesel (C1 and C2) 834,000 tons. Due to current standards, annual NO_X emission from these engines drop to 1.6 million tons in 2030 with roughly proportional emission reductions occurring in both the locomotive and commercial marine diesel categories while the recreational marine diesel category experiences an increase in $PM_{2.5}$ emissions. Both Table II–7 and Figure II–5 show NO_X

emissions remaining nearly flat through 2030 before beginning to rise again due to growth in these sectors.

Table II–7 shows how the proposed rule would begin reducing NO_X emissions from the current national inventory baseline starting in 2015 when annual reductions of 84,000 tons would occur. By 2020 that number would grow to 293,000 tons of NO_X, by 2030 to 765,000 annual tons, and reductions would continue to grow through 2040 to about 1.1 million tons of NO_X annually.

These numbers are comparable to emission reductions projected in 2030 for our already established nonroad Tier 4 program. Table II–8 provides the 2030 NO_X emission reductions (and PM reductions) for this proposed rule compared to the Heavy-Duty Highway rule and Nonroad Tier 4 rule. The 2030 NO_X reductions of about 740,000 tons for the Nonroad Tier 4 are similar to those from this proposed rule.

TABLE II–7.—LOCOMOTIVE AND MARINE DIESEL NO_X EMISSIONS

[Short tons/year]

	2015	2020	2030	2040
Without Proposed Rule	1,633,000	1,582,000	1,582,000	1,703,000
With Proposed Rule	1,549,000	1,289,000	817,000	579,000
Reductions From Proposed Rule	84,000	293,000	765,000	1,124,000

TABLE II–8.—PROJECTED 2030 EMISSIONS REDUCTIONS FROM RECENT MOBILE SOURCE RULES

[Short tons]

Rule	NO_X	$PM_{2.5}$
Proposed Locomotive and Marine	765,000	28,000

TABLE II–8.—PROJECTED 2030 EMISSIONS REDUCTIONS FROM RECENT MOBILE SOURCE RULES—Continued

[Short tons]

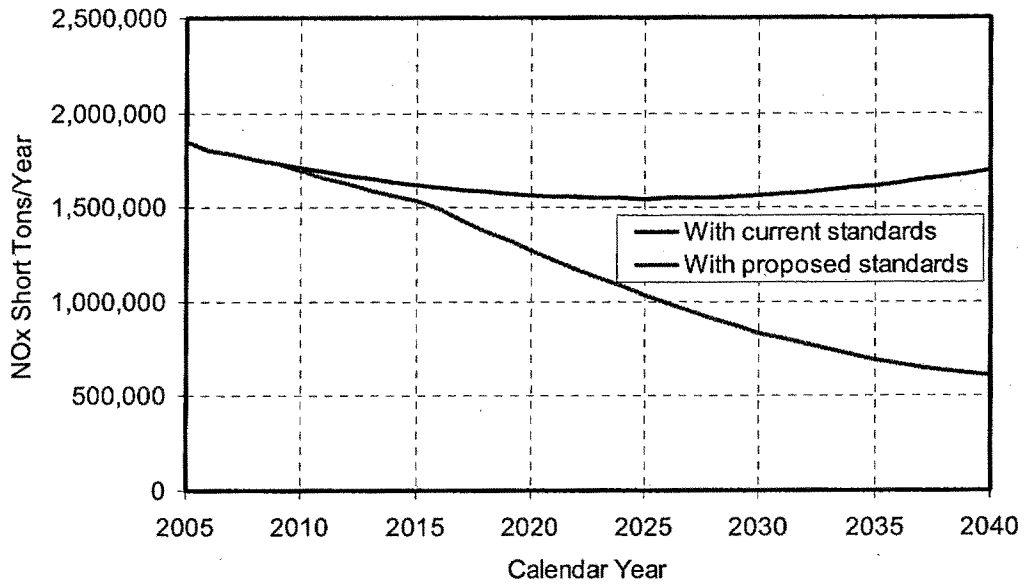
Rule	NO_X	$PM_{2.5}$
Nonroad Tier 4	738,000	129,000

TABLE II–8.—PROJECTED 2030 EMISSIONS REDUCTIONS FROM RECENT MOBILE SOURCE RULES—Continued

[Short tons]

Rule	NO_X	$PM_{2.5}$
Heavy-Duty Highway	2,600,000	109,000

Figure II-5 NO_x Reductions from Proposal



Although this proposed rule results in large nationwide NO_X inventory reductions, it would also help urban areas that have significant concentrations of locomotive and marine diesel engines in their inventories. Table II–9 shows the percent these engines contribute to the mobile source diesel NO_X inventory in a variety of urban areas in 2001 and 2030. In 2001, a number of metropolitan areas saw locomotives and marine diesel engines contribute a much larger share to their local inventories than the national average including Houston (32 percent), Kansas City (20 percent), and Los Angeles (19 percent). In 2030, each of these metropolitan areas would continue to see locomotive and marine diesel engines comprise a larger portion of their mobile source diesel $PM_{2.5}$ inventory than the national average as would other communities including Birmingham (43 percent), Chicago (42 percent) and Chattanooga (40 percent).

TABLE II–9.—LOCOMOTIVE AND MARINE DIESEL ENGINE CONTRIBUTION TO MOBILE SOURCE NO_X INVENTORIES IN SELECTED METROPOLITAN AREAS IN 2001 AND 2030

Metropolitan areas (MSA)	2001 Percent	2030 Percent
National Average	16	35
Los Angeles, CA	19	38
Houston, TX	32	45
Chicago, IL	20	42
Philadelphia, PA	14	19
Cleveland-Akron-Lorain, OH	19	40
New York, NY	5	8
St. Louis, MO	16	37
Seattle, WA	14	31
Kansas City, MO	20	44
Cincinnati, OH	18	39
Huntington-Ashland, WV-KY-OH	39	37
Boston, MA	7	11
San Joaquin Valley, CA	9	26
Minneapolis-St. Paul, MN	9	20
Atlanta, GA	5	13
Birmingham, AL	17	43
Baltimore, MD	8	10
Phoenix-Mesa, AZ	6	15
Detroit, MI	3	9
Chattanooga, TN	16	40
Indianapolis, IN	5	13

(5) Volatile Organic Compounds Emissions Reductions

Emissions of volatile organic compounds (VOCs) from locomotive and marine diesel engines based on a 50-state inventory are shown in Table II–10, along with the estimates of the reductions in 2015, 2020, 2030 and 2040 we expect would result from the VOC exhaust emission standard in our proposed rule. In 2015 15,000 tons of VOCs would be reduced and by 2020 reductions would almost double to 27,000 tons annually from these engines. Over the next ten years annual reductions from controlled locomotive and marine diesel engines would produce annual VOC reductions of 42,000 tons in 2030 and 54,000 tons in 2040.

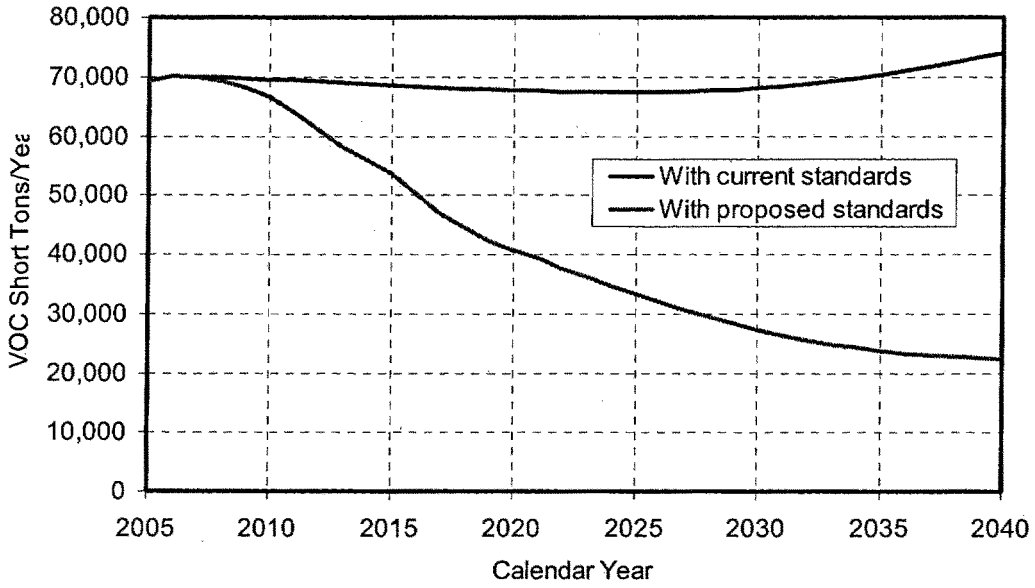
Figure II–6 shows our estimate of VOC emissions between 2005 and 2040 both with and without the proposed standards of this rule. We estimate that VOC emissions from locomotive and marine diesel engines would be reduced by 60 percent by 2030 and by 70 percent in 2040.

TABLE II–10.—LOCOMOTIVE AND MARINE DIESEL VOC EMISSIONS

[short tons/year]

	2015	2020	2030	2040
Without Proposed Rule	72,000	71,000	72,000	78,000
With Proposed Rule	57,000	44,000	30,000	24,000
Reductions From Proposed Rule	15,000	27,000	42,000	54,000

Figure II-6 VOC Reductions from Proposal



III. Emission Standards

This section details the emission standards, implementation dates, and other major requirements of the proposed program. Following brief summaries of the types of locomotives and marine engines covered and of the existing standards, we describe the proposed provisions for setting:

- Tier 3 and Tier 4 standards for newly-built locomotives,
- Standards for remanufactured Tier 0, 1, and 2 locomotives,

- Standards and other provisions for diesel switch locomotives,
- Requirements to reduce idling locomotive emissions, as well as possible ways to encourage emission reductions through the optimization of multi-locomotive teams (consists), and
- Tier 3 and Tier 4 standards for newly-built marine diesel engines.

As discussed in sections I.A(2) and VII.A(2), we are also soliciting comment on setting standards for remanufactured marine diesel engines.

A detailed discussion of the technological feasibility of the proposed standards follows the description of the proposed program. The section concludes with a discussion of considerations and activities surrounding emissions from large Category 3 engines used on ocean-going vessels, although we are not proposing provisions for these engines in this rulemaking.

To ensure that the benefits of the standards are realized in-use and throughout the useful life of these engines, and to incorporate lessons learned over the last few years from the existing test and compliance program, we are also proposing revised test procedures and related certification requirements. In addition, we are proposing to continue the averaging, banking, and trading (ABT) emissions credits provisions to demonstrate compliance with the standards. These provisions are described further in section IV.

A. What Locomotives and Marine Engines Are Covered?

The regulations being proposed would affect locomotives currently regulated under part 92 and marine diesel engines and vessels currently regulated under parts 89 and 94, as described below.[97]

With some exceptions, the regulations apply for all locomotives 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 existing locomotives owned by railroads that are classified as small businesses.[98]

Furthermore, engines used in 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.

There are currently three tiers of locomotive emission standards. The Tier 0 standards apply only to locomotives originally manufactured before 2002, the Tier 1 standards apply to new locomotives manufactured in 2002–2004, and the Tier 2 standards apply to new locomotives manufactured in 2005 and later. Under the existing regulations, the applicability of the Tier 1 and Tier 2 standards is based on the date of manufacture of the locomotive, rather than the engine. Thus, a newly manufactured engine in 2005 that is used to repower a 1990 model year locomotive would be subject to the Tier 0 emission standards, which are also applicable to all other 1990 model year locomotives. As described in section IV.B, we are proposing some changes to this approach.

The marine diesel engines covered by this rule would include propulsion engines used on vessels from recreational and small fishing boats to super-yachts, tugs and Great Lakes freighters, and auxiliary engines ranging from small gensets to large generators on ocean-going vessels.[99] Marine diesel engines are categorized both by per cylinder displacement and by rated power. Consistent with our existing marine diesel emission control program, the proposed standards would apply to any marine diesel engine with per cylinder displacement below 30 liters installed on a vessel flagged or registered in the United States. 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.

While marine diesel engines up to 37 kW (50 hp) are currently covered by our nonroad Tier 1 and Tier 2 standards, they were not included in the nonroad Tier 3 and Tier 4 programs. Instead, they are covered in this rule, making this a comprehensive control strategy for all marine diesel engines below 30 liters per cylinder displacement. This is a very broad range of engines and they are grouped into several categories for the existing standards, as described in detail in Chapter 1 of the draft RIA.

Consistent with our current marine diesel engine program, the standards described in this proposal would apply to engines manufactured for sale in the United States or imported into the United States beginning with the effective date of the standards. Any engine installed on a new vessel flagged or registered in the U.S. would be required to meet the appropriate emission limits. Also consistent with our current marine diesel engine program, the standards would also apply to any engine installed for the first time in a marine vessel flagged or registered in the U.S. after having 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.

Our current marine diesel engine emission controls do not apply to marine diesel engines on foreign vessels entering U.S. ports. At this time we believe it is appropriate to postpone consideration of the application of our national standards to engines on foreign vessels to a future rulemaking that would consider controls for Category 3 engines on ocean-going vessels. This will allow us consider the engines on foreign vessels as an integrated system, to better evaluate the regulatory options available for controlling their overall emission contribution to U.S. ambient air quality.

Nevertheless, we are soliciting comment on whether the emission standards we are proposing in this action should apply to engines below 30 liters per cylinder displacement installed on foreign vessels entering U.S. ports, and to no longer exclude these engines from the emission standards under 40 CFR 94.1(b)(3). Commenters are also invited to suggest when the standards should apply to foreign vessels. For example, the standards could apply based on the date the engine is built or, consistent with MARPOL Annex VI, the date the vessel is built.

B. Existing EPA Standards

NO_X emission levels from newly-built locomotives have been reduced over the past several years from unregulated levels of over 13 g/bhp-hr (17 g/kW-hr) to the current Tier 2 standard level for newly-built locomotives of 5.5 g/bhp-hr

[97] All of the regulatory parts referenced in this preamble are parts in Title 40 of the Code of Federal Regulations, unless otherwise noted.

[98] This small business provision is limited to railroads that are classified as small businesses by the Small Business Administration (SBA). Many but not all Class II and III railroads qualify as small businesses for this provision. See the 1998 locomotive rule (63 FR 18978, April 16, 1998) for a complete discussion of the basis and application of this provision.

[99] Marine diesel engines at or above 30 l/cyl displacement are not included in this program. See Section 3E, below.

(7.3 g/kW-hr)—a 60 percent reduction.[100] PM reductions on the order of 50 percent have also been achieved under a Tier 2 standard level of 0.20 g/bhp-hr (0.27 g/kW-hr). EPA emission standards for marine diesel engines vary somewhat due to the ranges in size and application of engines included; however Tier 2 levels for recreational and commercial marine engines are generally comparable in stringency to those adopted for locomotives, and are now in the process of phasing in over 2004–2009. See Chapter 1 of the draft RIA for a complete listing of the existing standards, including standards for remanufactured locomotives.

The Tier 2 emissions reductions have been achieved largely through engine calibration optimization and engine hardware design changes (such as improved fuel injectors and turbochargers, increased injection pressure, intake air after-cooling, combustion chamber design, reduced oil consumption and injection timing) Although these reductions in locomotive and marine emissions are important, they only bring today's cleanest locomotives and marine diesels to roughly the emissions levels of new trucks in the early 1990's, on the basis of grams per unit of work done.

C. What Standards Are We Proposing?

(1) Locomotive Standards

(a) Line-Haul Locomotives

We are proposing new emission standards for newly-built and remanufactured line-haul locomotives. Our proposed standards for newly-built line-haul locomotives would be implemented in two tiers: First, a new Tier 3 PM standard of 0.10 g/bhp-hr (0.13 g/kW-hr) taking effect in 2012, based on engine design improvements; second, new Tier 4 standards of 0.03 g/bhp-hr (0.04 g/kW-hr) for PM, 0.14 g/bhp-hr (0.19 g/kW-hr) for HC (both taking effect in 2015), and 1.3 g/bhp-hr (1.8 g/kW-hr) for NO_X (taking effect in 2017), based on the application of the high-efficiency catalytic aftertreatment technologies now being developed and introduced in the highway diesel sector. Our proposed standards for remanufactured line-haul locomotives would apply to all Tier 0, 1, and 2 locomotives and are based on engine design improvements. The feasibility of the proposed standards and the technologies involved are discussed in detail in section III.D. Table III–1 summarizes the proposed line-haul locomotive standards and implementation dates. See section III.C(3) for a discussion of the HC standards.

TABLE III–1.—PROPOSED LINE-HAUL LOCOMOTIVE STANDARDS

[g/bhp-hr]

Standards apply to:	Date	PM	NO_X	HC
Remanufactured Tier 0 & 1	2008 as Available, 2010 Required	0.22	[a] 7.4	[a] 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	PM and HC 2015 NO_X 2017	0.03	1.3	0.14

[a] For Tier 0 locomotives originally manufactured without a separate loop intake air cooling system, these standards are 8.0 and 1.00 for NO_X and HC, respectively.

(i) Remanufactured Locomotive Standards

We have previously regulated remanufactured locomotive engines under section 213(a)(5) of the Clean Air Act as new locomotive engines and we propose to continue to do so in this rule. Under our proposed standards, the existing fleet of locomotives that are currently subject to Tier 0 standards (our current remanufactured engine standards) would need to comply with a new Tier 0 PM standard of 0.22 g/bhp-hr (0.30 g/kW-hr). They would also need to comply with a new Tier 0 NO_X line-haul standard of 7.4 g/bhp-hr (9.9 g/kW-hr), except that Tier 0 locomotives that were built without a separate coolant loop for intake air (that is, using engine coolant for this purpose) would be subject to a less stringent Tier 0 NO_X standard of 8.0 g/bhp-hr (10.7 g/kW-hr) on the line-haul cycle.

These non-separate loop locomotives were generally built before 1993, though some are of more recent model years. Because of their age, many of them are likely to be retired and not remanufactured again, and many are entering lower use applications within the railroad industry. Correspondingly, their contribution to the locomotive emissions inventory is diminishing. Our analysis indicates that it is feasible to obtain a NO_X reduction for them on the order of 15 percent, from the current Tier 0 line-haul NO_X standard of 9.5 g/bhp-hr to the proposed 8.0 g/bhp-hr standard. However, we expect that any further reduction would require the addition of a separate intake air coolant loop, which provides more efficient cooling and therefore lower NO_X. This would be a fairly expensive hardware change and could have sizeable impacts on the locomotive platform layout and weight constraints. We are aware that this group of older, non-separate loop Tier 0 locomotives is fairly diverse, and that achieving even a 8.0 g/bhp-hr NO_X standard along with a stringent Tier 0 PM standard will be more difficult on some of these models than on others. We request comment on whether there are any locomotive families within this group for which meeting the proposed 8.0 g/bhp-hr standard may not be feasible, especially considering the cost of doing so and the age of the locomotives involved. Commenters should discuss feasibility and projected costs, and should also discuss the extent to which this concern is mitigated by the prospect that these locomotives will be retired rather than remanufactured anyway, or will be moved to lower usage switcher or small railroad applications, and therefore will be less likely to be remanufactured under the new Tier 0 standards.

We propose to apply the new Tier 0 standards (and corresponding switch-cycle standards) when the locomotive is remanufactured on or after January 1, 2008. However, if no certified emissions

[100] Consistent with past EPA rulemakings, our regulations generally express standards, power ratings, and other quantities in international SI (metric) units—kW, g/kW-hr, etc. One exception to this is Part 92 (locomotives), which for historical reasons expresses standards in g/bhp-hr. This proposal retains these established norms for locomotive and marine engine regulations. However, in this preamble we have chosen to express standards in units of g/bhp-hr, to provide a common frame of reference. Where helpful for clarity, we have also included g/kW-hr standards in parentheses. In any compliance questions that might arise from differences in these due to, for example, rounding conventions, the regulations themselves establish the applicable requirements.

control system exists for the locomotive before October 31, 2007, these standards will instead apply 3 months after such a system is certified, but no later than January 1, 2010. This would provide an incentive to develop and certify systems complying with these standards as early as possible, but allow the railroad to avoid having to delay planned rebuilds if a certified system is not available when the program is expected to begin in 2008. We also propose to include a reasonable cost provision, described in section IV.B, to protect against the unlikely event that the only certified systems made available when this program starts in 2008 will be exorbitantly priced.

Although under this approach, certification of new remanufacture systems before 2010 is voluntary, we believe that developers would 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 higher volume 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.

We are also proposing to set new more stringent standards for locomotives currently subject to Tier 1 and Tier 2 standards, to apply at the point of next remanufacture after the proposed implementation dates. Tier 1 locomotives would need to comply with the same new PM standard of 0.22 g/bhp-hr (0.30 g/kW-hr) required of Tier 0 locomotives (they are already subject to the 7.4 g/bhp-hr (9.9 g/kW-hr) NO_X standard). This in essence expands the model years covered by the Tier 1 standards from 2002–2004 to roughly 1993–2004, greatly increasing the size of the Tier 1 fleet while at the same time reducing emissions from this broadened fleet. Under the proposal, Tier 2 locomotives on the rails today or built prior to the start of Tier 3 would need to comply with a new Tier 2 PM line-haul standard of 0.10 g/bhp-hr (0.13 g/kW-hr). Because this is equal to the Tier 3 standard, it essentially adds the entire fleet of Tier 2 locomotives to the clean Tier 3 category over a period of just a few years, as they go through a remanufacture cycle.

The implementation schedule for the new Tier 1 standard would be the same as the 2008/2010 schedule discussed above for Tier 0 locomotives. Meeting the new Tier 2 standard would be required somewhat later, in 2013, reflecting the additional redesign challenge involved in meeting this more stringent standard, and the need to spread the redesign and certification workload faced by the manufacturers overall. However, as for Tier 0 and Tier 1 locomotives, we are proposing that if a certified Tier 2 remanufacture system meeting the new standard is available early, anytime after January 1, 2008, this system would be required to be used, starting 3 months after it is certified, subject to a reasonable cost provision as with early Tier 0 and Tier 1 remanufactures. We request comment on whether use of certified Tier 2 remanufacture systems should be required on the same schedule as Tier 3, that is, starting in 2012, given that we expect the upgraded Tier 2 designs to be very similar to newly-built Tier 3 designs, and the likelihood that substantial numbers of Tier 2 locomotives may be approaching their first scheduled remanufacture by 2012.

These proposed remanufactured locomotive standards represent PM reductions of about 50 percent, and (for Tier 0 locomotives with separate loop intake air cooling) NO_X reductions of about 20 percent. Significantly, these reductions would be substantial in the early years. This would be important to State Implementation Plans (SIPs) being developed to achieve attainment with national ambient air quality standards (NAAQS), owing to the 2008 start date and relatively rapid remanufacture schedule (roughly every 7 years, though it varies by locomotive model and age).

(ii) Newly-Built Locomotive Standards

We are requesting comment on whether additional NO_X emission reductions would be feasible and appropriate for Tier 3 locomotives in the 2012 timeframe. There are proven diesel technologies not currently employed in Tier 2 locomotives that can significantly reduce NO_X emissions, most notably cooled exhaust gas recirculation (EGR). Although employed successfully in the heavy-duty highway diesel sector since 2003, a considerable development and redesign program would need to be undertaken by locomotive manufacturers to apply cooled EGR to Tier 3 locomotives. This development work would not be limited to the engine but would include substantial changes to the locomotive chassis to handle the higher levels of heat rejection (engine cooling demand) required for cooled EGR. We project that it would require a similar degree of engineering time and effort to develop a cooled EGR solution for locomotive diesel engines as it will to develop the urea SCR based solution upon which we are basing our proposed Tier 4 NO_X standard. Therefore, we have not considered the application of cooled EGR in setting our proposed Tier 3 standard.

It may be possible to reoptimize existing Tier 2 NO_X control technologies, most notably injection timing retard (used to some degree on all diesel locomotives), to achieve a more modest NO_X reduction of 10 to 20 percent from the current Tier 2 levels. In fact, a version of General Electric's Tier 2 locomotive is available today that achieves such NO_X reductions for special applications such as the California South Coast Locomotive Fleet Average Emissions Program. In general, the use of injection timing retard to control NO_X emissions comes with a tradeoff against fuel economy, durability and increased maintenance depending upon the degree to which injection timing retard is applied. Experience with on-highway trucks suggests that a 20 percent NO_X reduction based solely on injection timing retard could result in an increase of fuel consumption as much as 5 percent. We request comment on the feasibility and other impacts of applying technologies such as these in the Tier 3 timeframe. We also request comment on the extent to which any workload-based impediments to applying such technologies in Tier 3 could be addressed via balancing it by obtaining less than the proposed NO_X reductions from remanufactured locomotives. We believe that a Tier 3 NO_X standard below 5 g/bhp-hr might be achievable with a limited impact if additional engineering resources were invested to optimize such a system for general line-haul application. We encourage commenters supporting lower NO_X levels for Tier 3 locomotives to address whether some tradeoff in engineering development (or emissions averaging) between new Tier 3 locomotives and remanufactured Tier 0 locomotives might be appropriate. For example, would it be appropriate to set a Tier 3 NO_X standard at 4.5 g/bhp-hr, but relax the NO_X standard for later model Tier 0 locomotives to 8.0 g/bhp-hr instead of 7.4 g/bhp-hr?

We are proposing that a manufacturer may defer meeting the Tier 4 NO_X standard until 2017. However, we expect that each manufacturer will undertake a single comprehensive redesign program for Tier 4, using this allowed deferral to work through any implementation and technology prove-out issues that might arise with advanced NO_X control technology, but relying on the same basic locomotive platform and overall emission control space allocations for all Tier 4 product years. For this reason we are proposing

that locomotives certified under Tier 4 in 2015 and 2016 without Tier 4 NO_X control systems have this system added when they undergo their first remanufacture, and be subject to the Tier 4 NO_X standard thereafter.

We are proposing that, starting in Tier 4, line-haul locomotives will not be required to meet standards on the switch cycle. Line-haul locomotives were originally made subject to switch cycle standards to help ensure robust control in use and in recognition of the fact that many line haul locomotives have in the past been used for switcher service later in life. As explained in section III.C(1)(b), the latter is of less concern today. Also, we expect that the aftertreatment technologies used in Tier 4 will provide effective control over a broad range of operation, thus lessening the need for a switch cycle to ensure robust control. We propose 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 (Table III–1) in the same proportion that the original Tier 0 through Tier 2 switch cycle standards are above their corresponding line-haul cycle standards. See section III.C(1)(b) for details.

(b) Switch Locomotives

Our 1998 locomotive rule included some provisions aimed at addressing emissions from switch locomotives. We adopted a set of switcher standards and a switcher test cycle. This cycle made use of the same notch-by-notch test data as the line haul cycle, but reweighted these notch-specific emission results to correspond to typical switcher duty. In addition to controlling emissions from dedicated switchers, we viewed this cycle as adding robustness to the line-haul emissions control program. For this reason, and because aging line-haul locomotives have often in the past found utility as switchers, we subjected all regulated locomotives to the switch cycle. We also allowed for dedicated switch locomotives, defined as locomotives designed or used primarily for short distance operation and using an engine with rated power at 2300 hp (1700 kW) or less, to be optionally exempted from the line-haul cycle standards.

There have been a number of changes in the rail industry since our 1998 rulemaking that are relevant to switchers. First, locomotives marketed for line-haul service have continued to increase in size, to a point where today's 4000+hp (3000+kW) line-haul locomotives are too large for practical use in switching service. Second, there have been practically no U.S. sales of newly-built switchers by the primary locomotive builders, EMD and GE, for many years. Third, smaller builders have entered this market, selling new or refurbished locomotives with one to three newly-built diesel engines originally designed for the nonroad equipment market, but recertified under Part 92, or sold under the 40 CFR 92.907 provisions that allow limited sales of locomotives using nonroad-certified engines. Fourth, although this new generation of switchers has shown great promise, their purchase prices on the order of a million dollars or more, compared to the relatively low cost of maintaining old switchers, have limited sales primarily for use in California and Texas where state government subsidies are available.

All of these factors together have produced a situation in which the current fleet of old switchers, including many pre-1973 locomotives not subject to any emissions standards, is maintained and kept in service. Because they have relatively light duty cycles and generally operate very close to repair facilities, they can be maintained almost indefinitely. Though many have poor fuel economy, this alone is not of great enough concern to the railroads to warrant replacing them because even very busy switchers consume a fraction of the fuel used by long-distance line-haul locomotives.

At the same time, these older switch locomotives have come under increasing public scrutiny. When operated in railyards located in urban neighborhoods, they have often become the focus of complaints from citizens groups about noise, smoke, and other emissions, and state and local governments have begun to place a higher priority on reducing their emissions.[101]

We note that switchers (or any other locomotives) that have not been remanufactured to EPA standards are not considered covered by the full preemption of state and local emission standards in section 209(e)(1) of the Clean Air Act, which applies to standards relating to the control of emissions from new locomotive engines. Similarly, the preemption that does apply for locomotives that are certified to EPA standards does not generally apply for any locomotive that has significantly exceeded its useful life. The provisions of section 209(e)(2) pertaining to other nonroad engines would apply for such engines, as well as other engines used in locomotives excluded from the definition of ''new.'' Such engines may be subject to regulation by California and other states.

As discussed in section II.B, we too are concerned that emissions from locomotives in urban railyards, many of which are switch locomotives, are causing substantial adverse health effects. Some railroads have been attempting to address these concerns, adopting voluntary idling restrictions and, where government subsidies are available, replacing older switchers with cleaner, quieter new-generation switchers. In light of these trends and market realities, we believe it is appropriate to propose standards and other provisions specific to switch locomotives, aimed at obtaining substantial overall emission reductions from this important fleet of locomotives.

We are proposing Tier 3 and 4 emission standards for newly-built switch locomotives, shown in Table III–2, based on the capability of the Tier 3 and 4 nonroad engines that will be available to power switch locomotives in the future under our clean nonroad diesel program. We propose to retain the existing switch locomotive test cycle upon which compliance with these standards would be measured, but not to apply the line-haul standards and cycle to Tier 3 and 4 switchers, in light of the divergence that has occurred in the design of newly-built switch and line-haul locomotives. We also propose that Tier 0, 1, and 2 switch locomotives certified only on the switch cycle (as allowed in our Part 92 regulations), be subject to a set of remanufactured locomotive standards equivalent to our proposed program for remanufactured line-haul locomotives, with proportional levels of emission reductions. These standards are also the switch cycle standards for the Tier 3 and earlier line-haul locomotives that are subject to compliance requirements on the switch cycle. In the case of the Tier 3 line-haul locomotives, we are proposing that the Tier 2 switch cycle standards be applied rather than the Tier 3 standards for dedicated switchers because the latter are based on nonroad engines.

[101] See, for example, letter from Catherine Witherspoon, Executive Director of the California Air Resources Board, to EPA Administrator Stephen Johnson, September 7, 2006.

TABLE III–2.—PROPOSED EMISSION STANDARDS FOR SWITCH LOCOMOTIVES

[g/bhp-hr]

Switch locomotive standards apply to:	PM	NO_X	HC	Date
Remanufactured Tier 0	0.26	11.8	2.10	2008 as available, 2010 required.
Remanufactured Tier 1	0.26	11.0	1.20	2008 as available, 2010 required.
Remanufactured Tier 2	0.13	8.1	0.60	2008 as available, 2013 required.
Tier 3	0.10	5.0	0.60	2011.
Tier 4	0.03	1.3	0.14	2015.

Standards and implementation dates for large nonroad engines vary by horsepower and by whether or not the engine is designed for portable electric power generation (gensets), as shown in Table III–3. This is significant for the switch locomotive program because it has been the practice for switch locomotive builders to use a variety of nonroad engine configurations. For example, a manufacturer building a 2100 hp switcher using nonroad engines in 2011 could team three 700 hp engines designed to the nonroad Tier 4 standards of 0.01 g/bhp-hr PM and 0.30 g/bhp-hr NO_X, or two 1050 hp engines at 0.075/2.6 g/bhp-hr PM/NO_X, or a single 2100 hp engine at 0.075/0.50 or 0.075/2.6 g/bhp-hr PM/NO_X, depending on if the engine is a genset engine or not.

As discussed in the nonroad Tier 4 rulemaking in which we set these standards, we believe that the standards set for all of these nonroad engines achieve the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available, with appropriate consideration to factors listed in the Clean Air Act. There are reasons for a switcher manufacturer to choose one configuration of engines over another related to function, packaging, reliability and other factors. We believe that limiting a manufacturer's choice to only the cleanest configuration in any given year would hinder optimum designs and thereby would tend to work against our goal of encouraging the turnover of the current fleet of old switchers. Furthermore, we note that there is no single large engine category that consistently has the most stringent nonroad Tier 4 PM and NO_X standards from year to year. We also note that, because State subsidies for the purchase of new switch locomotives have been clearly tied to their lower emissions, and also because the use of lower-emitting engines can generate valuable ABT credits, there is likely to be continuing pressure driving the industry toward the cleanest nonroad engines available in whatever new switcher market does develop.

TABLE III–3.—LARGE NONROAD ENGINE TIER 4 STANDARDS

[g/bhp-hr]

Rated power	PM	NO_X	Model year
≦750 hp	0.01	[a] 3.0 (NO_X+NMHC)	2011
	0.01	0.30	2014
750–1200 hp	0.075	2.6	2011
	0.02	[b] 0.50	2015
>1200 hp	0.075	[b] 0.50	2011
	0.02	[b] 0.50	2015

[a] 0.30 NO_X for 50% of sales in 2011–2013, or alternatively 1.5 g NO_X for 100% of sales.
[b] 2.6 for non-genset engines—setting the long-term Tier 4 standard for these engines was deferred in the Nonroad Tier 4 Rule.

There is one exception to this approach that we consider necessary. In the Tier 4 nonroad engine rule, we deferred setting a final Tier 4 NO_X standard for non-genset engines over 750 hp. These are typically used in large bulldozers and mine haul trucks. This was done in order to allow additional time to evaluate the technical issues involved in adapting NO_X control technology to these applications and engines (69 FR 38979, June 29, 2004). We believe it is appropriate to propose a Tier 4 NO_X standard for switch locomotives in 2015 based on SCR technology, as we are proposing for line-haul locomotives in 2017. We believe this to be feasible because the switch locomotive designer will have a variety of nonroad engine choices equipped with SCR available in 2015, such as multiple <750 hp engines or larger genset engines, an opportunity that is not available to large nonroad machine designers due to functional and packaging constraints. To set a non-SCR based standard for switch locomotives indefinitely, or to wait to do so after we set the final Tier 4 NO_X standard for mobile machine engines above 750 hp, would create significant uncertainty for the manufacturers and railroads, and would be contrary to our intent to reduce locomotive emissions in switchyards. We note too that SCR introduction in the fairly limited fleet of newly-built switchers likely to exist in 2015 and 2016 provides an opportunity for railroads to become familiar with urea handling and SCR operation in accessible switchyards, before large scale introduction in the far-ranging line-haul fleet.

Although we are factoring the current practice of building new switchers powered by nonroad-certified engines into the design of the program, it is not our intent to discourage the development and sale of traditional medium-speed engine switch locomotives. We have evaluated the proposed Tier 3 and 4 standards in this context and have concluded that they will be feasible for switchers using medium-speed engines as well as higher-speed nonroad engines.

Because in today's market the certifying switch locomotive manufacturer is typically a purchaser of nonroad engines and not involved in their design, we see the value in providing a streamlined option to help in the early implementation of this program. As described in Section IV, we are proposing that, for a program start-

up period sufficient to encourage the turnover of the existing switcher fleet to the new cleaner engines, switch locomotives may use nonroad-certified engines without need for certification under the locomotive program. Because of large differences in how the locomotive and nonroad programs operate in such areas as useful life and in-use testing, we do not believe it appropriate to allow locomotive ABT credits to be generated or used by locomotives sold under this option, though of course this would not preclude nonroad engine ABT credits under that program. For the same reasons, we also think it makes sense to eventually sunset this option after it has served its purpose of encouraging the early introduction of new low-emitting switch locomotives. We propose that the streamlined path be available for 10 years, through 2017, and ask for comment on whether a shorter or longer interval is appropriate, taking into account the turnover incentive provisions described below. We are proposing other compliance and ABT provisions relevant to switch locomotives as discussed in section IV.B(1), (2), (3), and (9).

Finally, we are proposing a rewording of the definition of a switch locomotive to make clear that it is the total switch locomotive power rating that must be below 2300 hp to qualify, not the engine power rating, and to drop the unnecessary stipulation that it be designed or used primarily for short distance operation. This clears up the ambiguity in the current definition over multi-engine switchers.

(c) Reduction of Locomotive Idling Emissions

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 railyards, as railcars and locomotives are transferred to build up trains. Many of these railyards are in urban neighborhoods, close to where people live, work, and go to school.

Short periods of idling are sometimes unavoidable, such as while waiting on a siding for another train to pass. Longer periods of idling operation may be necessary to run accessories such as cab heaters/air conditioners or to keep engine coolant (generally water without anti-freeze to maximize cooling efficiency) from freezing and damaging the engine if an auxiliary source of heat or power is not installed on the locomotive. Locomotive idling may also occur due to engineer habits of not shutting down the engine, and the associated difficulty in determining just when the engine can be safely shut down and for how long.

Automatic engine stop/start (AESS) systems have been developed to start or stop a locomotive engine based on parameters such as: ambient temperature, battery charge, water and oil temperature, and brake system pressure. AESS systems have been proven to reliably and safely reduce unnecessary idling. Typically they will shutdown the locomotive after a specified period of idling (typically 15–30 minutes) as long as the parameters are all within their required specifications. If one of the aforementioned parameters goes out of its specified range, the AESS will restart the locomotive and allow it to idle until the parameters have returned to their required limits. Although developed primarily to save fuel, AESS systems also reduce idling emissions and noise by reducing idling time. Any emissions spike from engine startup has been found to be minor, and thus idle emissions are reduced in proportion to idling time eliminated. It is expected that overall PM and NO_X idling emission reductions of up to 50 percent can be achieved through the use of AESS.

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. There are two main manufacturers of APUs, EcoTrans which manufacturers the K9 APU, and Kim Hotstart which manufactures the Diesel Driven Heating System (DDHS). 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 to run necessary 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. If an APU does not have the capability of an AESS built in, it may need to be installed in conjunction with one in order to receive the full complement of idle reductions that the combination of technologies can provide. The APUs are nonroad engines compliant with EPA or State of California nonroad engine standards, and emit at much lower levels than an idling locomotive.

Installation of an APU today costs approximately $25,000 to $35,000; while an AESS can cost anywhere from $7,500 to $15,000.[102] The costs vary depending on the model and configuration of the locomotive on which the equipment is being installed, and would likely be substantially lower if incorporated into the design of a newly-built locomotive. The amount of idle reduction each system can provide is also dependent on a number of variables, such as what the function of the locomotive is (e.g. a switcher or a line-haul), where it operates (i.e. geographical area), and what its operating characteristics are (e.g. number of hours per day it operates). The duty cycles in 40 CFR 92.132, based on real world data available at the time they were adopted in 1998, indicate a line haul locomotive idles nearly 40% of its operating time, and a switcher locomotive idles nearly 60% of its operating time. This idling time can be further divided into low idle (when there is no load on the engine) and normal idle (when there is a load on the engine). Only low idle can be reduced by an AESS, while an APU can reduce normal idle (or idle in a higher notch such as notch 3 which can burn up to 11 gallons per hour). Another difference between the two types of idle is the fuel consumption rate which is less at low idle than normal idle (2.4–3.6 gallons per hour vs. 2.9–5.4 gallons per hour, based on Tier 2 certification data).

Although there is a gradual trend in the railroad industry toward wider use of these types of idle control devices, we believe it is important for ensuring air quality benefits to propose that idle controls be required as part of a certified emission control system. We are proposing that at least an AESS system be required on all new Tier 3 and Tier 4 locomotives, and also installed on all existing locomotives that are subject to the new remanufactured engine standards, at the point of first remanufacture under the new standards, unless the locomotive is already equipped with idle controls. Specifically, we are requiring that 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

[102] Jessica Montañez and Matthew Mahler, ''Reducing Idling Locomotives Emissions'', NC Department of Environment and Natural Resources, DAQ *http://daq.state.nc.us/planning/locoindex.shtml.*

causing engine damage or other serious problems. The system must prevent the locomotive engine from being restarted to resume extended idling unless one of the following conditions necessitates such idling: to prevent engine damage such as damage caused by coolant freezing, to maintain air brake pressure, to perform necessary maintenance, or to otherwise comply with applicable government regulations. EPA approval of alternative criteria could be requested provided comparable idle emissions reduction is achieved.

As described in the RIA, it is widely accepted that for most locomotives, the fuel savings that result in the first several years after installation of an AESS system will more than 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 the major railroads to retrofit many of their locomotives with such controls. However, as is common with pollution, market forces generally do not account for the external social costs of the idling emissions. This proposal addresses those locomotives for which the railroads determine that the fuel savings are insufficient to justify the cost of the retrofit. We believe that applying AESS to these locomotives is appropriate when one also considers the very significant emissions reductions that would result, as well as the longer term fuel savings. We request comment on the need for this requirement. We also request comment regarding the reasons why a railroad might choose not to apply AESS absent this provision. Are there costs for AESS and retrofits that are higher than our analysis would suggest? Are there other reasons that would lead a railroad to not adopt AESS universally?

Even though we are proposing to require only AESS systems, we encourage the additional use of APUs by providing in our proposed test regulations a way for the manufacturer to appropriately account for the emission benefits of greater idle reduction. See Section IV.B(8) for further discussion. We are not proposing that APUs must 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 they do involve some inherent design and operational complexities that could not be justified without commensurate benefits. We are however asking for comment on requiring that some subset of new locomotives be equipped with APUs where feasible and beneficial. We are also asking for comments on whether to adopt a regulatory provision that would exempt a railroad from AESS and/or APU requirements if it demonstrated that it was achieving an equal or greater degree of idle reduction using some other method.

(d) Load Control in a Locomotive Consist

A locomotive consist is the linking of two or more locomotives in a train, typically where the lead locomotive has control over the power and dynamic brake settings on the trailing locomotives. For situations where locomotives are operated in a consist, EPA is requesting comment on how the engine loads could be managed in a way which reduces the combined emissions of the consist, and in what way our program can be set up to encourage such reductions. Consists are commonly used in long trains to achieve the power and traction levels necessary to move, stop, and control the train. The trailing locomotives can be directly-coupled to the lead locomotive, or, they may be placed anywhere along the train and controlled remotely by the lead. The load settings of the individual locomotives that make up a consist are not always equal—for example, if the train has crested a hill, the leading locomotive(s) could be operating under dynamic brake (to control the speed of the train) while the trailing locomotives could be producing propulsion power (to reduce strain on the couplers). Depending on the load, track, terrain, and weather conditions, it is conceivable that the engine loads of a consist could be managed to provide the lowest fuel consumption for the power/traction needed. For example, the train power can be distributed so that the lead engine is operating at its optimum brake-specific fuel consumption point while trailing engines are operated at reduced power settings and/or shut down. The capability to manage and distribute engine power in a locomotive consist is available on the market today.

We have been made aware that it may be possible to optimize the configuration of locomotives in a consist for emissions performance without compromising other key goals such as fuel economy and safety. Our proposed regulations do not explicitly take such possible optimization into account. However, if commenters believe that significant emission reductions can be attained by controlling the engine loads in a consist (beyond those attained by the current practice of operating the consist to achieve the lowest fuel consumption rate), we would solicit their views on how to calculate the emissions reduction and on how the in-use operation of the consist could be logged and reported. For example, it may be appropriate to allow a manufacturer to use alternative notch weightings tailored to operation in an emissions-optimized consist in demonstrating compliance with the emissions standards, thus providing added flexibility in designing such locomotives to meet the standards.

(2) Marine Standards

We are also proposing new emissions standards for newly-built marine diesel engines with displacements under 30 liters per cylinder, including those used in commercial, recreational, and auxiliary power applications. As for locomotives, our ANPRM described a one-step marine diesel program that would bring about the introduction of high-efficiency exhaust aftertreatment in this sector. Just as for locomotives, our analyses of the technical issues related to the application of aftertreatment technologies to marine engines, informed by our many discussions with stakeholders, have resulted in a proposal for new standards in multiple steps, focused especially on the engines with the greatest potential for large PM and NO_X emission reductions. Our technical analyses are summarized in section III.D and are detailed in the draft RIA.

In contrast to the locomotive sector, the marine diesel sector covered by this rule is quite diverse. Commercial propulsion applications range from small fishing boats to Great Lakes freighters. Recreational propulsion applications range from sailboats to super-yachts. Similarly, auxiliary power applications range from small gensets, to generators used on barges, to large power-generating units used on ocean-going vessels. Many of the propulsion engines are used to propel high-speed planing boats, both commercial and recreational, where low weight and high power density are critically important. Some engines are situated in crowded engine compartments accessed through a hatch in the deck, while others occupy relatively spacious engine rooms. All of them share a high premium on reliability, considering the potentially serious ramifications of engine failure while underway.

The resulting diversity in engine design characteristics is correspondingly large. Sizes range from a few horsepower to thousands of horsepower. Historically, we have categorized marine engines for standards-setting purposes based on

cylinder displacements: C1 engines of less than 5 liters/cylinder, C2 from 5 to 30 liters/cylinder, and Category 3 (C3) at greater than 30 liters/cylinder. (These C3 engines typically power ocean-crossing ships and burn residual fuel; we are not including such engines in this proposal). Our past standard-setting efforts have found it helpful to make further distinctions as well, considering small (less than 37 kW (50 hp)) engines and C1 recreational engines as separate categories.

Recreational engines typically power recreational vessels designed primarily for speed, and this imposes certain constraints on the type of engine they can use. For a marine vessel to reach high speeds, it is necessary to reduce the surface contact between the vessel and the water, and consequently these vessels typically operate in a planing mode. Planing imposes important design requirements, calling for low vessel weight and short periods of very high power— and thus prompting a need for high power density engines. The tradeoff is less durability, and recreational engines are correspondingly warranted for fewer hours of operation than commercial marine engines. These special characteristics are represented in EPA duty-cycle and useful life provisions for recreational marine engines.

Unlike the locomotive sector, the vast majority of marine diesel engines are derivatives of land-based nonroad diesel engines. Marine diesel engine sales are significantly lower (by 10 or even 100 fold) than the sales of the land-based nonroad engines from which they are derived. For this reason, changes to marine engine technology typically follow the changes made to the parent nonroad engine. For example, it may be economically infeasible to develop and introduce a new fuel system for a marine diesel engine with sales of 100 units annually, while being desirable to do so for a land-based nonroad diesel engine with sales of 10,000 or more units annually. Further, having developed a new technology for land-based diesel engines, it is often cheaper to simply apply the new technology to the marine diesel engine rather than continuing to carry a second set of engine parts within a manufacturing system for a marginal number of additional sales. Recognizing this reality, our proposed marine standards are phased in to follow the introduction of similar engine technology standards from our Nonroad Tier 4 emissions program. In most cases, the corresponding marine diesel standards will follow the Nonroad Tier 4 standards by one to two years.

We are proposing to retain the 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:

(1) We are proposing to move 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 (in terms of revolutions per minute (rpm)), with their correspondingly different emissions characteristics.

(2) We also propose to revise the per-cylinder displacement cutpoints within Category 1 to better refine the application of standards.

(3) An additional differentiation is proposed 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). In addition to recreational vessels, the high power-density engines are used in some commercial vessels, including certain kinds of crew boats, research vessels, and fishing vessels. Unlike most commercial vessels, these vessels are built for higher speed, which allows them to reach research fields, oil platforms, or fishing beds more quickly. This proposal addresses the technical challenges related to reducing emissions from engines with high power density.

(4) In the past, we did not formally include marine diesels under 37 kW (50 hp) in Category 1, but regulated them separately as part of the nonroad engine program, referring to them elsewhere as ''small marine engines''. They are typically marinized land-based nonroad diesel engines. Because we are now proposing to include these engines in the current marine diesel rulemaking, this distinction is no longer needed and so we are including these engines in Category 1 for Tier 3 and Tier 4 standards.

(5) Finally, we would further group engines by total rated power, especially in regard 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 the proposed standards for them.

Although this carefully targeted approach to standards-setting results in a somewhat complicated array of emissions standards, we believe it is justified because it maximizes overall emission reductions by ensuring the most stringent standards feasible for a given group of marine engines, and it also helps engine and vessel designers to implement the program in the most cost effective manner. The proposed standards and implementation schedules are shown on Tables III–4–7.

Briefly summarized, the proposed marine diesel standards include stringent engine-based Tier 3 standards, phasing in over 2009–2014. In addition, the proposed standards include aftertreatment-based Tier 4 standards for engines at or above 600 kW (800 hp), phasing in over 2014–2017, except that Tier 4 would not apply to recreational engines under 2000 kW (2670 hp). For engines of power ratings not included in the Tier 3 and Tier 4 tables, the previous tier of standards (Tier 2 or Tier 3, respectively) continues to apply.

TABLE III–4.—PROPOSED TIER 3 STANDARDS FOR MARINE DIESEL C1 COMMERCIAL STANDARD POWER DENSITY

Rated kW	L/cylinder	PM g/bhp-hr	NO_X+HC g/bhp-hr	Model year
<19 kW	<0.9	0.30	5.6	2009
19–<75 kW	[a] <0.9	0.22	5.6	2009
		[b] 0.22	[b] 3.5	2014
75–3700 kW	<0.9	0.10	4.0	2012
	0.9–<1.2	0.09	4.0	2013
	1.2–<2.5	[c] 0.08	4.2	2014
	2.5–<3.5	[c] 0.08	4.2	2013
	3.5–<7.0	[c] 0.08	4.3	2012

[a] <75 kW engines at or above 0.9 L/cylinder are subject to the corresponding 75–3700 kW standards.
[b] Option: 0.15 PM/4.3 NO_X in 2014.

[c] This standard level drops to 0.07 in 2018 for <600 kW engines.

TABLE III–5.—PROPOSED TIER 3 STANDARDS FOR MARINE DIESEL C1 RECREATIONAL AND COMMERCIAL HIGH POWER DENSITY

Rated kW	L/cylinder	PM g/bhp-hr	NO_X+HC g/bhp-hr	Model year
<19 kW	<0.9	0.30	5.6	2009
19–<75 kW	[a] <0.9	0.22	5.6	2009
		[b] 0.22	[b] 3.5	2014
	<0.9	0.11	4.3	2012
75—3700 kW	0.9–<1.2	0.10	4.3	2013
	1.2–<2.5	0.09	4.3	2014
	2.5–<3.5	0.09	4.3	2013
	3.5–<7.0	0.09	4.0	2012

[a] <75 kW engines at or above 0.9 L/cylinder are subject to the corresponding 75–3700 kW standards.
[b] Option: 0.15 PM/4.3 NO_X+HC in 2014.

TABLE III–6.—PROPOSED TIER 3 STANDARDS FOR MARINE DIESEL C2

Rated kW	L/cylinder	PM g/bhp-hr	NO_X+HC g/bhp-hr	Model year
=<3700 kW	7–<15	0.10	4.6	2013
	15–<20	[a] 0.20	[a] 6.5	2014
	20–<25	0.20	7.3	2014
	25–<30	0.20	8.2	2014

[a] For engines at or below 3300 kW in this group, the PM/NO_X+HC Tier 3 standards are 0.25/5.2.

TABLE III–7.—PROPOSED TIER 4 STANDARDS FOR MARINE DIESEL C1 AND C2

Rated kW	PM g/bhp-hr	NO_X g/bhp-hr	HC g/bhp-hr	Model year
>3700 kW	[a] 0.09	1.3	0.14	2014
	0.04	1.3	0.14	[b] 2016
1400–3700 kW	0.03	1.3	0.14	[c] 2016
600–<1400 kW	0.03	1.3	0.14	[b] 2017

[a] This standard is 0.19 for engines with 15–30 liter/cylinder displacement.
[b] Optional compliance start dates are proposed within these model years; see discussion below.
[c] Option for engines with 7–15 liter/cylinder displacement: Tier 4 PM and HC in 2015 and Tier 4 NO_X in 2017.

The proposed Tier 3 standards for engines with rated 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, model year 2009, providing substantial early benefits to the program. However, some of the less than 75 kW nonroad engines are also subject to aftertreatment-based Tier 4 nonroad standards, and our proposal would not carry these over into the marine sector, due to vessel design and operational constraints discussed in Section III.D. Because of the preponderance of both direct- and indirect-injection diesel engines in the 19 to 75 kW (25–100 hp) engine market today, we are proposing 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 would take effect in 2014.

With important exceptions, we propose that marine diesel engines at or above 75 kW (100 hp) be subject to new emissions standards in two steps, Tier 3 and Tier 4. The proposed Tier 3 standards are based on the engine-out emission reduction potential of the nonroad Tier 4 diesel engines which will be introduced beginning in 2011. Tier 3 standards for C1 engines would generally take effect in 2012, though for some engines, they would start in 2013 or 2014. We are not basing our proposed marine Tier 3 emission standards on the existing nonroad Tier 3 emission standards for two reasons. First, the nonroad Tier 3 engines will be replaced beginning in 2011 with nonroad Tier 4 engines, and given the derivative nature of marine diesel manufacturing, we believe it is more appropriate to use those Tier 4 engine capabilities as the basis for the proposed marine standards. Second, the advanced fuel and combustion systems that we expect these Tier 4 nonroad engines to apply will allow approximately a 50 percent reduction in PM when compared to the reduction potential of the nonroad Tier 3 engines. The proposed Tier 3 standards levels would vary slightly, from 0.08 to 0.11 g/bhp-hr (0.11 to 0.15 g/kW-hr) for PM and from 4.0 to 4.3 g/bhp-hr (5.4 to 5.8 g/kW-hr) for NO_X+HC. Tier 3 standards for C2 engines would take effect in 2013 or 2014, depending on engine displacement, and standards levels would also vary, from 0.10 to 0.25 g/bhp-hr (0.14 to 0.34 g/kW-hr) for PM and 4.6 to 8.2 g/bhp-hr (6.2 to 11.0 g/kW-hr) for NO_X+HC. For the largest C2 engines, those above 3700 kW (4900 hp), the NO_X+HC standard would remain at the Tier 2 levels until Tier 4 begins for these engines in 2014.

We are proposing that high-efficiency aftertreatment-based Tier 4 standards be

applied to all commercial and auxiliary C1 and C2 engines over 600 kW (800 hp). These standards would 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 very large majority of marine diesel engine emissions. However, for engines at or below 600 kW, our technical analysis indicates that applying aftertreatment to them appears at this time not to be feasible. There are many reasons for this preliminary conclusion, varying in relative importance with engine size and application, but generally including insufficient space in below-deck engine compartments, catalyst packaging limitations for water-injected exhaust systems, poor catalyst performance in water-jacketed exhaust systems, and weight constraints in planing hull vessels.

Although with time and investment these issues may be resolvable for some under 600 kW (800 hp) applications, we are not, at this time, proposing Tier 4 standards for these engines. We may do so at some point in the future, such as after the successful prove-out of aftertreatment in the larger marine engines and in nonroad diesel engines have established a clearer technology path for extension to these engines. The approach taken in this proposal concentrates Tier 4 design and development efforts into the engine and vessel applications where they can do the most good.

We are confident that there is a subset of recreational vessels that are large enough to accommodate the added size of engines equipped with aftertreatment and that have appropriate maintenance procedures to ensure that the aftertreatment systems are appropriately maintained, for example, because they have a professional crew as opposed to being maintained by the owner. Based on a review of publicly available sales literature, we believe that at least the subset of recreational vessels with engines at rated power above 2000 kW (2760 hp) have the space and design layout conducive to aftertreatment and professional crews such that aftertreatment-based standards are feasible. Therefore, we are proposing to apply the Tier 4 standards to recreational marine diesel engines at rated power above 2000 kW, but we request comment on whether this is the appropriate threshold, along with any available information supporting the commenter's view. We also request comment on the issue of ULSD availability for these vessels in places that they may visit outside the United States. The rapid pace at which the industrial nations are shifting to ULSD has surpassed expectations. By no means does this ensure its availability in every port that might be frequented by large U.S. yachts, but it does give confidence that ULSD will be a global product, and certainly not confined to the coastal U.S. when Tier 4 yachts begin to appear in 2016. These large yachts are operated by professional crews who plan their itineraries ahead of time and are unlikely to put in for fuel without checking out the facility ahead of time, though quite possibly this may require somewhat more diligence in the early years of the program while the ULSD-needing fleet is ramping up in size. We also expect that, from the marinas' perspective, those frequented by these affluent visitors typically covet this business today, and will likely be reticent to leave ULSD off the list of offerings and amenities aimed at attracting them.

We are setting the Tier 4 standards for most engines above 600 kW (800 hp) at 0.03 g/bhp-hr (0.04 g/kW-hr) for PM, based on the use of PM filters, and 1.3 g/bhp-hr (1.8 g/kW-hr) for NO_X based on the use of urea SCR systems. The largest marine diesel engines, those above 3700 kW (4900 hp), would be subject to this SCR-based NO_X standard in 2014, along with a new engine-based PM standard. The Tier 4 PM standard for these engines would then start in 2016, with the addition of a filter-based 0.04 g/bhp-hr (0.06 g/kW-hr) standard. See section III.C(3) for a discussion of the Tier 4 HC standard.

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 proposing to allow 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 over 3700 kW (4900 hp) engines 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 proposed Tier 4 standards for locomotives and C2 diesel marine engines of comparable size are at the same numerical levels but differ somewhat in implementation schedule, with locomotive Tier 4 starting in 2015 for PM and 2017 for NO_X, and diesel marine Tier 4 for both PM and NO_X starting in 2016 (for engines in the 1400–3700 kW (1900–4900 hp) range). We consider these implementation schedules to be close enough to warrant our providing an option to meet either schedule for these marine engines, aimed at facilitating the development of engines for both markets, a common practice today. Because the locomotive Tier 4 phase-in is offset by only one year on either side of the marine Tier 4 2016 date, we do not expect this option to introduce major competitiveness issues between manufacturers who will be designing engines for both markets and those who will be designing for only the marine market. Furthermore, we see no reason to make this option available only those who make locomotive products, and are therefore proposing its availability to any manufacturer. Comment is requested on the need for the option, and on whether it should be limited to a particular subset of engines.

We note too that the Tier 3 marine standards for locomotive-like marine engines (that is, in the 7–15 liters/cylinder group) although having the same implementation date and numerical PM standard level as locomotive Tier 3, includes a 4.6 g/bhp-hr (6.1 g/kW-hr) NO_X+HC standard, compared to the 5.5 g/bhp-hr (7.3 g/kW-hr) NO_X standard for locomotive Tier 3. We request comment on whether some provision is needed to avoid the need for designing an engine primarily used in locomotives to meet the marine standard in order to have both ready for Tier 3, on whether sufficient ABT credits are likely to be available to deal with this, and on how to ensure we do not lose environmental benefits or inadvertently create competitiveness problems.

Some marine engine families include engines of the same basic design and emissions performance but achieving widely varying power ratings in engine models marketed through varying the number of cylinders, for example 8 to 20. These families can and do straddle power cutpoints, most notably at the 3700 kW (4900 hp) cutpoint, above which NO_X aftertreatment is expected to be needed in 2014 under our proposed standards, and at the 600 kW (800 hp) cutpoint for application of the proposed Tier 4 standards. We understand that manufacturers have concerns about additional design and certification work

needed for an engine family falling into two categories, especially with regard to the 600 and 3700 kW cutpoints which involve very different standards or start dates on either side of the cutpoint. We request comment on whether this concern is a serious one for the manufacturers, on suggestions for how to address it fairly without a loss of environmental benefit, and on whether our not addressing it would cause undesirable shifts in ratings offered in the market in order to stay on one side or the other of the cutpoints. One particular idea on which we request comment is allowing engines above 3700 kW an option to meet the Tier 4 PM requirement in 2014 and the Tier 4 NO_X requirement December 31, 2016, similar to the less than 3700 kW option discussed above.

We are concerned that applying the Tier 4 standards to engines above 600 kW (800 hp) may create an incentive for vessel builders who would normally use engines greater than 600 kW to instead use a larger number of smaller engines in a vessel to get the equivalent power output. Generally, the choice of engines for a vessel is directly a function of the work that vessel is intended to do. There may be cases, however, in which a vessel designer that might have used, for example, two 630 kW engines, chooses instead to use three 420 kW engines to avoid the Tier 4 standards. We have concerns about the environmental impacts of such a result. There also may be competitiveness concerns. Therefore, we are seeking comment on whether substitution of several smaller engines for one or two larger engines is likely to occur as a result of differential standards, and on what can be done to avoid it. For example, the Tier 4 standards could be applied to engines in multi-engine vessels with a total power above a certain threshold, such as 1100 kW (1500 hp). We recognize that this would result in a need to equip engines somewhat below 600 kW with aftertreatment devices, but we believe the feasibility concerns such as space constraints discussed above for engines below this cutpoint are diminished in multi-engine vessel designs. Alternatively, we could require vessel manufacturers seeking to use more than two engines to make a demonstration to us that they are not attempting to circumvent the aftertreatment-based requirements, for example by showing that the vessel design they are using traditionally incorporates three or more engines or that there is a specific design requirement that leads to the use of several smaller engines. A third option would be to base the Tier 4 standards on the size (or other characteristics) of the vessel, for vessels that have two or more propulsion engines. Commenters on this issue should address the feasibility and potential market impacts of these potential solutions and are asked to offer their own suggestions as well.

(3) Carbon Monoxide, Hydrocarbon, and Smoke Standards

We are not proposing 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, under our proposal, the Tier 3 and Tier 4 CO standards for all locomotives and marine diesel engines would remain at current Tier 2 levels and remanufactured Tier 0, 1 and 2 locomotives would 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 would 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 for CO, emissions of HC are typically relatively low in diesel engines today compared to non-diesel sources. However, in contrast to CO standards, the line-haul locomotive Tier 2 HC standard of 0.30 g/bhp-hr, though comparable to emissions 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 proposed more stringent Tier 3 NO_X+HC standards for marine diesel engines would likely provide some reduction in HC emissions, but we expect that the catalyzed exhaust aftertreatment devices used to meet the proposed Tier 4 locomotive and marine NO_X and PM standards would 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 proposing that the 0.14 g/hp-hr HC standard apply for locomotives and marine diesel engines in Tier 4 as well.

We are proposing that the existing form of the HC standards be retained through Tier 3. That is, locomotive and marine HC standards would remain in the form of total hydrocarbons (THC), except for gaseous- and alcohol-fueled engines (See 40 CFR § 92.8 and § 94.8). Consistent with this, the Tier 3 marine NO_X+HC standards are proposed to be based on THC, except that Tier 3 standards for less than 75 kW (100 hp) engines would be based on NMHC, consistent with their basis in the nonroad engine program. However, we propose that the Tier 4 HC standards be expressed as NMHC standards, consistent with aftertreatment-based standards adopted for highway and nonroad diesel engines.

As in the case of other diesel mobile sources, we believe that existing smoke standards are of diminishing usefulness as PM levels drop to very low levels, as engines with PM at these levels emit very little or no visible smoke. We are therefore proposing to drop the smoke standards for locomotives and marine engines for any engines certified to a PM family emission limit (FEL) or standard of 0.05 g/bhp-hr (0.07 g/kW-hr) or lower. This allows engines certified to Tier 4 PM or to an FEL slightly above Tier 4 to avoid unnecessary testing for smoke.

D. Are the Proposed Standards Feasible?

In this section we describe the feasibility of the various emissions control technologies we project would be used to meet the standards proposed today. Because of the range of engines and applications we cover in this proposal, and because of the technology that will be available to them for emissions control, our proposed standards span a range of emissions levels. We have identified a number of different emissions control technologies we would expect to be used to meet the proposed standards. These technologies range from incremental improvements to existing engine components for the proposed remanufacturing program to highly advanced catalytic exhaust treatment systems similar to those expected to be used to control emissions from heavy-duty diesel trucks and nonroad equipment.

In this section we first describe the feasibility of emissions control technologies we project would be used

to meet the standards we are proposing for existing engines that are remanufactured as new (i.e., Tier 0, Tier 1, Tier 2). We also describe how these same technologies would be applied to meet our proposed interim standards for new engines (i.e., Tier 3). We conclude this section with a discussion of catalytic exhaust treatment technologies projected to be used to meet our proposed Tier 4 standards. A more detailed analysis of these technologies and the issues related to their application to locomotive and marine diesel engines can be found in the draft Regulatory Impact Analysis (RIA).

(1) Emissions Control Technologies for Remanufactured Engine Standards and for New Tier 3 Engine Standards

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). We are proposing more stringent standards for these engines that apply whenever the locomotives are remanufactured as new. Our proposed remanufactured standards apply to locomotive engines that were originally built as early as 1973.

We project that incremental improvements to existing engine components would be feasible to meet our proposed locomotive remanufactured engine standards. In many cases, similar improvements to these have already been implemented on newly built locomotives to meet our current new locomotive standards. To meet the lower NO_X standard proposed for the Tier 0 locomotive remanufacturing program, we expect that improvements in fuel system design, engine calibration and optimization of existing after-cooling systems may be used to reduce NO_X from the current 9.5 g/bhp-hr Tier 0 standard to 7.4 g/bhp-hr. These are the same technologies used to meet the current Tier 1 NO_X emission standard of 7.4 g/bhp-hr. In essence, locomotive manufacturers will duplicate current Tier 1 locomotive NO_X emission solutions and adapt those same solutions to the portion of the existing Tier 0 fleet that can accommodate them. For older Tier 0 locomotives manufactured without separate-circuit cooling systems for intake air charge air cooling, reaching the Tier 1 NO_X level will not be possible. For these engines 8.0 g/hp-hr NO_X emissions represents the lowest achievable level.

To meet all of our proposed PM standards for the remanufacturing program and for the new locomotive Tier 3 interim standard, we expect that lubricating oil consumption controls will be implemented, along with the ultra low sulfur diesel fuel requirement for locomotive engines (which was previously finalized in our nonroad clean diesel rulemaking). Because of the significant fraction of lubricating oil present in PM from today's locomotives, we believe that existing low-oil-consumption piston ring-pack designs, when used in conjunction with improvements to closed crankcase ventilation systems, will provide significant, near-term PM reductions. These technologies can be applied to all locomotive engines, including those built as far back as 1973. And based upon our on-highway and nonroad clean diesel experience, we also believe that the use of ultra low sulfur diesel fuel in the locomotive sector will assist in meeting the Tier 2 remanufacturing and Tier 3 PM standards. We believe that the combination of reduced sulfate PM and improvement of oil and crankcase emission control to near Tier 3 nonroad or 2007 heavy-duty on-highway levels will provide an approximately 50% reduction in PM emissions.

We believe that some fraction of the remanufacturing systems can be developed and certified as early as 2008, so we are proposing the required usage of Tier 0, Tier 1 and Tier 2 emission control systems as soon as they are available starting in 2008. However, we estimate that it will take approximately 3 years to complete the development and certification process for all of the Tier 0 and Tier 1 emission control systems, so we have proposed full implementation of the Tier 0 and Tier 1 remanufactured engine standards 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 new engine changes necessary to meet the Tier 3 and remanufactured Tier 2 PM emission standards will require additional engine changes leading us to propose an implementation date for those engines of 2012 for Tier 3 engines and 2013 for remanufactured Tier 2 engines. These changes include further improvements to ring pack designs—especially for two-stroke engines, and the implementation of high efficiency crankcase ventilation systems. These technologies are described and illustrated in detail in our draft Regulatory Impact Analysis.

In the marine sector, emissions standards do not currently exist for engines that are remanufactured as new. In today's proposal, we are requesting comment on a marine diesel engine remanufacturing program that would apply to some of these marine engines whenever they are remanufactured as new (see section VII.A(2)). Because we are requesting comment on a marine engine remanufacturing program that essentially parallels our locomotive remanufacturing program, we expect that the same emissions control technologies described above would be implemented for remanufactured marine diesel engines just as for remanufactured locomotive engines.

We are proposing more stringent emissions standards for all newly built marine diesel engines that have a displacement of less than thirty liters per cylinder. For marine diesel engines that are either used in recreational vessels or are rated to produce less than 600 kW of power, we are proposing emissions standards that likely would not require the use of catalytic exhaust treatment technology. We are also proposing similar standards, as interim standards, for marine diesel engines that are used in commercial vessels and are rated to produce 600 kW of power or more (except if greater than 3700 kW). Collectively, we refer to these standards as our Tier 3 marine diesel engine standards.

To meet our proposed Tier 3 marine diesel engine standards, we believe that engine manufacturers will utilize incremental improvements to existing engine components. To meet the lower NO_X standards we expect that improvements in fuel system design and engine calibration will be implemented. For Category 1 engines from 75 kW through 560 kW, these technologies would be similar to designs and calibrations that likely will be used to meet our nonroad Tier 4 standards for engines. For Category 1 engines below 75 kW and greater than 560kW, and for Category 2 engines that have cylinder displacements less than 15 L/cylinder, these technologies are similar to designs that will be used to meet our nonroad Tier 3 standards, and our proposed locomotive Tier 3 standards.

In almost all instances, marine diesel engines are derivative of land based nonroad engines or locomotive engines. In order to meet our nonroad Tier 4 emission levels (phased in from 2011–2015), nonroad engines will see significant base engine improvements designed to reduce engine-out emissions. Refer to our nonroad Tier 4 rulemaking for details on the designs and calibrations we expect to be used to meet the Tier 3 standards we are proposing for the lower horsepower marine engines. For example, we expect

marine engines to 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 Tier 3 marine diesel engine standards can be met. Since this technology and these components already have been implemented on on-highway, nonroad, and some locomotive engines, they can be applied to marine engines beginning as early as 2009.

Because some marine engines are not as similar to on-highway, nonroad or locomotive engines as others, we believe that full implementation of these technologies for marine engines cannot be accomplished until 2012. We expect that the PM emissions control technologies that will be used to meet our proposed Tier 3 marine diesel engine standards will be similar to the technology used to meet our nonroad Tier 3 PM standards and our proposed locomotive Tier 3 PM standards. That is, we believe that a combination of fuel injection improvements, plus the use of existing low-oil-consumption piston ring-pack designs and improved closed crankcase ventilation systems will provide significant PM reductions. And based upon our on-highway and non-road clean diesel experience, we also believe that the use of ultra low sulfur diesel fuel in the marine sector will assist in meeting the Tier 3 PM standards.

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 that these technologies can be implemented for some engines as early as 2009, and for all engines by 2014. We believe that this later date is needed only for those marine engines that are not similar to other on-highway, nonroad, or locomotive engines.

(2) Catalytic Exhaust Treatment Technologies for New Engines

For marine diesel engines in commercial service that are greater than 600 kW, for all marine engines greater than 2000 kW, and for all locomotives, we are proposing stringent Tier 4 standards based on the use of advanced catalytic exhaust treatment 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 applicability in terms of packaging; its long-term durability; and whether or not the technology significantly impacts an industry's supply chain infrastructure—especially with respect to supplying urea reductant for SCR to locomotives and vessels. We have carefully examined these points, and based upon our analysis (detailed in our draft Regulatory Impact Analysis), we believe that we have identified robust PM and NO_X catalytic exhaust treatment systems that are applicable to locomotives and marine engines that also pose a manageable impact on the rail and marine industries' infrastructure.

(a) Catalytic PM Emissions Control Technology

The most effective exhaust aftertreatment used for diesel PM emissions control is the diesel particulate filter (DPF). More than a million light diesel vehicles that are OEM-equipped with DPF systems have been sold in Europe, and over 200,000 DPF retrofits to diesel engines have been conducted worldwide.[103] Broad application of catalyzed diesel particulate filter (CDPF) systems with greater than 90 percent PM control is beginning with the introduction of 2007 model year heavy-duty diesel trucks in the United States. These systems use a combination of both passive and active soot regeneration. CDPF systems utilizing metal substrates are a further development that trades off a degree of elemental carbon soot control for reduced backpressure, improvements in the ability of the trap to clear oil ash, greater design freedom regarding filter size/shape, and greater 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 further 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.[104] 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.[105] 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 would provide 95 percent or greater removal of HC, including the semi-volatile organic compounds that contribute to PM. Such systems would reduce overall PM emissions from a locomotive or marine diesel engine by upwards of 90 percent.

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 U.S. 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 proposing 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 believe that our proposed implementation dates for locomotive and marine diesel engines are appropriate and achievable.

(b) Catalytic NO_X Emissions 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 our draft RIA, we are assuming locomotive and marine diesel engine manufacturers will choose to use—Selective Catalytic Reduction, or SCR to comply with our proposed 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 limited to marine ferryboat and stationary electrical power generation demonstration projects in California and

[103] ''Diesel Particulate Filter Maintenance: Current Practices and Experience'', Manufacturers of Emission Controls Association, June 2005, *http://meca.org/galleries/default-file/Filter_Maintenance_White_Paper_605_final.pdf.*

[104] Jacob, E., Lämmerman, R., Pappenheimer, A., Rothe, D. ''Exhaust Gas Aftertreatment System for Euro 4 Heavy-duty Engines'', MTZ, June, 2006.

[105] Smith, B., Sneed, W., Fritz, S. ''AAR Locomotive Emissions Testing 2005 Final Report''.

several of the Northeast states. However, 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, several heavy-duty truck engine manufacturers have indicated that they will use SCR technology.[106] [107] 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 proposing today), our analysis assumes that SCR will be the technology of choice in the locomotive and marine diesel engine sectors.

An SCR catalyst reduces nitrogen oxides 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 (>200 °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 an SCR system is capable of providing well in excess of 80 percent NO_X reduction efficiency in high-power, diesel applications.[108] thnsp[109] thnsp;[110] 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.[111] Given the preponderance of studies and data—and our analysis summarized here and detailed in the draft RIA—we believe that this technology is appropriate for locomotive and marine diesel applications. Furthermore, we believe that 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 proposed Tier 4 locomotive and marine standards. Given the 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 150 °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 emissions control systems. Through our discussions we have learned that some engine manufacturers currently 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. We have carefully investigated these issues, and we have concluded that accurate urea injection systems and durable catalysts already exist and have been applied to urea SCR NO_X emissions control systems that 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 accurate injection of urea, and these applications have similar—if not more dynamic—engine operation as compared to locomotive and marine engine operation. To ensure accurate 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. We believe these NO_X sensor based control systems are directly applicable to locomotive and marine engines.

Ammonia emissions, which are already minimized through the use of closed-loop feedback urea injection, can be all-but-eliminated with an oxidation catalyst downstream of the SCR catalyst. Such catalysts are in use today and have been shown to be 95% effective at reducing ammonia emissions.

Catalyst durability is affected by sulfur and other chemicals that can be present in some diesel fuel and lubricating oil. These chemicals have been eliminated in other applications by the use of ultra-low sulfur diesel fuel and low-SAPS (sulfated ash, phosphorous, and sulfur) lubricating oil. Locomotive and marine operators already will be using ultra low sulfur diesel by the time urea NO_X SCR systems would be needed, and low SAPS oil can be used in locomotive and marine engines. Thermal and mechanical vibration durability of catalysts has been addressed through the selection of proper materials and the design of support and mounting structures that are capable of withstanding the shock and vibration levels present in locomotive and marine applications. More details on catalyst durability and urea injection accuracy are available in the remainder of this section and also in our draft RIA.

[106] ''Review of SCR Technologies for Diesel Emission Control: European Experience and Worldwide Perspectives,'' presented by Dr. Emmanuel Joubert, 10th DEER Conference, July 2004.

[107] Lambert, C., ''Technical Advantages of Urea SCR for Light-Duty and Heavy-Duty Diesel Vehicle Applications,'' SAE Technical Paper 2004–01–1292, 2004.

[108] Walker, A.P. *et al.*, ''The Development and In-Field Demonstration of Highly Durable SCR Catalyst Systems,'' SAE 2004–01–1289.

[109] Conway, R. *et al.*, ''Combined SCR and DPF Technology for Heavy Duty Diesel Retrofit,'' SAE Technical Paper 2005–01–1862, 2005.

[110] ''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.

[111] Telephone conversation with Gary Keefe, Argillon, June 6, 2006.

Even though we believe that the issues of catalyst durability and urea injection accuracy have been addressed in existing NO_X SCR emissions control systems, we invite comments and the submission of additional information and data regarding catalyst durability and urea injection accuracy.

(c) Durability of Catalytic PM and NO_X Emissions Control Technology

Published studies indicate that SCR systems should experience very little deterioration in NO_X conversion throughout the life-cycle of a diesel engine.[112] 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. Another mechanism for catalyst deterioration is catalyst 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. Catalyst deterioration due to phosphorous poisoning can be reduced through the use of engine oil with low sulfated-ash, phosphorus, and sulfur content (low-SAPS oil) and through reduced engine oil consumption. The high ash content in current locomotive and marine engine oils is related to the need for a high total base number (TBN) in the oil formulation. Because today's diesel fuel has relatively high sulfur levels, a high TBN in the engine oil is necessary today to neutralize the acids created when fuel-borne sulfur migrates to the crankcase. With the use of ULSD fuel, acid formation in the crankcase will not be a significant concern. The low-SAPS oil will be available for on-highway use by October 2006 and is specified by the American Petroleum Institute as ''CJ–4.'' We also expect that Tier 3 locomotive and marine engine designs will have reduced oil consumption in order to meet the Tier 3 PM standards, and that the Tier 4 designs will be an evolutionary development that will apply catalytic exhaust controls to the Tier 3 engine designs. The durability of other exhaust aftertreatment devices, namely the DOC and CDPF, will also benefit from the use of ULSD fuel, reduced oil consumption and low-SAPS engine oil because the reduction in exposure of these devices to sulfur and phosphorous will improve their effectiveness and the reduction in ash loading will increase the CDPF ash-cleaning intervals.

(d) Packaging of Catalytic PM and NO_X Emissions Control Technology

We project that locomotive manufacturers will need to re-package/re-design the exhaust system components to accommodate the aftertreatment system. Our analysis shows 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.[113] 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 an engine with 6 ft^3 of total displacement, the volume requirement for the aftertreatment components would be approximately 25 ft^3. EPA engineers have examined Tier 2 EMD and GE line-haul locomotives and conclude that there is adequate space to package these components. This conclusion also applies to new switcher locomotives, which, while being shorter in length than line-haul locomotives, will also be equipped with smaller, less-powerful engines—resulting in smaller volume requirements for the aftertreatment components. Given the space available on today's locomotives, we feel that packaging catalytic PM and NO_X emissions control technology on-board locomotives is actually less challenging than packaging similar technology on-board other mobile sources such as light-duty vehicles, heavy-duty trucks, and nonroad equipment. Given that similar exhaust systems are either already implemented on-board these vehicles or will be implemented on these vehicles years before similar systems would be required on-board locomotives, we believe that any packaging issues would be successfully addressed early in the locomotive redesign process.

For commercial vessels that use marine diesel engines greater than 600 kW, we expect that marine vessel builders will need to re-package and re-design the exhaust system components to accommodate the aftertreatment components expected to be necessary to meet the proposed standards. Our discussions with marine architects and engineers, along with our review of vessel characteristics, leads us to conclude 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 the design process undertaken by marine architecture firms.[114]

We did determine, however, that for recreational vessels and for vessels equipped with engines less than 600 kW, catalytic PM and NO_X exhaust treatment systems were less practical from a packaging standpoint than for the larger, commercially operated vessels. We did identify catalytic emissions control systems that would significantly reduce emissions from these smaller vessels. However, after taking into consideration costs, energy, safety, and other relevant factors, we identified a number of reasons why we are not proposing at this time any standards that would likely require catalytic exhaust treatment systems on these smaller vessels. One reason is that most of these vessels use seawater (fresh or saltwater) cooled exhaust systems, and even seawater injection into their exhaust systems, to cool engine exhaust to prevent overheating materials such as a fiberglass hull. This current practice of cooling and seawater injection could reduce the effectiveness of catalytic exhaust treatment 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

[112] 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.

[113] ''AAR Manual of Standards and Recommended Practices,'' Standard S–5510, Association of American Railroads.

[114] Telephone conversation between Brian King, Elliot Bay Design Group, and Brian Nelson, EPA, July 24, 2006.

vessels' small size and their typical design to operate by planing high on the surface of the water, catalytic exhaust treatment systems pose several significant packaging and weight challenges. Normally, such packaging and weight challenges would be addressed by the use of lightweight hull and superstructure materials. However, the currently accepted lightweight vessel materials are incompatible with the temperatures required to sustain catalyst effectiveness. One solution could be new lightweight hull and superstructure materials which would have to be developed, tested and approved prior to their application on vessels using catalytic exhaust treatment systems. Given these issues, we believe it is prudent to not propose catalytic exhaust treatment-based emission standards for marine diesel engines below 600 kW at this time.

(e) Infrastructure Impacts of Catalytic PM and NO_X Emissions Control Technology

For PM trap technology the locomotive and marine industries will have minimal impact imposed upon their industries' infrastructures. Since PM trap technology relies on no separate reductant, any infrastructure impacts would be limited to some minor changes in maintenance practices or maintenance facilities. Such maintenance would be limited to the infrequent process of removing lubricating oil ash buildup from within a PM trap. This type of maintenance might require facilities to remove PM traps for cleaning. This might 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 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 preferred reductant in an SCR system is 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 assures that the ratio of urea-to-water will not change when the solution begins to freeze.[115] Heated storage tanks and insulated dispensing equipment may be necessary to prevent freeze-up in Northern climates. In addition, the urea dosing apparatus (urea storage tank, pump, and lines) onboard the locomotive or marine vessel may require similar protections. 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 needs to be added will be dependent on the urea storage capacity, duty-cycle, and urea dosing rate for each application. 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, in which diesel engine/truck manufacturers and fuel refiners/distributors 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.[116] Concerning 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.[117] 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.[118] 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.[119] In the hypothetical 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 in the 2017 timeframe—EPA does not project any urea cost or supply issues will result from implementing the proposed Tier 4 standards.

(3) The Proposed Standards Are Technologically Feasible

Our proposal covers a wide range of engines and the implementation of a range of emissions controls technologies, and we have identified a range of technologically feasible emissions control technologies that likely would be used to meet our proposed 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 treatment 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 draft RIA, we conclude that incremental improvements to engine components and the implementation of catalytic PM and NO_X exhaust treatment technology would be feasible to meet our proposed emissions standards.

[115] Miller, W. *et al.*, ''The Development of Urea-SCR Technology for U.S. Heavy Duty Trucks,'' SAE Technical Paper 2000–01–0190, 2000.

[116] ''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.

[117] ''National Transportation Statistics—2004,'' Table 4–5, U.S. Bureau of Transportation Statistics.

[118] 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.

[119] ''Mineral Commodity Summaries 2006,'' page 118, U.S. Geological Survey, *www.minerals.usgs.gov/minerals/pubs/mcs/mcs2006.pdf.*

(4) A Request for Detailed Technical Comments

We have carried out an extensive outreach program with the regulated industry to understand the potential impacts and technical challenges to the application of aftertreatment technology to diesel locomotives and marine engines. We are requesting comments on all parts of our resulting analyses summarized in the preceding sections and presented in greater detail in the Draft RIA.

Further, we request comment on the following list of detailed questions provided to the Agency by a stakeholder regarding particular challenges in applying aftertreatment technologies to diesel locomotives. Some of these questions raise concerns about the feasibility of the proposed Tier 4 standards under specific environmental conditions. We present theses questions without endorsing the appropriateness of applying these conditions to locomotive catalyst designs. The reader should refer to the preceding sections and the draft RIA for our analyses of the relevant issues.

(1) How do the following attributes of the locomotive exhaust environment impact the ability of a Zeolite SCR type catalyst to operate within 10% of its ''as new'' conversion efficiency (~94%) after 34,000 MW-hours of operation?

○ 150 hours per year operation at 600 Celsius exhaust temperature at the inlet to the SCR, due to DPF regeneration.'' (20-minute regeneration every 20 hours of operation).

○ 120 minutes per year operation at 700 Celsius.

○ Soot exposure equal to 0.03 g/bhp-hr.

○ Shock loading averaging 1,000 mechanical shock pulses per year due to hard coupling.

○ Extended periods of vibration where the vibration load on the catalysts can reach 6G and 1000 Hz.

○ Water exposure due to rains, icing, water spray and condensed frozen or liquid water during 20% of its life.

○ Salt fog consisting of 5 ± 1% salt concentration by weight with fallout rate between 0.00625 and 0.0375 ml/cm^2/hr.

○ The catalysts will be subject to sands composed of 95% of SiO_2 with particle size between 1 to 650 microns in diameter with sand concentration of 1.1 ± 0.25 g/m^3 and air velocity of 29 m/s (104 km/h).

○ Exposure to dusts comprised of red china clay and silicon flour of particle sizes that are between 1 to 650 microns in diameter with dust concentration of 10.6 ± 7 g/m^3 with a velocity equal to locomotive motion velocity on catalyst surfaces.

(2) Is it feasible for a Zeolite SCR catalyst (as compared to the Vanadium-based catalysts) to operate within 10% of its as new conversion efficiency (~94%) after sustained exposure to real exhaust? If it is, why is it feasible? If it is not feasible, please explain why it is not.

(3) Is it feasible to maintain the conversion efficiency of a diesel oxidation catalyst at least at 45% in the same catalyst environment described in (1) above? In your comments, please explain why or why not.

(4) The feasibility of achieving low ammonia slip, i.e., less than 5 ppm, from urea-based SCR systems that dose at or above 1:1 ratios when applied to an exhaust stream with 500–600 ppm NO_X under both steady state and transient load conditions.

(5) The feasibility of a reliable NO_X sensor with 5% accuracy to control urea dosing sufficiently to achieve a 95% NO_X conversion efficiency using a Zeolite-based SCR when not kinetically limited.

(6) The expected level of ammonia slip catalyst selectivity back to NO_X when a Zeolite-based SCR is dosed at 1:1 ratios and applied to diesel engines above 3.0 MW with an exhaust stream of 500–600 ppm NO_X.

(7) The effect on overall locomotive weight and balance when applying DPF and SCR devices with a weight in excess of 8000 lbs and volume in excess of 40 cubic feet mounted above the engine.

(8) The expected effect on locomotive operating range when adding urea storage equal to 5% of locomotive fuel capacity and a 2% decrease in locomotive fuel efficiency.

(9) Incidental emissions generation resulting from the production and distribution of urea for railroad usage (200,000,000 gallons/year).

(10) The comparative performance of a given engine on the marine v. locomotive duty cycle to include an assessment of SCR technologies (i.e., *Zeolilte* v. *Vanadium*), expected effectiveness for each application, and any considerations that may be unique for one application versus the other that could impact overall NO_X conversion effectiveness.

(11) The impact of the proposed Tier 4 NO_X limit of 1.3 g/hp-hr versus incrementally higher limits on fuel burn and greenhouse gas emissions.

EPA notes that many of these issues are addressed elsewhere in the preamble and in the draft RIA. We invite comment on these questions in the context of the information provided elsewhere on these issues. In providing comments to these eleven questions, we ask that commenters provide information both directly responsive to the individual question and further to the relevance of the question in determining the appropriate emission standard for diesel locomotives. For example, question 1 lists a wide range of conditions for catalyst systems on a diesel locomotive. In that context, EPA also invites comment on the following questions.

- How do the shock loading, vibration loading, soot exposure, and temperature exposure conditions listed in Question 1 compare to conditions faced by other applications of Zeolite-type urea SCR systems that are either under development or that have been developed for on-highway diesel, nonroad diesel, marine and stationary gas turbine applications?
- Question 1 asserts that a locomotive catalyst design would directly expose catalyst substrates to rain water, icing, water spray and condensed frozen or liquid water during 20% of its life. Are there catalyst packaging and installation issues that would necessitate any direct exposure of catalyst substrates to weather?
- Question 1 implies that a locomotive catalyst design would directly expose catalyst substrates to salt fogs consisting of 5 ± 1% salt concentration by weight with fallout rate between 0.00625 and 0.0375 ml/cm^2/hr. What salt concentrations in salt fogs and what fallout rates have SCR systems applied to ocean-going vessels been exposed to? How would the systems designs, exposures and impacts be similar to or different from locomotive applications? Are there unique characteristics of locomotive catalyst installations that would increase their exposure to salt fog relative to other applications operated near or in ocean environments? What direct experiences have ocean-going vessels had regarding the durability of their catalytic emission control systems?
- Question 1 implies that locomotive catalyst systems must withstand exposure to sand ingested by the engine at a rate of up to 50 pounds per hour at notch 8. The question also implies that locomotive catalyst substrates must withstand exposure to a combination of red china clay and silicon flour at a rate of up to one-quarter ton per hour at notch 8. Are these appropriate metrics that reasonably take into consideration the design of the locomotive air-intake and filtration system and the ability of the engine and turbocharger systems to withstand such extreme exposure to ingestion of abrasive materials? Are tests replicating this condition routinely

conducted to demonstrate the durability of the engine and turbocharger systems and emissions compliance following such high rates of engine ingestion of abrasive materials?

• Questions 2 and 3 imply that greater than 45% DOC oxidation efficiency is required to maintain Zeolite SCR catalyst efficiency at greater than 94% NO_X efficiency, and that 94% NO_X efficiency is required to meet the proposed Tier 4 NO_X standard. Is greater than 45% oxidation efficiency for an upstream DOC necessary for locomotives to meet the 1.3 g/bhp-hr NO_X standard over the range of exhaust temperature encountered by locomotives over the line-haul duty cycle when using a Zeolite-based SCR system? Is 94% NO_X efficiency from the current Tier 2 locomotive baseline even necessary to achieve 1.3 g/bhp-hr NO_X emissions when using a Zeolite SCR catalyst system over the line-haul duty-cycle?

• What level of ammonia slip is achievable from modern urea-SCR systems using closed-loop feedback control? Is 5 ppm an appropriate level to set for maximum ammonia slip under any conditions?

• Is 5% of point the limit of zirconia-NO_X sensor accuracy? Does NO_X sensor accuracy currently limit NO_X conversion efficiency of feedback controlled SCR systems, and if so by how much? What level of NO_X conversion efficiency using a Zeolite-based SCR when not kinetically limited is achievable using current feedback control systems using of zirconia-NO_X sensors? What level of NO_X conversion efficiency can be expected taking into consideration projected NO_X sensor and feedback control system development over the next ten to fifteen years?

Comments submitted should provide detailed technical information and data to the extent possible. The EPA solicits comment on the extent to which any factor may impact the ability to achieve the proposed standard and if the proposed standard cannot be achieved in the commenter's view, what standard can be achieved.

E. What Are EPA's Plans for Diesel Marine Engines on Large Ocean-Going Vessels?

Today's proposal covers marine diesel engines up to 30 l/cyl displacement installed on vessels flagged or registered in the U.S. There are two additional significant sources of air pollution from diesel marine engines which are not covered by today's proposal: first, marine diesel engines of any size (Category 1, 2 or 3) installed on foreign-flagged vessels; and second, marine diesel engines at or above 30 l/cyl displacement (Category 3) installed on U.S. flagged vessels. The largest environmental concern for these types of engines are the large, ocean-going marine vessels (OGV), which are typically larger than 2,000 gross tons and involved primarily in international commerce. Ocean-going marine vessels typically are powered by one or more Category 3 diesel engines for propulsion of the vessel, and they typically also have several Category 2 engines to provide auxiliary power. Engines on OGV are predominately fueled by residual fuel (often called ''heavy fuel oil''), which is a by-product of distilling crude oil to produce lighter petroleum products such as gasoline, distillate diesel fuel, and kerosene and has a high sulfur content, up to 45,000 ppm.[120] Ocean-going vessels are a significant contributor to air pollution in the United States, in particular in coastal areas and ports. Current projections indicate that on a national level, OGVs flagged in the U.S. and other countries will contribute about 21 percent of mobile source PM, 12 percent NO_X and 76 percent of SO_X in the year 2030. These contributions can be much higher in some coastal and port areas. However, recent inventory estimates performed for the California Air Resources Board and the Commission for Environmental Cooperation in North America suggest that we are significantly underestimating the emissions for C3 engines, by as much as a factor of 2 or 3.[121]

EPA has a number of activities underway which hold promise for reducing air pollution from OGVs. These include: a future rulemaking action on C3 engine standards; negotiations underway at the International Maritime Organization to establish a new set of environmentally protective international emission standards for OGVs; studies to assess the feasibility of establishing one or more SO_X Emission Control Areas adjacent to North America to reduce SO_X and particulate matter from OGVs; and voluntary actions through our Clean Ports USA program.

(1) Future C3 Marine Rule

In 2003 we issued a final rule for new C3 engines installed on U.S. flagged vessels. That final action established NO_X limits for new C3 engines which are equal to the current international NO_X standards for C3 engines established through Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78). The MARPOL standards are based on the capabilities of emission control technologies from the early 1990s, and are significantly higher then emission standards for any other mobile source in the United States. In the 2003 final rule, we identified the technical challenges associated with the application of after-treatment technologies to these engines and vessels, but committed to revisiting the issue of the appropriate long-term emission standards for C3 marine engines, both those which are on vessels flagged in the U.S. and those which are installed on foreign flagged vessels. In revisiting the standards we indicated that we would consider the state of technology that may permit deeper emission reductions and the status of international action for more stringent standards. We committed to a final Agency action by April 27, 2007.

In 2003, we believed the next round of emission standard discussions at the IMO would be well underway, if not concluded, by April of 2006. In 2003, we also believed the IMO deliberations would be one of the avenues to explore improvements in emission control technology for C3 engines and ocean-going vessels, and would provide valuable technical input for EPA's C3 rulemaking.

Despite efforts by the United States Government at IMO, deliberations regarding future emission standards for OGV did not begin until April 2006. The current round of negotiations at IMO is expected to continue through 2007. The discussions thus far at IMO have yielded new technical information which EPA will be able to make use of in our future C3 rulemaking. We expect to issue a revised schedule for the C3 rule in the next few months as well as solicit comments on the appropriate technologies, standards, and lead time EPA should consider for C3 standards.

(2) International Standards Deliberation at IMO

With respect to the discussions currently underway at the IMO, the United States Government is actively

[120] Residual fuel also possesses a high viscosity and density, which makes it harder to handle and use of this fuel requires special equipment such as heaters, centrifuges, and purifiers. It typically also has a high ash, and nitrogen content compared to distillate diesel fuels. It is not produced to a set of narrow specifications, and so fuel parameters can be highly variable.

[121] Corbett, J.J., et al. Estimation, Validation, and Forecasts of Regional Commercial Marine Vessel Inventories, Tasks 1 and 2: Baseline Inventory and Ports Comparison, Final Report, dated 3 May 2006. Prepared for the California Air Resources Board, the Californian Environmental Protection Agency and the Commission for Environmental Cooperation in North America. ARB contract 04–346, CEC Contract 113.11. A copy of this document can be found at*www.arb.ca.gov/research/seca/jctask12.pdf.*

engaged in the negotiation of a new set of international standards for Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL Annex VI). Since the current Annex VI NO_X limits have entered into effect, and in the time frame since EPA issued our 2003 rule, improvements in both in-cylinder and external emission control technologies have been demonstrated, both in the laboratory and on-board OGVs. These technologies offer the potential to substantially reduce NO_X emissions from OGVs. In addition, the use of lower sulfur residual or distillate fuels and/or the use of SO_X scrubbing technologies offer the potential to substantially reduce PM and SO_X emissions from OGVs. We believe the member states of the IMO, including the United States, have a unique opportunity to establish appropriate long-term standards to address air pollution from OGVs.

The current discussions for the next tier of engine emission standards at IMO also provide an opportunity to apply emission reduction technologies to existing vessels. EPA is a strong supporter of reducing pollution of existing vessels through mandatory rebuild/retrofit requirements and we will continue to pursue this objective at the IMO.

(3) SO_X Emission Control Areas

The existing international agreements adopted by the IMO provide the opportunity for signatories to Annex VI of the International Convention for the Prevention of Pollution from Ships to propose the designation of one or more SO_X Emission Control Areas (SECA). When operating in a SECA, all OGVs must either use fuel with a maximum sulfur content of 15,000 ppm or use emission control technology such that the vessel meets a SO_X limit of 6 g/kW-hr (a value deemed equivalent to 15,000 ppm sulfur). This represents only approximately a 45 percent reduction in SO_X emissions compared to the world-wide fuel sulfur average for heavy-fuel oil of about 27,000 ppm. EPA is currently performing environmental impact and economic analyses that will assist the federal government in making a determination whether the U.S. Government should consider a proposal designating a SECA to one or more areas adjacent to North America. We are working closely with the Canadian Government Canada) on these efforts, and we also intend to coordinate our actions with Mexico. This could allow for the inclusion of additional coastal areas within SECAs for North American. It must be noted that the United States has not yet ratified Annex VI and any decision regarding whether the United States will pursue the designation of a SECA will be influenced by where the United States stands with respect to ratification of MARPOL Annex VI.

(4) Clean Ports USA

As part of EPA's National Clean Diesel Campaign, Clean Ports USA is an incentive-based, public-private partnership designed to reduce emissions from existing diesel engines and vessels at ports. The Clean Ports USA team works to bring together partners and build coalitions to identify and develop cost-effective diesel emission reduction projects that address the key issues affecting ports today. EPA provides technical support in verifying the effectiveness of retrofit technology, to ensure through rigorous testing that the emissions reductions promised by vendors are in fact achieved in the field.

Clean Ports USA is providing incentives to port authorities, terminal operators, cargo interests, trucking fleets, and maritime fleet owners to:

- Retrofit and replace older diesel engines with verified technologies such as diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs).
- Use cleaner fuels (ultra-low sulfur diesel fuel, emulsions).
- Increase operational efficiency, including environmental management systems, logistics, and appointment systems.
- Reduce engine idling.
- Replace older engines with new, cleaner engines.

Additional information is available on the Clean Ports USA Web site at *www.epa.gov/cleandiesel/ports*.

IV. Certification and Compliance Program

This section describes the regulatory changes proposed for the locomotive and marine compliance programs. The most obvious change is that the proposed regulations have been written in plain language. They are structured to contain the provisions that are specific to locomotives in a new proposed part 1033 and contain the provisions that are specific to marine engines and vessels in a new proposed part 1042. We also propose to apply the general provisions of existing parts 1065 and 1068.[122] The proposed plain language regulations, however, are not intended to significantly change the compliance program, except as specifically noted in today's notice (and we are not reopening for comment the substance of any part of the program that remains unchanged substantively). As proposed, these plain language regulations would 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 along with other notable aspects of the compliance program. **Note:** The term manufacturer is used in this section to include locomotive and marine manufacturers and locomotive remanufacturers. It would also include marine remanufacturers if we finalize remanufacture standards.

A. Issues Common to Locomotives and Marine

For many aspects of compliance, we are proposing similar provisions for marine engines and locomotives, which are discussed in this section. Also included in this section are issues which are similar, but where we are proposing different provisions. The other compliance issues are discussed in sections IV. B. (for locomotives) and IV. C. (for marine).

(1) Modified 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 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. We intend in this proposal to continue this process of having all our engine programs refer to a common set of procedures by applying part 1065 to all locomotive and marine diesel engines.

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

[122] In a separate rulemaking, which has been submitted to the Office of Management and Budget (OMB) for review, we will be proposing modifications to the existing provisions of 40 CFR part 1068. We have placed into the docket for this current proposal, a copy of the draft part 1068 regulatory language that was submitted to OMB. Readers interested in the compliance provisions that would apply to locomotives and marine diesel engines should also read the actual regulatory changes that will be proposed in that upcoming rulemaking.

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 would allow 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, would remain separate and would be reflected in the standard-setting parts of the regulations.

As compared to the existing locomotive and marine diesel test procedures found in parts 92 and 94, part 1065 test procedures are organized and written for improved clarity. In addition, we are proposing part 1065 for locomotive and marine diesel engines to improve the content of their 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.

Some emission-control programs already rely on the 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.

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. For several years, manufacturers would be able to optionally use the part 1065 procedures. Part 1065 procedures would be required for any new testing by the model year in which the Tier 4 standard applies to a locomotive or marine diesel engine or by 2012 for a locomotive or marine diesel engine that is not proposed to be subject to a Tier 4 standard. For any testing completed for any emissions standard that is less stringent than the respective Tier 4 standard, manufacturers may continue to rely on carryover test data based on part 92 or 94 procedures to certify engine families in later years. In addition, for any other programs that refer to the test procedures in parts 92 or 94, we are including updated references for all these other programs to refer instead to the appropriate cite in part 1065.

Part 1065 is also advantageous for in-use testing because it specifies the same procedures for all common parts of field testing and laboratory testing. It also contains new provisions that help ensure that engines are tested in a laboratory in a way that is consistent with how they operate in use. These new provisions would ensure that engine dynamometer lab testing and field testing are conducted in a consistent way.

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 recent rulemaking adopting emission standards for nonroad diesel engines has also made part 1065 optional for Tier 2 and Tier 3 nonroad standards and required for Tier 4 standards. 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. In particular, we reorganized part 1065 by subparts as shown below:

- *Subpart A:* General provisions; global information on applicability, alternate procedures, units of measure, etc.
- *Subpart B:* Equipment specifications; required hardware for testing.
- *Subpart C:* Measurement instruments.
- *Subpart D:* Calibration and verifications; for measurement systems.
- *Subpart E:* Engine selection, preparation, and maintenance.
- *Subpart F:* Test protocols; step-by-step sequences for laboratory testing and test validation.
- *Subpart G:* Calculations and required information.
- *Subpart H:* Fuels, fluids, and analytical gases.
- *Subpart I:* Oxygenated fuels; special test procedures.
- *Subpart J:* Field testing and portable emissions measurement systems.
- *Subpart K:* Definitions, references, and symbols.

The regulations now prescribe scaled specifications for test equipment and measurement instruments by parameters such as engine power, engine speed and the emission standards to which an engine must comply. That way this single set of specifications would cover the full range of engine sizes and our full range of emission standards. Manufacturers would be able to use these specifications to determine what range of engines and emission standards may be tested using a given laboratory or field testing system.

The content of part 1065 is mostly a combination of content from our most recent updates to other test procedures and from test procedures specified by the International Organization for Standardization (ISO). In some cases, however, there is new content that never existed in previous regulations. This new content addresses very recent issues such as measuring very low concentrations of emissions, using new measurement technology, using portable emissions measurement systems, and performing field testing. A detailed description of the changes is provided in a memorandum to the docket.[123]

The new content also reflects a shift in our approach for specifying measurement performance. In the past we specified numerous calibration accuracies for individual measurement instruments, and we specified some verifications for individual components, such as NO_2 to NO converters. We have shifted our focus away from individual instruments and toward the overall performance of complete measurement systems. We did this for several reasons. First, some of what we specified in the

[123] Memorandum to docket EPA–HQ–OAR–2003–0190, ''Redline/Strikeout of 40 CFR 1065 (Test Procedures) Changes and Additions''.

past precluded the implementation of new measurement technologies. These new technologies, sometimes called ''smart analyzers'', combine signals from multiple instruments to compensate for interferences that were previously tolerable at higher emissions levels. These analyzers are useful for detecting low concentrations of emissions. They are also useful for detecting emissions from raw exhaust, which can contain high concentrations of interferences, such as water vapor. This is particularly important for field testing, which will most likely rely upon raw exhaust measurements. Second, this new ''systems approach'' challenges complete measurement systems with a series of periodic verifications, which we feel will provide a more robust assurance that a measurement system as a whole is operating properly. Third, the systems approach provides a direct pathway to demonstrate that a field test system performs similarly to a laboratory system. This is explained in more detail in item 10 below. Finally, we feel that our systems approach will lead to a more efficient way of assuring measurement performance in the laboratory and in the field. We believe that this efficiency will stem from less frequent individual instrument calibrations, and higher confidence that a complete measurement system is operating properly.

We have organized the new content relating to measurement systems performance into subparts C and D. We specify measurement instruments in subpart C and calibrations and periodic system verifications in subpart D. These two subparts apply to both laboratory and field testing. We have organized content specific to running a laboratory emissions test in subpart F, and we separated content specific to field testing in subpart J.

In subpart C we specify the types of acceptable instruments, but we only recommend individual instrument performance. We provide these recommendations as guidance for procuring new instruments. We feel that the periodic verifications that we require in subpart D will sufficiently evaluate the individual instruments as part of their respective overall measurement systems. In subpart F we specify performance validations that must be conducted as part of every laboratory test. In subpart J we specify similar performance validations for field testing that must be conducted as part of every field test. We feel that the periodic verifications in subpart D and the validations for every test that we prescribed in subparts F and J ensure that complete measurement systems are operating properly.

In subpart J we also specify an additional overall verification of portable emissions measurement systems (PEMS). This verification is a comprehensive comparison of a PEMS versus a laboratory system, and it may take several days of laboratory time to set up, run, and evaluate. However, we only require that this particular verification must be performed at least once for a given make, model, and configuration of a field test system.

Below is a brief description of the content of each subpart, highlighting some of the most important content.

(i) Subpart A: General Provisions

In Subpart A we identify the applicability of part 1065 and describe how procedures other than those in part 1065 may be used to comply with a standard-setting part. In § 1065.10(c)(1), we specify that testing must be conducted in a way that represents in-use engine operation, such that in the rare case where provisions in part 1065 result in unrepresentative testing, other procedures would be used.

Other information in this subpart includes a description of the conventions we use regarding units and certain measurements; and we discuss recordkeeping. We also provide an overview of how emissions and other information are used to determine final emission results. The regulations in § 1065.15 include a figure illustrating the different ways we allow brake-specific emissions to be calculated.

In this same subpart, we describe how continuous and batch sampling may be used to determine total emissions. We also describe the two ways of determining total work that we approve. Note that the figure indicates our default procedures and those procedures that require additional approval before we will allow them.

(ii) Subpart B: Equipment Specifications

Subpart B first describes engine and dynamometer related systems. Many of these specifications are scaled to an engine's size, speed, torque, exhaust flow rate, etc. We specify the use of in-use engine subsystems such as air intake systems wherever possible in order to best represent in-use operation when an engine is tested in a laboratory.

Subpart B also describes sampling dilution systems. These include specifications for the allowable components, materials, pressures, and temperatures. We describe how to sample crankcase emissions. Subpart B also specifies environmental conditions for PM filter stabilization and weighing.

The regulations in § 1065.101 include a diagram illustrating all the available equipment for measuring emissions.

(iii) Subpart C: Measurement Instruments

Subpart C specifies the requirements for the measurement instruments used for testing. In subpart C we recommend accuracy, repeatability, noise, and response time specifications for individual measurement instruments, but note that we only require that overall measurement systems meet the calibrations and verifications in Subpart D.

In some cases we allow instrument types to be used where we previously did not allow them in parts 92 or 94. For example, we now allow the use of a nonmethane cutter for NMHC measurement, a nondispersive ultraviolet analyzer for NO_X measurement, a zirconia sensor for O_2 measurement, various raw-exhaust flow meters for laboratory and field testing measurement, and an ultrasonic flow meter for CVS systems.

(iv) Subpart D: Calibrations and Verifications

Subpart D describes what we mean when we specify accuracy, repeatability and other parameters in Subpart C. We are adopting calibrations and verifications that scale with engine size and with the emission standards to which an engine is certified. We are replacing some of what we have called ''calibrations'' in the past with a series of verifications, such as a linearity verification, which essentially verifies the calibration of an instrument without specifying how the instrument must be initially calibrated. Because new instruments have built-in routines that linearize signals and compensate for various interferences, our existing calibration specifications in parts 92 and 94 sometimes conflicted with an instrument manufacturer's instructions. In addition, there are new verifications in subpart D to ensure that the new instruments we specify in Subpart C are used correctly.

(v) Subpart E: Engine Selection, Preparation, and Maintenance

Subpart E describes how to select, prepare, and maintain a test engine.

(vi) Subpart F: Test Protocols

Subpart F describes the step-by-step protocols for engine mapping, test cycle generation, test cycle validation, pre-test preconditioning, engine starting, emission sampling, and post-test validations. We allow modest corrections for drift of emission analyzer

signals within a certain range. We recommend a step-by-step procedure for weighing PM samples.

(vii) Subpart G: Calculations and Required Information

Subpart G includes all the calculations required in part 1065. Subpart G includes definitions of statistical quantities such as mean, standard deviation, slope, intercept, t-test, F-test, etc. By defining these quantities mathematically we intend to resolve any potential mis-communication when we discuss these quantities in other subparts. We have written all calculations for calibrations and emission calculations in international units. For our standards that are not completely in international units (i.e., grams/horsepower-hour, grams/mile), we specify in part 1065 the correct use of internationally recognized conversion factors.

We also specify emission calculations based on molar quantities for flow rates, instead of volume or mass. This change eliminates the frequent confusion caused by using different reference points for standard pressure and standard temperature. Instead of declaring standard densities at standard pressure and standard temperature to convert volumetric concentration measurements to mass-based units, we declare molar masses for individual elements and compounds. Since these values are independent of all other parameters, they are known to be universally constant.

(viii) Subpart H: Fuels, Fluids, and Analytical Gases

Subpart H specifies test fuels, lubricating oils and coolants, and analytical gases for testing. We eliminated the Cetane Index specification for all diesel fuels, because the existing specification for Cetane Number sufficiently determines the cetane levels of diesel test fuels. We do not identify any detailed specification for service accumulation fuel. Instead, we specify that service accumulation fuel may be either a test fuel or a commercially available in-use fuel. We include a list of ASTM specifications for in-use fuels as examples of appropriate service accumulation fuels. We include an allowance for engine manufacturers to use in-use test fuels that do not meet all of the specifications, provided that the in-use fuel does not adversely affect the manufacturer's ability to demonstrate compliance with the applicable standard. For example a fuel that would result in lower emissions versus the certification fuel would generally adversely affect a manufacturers ability to demonstrate compliance with the applicable standards. We also allow the use of ASTM test methods specified in 40 CFR Part 80 in lieu of those specified in part 1065. We did this because we more frequently review and update the ASTM methods in 40 CFR Part 80 versus those in part 1065.

(ix) Subpart I: Oxygenated Fuels

Subpart I describes special procedures for measuring certain hydrocarbons whenever oxygenated fuels are used. We allow the use of the California NMOG test procedures to measure alcohols and carbonyls.

(x) Subpart J: Field Testing and Portable Emissions Measurement Systems

As described in Subpart J, Portable Emissions Measurement Systems (PEMS) must generally meet the same specifications and verifications that laboratory instruments must meet, according to subparts B, C, and D. However, we allow some deviations from laboratory specifications. In addition to meeting many of the laboratory system requirements, a PEMS must meet an overall verification relative to a series of laboratory measurements. This verification involves repeating a duty cycle several times. This is a comprehensive verification of a PEMS. We are also adopting a procedure for preparing and conducting a field test, and we are adopting drift corrections for PEMS emission analyzers. Given the evolving state of PEMS technology, the field-testing procedures provide for a number of known measurement techniques. We have added provisions and conditions for the use of PEMS in an engine dynamometer laboratory to conduct laboratory testing.

(xi) Subpart K: Definitions, References, and Symbols

In Subpart K we define terms frequently used in part 1065. For example we have defined ''brake power'', ''constant-speed engine'', and ''aftertreatment'' to provide more clarity, and we have definitions for things such as ''300 series stainless steel'', ''barometric pressure'', and ''operator demand''. There are definitions such as ''duty cycle'' and ''test interval'' to distinguish the difference between a single interval over which brake-specific emissions are calculated and the complete cycle over which emissions are evaluated in a laboratory. We also present a thorough and consistent set of symbols, abbreviations, and acronyms in subpart K.

(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. Because we have reduced the upper limit for locomotive and marine diesel fuel sulfur content for refiners to 15 ppm in 2012, we are proposing to establish new ranges of allowable sulfur content for diesel test fuels. See sectionC.(5) for information about testing marine engines designed to use residual fuel.

For marine diesel engines, we are proposing the use of ULSD fuel as the test fuel for Tier 3 and later standards (when the new plain language regulations begin to apply). We believe this would correspond to the fuels that these engines will see in use over the long term. We recognize that this approach would mean that some marine engines would 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 would 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 proposing to allow certification with fuel meeting the 7 to 15 ppm sulfur specification for Tier 2 to simplify testing, but would require PM emissions to be corrected to be equivalent to testing conducted with the specified fuel.

For locomotives, we are proposing to require that Tier 4 engines be certified based on ULSD test fuels. We are also proposing to require that these locomotives use ULSD in the field. We would continue to allow older locomotives to use in the field low sulfur diesel (LSD) fuel, which is the intermediate grade of fuel with sulfur levels between 15 and 500 ppm. Thus, we are proposing to require that remanufacture systems for most of these locomotives be certified on LSD test fuel. We are proposing to allow the use of test fuels other than those specified here. Specifically, we would 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 would 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 would 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).

We are proposing special fuel provisions for Tier 3 locomotives and Tier 2 remanufacture systems. We are proposing 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 would not require them to be labeled to require the use of ULSD, unless they included sulfur sensitive technology.

We are proposing 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 are proposing to allow manufacturers to perform testing of locomotives and Category 2 engines with commercially available diesel fuel.

For both locomotive and marine engines, all of the specifications described above would apply to emission testing conducted for certification, selective enforcement audits, 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 would be done with the fuels designated in our regulations for those model years.

(3) Supplemental Emission Standards

We are proposing to continue the supplemental emission standards for locomotives and marine engines. For locomotives, this means we would 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 proposed standards it would not be practical to measure very low levels of PM emissions separately for each notch during testing, and thus we are proposing a change in the calculation of the PM notch cap for Tier 4 locomotives. All other notch caps would be determined and applied as they currently are under 40 CFR 92.8(c). See § 1033.101(e) of the proposed regulations for the detailed calculation.

Marine engines would continue to be subject to not-to-exceed (NTE) standards, however, we are proposing 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 that we are proposing. 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 would ensure the greatest degree of in-use emissions control, while at the same time would 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 we are proposing—and our best information of in-use marine engine operation—we are proposing certain improvements to our marine NTE standards.

For marine engines we are proposing a broadening of 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 proposed change also would 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 would help clarify when an engine is operating within a marine NTE zone. Please refer to section 1042.101(c) of our draft proposed regulations for a description of our proposed NTE standards. Note that we currently 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, etc.). 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. Because we are proposing changes to the shapes of these NTE zones, we request comment as to whether or not these changes best reflect actual in-use operation of marine engines.

We are also proposing changes to the NTE multipliers. We have analyzed how our proposed Tier 3 and Tier 4 emissions standards would affect the stringency of our current marine NTE standards, especially in comparison to the stringency of the underlying duty cycle standards. We recognized that in certain sub-regions of our proposed NTE zones, slightly higher multipliers would be necessary because of the way that our more stringent proposed Tier 3 and Tier 4 emissions standards would affect the stringency of the NTE standards. For comparison, our current marine NTE standards contain multipliers that range in magnitude from 1.2 to 1.5 times the corresponding duty cycle standard. In the changes we are proposing, the new multipliers would range from 1.2 to 1.9 times the standard. Even with these slightly higher NTE multipliers, we are confident that our proposed changes to the marine NTE standards would ensure the greatest degree of in-use emissions control. We are also confident that our proposed changes to the marine NTE standards would continue to ensure proportional emissions reductions, across the full range of marine engine operation. Because we are proposing changes to the NTE multipliers, we request comment as to whether or not these changes best reflect actual in-use emissions profiles of marine engines throughout the NTE zones we are proposing.

We are also proposing to adopt other NTE provisions for marine engines that are similar to our existing heavy-duty on-highway and nonroad diesel NTE standards. We are proposing these particular changes to account for the implementation of catalytic exhaust treatment devices on marine engines and 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). We feel that these provisions have been effective

in our on-highway and nonroad NTE programs; therefore, we are proposing to adopt them for our marine NTE standards as well.

We are also proposing for the first time auxiliary marine engine NTE standards, effective for both Tier 3 and Tier 4 auxiliary marine engines. Since these engines are similar to nonroad constant speed engines, we propose to adopt the same NTE standards for auxiliary marine engines as we have already finalized for nonroad constant speed engines. Specifically, these engines are engines certified to the ISO 8178–1 D2 test cycle, illustrated in 40 CFR § 94.105, Table B–4. Refer to 40CFR § 1039.101(e) for our constant speed nonroad engine NTE standards. Because we are proposing marine diesel Tier 3 implementation dates in the 2012 timeframe, we request comment as to whether or not additional lead-time might be necessary to marinize and certify NTE-compliant nonroad engines to the marine diesel Tier 3 standards, especially since it will be within that same timeframe that the similar nonroad Tier 4 engines will be NTE-certified for nonroad use.

We request comment regarding the changes we are proposing for the marine NTE standards.

(4) Emission Control Diagnostics

As described below, we are requesting comment on (but not proposing) a requirement that all Tier 4 engines include simple engine diagnostic system to alert operators to general emission-related malfunctions. (See section IV.A.(7) for related requirements involving SCR systems.) We are, however, proposing special provisions for locomotives that include emission related diagnostics. First, we would require locomotive operators to respond to malfunction indicators by performing the required maintenance or inspection. Second, locomotive manufacturers would 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 would take advantage of the unique market structure with two major manufacturers and only a few railroads buying nearly all of the freshly manufactured locomotives. The proposed provisions would create incentives for both the manufacturers and railroads to work together to develop a diagnostic system that effectively revealed real emission malfunctions. Our current regulations already require that locomotive operators complete all manufacturer-specified emission-related maintenance and this new requirement would treat repairs indicated by diagnostic systems as such emission-related maintenance. Thus, the railroads would have a strong incentive to make sure that they only had to perform this additional maintenance when real malfunctions were occurring. On the other hand, manufacturers would want to have all emission malfunctions revealed so that when they test an in-use locomotive they could repair identified malfunction before testing if the railroad had not yet done it.

At this time, we are requesting comment on a adopting a detailed regulatory program to require that all Tier 4 locomotives and marine engines include a specific engine diagnostic system. We believe that most of these engines will be equipped with a basic diagnostic system for other purposes, so codifying a uniform convention based largely on these preexisting systems could be appropriate. Manufacturers would generally not be required to monitor actual emission levels, but rather would be required to monitor functionality. Such systems could be very helpful in maintaining emission performance during the useful life and ensuring that malfunctioning marine catalysts would be replaced. However, we also believe that it might be more appropriate to address this issue in a future rulemaking in the broader context of all nonroad diesel engines.

(5) Monitoring and Reporting of Emissions Related Defects

We are proposing to apply the defect reporting requirements of § 1068.501 to replace the provisions of subparts E in parts 92 and 94. This would 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. Manufacturers must initiate these investigations when warranty information, parts shipments, and any other information which is available and indicates that a defect investigation may be fruitful. For this purpose, we consider defective any part or system that does not function as originally designed for the regulatory useful life of the engine or the scheduled replacement interval specified in the manufacturer's maintenance instructions. The parts and systems are those covered by the emissions warranty, and listed in Appendix I and II of part 1068. As we noted in previous rulemakings, we believe the investigation requirement is necessary because it will allow both EPA and the engine manufacturers to fully understand the significance of any unusually high rates of warranty claims and parts replacements for parts or parameters that may have an impact on emissions. We believe that as part of its normal product quality practices, prudent engine manufacturers already conduct a thorough investigation when available data indicate recurring parts failures. Such data is valuable and readily available to most manufacturers and, under this proposal it must be considered to determine whether or not there is a possible defect of an emission-related part.

The second change is related to reporting thresholds. Defect reports submitted in compliance with the current regulations are based on a single threshold applicable to engine families of all production volumes. The single threshold in the existing regulations rarely results in reporting of defects in the smallest engine families covered by this regulation because a relatively high proportion of such engines would have to be known to be defective before reporting is required under a fixed threshold scheme. Therefore, under § 1068.501, the threshold for reporting for the smallest engine families would generally be decreased as compared to the current requirements. These thresholds were established during our rulemaking adopting Tier 4 standards for nonroad diesel engines.[124] Those engines are substantially similar to the engines used in the marine and locomotive sectors, and thus, we believe that these thresholds will also be appropriate for these engines.

We are aware that accumulation of warranty claims and part shipments will likely include many claims and parts that do not represent defects, so we are establishing a relatively high threshold for triggering the manufacturer's responsibility to investigate whether there is, in fact, a real occurrence of an emission-related defect. Manufacturers are not required to count towards the investigation threshold any replacement parts they require to be replaced at specified intervals during the useful life, as specified in the application for certification and maintenance instructions to the owner, because shipments of such parts clearly do not represent defects. All such parts would be excluded from investigation of potential defects and reporting of defects, whether or not any specific part was, in fact, shipped for specified replacement. This proposal is intended to require manufacturers to use

[124] 69 FR 38957, June 29, 2004.

information we would expect them to keep in the normal course of business. We believe in most cases manufacturers would not be required to institute new programs or activities to monitor product quality or performance. A manufacturer that does not keep warranty or replacement part information may ask for our approval to use an alternate defect-reporting methodology that is at least as effective in identifying and tracking potential emissions related defects as the proposed requirements. However, until we approve such a request, the proposed thresholds and procedures continue to apply.

The thresholds for investigation are generally ten percent of total production to date with special limits for small volume engine families. Please note, manufacturers would not investigate for emission related defects until either warranty claims or parts shipments separately reach the investigation threshold. We recognize that a part shipment may ultimately be associated with a particular warranty claim in the manufacturer's database and, therefore, warranty claims and parts shipments would not be aggregated for the purpose of triggering the investigation threshold under this proposal.

The second threshold in this proposal specifies when a manufacturer must report that there is an emission-related defect. This threshold involves a smaller number of engines because each potential defect would have been screened to confirm that it is an emission-related defect. In counting engines to compare with the defect-reporting threshold, the manufacturer would consider a single engine family and model year. However, when a defect report is required, the manufacturer would report all occurrences of the same defect in all engine families and all model years which use the same part. For engines subject to this proposal, the threshold for reporting a defect is two percent of total production for any single engine family with special limits for small volume engine families. It is important to note that while we regard occurrence of the defect threshold as proof of the existence of a reportable defect, we do not regard that occurrence as conclusive proof that recall or other action is merited.

If the number of engines with a specific defect is found to be less than the threshold for submitting a defect report, but information, such as warranty claims or parts shipment data, later indicates additional potentially defective engines, under this proposal the information must be aggregated for the purpose of determining whether the threshold for submitting a defect report has been met. If a manufacturer has actual knowledge from any source that the threshold for submitting a defect report has been met, a defect report would have to be submitted even if the trigger for investigating has not yet been met. For example, if manufacturers receive information from their dealers, technical staff or other field personnel showing conclusively that there is a recurring emission-related defect, they would have to submit a defect report if the submission threshold is reached.

For both the investigation and reporting thresholds, § 1068.501 specifies lower thresholds for very large engines over 560 kW. A defect in these engines can have a much greater impact than defects in smaller engines due to their higher gram per hour emission rates and the increased likelihood that such large engines will be used more continuously.

(6) Rated Power

We are proposing to specify how to determine maximum engine power in the regulations for both locomotives and marine engines. The term ''maximum engine power'' would be used for marine engines instead of previously undefined terms such as ''rated power'' or ''power rating'' to specify the applicability of the standards. We are not proposing to define these terms for our purposes because they already have commercial meanings. The addition of this definition is intended to allow for more objective applicability of the standards. More specifically, for marine engines, we are proposing that maximum engine power would mean the maximum brake power output on the nominal power curve for an engine.

Currently, rated power and power rating are undefined and are specified by the manufacturer during certification. This makes the applicability of the standards unnecessarily subjective and confusing. One manufacturer may choose to define rated power as the maximum measured power output, while another may define it as the maximum measured power at a specific engine speed. Using this second approach, an engine's rated power may be somewhat less than the true maximum power output of the engine. Given the importance of engine power in defining which standards an engine must meet and when, we believe that it is critical that a singular power value be determined objectively according to a specific regulatory definition.

For locomotives, the term ''rated power'' will continue to be used, but would be explicitly defined to be the brakepower of the engine at notch 8. We would continue to use the term ''rated power'' because this definition is consistent with the commercial meaning of the term.

We are also adding a clarification to the regulations for both locomotives and marine engines to recognize that actual engine power varies to some degree during production. Manufacturers would specify maximum engine power (or rated power for locomotives) based on the design specifications for the engine (or locomotive). Measured power from actual production engines would be allowed to vary from that specification to some degree based on normal production variability. The expected production variability would be described by the manufacturer in its application. If the engines that are actually produced are different from those described in the application for certification, the manufacturer would be required to amend its application.

Finally, we are requesting comment on whether we need to specify more precisely how to determine alternator/generator efficiency for locomotive testing. In locomotive testing, engine power is not generally measured directly, but rather is calculated from the measured electrical output of the onboard alternator/generator and the alternator/generator's efficiency. Thus, it is important that the efficiency be calculated in a consistent manner. Specifically, we are requesting comment on whether to require that the efficiency be determined (and applied) separately for each notch, and whether a specific test procedure is necessary.

(7) In-Use Compliance for SCR Operation

As discussed in section III.D, we are projecting that manufacturers would use urea-based SCR systems to comply with the proposed Tier 4 emission standards. These systems are very effective at controlling NO_X emissions as long as the operator continues to supply urea of acceptable quality. Thus we have considered concepts put forward by manufacturers in other mobile source sectors in dealing with this issue that 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 recently issued a proposed guidance document for urea SCR systems discussing the use of such features on highway diesel vehicles.

Although we request comment on our adopting requirements for manufacturers on the design of SCR systems to ensure use of urea, we

believe that the nature of the locomotive and large commercial marine sectors supports a different in-use compliance approach. This approach would focus 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 would be required to include in their engine designs. Except in the rare instance that operation without urea may be necessary, the regulatory provisions proposed here put no burden on the end-user beyond simply filling the urea tank with appropriate quality urea. Specifically, we are proposing:

- That it be 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 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.
- 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.
- 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. States and localities could require operators to make this information available to them in implementing such programs.

We propose that what constitutes acceptable urea solution quality be specified by the manufacturers in their maintenance instructions, with the requirement that the certified emission control system must meet the emissions standards with any urea solution within stated specifications. This will 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 requiring onboard detection of inadequate urea quality implies the need for automated sensing of some characteristic indicator such as urea concentration or exhaust NO_X concentration. We request comment on how this can be best managed to minimize the complexity and cost while at the same time precluding tampering through such means as adding water to the urea tank. We request comment on additional compliance provisions, such as mandatory recordkeeping of fuel and urea consumption for each SCR-equipped locomotive or vessel, with periodic reporting requirements.

We believe these proposed 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 proposing 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. The incident logging or recordkeeping requirements could be effective tools for detecting in-use problems besides no-urea or poor-quality urea, such as other tampering or malmaintenance, or operation with broken or frozen urea dosing systems. We request comment on all aspects of the urea maintenance issue, including other measures we should require of manufacturers and operators of SCR-equipped engines, and on the definition of a temporary emergency.

(8) Fuel Labels and Misfueling

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, we set the downstream standard for LM diesel fuel at 500 ppm sulfur. In this way the LM diesel fuel pool could remain an outlet for off-specification distillate product and interface/transmix material. Because refiners cannot intentionally produce off-specification fuel for locomotives, most in-use locomotive and marine diesel fuel will be ULSD (which contains less than 15 ppm sulfur). Nevertheless, we expect that some fuel will be available with sulfur levels between 15 and 500 ppm.

The advance emission controls that would be used to comply with many of the new standards will require the use of ULSD. Therefore, we are proposing a requirement 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 also propose to apply this requirement for locomotives and engines having sulfur-sensitive technology and certified using ULSD. We are also proposing that all of these locomotives and vessels must be labeled near the refueling inlet to say: ''Ultra-Low Sulfur Diesel Fuel Only''. These labels would be required to be affixed or updated any time any engine on a vessel is replaced after the proposed program goes into effect.

We are proposing to require the use of ULSD in locomotives and vessels labeled as requiring such use, including all Tier 4 locomotives and marine engines. More specifically, we are proposing that 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 request comment on the need for these measures and on additional ideas for preventing misfueling.

(9) Emission Data Engine Selection

Some marine 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 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 proposing to keep essentially the same language in part 1042 as is in part 94.

We are proposing to adopt similar language for locomotives and apply it in the same manner as we do for marine engines.

(10) Deterioration Factor Plan Requirements

In this rulemaking, we are proposing to amend 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 proposing to fundamentally change either the locomotive or marine engine DF requirements other than to require advance approval.

An advance submittal and approval format would 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 would 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. We request comment on other items that should be included in the DF plan.

(11) Labeling Simplification

Our current engine regulations (i.e., Part 86, Part 89, Part 94, etc.) have similar but not identical provisions for emission certification labels. These requirements can vary from regulation to regulation and in many cases may request labeling information that manufacturers feel is either not relevant for modern electronic engines or can be made readily available through other sources. In response to manufacturer concerns, we request comment on the concept of developing a common labeling regulation, similar to our consolidation of testing and compliance provisions into part 1068. Commenters supporting a common labeling requirement for diesel engines, should address in detail the requirements of 40 CFR 1039.135 and 86.007–35 (including reserved text) along with the labeling sections being proposed in this notice (1033.135 and 1042.135).

(12) Production Line Testing

We propose to continue the existing production line testing provisions that apply to manufacturers. Some manufacturers have suggested that we should eliminate this requirement on the basis that very low noncompliance rates are being detected at a high expense. We disagree. 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 nonmarine engines. We believe these existing provisions already address the concerns raised to us by the manufacturers. Nevertheless, we welcome comments regarding the appropriateness of the current provisions.

We are asking for comment on whether manufacturers should be allowed to use special procedures for production line testing of catalyst-equipped engines. For example, should we allow the use of a previously stabilized catalyst instead of an unstabilized (or green) catalyst? If we allow this approach, should we require some additional procedure for ensuring proper in-use operation of the production catalysts? Should we allow manufacturers to demonstrate that the diagnostic system is capable of verifying proper function of the emission controls? Alternatively for locomotives, should we allow a locomotive selected for testing to be introduced into service before testing, provided that it is tested within the first 10,000 miles of operation?

(13) 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 a ''good engineering'' requirements. We propose to adopt these same requirements in part 1033 and request comment on the need to specify a test procedure and specific numerical limits.

We are also proposing to adopt similar requirements for marine engines and vessels that run on volatile fuels. We are not aware of any marine engines currently being produced that would be subject to these requirements, but believe that it would be appropriate to adopt these requirements now, rather than waiting until such engines are produced because it would provide manufacturers certainty. Specifically, we are proposing that if someone were to build a marine vessel to use a compression-ignition engine that runs on a volatile liquid fuel, the engine would be subject to the exhaust standards of part 1042, but the fuel system would be subject to the evaporative emission requirements of the recently proposed part 1045.[125]

(14) Small Business Provisions

There are a number of small businesses that would be subject to this proposal because they are locomotive manufacturers/remanufacturers, railroads, marine engine manufacturers, post-manufacture marinizers, or vessel builders. We are proposing to 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 VIII.C of this proposed rule for discussion of our outreach efforts with small entities.) We request comment on whether continuing these provisions is appropriate. We also request comment

[125] Part 1045 is scheduled to be proposed just before this proposed rule.

on whether additional flexibilities are needed.

(a) Locomotive Sector

A significant portion of the locomotive remanufacturing and railroad industry is made up of small businesses. As such, these companies do not tend to have the financial resources or technical expertise to quickly respond to the requirements contained in today's proposed rule. Therefore, as mentioned earlier, we would continue the existing provisions described below.

(i) Production-Line and In-Use Testing Does Not Apply

Production-line and in-use testing requirements would not apply to small locomotive remanufacturers until January 1, 2013, which would be up to five calendar years after this proposed program becomes effective. The advantage of this approach would be to minimize compliance testing during the first five calendar years.

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 proposing today). As an amendment to the existing in-use testing exemption, we are proposing that small remanufacturers with these new locomotives or locomotive engines would be required to begin complying with the in-use testing requirements after the five-year delay, January 1, 2013 (exemption based on calendar years). Thus, they would no longer have an exemption from in-use testing for the entire useful life of a locomotive or a locomotive engine. We want to ensure that small remanufacturers would comply with our standards in-use, and subsequently, the public can be assured they are receiving the air quality benefits of the proposed standards. In addition, this proposed amendment would provide a date certain for small remanufacturers on when the in-use testing requirements would begin to apply.

(ii) Small Railroads Exempt From New Standards for Existing Fleet

For locomotives in their existing fleets, the Tier 0 remanufacturing requirements would not apply to railroads qualifying as small businesses. The definition of small business currently used by EPA is same as the definition used by the Small Business Administration, which is based on employment. For line-haul railroads the threshold is 1,500 or fewer employees, and for short-haul railroads it is 500 or fewer employees. Previously we believed that small railroads were not likely to remanufacture their locomotives to ''as new'' condition in most cases, so their locomotives would be generally excluded from the definition of ''new''.

We are requesting comment on whether the current provisions for railroads qualifying as small businesses have been effective and appropriate, on whether they should continue under the new program, and, if so, on whether the existing employee thresholds are appropriate for the purpose of this rulemaking or whether a new threshold based on revenue would be appropriate. Based on the increased efficiencies associated with railroad operations, we believe a railroad with 500 or fewer employees can be viewed as a medium to large business. We believe a different approach based on annual revenues may be more appropriate. For example, should we limit the category of ''small railroad'' to only those railroads that qualify as Class III railroads and that are not owned by a larger company? Under the current classification system, this would limit the exemption to railroads having total revenue less than $25 million per year.

We are clarifying in 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 would be small passenger railroads related to tourism. We invite comment on whether any intercity passenger or commuter railroads would need this exemption for locomotives in their existing fleet.

(iii) Small Railroads Excluded From In-Use Testing Program

The railroad in-use testing program would continue to only apply to Class I freight railroads, and thus, no small railroads would be subject to this testing requirement. It is important to note that most, but not all 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. [126]

(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 are proposing to apply this section for locomotives as described below.

Under this unusual circumstances hardship provision, locomotive manufacturers may apply for hardship relief if circumstances outside their control cause the failure to comply and if the failure to sell the subject locomotives would 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 would depend on the specific circumstances of the company and the situation involved. As part of its application for hardship, a company would be required to provide a compliance plan detailing when and how it would achieve compliance with the standards.

(b) Marine Sector

There are numerous small businesses that marinize engines for marine use or build vessels. These businesses do not necessarily have the financial resources or technical expertise to quickly respond to the requirements contained in today's proposed rule. To address this issue, we propose to continue most of the existing provisions, as described below.

(i) Revised Definitions of Small-Volume Manufacturer and Small-Volume Boat Builder

We propose to revise 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 proposing to include worldwide production in these

[126] 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.

definitions, we would 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. As discussed above, 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 proposed rule.

(ii) Broader Engine Families and Testing Relief

Broader engine families: Post-manufacture marinizers (PMMs) and SVMs would 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 would be responsible for certifying based on the ''worst-case'' emitting engine. The advantage of this approach is that it would minimize 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 could then carry-over data from year to year until changing engine designs in a way that might significantly affect emissions.

We understand that this broad engine family provision still would require a certification test and the associated burden for small-volume manufacturers. 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. We would require testing because we need a reliable, test-based technical basis to issue a certificate for these engines. However, manufacturers would be able to use carryover to spread costs over multiple years of production.

Production-line and deterioration testing: In addition, SVMs producing engines less than or equal to 800 hp (600 kW) would be exempted from production-line and deterioration testing for the proposed Tier 3 standards. We would assign a deterioration factor for use in calculating end-of-useful life emission factors for certification. This approach would minimize compliance testing since production-line and deterioration testing would be more extensive than a single certification test. The Tier 3 standards proposed for these engines are expected to be engine-out standards and would not require the use of aftertreatment—similar to the existing Tier 1 and Tier 2 standards. The Tier 4 standards proposed for engines greater than 800 hp (600 kW) are expected to require aftertreatment emission-control devices. Currently, we are not aware of any SVMs that produce engines greater than 800 hp (600 kW), except for one marinizer that plans to discontinue their production in the near future.[127] As a proposed revision to the existing provisions, we would not apply these production-line and deterioration testing exemptions to SVMs that begin producing these larger engines in the future due to the sophistication of manufacturers that produce engines with aftertreatment technology. These manufacturers would have the resources to conduct both the design and development work for the aftertreatment emission-control technology, along with production-line and deterioration testing. We invite comments on this proposed revision.

(iii) Delayed Standards

One-year delay: Post-manufacture marinizers 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 propose 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 used by EPA for these provisions for manufacturers of new marine diesel engines—or other engine equipment manufacturing—is 1,000 or fewer employees) and producing engines less than or equal to 800 hp (600 kW). As described earlier, the Tier 4 standards proposed for engines greater than 800 hp (600 kW) are expected to require aftertreatment emission-control devices. We would 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 would expect that the large base engine manufacturer (with the needed resources), not the small PMM, would conduct both the design and development work for the aftertreatment emission-control technology, and they would also take on the certification responsibility in the future. Thus, the small PMM marinizing large engines would not need a one-year delay. We invite comments on this proposed revision.

Three-year delay for not-to-exceed (NTE) requirements: 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, PMMs qualifying as small businesses and producing engines less than or equal to 800 hp (600 kW) could 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) would be appropriate considering their more limited resources. As described earlier, the Tier 4 standards proposed for engines greater than 800 hp (600 kW) are expected to require aftertreatment emission-control devices. We would 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 would expect that the large base engine manufacturer (with the needed resources), not the small PMM, would conduct both the design and development work for the aftertreatment emission-control technology, and they would also take on the certification responsibility in the future. Thus, the small PMM marinizing large engines would not need a three-year delay for compliance with the NTE requirements. We invite comments on this proposed revision.

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, we do not plan to continue this provision. As discussed earlier, the Tier 3 standards proposed for these engines are expected to be engine-out standards and would not require the use of aftertreatment—similar to the existing Tier 1 and Tier 2 standards. The Tier 4 standards

[127] U.S. EPA, Assessment and Standards Division, Memorandum from Chester J. France to Alexander CristoFaro of the U.S. EPA's Office of Policy, Economics, and Innovation, Locomotive and Marine Diesel RFA/SBREFA Screening Analysis, September 25, 2006.

proposed for engines greater than 800 hp (600 kW) are expected to require aftertreatment emission-control devices. For the recreational marine sector, most of the engines are less than or equal to 800 hp (kW). To meet the Tier 3 standards, the design and development effort is expected to be for recalibration work, which is much less than the work for Tier 4 standards. 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 would provide enough time for these entities to meet the proposed standards. We invite comment on discontinuing this provision for a 5-year delay.

(iv) Engine Dressing Exemption

Marine engine dressers would continue to be exempted from certification and compliance requirements. Many marine diesel engine manufacturers take a new, land-based engine and modify it for installation on a marine vessel. Some of the companies that modify an engine for installation on a vessel 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. Because the modified land-based engines are subsequently used on a marine vessel, however, these modified engines would be considered marine diesel engines, which would then fall under these requirements.

To clarify the responsibilities of engine dressers under this proposed rule, while we would continue to consider them to be manufacturers of a marine diesel engine, they would 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 would be an extension of § 94.907 of the existing regulations. For further details of engine dressers responsibilities see § 1042.605 of the proposed regulations.

(v) Vessel Builder Provisions

For recreational marine engines, the existing 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 vessel manufacturer's sales for one year. For boat builders with very small production volumes, this 80-percent allowance could be exceeded, as long as sales do not exceed 10 engines in any one year nor 20 total engines over five years and applies only to engines less than or equal to 2.5 liters per cylinder. However, we do not plan to continue this provision. The vast majority of the recreational marine engines would be subject only to the Tier 3 engine-out standards that are not expected to change the physical characteristics of engines (Tier 3 standards would not result in a larger engine or otherwise require any more space within a vessel). This is similar to the Tier 2 engine-out standards, and thus, we believe this provision is not necessary anymore as boat builders are not expected to need to redesign engine compartments of boats, for engines meeting Tier 3 standards. We invite comment on discontinuing this provision for boat builders.

(vi) Hardship Provisions

Sections 1068.245, 1068.250 and 1068.255 of the existing regulations in title 40 contain hardship provisions for engine and equipment manufacturers, including those that are small businesses. We are proposing to apply these sections for marine applications which would effectively continue existing hardship provisions as described below.

PMMs and SVMs: We are proposing to continue two existing hardship provisions for PMMs and SVMs. They may apply for this relief on an annual basis. First, under an economic hardship provision, PMMs and SVMs 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 would be required to provide a compliance plan detailing when and how it would 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 would be up to one year, with the potential to extend the relief as needed. We anticipate that one to two years would normally be sufficient. Also, if a certified base engine is available, the PMMs and SVMs must generally use this engine. We believe this provision would 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 proposed regulatory text in 40 CFR 1068.250 for additional information.

Second, under the unusual circumstances hardship provision, PMMs and SVMs 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 would 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 terms and time frame of the relief would depend on the specific circumstances of the company and the situation involved. As part of its application for hardship, a company would be required to provide a compliance plan detailing when and how it would achieve compliance with the standards. We consider this relief mechanism to be an option of last resort. We believe this provision would protect PMMs and SVMs from circumstances outside their control. We, however, would not envision granting hardship relief if contract problems with a specific company prevent compliance for a second time. See the proposed regulatory text in 40 CFR 1068.245 for additional information.

Small-volume boat builders: We are also 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 would 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. This relief would allow the boat builder to use an uncertified engine and is considered a mechanism of last resort. The terms and time frame of the relief would depend on the specific circumstances of the company and the situation involved. As part of its application for hardship, a company would be required to provide a compliance plan detailing when and how it would achieve compliance with the standards. See the proposed regulatory text in 40 CFR 1068.245 for additional information.

In addition, small-volume boat builders generally depend on engine manufacturers to supply certified engines in time to produce complying vessels by the date emission standards would 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 or performance characteristics. To address this concern, we are proposing to allow small-volume boat builders to request up to one extra year before using certified engines if they are not at fault and would face serious economic hardship without an extension. See the proposed regulatory text in 40 CFR 1068.255 for additional information.

(15) Alternate Tier 4 NO_X+HC Standards

We are proposing new Tier 4 NO_X and HC standards for locomotives and marine engines, and proposing to continue our existing emission averaging programs. 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 proposing an alternate NO_X+HC standard of 1.3 g/bhp-hr that could be used as part of the averaging program.[128] 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. We are proposing that NO_X+HC credits and NO_X credits could be averaged together without discount.

(16) Other Issues

We are also proposing other minor changes to the compliance program. For example, we are proposing that engine manufacturers 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 would 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 proposed 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.

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.[129] 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.

The proposed 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 proposing to add a definition of ''refurbish'' which would 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 in section IV.B.(3) we are proposing to set the credit proration factor for

[128] For model year 2015 and 2016 the alternate standard would b3 5.5 g/bhp-hr NO_X+HC. In all cases the alternate standard would be equal to the otherwise applicable NO_X standard.

[129] As is described in this section, freshly manufactured locomotives, repowered locomotives, refurbished locomotives, and all other remanufactured locomotive3s are all ''new locomotives'' in both the existing and proposed regulations.

refurbished switch locomotives equal to the proration factor for 20-year old switchers (0.60).

We are requesting comment on whether refurbished locomotives should be required to meet more stringent standards than locomotives that are simply remanufactured. For example, would it be feasible and cost-effective to require refurbished switch locomotives to meet latest applicable emission standards (i.e., the highest tier of standards that is applicable to freshly manufactured switch locomotives at the time of the remanufacture) rather than the old standards? If not, should they be required to at least meet the Tier 1 or Tier 2 standards?

We recognize that the issues are somewhat different for refurbished line-haul locomotives because of different design constraints that are not present with switchers. If we required refurbished line-haul locomotives to meet very stringent standards, should we allow railroads to refurbish a limited number of line-haul locomotives to less stringent standards? For example, if we required refurbished line-haul locomotives to meet the Tier 3 standards, should we allow railroads to refurbish up to 10 line-haul locomotives per year to the Tier 2 standards.

(2) Averaging, Banking and Trading

We are proposing to continue the existing averaging banking and trading provisions for locomotives. In general, we will continue the historical practice of capping family emission limits (FELs) at the level of the previously applicable standard. However, we are requesting comment on whether we should set lower caps for Tier 4 locomotives similar to what was done for highway engines.[130] We recognize that it would be appropriate to allow the use of emission credits to smooth the transition from Tier 3 to Tier 4, and this requires the FELs to be set at the level of the Tier 3 standards.

In order to ensure that the ABT program is not used to delay the implementation of the Tier 4 technology, we are also proposing to carry over an averaging restriction that was adopted for Tier 2 locomotives in the previous locomotive rulemaking. We would restrict to 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 would be intended to ensure that progress is made toward compliance with the advanced technology expected to be needed to meet the Tier 4 standards. This would 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 request comment on the need for this or other restriction on the application of credits to Tier 4 locomotives.

We are proposing to prohibit the carryover of PM credits generated from Tier 0 or Tier 1 locomotives under part 92. 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. Thus, credits generated against these standards can be considered to be windfall credits. We believe that allowing the carryover of such PM credits would not be appropriate. We would allow credits generated from Tier 2 locomotives to be used under part 1033. We request comment on this prohibition as well as an alternative approach in which part 92 PM credits are discounted significantly rather than prohibited completely.

We are also proposing to update 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 will 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 will 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 locomotive in terms of lifetime emissions. The proposed proration factors are shown in § 1033.705 of the proposed regulations. These would replace the existing proration factors of § 92.305. For example, using the proposed 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 existing regulations, the proration factor would be 0.50. See section IV.B.(3) for additional discussion of proration factor issues related to refurbished switchers.

We are also requesting comment on how to assign emission credits. Under the current regulations, credits can be held by the manufacturer, railroad, or other entities. Since remanufacturing is frequently a collaborative process between the railroad and either a manufacturer or other remanufacturer, there can be multiple entities that are considered to be remanufacturers, and thus allowed to hold the certificate for the remanufactured locomotive. The regulations presume that credits are held by the certificate holder, but they can be transferred to the railroad at the point of sale or the point of remanufacture. We are requesting comment on whether it would be more appropriate to require that credits be transferred to the railroads for some or all cases. Automatically transferring credits to the railroad at the time of remanufacture would be a way of applying the standards on a fleet-average basis. Would this be a better approach for ensuring that the industry applies low emission technology in the most equitable and cost effective manner? Would it reduce the potential for market disruptions? Would it have any other beneficial or adverse consequences not discussed here?

Finally, we are requesting comment on how to treat 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 locomotives are subject to the same standards. However, for the Tier 3 and Tier 4 programs, switch and line-haul locomotives would be subject to different standards with emissions generally measured only for one test cycle. We are proposing to 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. We are requesting comment on (but not proposing) 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, we are also proposing a special calculation

[130] 66 FR 5109–5111, January 18, 2001.

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 megagrams of NO_X credits to comply with the line-haul emission standard, the manufacturer would have to use 1.0 megagrams of line-haul NO_X credits and 1.0 megagrams of switch NO_X credits if the line-haul credits were generated by a locomotive subject to standards over both cycles.

Commenters supporting cross-cycle credit averaging should also address uncertainty due to cycle differences and the different ways in which switch and line-haul locomotives are likely to be used. For example, the two cycles are very different and reflect average duty cycles for the two major types of operation. Moreover, because switch locomotive generally spend more time in low-power operation than line-haul locomotives, they tend to last much longer in terms of years. This means that the full benefits of emission reductions from switch locomotives will likely occur further into the future than will the benefits of emission reductions from line-haul locomotives. Should such credits be adjusted to account for this difference? If so, how? Are there other factors that would warrant applying some adjustment to the credits to make them more equivalent to one another?

(3) Switch Credit Calculation

We are proposing to correct the existing ABT program to more appropriately give credits to railroads for upgrading old switchers to use clean engines, rather than to continue using the old high emission engines indefinitely. As with the existing program, credits would be calculated from the difference between the emissions of the old switcher and the emissions of the new replacement switcher, adjusted to account for the projected time the old switcher would have otherwise remained in service. We are also requesting comment on whether other changes need to be made to the switch credit calculation.

The proposed correction would affect the proration factor that is used in the credit calculation to account for the locomotive's emissions projected for the remainder of its service life, relative to a freshly manufactured locomotive. More specifically, the correction we are proposing would create a floor for the credit proration factor for refurbished switch locomotives equal to the proration factor for 20 year old switchers (0.60). For example, under the proposed program, 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. Such credits can be generated under the existing program, but not to the full degree that they should be. That original program was designed to address line-haul locomotives, and no special consideration was made for switchers or for substantially refurbishing the locomotive. Most significantly, the existing regulations assume that any locomotive 32 years old or older would only be remanufactured one additional time (i.e., only have one remaining useful life). This is true without regard to how many additional improvements are made to the locomotive to extend its service life. Based on this assumption, any credits generated by such a locomotive are discounted by 86 percent relative to credits generated or used by a freshly manufactured locomotive. While this kind of discount appropriately reflected the differences in future emissions for line-haul locomotives, it greatly underestimates the emission reduction achieved by refurbishing switch locomotives.

The existing and proposed credit programs allow for remanufacturers to generate emission credits by refurbishing an existing old switch locomotive so that it will use engines meeting the standards for freshly manufactured locomotives. However, they do not allow for any credits to be generated by simultaneously creating a freshly manufactured locomotive and scrapping an existing old switch locomotive, even though the emissions impact of the two scenarios may be identical. We request comment on whether it is appropriate to maintain this distinction. Commenters supporting allowing credits to be generated by scrapping old locomotives should address how to ensure that allowing it would not result in windfall credits being generated from old locomotives that would have been scrapped anyway.

(4) Phase-in and Reasonable Cost Limit

We are proposing that the new Tier 0 and 1 emission standards become applicable on January 1, 2010. We are also proposing a requirement for 2008 and 2009 when a remanufacturing system is certified to these new standards. If such system is available before 2010 for a given locomotive 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. Similarly, we are proposing a requirement to use certified Tier 2 systems for 2008 through 2012 when a remanufacturing system is certified to the new Tier 2 standards. We are requesting comment on how best to define reasonable cost.

As part of this phase-in requirement, we would allow owners/operators a 90-day grace period in which they could remanufacture their locomotives to the previously applicable standards. This would allow them to use up inventory of older parts. It would also allow sufficient time to find out about the availability of kits and to make appropriate plans for compliance.

We are also requesting comment on whether this requirement will cause any disadvantage to non-OEM remanufacturers who may be unable to develop remanufacture systems in time.

(5) 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 proposing to continue this allowance. We are also requesting comment on extending this allowance to owner/operators. Specifically, we request comment on adding the following paragraph to the end of the proposed § 1033.240:

> An owner/operator remanufacturing its locomotives to be identical to its 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.

Several railroads have expressed concern that once they purchase a compliant locomotive, they are at the mercy of the original manufacturer at the time of remanufacture if there are no other certified kits available for that model. The regulatory provision shown

above would make it somewhat simpler for a railroad to obtain the certificate because it would eliminate the need to certification testing.

(6) Railroad Testing

Section 92.1003 requires Class I freight railroads to annually test a small sample of their locomotives. We are proposing to adopt the same requirements in § 1033.810. We are requesting comments on whether this program should be changed. In particular, we request suggestions to better specify how a railroad selects which locomotives to test, which has been a source of some confusion in recent years. Commenters suggesting changes should also address when such changes should take effect.

(7) 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 proposing to change the lower limit for testing to 60 °F and eliminate the correction for the effects of ambient temperature. In implementing the current regulations, we have found that the broad temperature range with correction, which was established to make testing more practical, was not workable. Given the uncertainty with the existing correction, manufacturers have generally tried to test in the narrower range being proposed today. However, under the proposed regulations, we would allow manufacturers to test at lower temperatures, but would require them to develop correction factors specific to their locomotive designs. We would continue the other existing test condition provisions in the proposed regulations.

(8) Duty Cycles

We are not proposing any changes to the weighting factors for the locomotive duty cycles. However, we are requesting comment on whether such changes would be appropriate in light of the proposed idle reduction requirements. The existing regulations (§ 92.132(a)(4)) specifies an alternate calculation for locomotive equipped with idle shutdown features. Specifically, the regulatory language states:

> For locomotives equipped with features that shut the engine off after prolonged periods of idle, the measured mass emission rate M_{i1} (and M_{i1a} as applicable) shall be multiplied by a factor equal to one minus the estimated fraction reduction in idling time that will result in use from the shutdown feature. Application of this adjustment is subject to the Administrator's approval.

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 proposing to change the calculation procedures with respect to the proposed 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 will 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.

While we are proposing to continue this approach, we are requesting comment on whether we should be more specific in our regulations about what level of adjustment is appropriate. For example, should we specify that idle emission rates for locomotives meeting our proposed minimum shutdown requirements in § 1033.115 be reduced by 20 percent, unless the manufacturer demonstrates that greater idle reduction will be achieved?

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 existing regulations, we handle such locomotives under our discretion to allow alternate calculations (40 CFR 92.132(e)). We are requesting comment on whether we need detailed regulations to specify duty cycles for such locomotives. 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, commenters should consider the following information provided to us by manufacturers for the previous rulemaking that shows that typical notch power levels expressed as a percentage of the rated power of the engine as shown in Table IV–below.

TABLE IV–1.—TYPICAL LOCOMOTIVE NOTCH POWER LEVELS

	Notch							
	1	2	3	4	5	6	7	8
Percent of Rated Power	4.5	11.5	23.5	35.0	48.5	64.0	85.0	100.0

(9) Use of 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 certifying under the locomotive program. We placed limits on the number of nonroad engines that can be used for four primary reasons:

- The locomotive program is uniquely tailored to the railroad industry to ensure emission reductions for actual locomotive operation over 30–60 year service lives.

• At sufficiently high sales levels, the per locomotive cost of certifying under part 92 become less significant.

• It is somewhat inequitable to allow nonroad engine manufacturers the option of certifying the engines in whichever program they believe to be more advantageous to them, considering factors such as compliance testing requirements.

• States and localities have much less ability to regulate locomotives than other engine types, and thus EPA has an obligation to monitor locomotive performance more closely.

We believe that these reasons remain valid and are proposing to continue this type of allowance. However, we are proposing some changes to these procedures. In general, manufacturers have not taken advantage of these 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 proposing 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 proposing to replace the existing allowance to rely on part 89 certificates with a design-certification program that would make the locomotives subject to the locomotive standards in-use, but not require new testing to demonstrate compliance at certification. Specifically, this program would allow switch manufacturers using nonroad engines to introduce up to 15 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 have locomotive certificates. Thus, purchasers would have the compliance assurances that they seem to desire.

The short term program is more flexible and would not require that the locomotives comply with the switch cycle standards, and instead the engines would be subject to the part 1039 standards. The manufacturer would be required to use good engineering judgment to ensure that the engines' emission controls will function properly when installed in a locomotive. 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 propose to not have any limits of the sales of such locomotives. Nevertheless, we are proposing that this allowance be limited to model years through 2017. This will provide sufficient time to develop these new switchers. We are not proposing that these locomotives would 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 would be required to be covered by a part 1033 remanufacturing certificate.

We are also requesting comment on whether specific regulatory language is needed to describe how to test locomotives that have multiple propulsion engines, and when it is appropriate to allow single engine testing for certification.

(10) Auxiliary Emission Control Devices Triggered by GPS Data

Some manufacturers have developed software which can use latitude and longitude to change engine operating characteristics including emissions. Such software fits our definition of an auxiliary emission control device (AECD). If for example, the software were to increase emissions when the locomotive was operated in Mexico; this would cause the locomotive to fail emission standards when in Mexico. Moreover, the emissions from such a locomotive would likely be harmful to both Mexican and U.S. citizens due to emissions transport. AECDs (except those approved during certification) which cause emission exceedences when a locomotive crosses the U.S. border into a foreign country are considered defeat devices and are not permitted. When a locomotive is certified, it should comply with U.S. standards and requirements during all operation. It does not matter where the locomotive goes after it is introduced into commerce. In addition, since emission labels have to contain an unconditional statement of compliance, non-compliant operation in any area, including a foreign country, would render the label language false, and this is not allowed.

(11) Mexican and Canadian Locomotives

Under the existing regulations, Mexican and Canadian locomotives are subject to the same requirements as U.S. locomotives if they operate extensively within the U.S. The regulations 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 proposing to change 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 would 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 would be required to submit a detailed plan for our review prior to using uncertified locomotives in the U.S. We would grant an exemption for locomotives that we determine will not be used extensively in the U.S. and that such operation would 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.

(12) Temporary In-Use Compliance Margins and Assigned Deterioration Factors

The Tier 4 standards would be challenging for manufacturers to achieve, and would require manufacturers to develop and adapt new technologies. Not only would manufacturers be responsible for ensuring that these technologies would allow engines to meet the standards at the time of certification, they would also have to ensure that these technologies continue to be highly effective in a wide range of in-use environments so that their engines would comply in use when tested by EPA. However, in the early years of a program that introduces new technology, there are risks of in-use compliance problems that may not appear in the certification process or during developmental testing. Thus, we believe that for a limited number of model years after new standards take effect it is appropriate to adjust the compliance levels for assessing in-use compliance for diesel engines equipped with aftertreatment. This would provide assurance to the manufacturers that they would not face recall if they exceed

standards by a small amount during this transition to clean technologies. This approach is very similar to that taken in the highway heavy-duty rule (66 FR 5113–5114) and general nonroad rule (69 FR 38957), both of which involve similar approaches to introducing the new technologies.

Table IV–2 shows the in-use adjustments that we propose to 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. Note that these in-use add-on levels apply only to engines certified through the first few model years of the new standards. During the certification demonstration, manufacturers would still be required to demonstrate compliance with the unadjusted Tier 4 certification standards using deteriorated emission rates. Therefore, the manufacturer would not be able to use these in-use standards as the design targets for the engine. They would need to project that engines would meet the standards in-use without adjustment. The in-use adjustments would merely provide some assurance that they would not be forced to recall engines because of some small miscalculation of the expected deterioration rates.

To put these levels in context, the difference between the NO_X standard with and without the end of life add-on is equivalent to the end of life catalyst efficiency being about 20 percent lower than expected. Our feasibility analysis projects that the SCR catalyst would need to be approximately 80 percent efficient over the locomotive duty cycle at the end of the locomotive's useful life to comply with the 1.3 g/bhp-hr standard. However, if this efficiency dropped to 60 percent, the cycle-weighted emissions would essentially double, increasing by up to 1.3 g/bhp-hr.

TABLE IV–2.—PROPOSED IN-USE ADD-ONS

[g/bhp-hr]

For useful life fractions	NO_X (2017–2019)	PM (2015–2017)
<50% UL	0.7	0.01
50%–75% UL	1.0	
>75% UL	1.3	

C. Compliance Issues Specific to Marine Engines

(1) Useful Life

We specify in 40 CFR 94.9 minimum values for the useful life compliance period. We require manufacturers to specify longer useful lives for engines that are designed to last longer than these minimum values. We also allow manufacturers to ask for shorter useful lives where they can demonstrate that the engines will rarely exceed the requested value in use. Some manufacturers have proposed that the useful life scheme in our regulation be modified to more closely reflect the design lives of current marine engines and the fact that design life inherently varies with engine cylinder size and power density. Our existing regulations do account for this variation by specifying nominal minimum useful life values which most engines are certified to. Manufacturers are required to certify to longer useful lives if their engines are designed to last significantly longer than this minimum. The regulations also include provisions for a manufacturer to request a shorter useful life. This was recently amended to include a more prescriptive basis for manufacturers to demonstrate that a shorter useful life is more appropriate.[131] Specifically, our regulations used to require that the demonstration include data from in-use engines. Manufacturers were concerned that they generally do not (and cannot) have the data from in-use engines that is needed to justify an alternate useful life prior to obtaining certification and putting engines into service. The amended regulations allow manufacturers to use information equivalent to in-use data, such as data from research engines or similar engine models that are already in production. Additionally, the demonstration currently required must include recommended overhaul intervals, any mechanical warranties offered for the engine or its components, and any relevant customer design specifications. Given the above amendments, we do not feel that a sweeping change to our useful life scheme is warranted at this time. We would be willing to consider modifying our scheme in the future should manufacturers provide data for characteristics used to design engine overhaul intervals (e.g., compression loss, oil consumption increase, engine component wear, etc.) in specific cylinder size and power density categories.

(2) Replacement Engines

Under the provisions of our current marine diesel engine program, when an engine on an existing vessel is replaced with a new engine, that new engine must be certified to the standards in existence when the vessel is repowered. These repower requirements apply to both propulsion and auxiliary engines. We are proposing to apply this approach under the new regulations rather than the provisions of § 1068.240.

We provided an exemption in 40 CFR 94.1103(b)(3) which allows a vessel owner to replace an existing engine with a new uncertified engine or a new engine certified to an earlier standard engine in certain cases. This is only allowed, however, if it can be demonstrated that no new engine that is 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. In other words, if a new certified engine cannot be used, an engine manufacturer may produce a new replacement engine that does not meet all of the requirements in effect at that time. For example, if a vessel has twin Tier 1 propulsion engines and it becomes necessary to replace one of them after the Tier 3 standards go into effect, the vessel owner can request approval for an engine manufacture to produce a new Tier 1 engine if it can be demonstrated that the vessel would not function properly if the engines are not identically matched.

There are certain conditions for this exemption. The replacement engine must meet standards at least as stringent as those of the original engine. So, for example, if the original engine is a pre-Tier 1 engine, then the replacement engine need not meet any emission limits. If the old engine was a Tier 1 engine, the new engine must meet at

[131] 70 FR 40458, July 13, 2005.

least the Tier 1 limits. As described in this section, the new engine does not necessarily need to meet stricter limits that may otherwise apply when the replacement occurs. Also as a condition for the exemption, the engine manufacturer must take possession of the original engine or make sure it is destroyed. In addition, 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. Our regulations specify the information that must be on the label. In this proposal, we are adding a provision to cover the case where the engine meets a previous tier of standards.

As described above, this provision requires EPA to make the determination that no certified engine would meet the required physical or performance needs of the vessel. However, we recently revised this provision to allow the engine manufacturer to make this determination in cases of catastrophic engine failure. In these cases, the vessel is not usable until a replacement engine is found and installed. The engine manufacturers and vessel owners were concerned that our review would take a considerable amount of time. In addition, they were also concerned that reviewing all potential replacement engines for suitability would also take a lot of time. Note that in cases where a vessel owner simply wants to replace an engine with a new version of the same engine as part of a vessel overhaul for example, it would still be necessary to obtain our approval.

In catastrophic failure situations, our regulations now allow an engine manufacturer to determine that no compliant engine can be used for a replacement engine, provided that certain conditions are met. First, 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). Second, 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. Finally, 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. This is to avoid the situation where an engine is replaced prior to a vessel modification that would otherwise result in the vessel becoming ''new'' and its engines becoming subject to the new engine standards. In addition, the replacement of important navigation systems at the same time may actually allow the use of a newer tier engine.

We are returning to this provision to add an additional requirement. Specifically, the determination (either by the engine manufacturer in the case of a catastrophic failure or by us in all other cases) must show that no engine of the current or any previous tier would meet the physical or performance requirements of the engine. In other words, after the Tier 4 standards go into effect, it must be demonstrated that no other Tier 4, or Tier 3, Tier 2, or Tier 1 engines would work. Similarly, when the Tier 3 standards are in effect it must be demonstrated that no other Tier 3, or Tier 2 or Tier 1 engine would work. If there are engines from two or more previous tiers of standards that would meet the performance requirements, then the requirement would be to use the engine from the cleanest tier of standards.

(3) Personal Use Exemption

The existing control program provides for exemptions from the standards, including testing, manufacturer-owned engines, display engines, competition engines, national security, and export. 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 proposing a new provision that would exempt an engine installed on a vessel manufactured by a person for his or her own use (see 40 CFR 1042.630). This proposal 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 proposed exemption would be negligible.

Because the exemption is intended for hobbyists and fishermen, we are setting additional requirements for it. 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 would be limited to one such vessel over a ten-year period and would not allow exempt engines to be sold for at least five years. We believe these restrictions would not be unreasonable for a true hobby builder or comparable fisherman. Moreover, we would 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 will be certified to meet 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.

We are requesting comment on all aspects of this proposed exemption. We also request comment on whether this application of the exemption should be limited to fishing vessels under a certain length (e.g., 36 feet), to ensure that it is limited to small operators, and/or whether it should be limited to vessels that are engaged only in seasonal fishing and not used year-round.

(4) Gas Turbine Engines

While gas turbine engines [132] 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 proposing to regulate marine gas turbines in this rulemaking. Nevertheless, we believe that gas turbines could likely meet the proposed standards (or similar standards) since they generally have lower emissions than diesel engines and will reconsider gas turbines in a future rulemaking. We are requesting that commenters familiar with gas turbines provide to us any emissions information that is available. We would also welcome comments on whether it would be appropriate to regulate turbines and diesels together. Commenters supporting the regulation of turbines should also address whether any special provisions would be needed for the testing and certification of turbines.

[132] 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.

(5) Residual Fuel Engines

Our Category 1 and Category 2 marine diesel engine standards, both the existing emission limits (Tiers 1 and 2) and the proposed emission limits (Tiers 3 and 4) apply to all newly built marine diesel engines regardless of the fuel they are designed to use. In the vast majority of cases, this fuel would be distillate diesel fuel similar to diesel fuel used in highway or land-based nonroad applications. However, there are a small number of Category 1 and Category 2 auxiliary engines that are designed to use residual fuel. Residual fuel is a by-product of distilling crude oil to produce lighter petroleum products such as gasoline, DM-grade diesel fuel (also called ''distillate diesel'' which is used in on-highway, land-based nonoroad, and marine diesel engines), and kerosene. Residual fuel possesses a high viscosity and density, which makes it harder to handle (usage requires special equipment such as heaters, centrifuges, and purifiers). It typically has a high ash, nitrogen, and sulfur content compared to distillate diesel fuels. It is not produced to a set of narrow specifications, and so fuel parameters can be highly variable. All of these characteristics of residual fuel make it difficult to handle, and it is typically used only in Category 3 engines on ocean-going vessels or in very large (above 30 l/cylinder) generators used in land-based power plants. Residual fuel is traditionally not used in Category 1 or Category 2 propulsion engines because of the fuel handling equipment required onboard and because it can affect engine responsiveness. However, it may be used in Category 1 or Category 2 auxiliary engines used on ocean-going vessels, to simplify the fuel requirements for the vessel (both propulsion and auxiliary engines would operate on the same fuel).

In contrast to the federal program, the engine testing and certification provision in Annex VI allow manufacturers to test engines on distillate fuel even if they are intended to operate on residual fuel. This approach was adopted because it was thought that the use of residual fuel would not affect NO_X, and the Annex VI standards are NO_X only. At the same time, however, the NO_X Technical Code allows a ten percent allowance for in-use testing on residual fuel, to accommodate any marginal impact on NO_X and also to reflect the fact that the engine would be adjusted differently to operate on residual fuel.

The Annex VI approach was rejected for our national Category 1 and Category 2 engines standards. We noted in our 1999 FRM that residual fuel is sufficiently different from distillate as to be an alternative fuel. We also noted that changes to an engine to make it operable on residual fuel could constitute a violation of the tampering prohibition in § 94.1103(a)(3). More importantly, however, all of our emission control programs are predicated on an engine meeting the emission standards in use. We have a variety of provisions that help ensure this outcome, including specifying the useful life of an engine, specification of an emission deterioration factor, durability testing, and not-to-exceed zone requirements to ensure compliance over the range of operations an engine is likely to see in-use. These provisions are necessary to ensure that the emission reductions we expect from the emission limits actually occur. This would not be the case with the Annex VI approach. While an engine may pass the certification requirements using distillate fuel, it is unclear what emission reductions would actually occur from engines using residual fuel. So, for example, while the Annex VI NO_X limits were expected to achieve a 30 percent reduction from uncontrolled levels for marine diesel engines, we estimated the actual reduction for residual fuel Category 3 engines to be closer to 20 percent (see 68 FR 9777, February 28, 2003).

For these reasons, our existing requirements for engines less than 30 l/cyl displacement require certification that specifies that if a Category 1 or Category 2 engine is designed to be capable of using a fuel other than or in addition to distillate fuel (e.g., natural gas, methanol, or nondistillate diesel, or a mixed fuel), exhaust emission testing must be performed using a commercially available fuel of that type, with fuel specifications approved by us (40 CFR 94.108(b)(1)).

In recent months, shipbuilders have notified us that they are unable to obtain certified Category 1 or Category 2 residual fuel auxiliary engines for installation on newly built vessels with Category 3 propulsion engines. The standard building practice for these vessels is to install auxiliary engines that use the same fuel, residual fuel, as the propulsion engine. This approach is common throughout the industry because it simplifies the fuel handling systems for the vessel (only one grade of fuel is required for the vessel's primary power plants, although there may be one or two smaller distillate fuel auxiliary engines for emergency purposes) and it reduces the costs of operating the vessel (residual fuel is less expensive than distillate fuel). Shipbuilders indicated they have been unable to find Category 1 or Category 2 auxiliary engines certified to the Tier 2 standards on residual fuel. Engine manufacturers have indicated that they have not certified these engines on residual fuel because it is not profitable to do this for only the U.S. market (according to the U.S. Maritime Administration, while the U.S. fleet of ocean-going vessels above 10,000 deadweight tons is 13th largest in the world with 295 vessels, there were only 13 vessels built in 2005).[133] Engine manufacturers also informed us that they are not sure they could meet the PM limits for the Category 1 engines on residual fuel.

The most obvious solution for vessels in this situation is to install and use certified distillate fuel engines. Ship builders have indicated that this option would be prohibitively expensive for ship owners and have asked EPA to reconsider the control program for these engines. We are requesting comment on this issue, and especially on the costs associated with installing and using distillate auxiliary engines instead of residual auxiliary engines on these vessels. We are particularly interested in data that would indicate whether such additional costs would represent an undue burden to the owners of these vessels and whether the additional cost in terms of tons of PM and NO_X reduced would be significantly higher than what is required of users of non-residual fuel auxiliary engines.

One possibility to address the shipbuilders' concerns would be to create a compliance flexibility for auxiliary engines intended to be installed on vessels with Category 3 propulsion engines. The flexibility could consist of pulling ahead NO_X aftertreatment for these engines by setting a tighter NO_X limit (1.8 g/kW-hr) while setting an alternative PM limit (0.5 g/kW-hr) equivalent to the Tier 2 Category 2 limit. These engines would still be required to be certified on residual fuel, for the reasons described above. However, we could allow alternative PM measurement procedures, such as a two-step approach that would remove the water component of the exhaust, which would take into account the difficulty in measuring PM

[133] See Top 25 Merchant Fleets of the World—Major world fleets by vessel type, listed by Flag of Registry and Country of Ownership. U.S. ranks 13th by flag, but 5th by ownership. (Updated 11/21/06) accessed at *http://www.marad.dot.gov/MARAD_statistics/index.html#Fleet%20Statistics* and World Merchant Fleet 2001–2005 (July 2006) accessed at *http://www.marad.dot.gov/MARAD_statistics/2005%20STATISTICS/World%20Merchant%20Fleet%202005.pdf.*

when the sulfur levels of the test fuel are high.

Controlling emissions from residual fuelled engines is inherently difficult due to the characteristics of residual fuels. In particular, the high levels of sulfur and other metals present in residual fuel lead to high levels of PM emissions and can damage catalyst based emission control technologies. Urea SCR catalyst systems have been developed to work under similar conditions for coal fired power plants and some marine applications. We project that these solutions could be used to enable a residual fuelled marine diesel engine to meet the same emission NO_X emission standard as distillate fuelled engines of 1.8 g/kWhr. Unfortunately, the high levels of sulfur and other metals in residual fuels make it impossible to apply catalyst based emission control systems to reduce PM emissions. Stationary residual fuelled engines have demonstrated that PM emission levels around 0.5 g/kWhr are possible, and we believe similar solutions can be applied to these same engines in marine applications.

Such a compliance flexibility would not be automatic; engine manufacturers would have to apply for it. This is necessary to ensure that the questions of test fuel and PM measurement are resolved before the certification testing begins. In addition, engines would have to be labeled as intended for use only as auxiliary engines onboard vessels with Category 3 propulsion engines.

We are requesting comment on all aspects of this compliance flexibility, including the need for it and how it should be structured.

V. Costs and Economic Impacts

In this section, we present the projected cost impacts and cost effectiveness of the proposed standards, and our analysis of potential 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 likely to be achieved by 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 would be affected by the standards.

The total monetized benefits of the proposed standards, when based on published scientific studies of the risk of PM-related premature mortality, these benefits are projected to be more than $12 billion in 2030, assuming a 3 percent discount rate (or $11 billion assuming a 7 percent discount rate). Our estimate of total monetized benefits based on the PM-related premature mortality expert elicitation is between $4.6 billion and $33 billion in 2030, assuming a 3 percent discount rate (or $4.3 and $30 billion assuming a 7 percent discount rate). The social costs of the proposed program are estimated to be approximately $600 million in 2030.[134] The impact of these costs on society are estimated to be minimal, with the prices of rail and marine transportation services estimated to increase by less about 0.4 percent for locomotive transportation services and about 0.6 percent for marine transportation services.

Further information on these and other aspects of the economic impacts of our proposal are summarized in the following sections and are presented in more detail in the Draft RIA for this rulemaking. We invite the reader to comment on all aspects of these analyses, including our methodology and the assumptions and data that underlie our analysis.

A. Engineering Costs

The following sections briefly discuss the various engine and equipment cost elements considered for this proposal and present the total engineering costs we have estimated for this rulemaking; the reader is referred to Chapter 5 of the draft 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 new 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 proposed standards. The wide size variation of engines covered by this proposal (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 draft 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 proposed 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 proposed locomotive and marine program. 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. We request comment with supporting data and/or analysis on the engineering cost estimates presented here and the underlying analysis presented in Chapter 5 of the draft RIA.

(1) New Engine and Equipment Variable Engineering Costs

Engineering costs for exhaust emission control devices (i.e., catalyzed DPFs, urea 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

[134] The estimated 2030 social welfare cost of 567.3 million is based on an earlier version of the engineering costs of the rule which estimated $568.3 million engineering costs in 2030 (see table V–15). The current engineering cost estimate for 2030 is $605 million. See section V.C.5 for an explanation of the difference. The estimated social costs of the program will be updated for the final rule.

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.[135] Importantly, the analysis summarized here and detailed in the draft 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 and new sheet metal. 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.[136] As shown, we estimate the net present value for the years 2006 through 2040 of all variable costs at $1.4 billion using a three percent discount rate, with $1.3 billion of that being engine-related variable costs. Using a seven percent discount rate, these costs are $630 million and $586 million, respectively.

TABLE V–1.—NEW ENGINE AND EQUIPMENT VARIABLE ENGINEERING COSTS

[$Millions]

Year	Engine variable engineering costs	Equipment variable engineering costs	Total variable engineering costs	Total for PM	Total for NO_X+NMHC
2011	0	0	0	0	0
2012	0	0	0	0	0
2015	32	4	36	34	2
2020	87	6	94	49	45
2030	105	8	113	59	54
2040	104	8	112	59	53
NPV at 3%	1,297	99	1,395	749	646
NPV at 7%	586	44	630	342	288

We can also look at these variable engineering costs on a per engine basis rather than an annual total basis. Doing so results in the costs summarized in Table V–2. These costs represent the engineering costs for a typical engine placed into a piece of equipment within each of the given market segments and, where applicable, power ranges on a one-to-one basis (i.e., one engine per locomotive or vessel). For a vessel using two engines, the costs would be double those shown. The costs shown represent the total engine-related engineering hardware costs associated with all of the proposed emissions standards (Tier 3 and Tier 4) 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, while a commercial marine engine over 600 kW is expected to comply with both Tier 3 and then Tier 4 and would, therefore, incur engine 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.—2 LONG-TERM VARIABLE ENGINEERING COST PER NEW ENGINE TO COMPLY WITH THE FINAL TIER OF STANDARDS

[$/engine]

Power range	Locomotive line haul	Locomotive switcher [a]	C1 Marine	C2 Marine	Recreational marine [b]	Small marine
<50 Hp (<37 kW)	[c]					[d]$0
50≤hp<75 (37<=kW<56)			0		0	
75≤hp<200 (56<=kW<149)			0		0	
200≤hp<400 (149≤kW<298)			0		0	
400≤hp<800 (298≤kW<597)			0		0	
800≤hp<2000 (597≤kW<1492)			11,560	29,980	0	
≥2000 Hp (≥1492 kW)	54,650	13,640	20,550	55,770	0	

[a] 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.

[b] Recreational marine engines >2000 kW are considered within the C1 Marine category.

[c] A blank entry means there are no engines in that market segment/power range.

[d] $0 means costs are estimated at $0.

[135] ''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.

[136] The PM/NO_X+NMHC cost allocations for variable costs used in this cost analysis are as follows: Urea 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.

(2) New 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. In fact, we believe that this transfer of learning—from highway to nonroad to locomotive and marine—is real and have quantified it. Chapter 5 of the draft RIA details our approach and we seek comment on the 10 percent and 70 percent factors we have employed at each transfer step. 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.[137] As shown, we have estimated the net present value for the years 2006 through 2040 of all fixed engineering costs at $424 million using a three percent discount rate, with $381 million of that being engine-related fixed costs. Using a seven percent discount rate, these costs are $324 million and $297 million, respectively.

TABLE V–3.—ENGINE AND EQUIPMENT FIXED ENGINEERING COSTS

($Million)

Year	Engine research	Engine tooling	Engine certification	Equipment redesign	Total fixed engineering costs	Total for PM	Total for NO_X+NMHC
2011	75	19	5	0	99	39	59
2012	55	0	0	0	55	18	37
2015	51	17	1	22	90	34	56
2020	0	0	0	4	4	2	2
2030	0	0	0	0	0	0	0
2040	0	0	0	0	0	0	0
NPV at 3%	341	33	7	43	424	155	269
NPV at 7%	267	24	6	27	324	118	206

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 2017, 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 2024 all equipment-related fixed engineering costs would be zero.

(3) Engine Operating Costs

We anticipate an increase in costs associated with operating locomotives and marine vessels. We anticipate three sources of increased operating costs: urea use; DPF maintenance; and a fuel consumption impact. Increased operating costs associated with urea use would occur only in those locomotives/vessels equipped with a urea SCR engine. 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. We also expect a one percent fuel consumption increase would occur for remanufactured Tier 0 locomotives due to our expectation that the tighter NO_X standard would be met using retarded timing. These costs and how the fleet cost estimates were generated are detailed in Chapter 5 of the draft RIA and are summarized in Table V–4.[138]

[137] 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.

[138] The PM/NO_X+NMHC cost allocations for operating costs used in this cost analysis are as follows: Urea costs are 100% NO_X+NMHC; DPF maintenance costs are 100% PM; and, fuel consumption impacts are split evenly.

TABLE V–4.—ESTIMATED INCREASED OPERATING COSTS

($Millions)

Year	Urea use	DPF maintenance	Fuel consumption impact	Total operating costs	Total for PM	Total for NO_X+MHC
2011	0	0	11	11	5	5
2012	0	0	13	13	6	6
2015	4	0	21	25	11	15
2020	85	3	50	137	28	110
2030	300	8	99	407	57	350
2040	458	11	142	611	82	528
NPV at 3%	2,850	74	1,116	4,039	631	3,408
NPV at 7%	1,090	29	477	1,595	267	1,328

As shown, we have estimated the net present value for the years 2006 through 2040 of the annual operating costs at $4 billion using a three percent discount rate and $1.6 billion using a seven percent discount rate. The urea and DPF maintenance costs are zero until Tier 4 engines start being sold since only the Tier 4 engines are expected to add these technologies. Urea use represents the largest source of increased operating costs. Because urea use is meant for controlling NO_X emissions, most of the operating costs are associated with NO_X+NMHC control.

(4) Engineering Costs Associated With the Remanufacturing Program

We have also estimated engineering costs associated with the locomotive remanufacturing program. The remanufacturing process is not a low cost endeavor. However, it is much less costly than purchasing a new 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 costs resulting from the proposed requirement to meet a more stringent standard than the engine was designed to meet at its original sale. These engineering costs and how the fleet cost estimates were generated are detailed in Chapter 5 of the draft RIA and are summarized in Table V–5.[139] As shown, we have estimated the net present value for the years 2006 through 2040 of the annual engineering costs associated with the locomotive remanufacturing program at $1.4 billion using a three percent discount rate and $682 million using a seven percent discount rate.

TABLE V–5.—ESTIMATED ENGINEERING COSTS ASSOCIATED WITH THE LOCOMOTIVE REMANUFACTURING PROGRAM

($Millions)

Year	Remanufacturing Program Costs	Total for PM	Total for NO_X+NMHC
2011	97	49	49
2012	75	37	37
2015	31	15	15
2020	15	8	8
2030	85	43	43
2040	153	77	77
NPV at 3%	1,374	687	687
NPV at 7%	682	341	341

(5) Total Engineering Costs

The total engineering costs associated with today's proposal are the summation of the engine and equipment engineering costs, both fixed and variable, the operating costs, and the engineering costs associated with the locomotive remanufacturing program. These costs are summarized in Table V–6.

TABLE V–6.—TOTAL ENGINEERING COSTS OF THE PROPOSAL

[$Millions]

Year	Engine related engineering costs	Equipment related engineering costs	Operating costs	Engineering costs of the remanufacturing program	Total engineering costs	Total PM costs	Total NO_X+NMHC costs
2011	99	0	11	97	207	93	113
2012	55	0	13	75	142	62	80

[139] Costs associated with the remanufacturing program are split evenly between NO_X+NMHC and PM.

TABLE V–6.—TOTAL ENGINEERING COSTS OF THE PROPOSAL—Continued

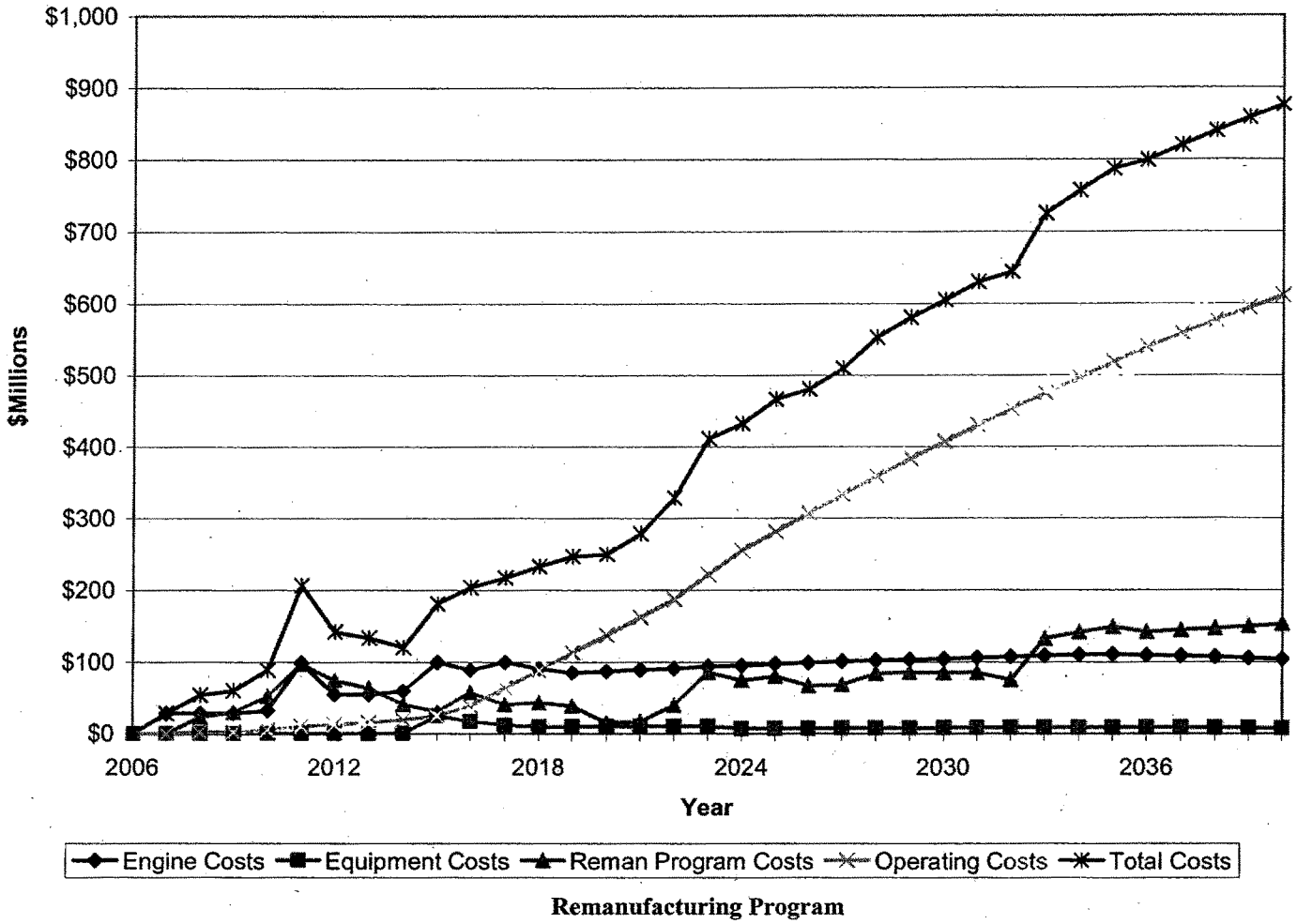
[$Millions]

Year	Engine related engineering costs	Equipment related engineering costs	Operating costs	Engineering costs of the remanufacturing program	Total engineering costs	Total PM costs	Total NO_X+NMHC costs
2015	100	25	25	31	181	93	88
2020	87	10	187	15	250	836	164
2030	105	8	407	85	605	159	446
2040	104	8	611	153	876	218	658
NPV at 3%	1,678	141	4,039	1,374	7,233	2,222	5,011
NPV at 7%	883	71	1,595	682	3,231	1,068	2,163

As shown, we have estimated the net present value of the annual engineering costs for the years 2006 through 2040 at $7.2 billion using a three percent discount rate and $3.2 billion using a seven percent discount rate. Roughly half of these costs are operating costs, with the bulk of those being urea related costs. As explained above in the operating cost discussion, because urea 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 today's proposed program. 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 urea 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 sheet metal and brackets. The remanufacturing program costs include incremental engineering costs for the locomotive remanufacturing program. The operating costs include incremental increases in operating costs associated with urea use, DPF maintenance, and a one percent fuel consumption increase for Tier 4 engines and remanufactured Tier 0 locomotives. The total program engineering costs are shown in Table V–6 as $7.2 billion at a three percent discount rate and $3.2 billion at a seven percent discount rate.

Figure V-1 Annual Engineering Costs of the Proposed New Engine Standards and Locomotive



B. Cost Effectiveness

One tool that can be used to assess the value of the proposed program is the engineering costs incurred per ton of emissions reduced. This analysis involves a comparison of our proposed program to other measures that have been or could be implemented. As summarized in this section and detailed in the draft RIA, the locomotive and marine diesel program being proposed today represents a highly cost effective mobile source control program for reducing PM and NO_X emissions.

We have calculated the cost per ton of our proposed 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 proposed program including those costs incurred and emissions reductions generated by the locomotive remanufacturing program. The baseline case for this evaluation is the existing set of engine standards for locomotive and marine diesel engines and the existing locomotive remanufacturing requirements. The analysis timeframe is meant to capture both the early period of the program when very few new engines that meet the proposed 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 proposal. These reductions are discussed in more detail in section II of this preamble and Chapter 3 of the draft RIA.

TABLE V–7.—ESTIMATED EMISSIONS REDUCTIONS ASSOCIATED WITH THE PROPOSED LOCOMOTIVE AND MARINE STANDARDS

[Short tons]

Year	$PM_{2.5}$	PM_{10}[a]	NO_X	NMHC
2015	7,000	7,000	84,000	14,000

TABLE V–7.—ESTIMATED EMISSIONS REDUCTIONS ASSOCIATED WITH THE PROPOSED LOCOMOTIVE AND MARINE STANDARDS—Continued

[Short tons]

Year	$PM_{2.5}$	PM_{10}[a]	NO_X	NMHC
2020	15,000	15,000	293,000	25,000
2030	28,000	29,000	765,000	39,000
2040	38,000	40,000	1,123,000	50,000
NPV at 3%	315,000	325,000	7,869,000	480,000
NPV at 7%	136,000	140,000	3,188,000	216,000

[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. Traditionally, we have used PM_{10} in our cost effectiveness calculations. Since cost effectiveness is a means of comparing control measures to one another, we use PM_{10} 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 proposal. 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 draft RIA.

TABLE V–8.—PROPOSED 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%	Long-term cost per ton in 2030
NO_X+NMHC	$600	$630	$550
PM	6,840	7,640	5,560

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 year 2030 using the annual engineering costs and emissions reductions in that year alone. These numbers are also shown in Table V–8 and represent the long-term annual costs per ton of emissions reduced.[140] All of the costs per ton include costs and emission reductions that will occur from the locomotive remanufacturing program.

In comparison with other emissions control programs, we believe that the proposed 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 of this proposed 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.—PROPOSED LOCOMOTIVE AND MARINE STANDARDS COMPARED TO PREVIOUS MOBILE SOURCE

[Programs for NO_X+NMHC]

Program	$/ton NO_X+NMHC
Today's locomotive & marine proposal	600
Tier 4 Nonroad Diesel (69 FR 39131)	1,010
Tier 2 Nonroad Diesel (EPA420–R–98–016, Chapter 6)	630
Tier 3 Nonroad Diesel (EPA420–R–98–016, Chapter 6)	430
Tier 2 vehicle/gasoline sulfur (65 FR 6774)	1,400–2,350
2007 Highway HD (66 FR 5101)	2,240
2004 Highway HD (65 FR 59936)	220–430

Note: Costs adjusted to 2002 dollars using the Producer Price Index for Total Manufacturing Industries.

TABLE V–10.—PROPOSED LOCOMOTIVE AND MARINE STANDARDS COMPARED TO PREVIOUS MOBILE SOURCE

[Programs for PM]

Program	$/ton PM
Today's locomotive & marine proposal	6,840
Tier 4 Nonroad Diesel (69 FR 39131)	11,200
Tier 1/Tier 2 Nonroad Diesel (EPA420–R–98–016, Chapter 6)	2,390
2007 Highway HD (66 FR 5101)	14,180

Note: Costs adjusted to 2002 dollars using the Producer Price Index for Total Manufacturing Industries.

C. EIA

We prepared an Economic Impact Analysis (EIA) to estimate the economic impacts of the proposed emission control program on the locomotive and marine diesel engine and vessel markets. In this section we briefly describe the Economic Impact Model (EIM) we developed to estimate the market-level changes in price and outputs for affected markets, the social costs of the program, and the expected distribution of those costs across stakeholders. We also present the results of our analysis. We request comment on

[140] ''Long-term'' cost here refers to the ongoing cost of the program where only operating and variable costs remain (no more fixed costs). We have chosen 2030 to represent those costs here.

all aspects of the analysis, including the model and the model inputs.

We estimate the net social costs of the proposed program to be approximately $600 million in 2030.[141] [142] The rail sector is expected to bear about 64 percent of the social costs of the program in 2030, and the marine sector is expected to bear about 36 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 (63.3 and 33.2 percent, respectively). The remaining 3.5 percent is expected to be borne by locomotive, marine engine, and marine vessel manufacturers and fishing and recreational users.

With regard to market-level impacts in 2030, the average price of a locomotive is expected to increase about 2.6 percent ($49,100 per unit), but sales are not expected to decrease. In the marine markets, the expected impacts are different for engines above and below 800 hp (600 kW). With regard to engines above 800 hp and the vessels that use them, the average price of an engine is expected to increase by about 8.4 percent for C1 engines and 18.7 percent for C2 engines ($13,300 and $48,700, respectively). However, the expected impact of these increased prices on the average price of vessels that use these engines is smaller, at about 1.1 percent and 3.6 percent respectively ($16,200 and $141,600). The decrease in engine and vessel production is expected to be negligible, at less than 10 units. For engines less than 800 hp and the vessels that use them, the expected price increase and quantity decrease are expected to be negligible, less than 0.1 percent. Finally, even with the increases in the prices of locomotives and large marine diesel engines, the expected impacts on prices in the locomotive and marine transportation service markets are small, at 0.4 and 0.6 percent, respectively.

(1) What Is an Economic Impact Analysis?

An EIA is prepared to inform decision makers about the potential economic consequences of a regulatory action. The analysis consists of estimating the social costs of a regulatory program and the distribution of these costs across stakeholders. These estimated social costs can then be compared with estimated social benefits presented above. 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.[143] In this analysis, social costs are explored in two steps. In the market analysis, we estimate how prices and quantities of goods and services affected by the proposed emission control program can be expected to change once the program goes into effect. In the economic welfare analysis, we look at the total social costs associated with the program and their distribution across key stakeholders.

(2) What Is the Economic Impact Model?

The EIM is the behavioral model we developed to estimate price and quantity changes and total social costs associated with the emission controls under consideration. The EIM simulates how producers and consumers of affected products can be expected to respond to an increase in production costs as a result of the proposed emission control program. In this EIM, compliance costs are directly borne by producers of affected goods. Producers of affected products will try to pass some or all of the increased production costs on to the consumers of these goods through price increases. In response to the price increases, consumers will decrease their demand for the affected good. Producers will react to the decrease in quantity demanded by decreasing the quantity they produce; the market will react by setting a higher price for those fewer units. These interactions continue until a new market equilibrium price and quantity combination is achieved. The amount of the compliance costs that can be passed on to consumers is ultimately limited by the price sensitivity of purchasers and producers in the relevant market (represented by the price elasticity of demand and supply). The EIM explicitly models these behavioral responses and estimates new equilibrium prices and output and the resulting distribution of social costs across these stakeholders (producers and consumers).

(3) What Economic Sectors Are Included in This Economic Impact Analysis?

In this EIA we estimate the impacts of the proposed emission control program on two broad sectors: rail and marine. The markets analyzed are summarized in Table V–11.

TABLE V–11.—ECONOMIC SECTORS INCLUDED IN THE LOCO/MARINE ECONOMIC IMPACT MODEL

Sector	Market	Demand	Supply
Rail	Rail Transportation Services.	Entities that use rail transportation services as production input or for personal transportation.	Railroads.
	Locomotives	Railroads	Locomotive manufacturers (integrated manufacturers).
Marine	Marine Transportation Services.	Entities that use marine transportation services as production input.	Entities that provide marine transportation services. • Tug/tow/pushboat companies. • Cargo companies. • Ferry companies. • Supply/crew companies. • Other commercial users.

[141] All estimates presented in this section are in 2005$.

[142] The estimated 2030 social welfare cost of 267.3 million is based on an earlier version of the engineering costs of the rule which estimated $568.3 million engineering costs in 2030 (see table V–17). The current engineering cost estimate for 2030 is $605 million. See section V.C.5 for an explanation of the difference. The estimated social costs of the program will be updated for the final rule.

[143] 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*

TABLE V–11.—ECONOMIC SECTORS INCLUDED IN THE LOCO/MARINE ECONOMIC IMPACT MODEL—Continued

Sector	Market	Demand	Supply
	Marine Vessels	Entities that provide marine transportation services. • Tug/tow/pushboat companies. ..... • Cargo companies. ..... • Ferry companies. ..... • Supply/crew companies. ..... • Other commercial users. ..... • Fishing persons. ..... • Recreation users.	Vessel manufacturers.
	Marine Diesel Engines ..	Vessel manufacturers	Engine manufacturers.

(a) Rail Sector Component

The rail sector component of the EIM is a two-level model consisting of suppliers and users of locomotives and rail transportation services.

Locomotive Market. The locomotive market consists of locomotive manufacturers (line haul, switcher, and passenger) on the supply side and railroads on the demand side. The vast majority of locomotives built in any given year are for line haul applications; a small number of passenger locomotives are built every year, and even fewer switchers. The locomotive market is characterized by integrated manufacturers (the engine and locomotive are made by the same manufacturer) and therefore the engine and equipment impacts are modeled together. The EIM does not distinguish between power bands for locomotives. This is because while there is some variation in power for different engine models, the range is not large. On average line haul locomotives are typically about 4,000 hp, passenger locomotives are about 3,000 hp, and switchers are about 2,000 hp.

Recently, a new switcher market is emerging in which manufacturers are expected to be less integrated, and the manufacturer of the engine is expected to be separate from the manufacturer of the switcher.[144] Because the characteristics of this new market are speculative at this time, the switcher market component of the EIM is modeled in the same way as line haul locomotives (integrated manufacturers; same behavioral parameters), but uses separate baseline equilibrium prices and quantities. The compliance costs used for switchers reflect the expected design characteristics for these locomotives and their lower total power. We request comment on the switcher aspect of the model. Consistent with the engineering cost analysis, the passenger market is combined with the switcher market in this EIA because we do not have separate compliance costs estimates for each of those two market segments. We request comment on this, and on whether it would be more appropriate to model the passenger market like the line haul market.

Rail Transportation Services. The rail transportation services market consists of entities that provide and utilize rail transportation services. On this supply side, these are the railroads. On the demand side, these are rail transportation service users such as the chemical and agricultural industries and the personal transportation industry. The EIM does not estimate the economic impact of the proposed emission control program on ultimate finished goods markets that use rail transportation services as inputs. This is because transportation services are only a small portion of the total variable costs of goods and services manufactured using these bulk inputs. Also, changes in prices of transportation services due to the estimated compliance costs are not expected to be large enough to affect the prices and output of goods that use rail transportation services as an input.

(b) Marine Sector Component

The marine sector component of the EIM distinguishes between engine, vessel, and ultimate user markets (marine transportation service users, fishing users, recreational users). This is because, in contrast to the locomotive market, manufacturers in the diesel marine market are not integrated. Marine engines and vessels are manufactured by different entities.

Marine Engine Market. The marine engine markets consist of marine engine manufacturers on the supply side and vessel manufacturers on the demand side. The model distinguishes between three types of engines, commercial propulsion, recreational propulsion, and auxiliary. Engines are broken out into eight categories based on rated power and displacement: small engines below 50 hp (37 kW); five C1 engine categories (50–200 hp, 200–400 hp, 400–800 hp, 800–2,000 hp, >2,000 hp); and two C2 engine categories (800–2,000 hp, >2,000 hp). For the purpose of the EIA, the C1/C2 threshold is 5 l/cyl displacement, even though the new C1/C2 threshold is proposed to be 7 l/cyl displacement. The 5 l/cyl threshold was used because it is currently applicable limit. In addition, there is currently only one engine family in the 5 to 7 l/cyl range, and it is not possible to project what future sales will be in that range or if more engine families will be added.

Marine Vessel Market. The marine vessel market consists of marine vessel manufacturers on the demand side and marine vessel users on the supply side. The model distinguishes between seven vessel categories: Recreational, fishing, tow/tug/push, ferry, supply/crew, cargo, and other. Each of these vessels would have at least one propulsion engine and at least one auxiliary engine. For fishing and recreational vessels, the purchasers of those vessels are the end users and so the EIM is a two-level model for those two markets. For the fishing market, this approach is appropriate because demand for fishing vessels comes directly from the fishing industry; fishing vessels are a fixed capital input for that industry. For the recreational market, demand for vessels comes directly from households that use these vessels for recreational activities and acquire them for the personal enjoyment of the owner. For the other commercial vessel markets (tow/tug/push, ferry, supply/crew, cargo, other), demand is derived from the transportation services they provide, and so demand is from the transportation service market and the providers of those services more specifically. Therefore it is necessary to

[144] Until recently, switchers have typically been converted line haul locomotives and very few, if any, new dedicated switchers were built in any year. Recently, however, the power and other characteristics of line haul locomotives have made them less attractive for switcher usage. Their high power means they consume more fuel than smaller locomotives, and they have less attractive line-of-sight characteristics than what is needed for switchers. Therefore, the industry is anticipating a new market for dedicated switchers.

include the marine transportation services market in the model.

Marine Transportation Services. The marine transportation services market consists of entities that provide and utilize marine transportation services: vessel owners on the supply side and marine transportation service users on the demand side. The firms that use these marine transportation services are very similar to those that use locomotive transportation services: those needing to transport bulk chemicals and minerals, coal, agricultural products, etc. These transportation services are production inputs that depend on the amount of raw materials or finished products being transported and thus marine transportation costs are variable costs for the end user. Demand for these transportation services will determine the demand for vessels used to provide these services (tug/tow/pushboats, cargo, ferries, supply/crew, other commercial vessels).

(c) Market Linkages

The individual levels of the rail and marine components of the EIM are linked to provide feedback between consumers and producers in relevant markets. The locomotive and marine components of the EIM are not linked however, meaning there is no feedback mechanism between the locomotive and marine sectors. Although locomotives and marine vessels such as tugs, towboats, cargo, and ferries provide the same type of transportation service, the characteristics of these markets are quite different and are subject to different constraints that limit switching from one type of transportation service to the other. For the limited number of cases where there is direct competition between rail and marine transportation services, we do not expect this rule to change the dynamics of the choice between marine or rail providers of these services because (1) the estimated compliance costs imposed by this rule are relatively small in comparison with the total production costs of providing transportation services, and (2) both sectors would be subject to the new standards.

(4) What Are the Key Features of the Economic Impact Model?

A detailed description of the features of the EIM and the data used in this analysis is provided in Chapter 7 of the RIA prepared for this rule. 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.[145]

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 initial market equilibrium conditions are shocked by applying the compliance costs for the control program to the supply side of the markets (this is done by shifting the relevant supply curves by the amount of the compliance costs). The EIM uses the model equations, model inputs, and a solution algorithm to estimate equilibrium prices and quantities for the markets with the regulatory program. These new prices and quantities are used to estimate the social costs of the model and how those costs are shared among affected markets.

The EIM uses a multi-market partial equilibrium approach to track changes in price and quantity for the modeled markets. As explained in EPA's Guidelines for Preparing Economic Analyses, ''partial equilibrium'' means that the model considers markets in isolation and that conditions in other markets are assumed to be either unaffected by a policy or unimportant for social cost estimation. Multi-market models go beyond partial equilibrium analysis by extending the inquiry to more than just a single market and attempt to capture at least some of the interaction between markets.[146] In the marine sector, the model captures the interactions between the engine markets, the vessel markets, and the marine transportation service markets; in the rail sector, it captures the interactions between the locomotive markets and the rail transportation service markets.

The EIM uses an intermediate run time frame. This means that some factors of production are fixed and some are variable. In very short analyses, all factors of production would be assumed to be fixed, leaving the producers with no means to respond to the increased production costs associated with the regulation (e.g., they cannot adjust labor or capital inputs). Under this time horizon, the costs of the regulation fall entirely on the producer. In the long run, all factors of production are variable and producers can adjust production in response to cost changes imposed by the regulation (e.g., using a different labor/capital mix) and changes in consumer demand due to price changes. In the intermediate run there is some resource immobility which may cause producers to suffer producer surplus losses, but they can also pass some of the compliance costs to consumers.

The EIM assumes a perfectly competitive market structure. The perfect competition assumption is widely accepted for this type of analysis, and only in rare cases are other approaches used.[147] It should be noted that the perfect competition assumption is not about the number of firms in a market; it is about how the market operates. The markets included in this analysis do not exhibit evidence of noncompetitive behavior: These are mature markets; there are no indications of barriers to entry for the marine transportation, fishing, and recreational markets; the firms in the affected markets are not price setters; and there is no evidence of high levels of strategic behavior in the price and quantity decisions of the firms. The perfect competition assumption is discussed in more detail in Chapter 7 of the RIA.

The perfect competition assumption has an impact on the way the EIM is structured. In a competitive market the supply curve is based on the industry marginal cost curve; fixed costs do not influence production decisions at the margin. Therefore, in the market analysis, the model is shocked by variable costs only. However, an argument can be made that fixed costs must be recovered; otherwise manufacturers would go out of business. This analysis assumes that manufacturers cover their fixed costs through their current product development budgets. If this is the case, then the rule would have the effect of shifting product development resources to regulatory compliance from other market-based investment decisions. Thus, fixed costs are a cost to society because they displace other product development activities that may improve the quality or performance of engines and equipment. Therefore these costs are included in the social welfare costs, as a social cost that accrues to producers. We request comment on the extent to which manufacturers can be expected to use current product development resources to cover the fixed costs associated with the standards (thus foregoing product development projects in the short term),

[145] 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/*.

[146] EPA Guidelines for Preparing Economic Analyses, EPA 240–R–00–003, September 2000, pp. 125–6.

[147] See, for example, EPA Guidelines for Preparing Economic Analyses, EPA 240–R–00–003, September 2000, p 126.

and whether current product development budgets would cover the compliance costs in the year in which they occur. We also request comment on whether companies would instead attempt to pass on these fixed costs as an additional price increase and, if the latter, how much of the fixed costs would be passed on, and for how long.

The EIM is a market-level analysis that estimates the aggregate economic impacts of the control program on the relevant markets. It is not a firm-level analysis and therefore the supply elasticity or individual compliance costs facing any particular manufacturer may be different from the market average. This difference can be important, particularly where the rule affects different firms' costs over different volumes of production. However, to the extent there are differential effects, EPA believes that the wide array of flexibilities provided in this rule are adequate to address any cost inequities that may arise.

Finally, consistent with the proposed emission controls, this EIA covers locomotives and marine diesel engines and vessels sold in 50 states.

(5) What Are the Key Model Inputs?

Key model inputs for the EIM are the behavioral parameters, the market equilibrium quantities and prices, and the compliance costs estimates.

The model's behavioral paramaters are the price elasticities of supply and demand. These parameters reflect how producers and consumers of the engines and equipment affected by the standards can be expected to change their behavior in response to the costs incurred in complying with the standards. More specifically, the price elasticity of supply and demand (reflected in the slope of the supply and demand curves) measure the price sensitivity of consumers and producers. The price elasticities used in this analysis are summarized in V–12 and are described in more detail in Chapter 7 of the RIA. An ''inelastic'' price elasticity (less than one) means that supply or demand is not very responsive to price changes (a one percent change in price leads to less than one percent change in demand). An ''elastic'' price elasticity (more than one) means that supply or demand is sensitive to price changes (a one percent change in price leads to more than one percent change in demand). A price elasticity of one is unit elastic, meaning there is a one-to-one correspondence between a change in price and change in demand.

TABLE V–12.—BEHAVIORAL PARAMETERS USED IN LOCO/MARINE ECONOMIC IMPACT MODEL

Sector	Market	Demand elasticity	Source	Supply elasticity	Source
Rail	Rail Transportation Services.	−0.5 (inelastic)	Literature Estimate	0.6 (inelastic)	Literature Estimate.
	Locomotives (all types).	Derived	N/A	2.7 (elastic)	Calibration Method Estimate.
Marine	Marine Transportation Services.	−0.5 (inelastic)	Literature Estimate	0.6 (inelastic)	Literature Estimate.
	Vessels Commercial [a]	Derived	N/A	2.3 (elastic)	Econometric Estimate.
	Fishing	−1.4 (elastic)	Econometric Estimate	1.6 (elastic)	Econometric Estimate.
	Recreational	−1.4 (elastic)	Econometric Estimate	1.6 (elastic)	
	Engines	Derived	N/A	3.8 (elastic)	Econometric Estimate.

[a] Commercial vessels include tug/tow/pushboats, ferries, cargo vessels, crew/supply boats, and other commercial vessels.

Initial market equilibrium quantities for these markets are simulated using the same current year sales quantities used in the engineering cost analysis. The initial market equilibrium prices were derived from industry sources and published data and are described in Chapter 7 of the RIA.

The compliance costs used to shock the model, to simulate the application of the control program, are the same as the engineering costs described in Section V.A. However, the EIM uses an earlier version of the engineering costs developed for this rule. The engineering costs for 2030 presented in Section V.A. are estimated to be $605 million, which is $37 million more than the compliance costs used in this EIA. Over the period from 2007 through 2040, the net present value of the engineering costs in Section V.A. is $7.2 billion while the NPV of the estimated social costs over that period based on the compliance costs used in his chapter is $6.9 billion (3 percent discount rate). The differences are primarily in the form of operating costs ($22 million for the rail sector, $10 million for the marine sector). The variable costs for locomotives are slightly smaller ($4.0 million) and for marine are somewhat higher ($5.0 million). The difference for marine engines occurs in part because the engineering costs in Section V.A. include Tier 4 costs for recreational marine engines over 2,000 kW. There are also small differences for the estimated operating costs. As a result of these differences, the amount of the social costs imposed on producers and consumers of rail and marine transportation services as a result of the proposed program would be larger than estimated in this section, while the impacts on the prices and quantities of locomotives would be slightly less. In addition, there would be larger social costs for the recreational marine sector. Nevertheless, the estimated market impacts and the distribution of the social costs among stakeholders would be about the same as those presented below.

There are four types of compliance costs associated with the program: fixed costs, variable costs, operating costs, and remanufacturing costs. The timing of these costs are different and, in some cases, overlap.

Fixed costs are not included in the market analysis (they are not used to shock the model). However, the fixed costs associated with the standards are a cost to society (in the form of foregone product development) and therefore must be reflected in the total social costs as a cost to producers. In this EIA, fixed costs are accounted for in the year in which they occur and are attributed to the respective locomotive, marine engine, and vessel manufacturers. These manufacturers are expected to see losses of producer surplus as early as 2007.

Variable costs are the driver of the market impacts. There are no variable costs associated with the Tier 3 new engine standards because the Tier 3 standards are engine-out emission limits and engine manufacturers are expected to comply by maximizing the emission reduction potential of controls they are already using rather than adding new components. The variable costs associated with Tier 4 begin to apply in 2015, for locomotive PM standards; 2016, for marine PM and NO_X standards; and 2017, for locomotive NO_X standards.

Operating costs are the additional costs for associated with urea use and DPF maintenance as well as additional fuel consumption for both Tier 4 engines and remanufactured locomotive Tier 0 engines. These begin to occur when the standards go into effect. In the EIM, operating costs are attributed to railroads and vessel owners. On the marine side, all marine operating costs are applied to the marine transportation services market even though there will be Tier 4 engine in the recreational and fishing markets. This approach was taken because the operating costs (fuel and urea consumption) were estimated based on fuel consumption and we believe that most of the fuel consumed in the marine sector is by vessels in the marine transportation services sector. As a result of this assumption, the impacts on the marine transportation service market may be somewhat over-estimated. We request comment on this simplifying assumption.

Remanufacturing costs are incurred when locomotives are remanufactured (there is no corresponding remanufacture requirement for marine diesel, although we are requesting comment on such a program). These costs represent the difference between the cost of current remanufacture kits and those that will be required pursuant to the standards. In the EIM, these costs are allocated to the railroads; the remanufacture market is not modeled separately. This is appropriate because railroads are required to purchase these kits when they rebuild their locomotives. Their sensitivity to price changes is likely to be very inelastic because they cannot operate the relevant locomotives without using a certified remanufacture kit. This means the kit manufacturers would be able to pass most if not all of the costs of these kits to the railroads. We request comment on this approach for including remanufacture costs in the model.

(6) What Are the Results of the Economic Impact Modeling?

Using the model and data described above, we estimated the economic pacts of the proposed emission control program. The results of our analysis are summarized in this section. Detailed results for all years are included in the appendices to Chapter 7 of the RIA. Also included in Appendix 7H to that chapter are sensitivity analyses for several key inputs.

The EIA consists of two parts: a market analysis and welfare analysis. The market analysis looks at expected changes in prices and quantities for affected products. The welfare analysis looks at economic impacts in terms of annual and present value changes in social costs.

We performed a market analysis for all years and all engines and equipment types. Detailed results can be found in the appendices to Chapter 7 of the RIA. In this section we present summarized results for selected years.

Due to the structure of the program (see section V.C.5 above), the estimated market and social costs impacts of the program in the early years are small and are primarily due to the locomotive remanufacturing program. By 2016, the impacts of the program are more significant due to the operational costs associated with the Tier 4 standards (urea usage). Consequently, a large share of the social costs of the program after the Tier 4 standards to into effect fall on the marine and rail transportation service sectors. These operational costs are incurred by the providers of these services, but they are expected to pass along some of these costs to their customers.

(a) Market Analysis Results

In the market analysis, we estimate how prices and quantities of goods affected by the proposed emission control program can be expected to change once the program goes into effect. The analysis relies on the baseline equilibrium prices and quantities for each type of equipment and the price elasticity of supply and demand. It predicts market reactions to the increase in production costs due to the new compliance costs (variable, operating, and remanufacturing costs). It should be noted that this analysis does not allow any other factors to vary. In other words, it does not consider that manufacturers may adjust their production processes or marketing strategies in response to the control program.

A summary of the market analysis results is presented in Table V–13 for 2011, 2016, and 2030. These years were chosen because 2011 is the first year of the Tier 3 standards, 2016 is when the Tier 4 standards begin for most engines, and 2030 illustrates the long-term impacts of the program. Results for all years can be found in Chapter 7 of the RIA.

The estimated market impacts are designed to provide a broad overview of the expected market impacts that is useful when considering the impacts of the rule. Absolute price changes and relative price/quantity changes reflect production-weighted averages of the individual market-level estimates generated by the model for each group of engine/equipment markets. For example, the estimated marine diesel engine price changes are production-weighted averages of the estimated results for all of the marine diesel engine markets included in the group.[148] The absolute change in quantity is the sum of the decrease in units produced across sub-markets within each engine/equipment group. For example, the estimated marine diesel engine quantity changes reflect the total decline in marine diesel engines produced. The aggregated data presented in Table V–13 is intended to provide a broad overview of the expected market impacts that is useful when considering the impacts of the rule on the economy as a whole and not the impacts on a particular engine or equipment category.

Locomotive Sector Impacts. On the locomotive side, the proposed program is expected to have a negligible impact on locomotive prices and quantities. In 2011, the expected impacts are mainly the result of the operating costs associated with locomotive remanufacturing standards. These standards impose an operating cost on railroad transportation providers and are expected to result in a slight increase in the price of locomotive transportation services (about 0.1 percent, on average) and a slight decrease in the quantity of services provided (about 0.1 percent, on average). The locomotive remanufacturing program is also expected to have a small impact on the new locomotive market. The remanufacturing program will increase railroad operating costs, which expected to result in an increase in the price of transportation services. This increase will results in a decrease in demand for rail transportation services and

[148] As a result, estimates for specific types of engines and equipment may be different than the reported group average. The detail results for markets are reported in the Appendices to Chapter 7 of the RIA.

ultimately in a decrease in the demand for locomotives and a decrease in their price. In other words, the market will contract slightly. We estimate a reduction in the price of locomotives of about $425, or about 0.02 percent on average.

Beginning in 2016, the market impacts are affected by both the operating costs and the direct costs associated with the Tier 4 standards. As a result of both of these impacts, the price of a new locomotive is expected to increase by about 1.9 percent ($35,900), on average and the quantity produced is expected to decrease by about 0.1 percent, on average (less than one locomotive). Locomotive transportation service prices are expected to decrease by about 0.1 percent). By 2030, the price of new locomotives is expected to increase by about 2.6 percent ($49,000), on average, and the quantity expected to decrease by about 0.2 percent (less than one locomotive). The price of rail transportation services is expected to increase by about 0.4 percent.

Marine Sector Impacts. On the marine engine side, the expected impacts are different for engines above and below 800 hp (600 kW). With regard to engines above 800 hp and the vessels that use them, the proposed program does not begin to affect market prices or quantities until the Tier 4 standards go into effect, which is in 2016 for most engines. For these engines, the price of a new engine in 2016 is expected to increase between 11.0 and 24.6 percent, on average ($17,300 for C1 engines above 800 hp and $64,100 for C2 engines above 800 hp), depending on the type of engine, and sales are expected to decrease less than 2.0 percent, on average. The price of vessels that use them is expected to increase between 1.7 and 1.0 percent ($20,900 for vessels that use C1 engines above 800 hp and $188,600 for vessels that use C2 engines above 800 hp) and sales are expected to decrease less than 2.0 percent. The percent change in price in the marine transportation sector is expected to be about 0.1 percent. By 2030, the price of these engines is expected to increase between 8.4 and 18.7 percent, on average ($13,200 for C1 engines above 800 hp and $48,700 for C2 engine above 800 hp), depending on the type of engine, and sales are expected to decrease by less than 2 percent, on average. The price of vessels is expected to increase between 1 and 3.6 percent ($16,200 for vessels that use C1 engines above 800 hp and $141,600 for vessels that use C2 engines above 800 hp) and sales are expected to decrease by less than 2 percent. The percent change in price in the marine transportation is expected to be about 0.6 percent.

With regard to engines below 800 hp, the market impacts of the program are expected to be negligible.[149] This is because there are no variable costs associated with the standards for these engines. The market impacts associated with the program are indirect effects that stem from the impacts on the marine service markets for the larger engines that would be subject to direct compliance costs. Changes in the equilibrium outcomes in those marine service markets may lead to reductions for marine services in other marine engine and vessel markets, including the markets for smaller marine diesel engines and vessels. The result is that in some years there may be small declines in the equilibrium price in the markets for marine diesel engines less than 800 hp. This would occur because an increase in the price and a decrease in the quantity of marine transportation services provided by vessels with engines above 800 hp that results in a change in the price of marine transportation services may have follow-on effects in other marine markets and lead to decreases in prices for those markets. For example, the large vessels used to provide transportation services are affected by the rule. Their compliance costs lead to a higher vessel price and a reduced demand for those vessels. This reduced demand indirectly affects other marine transportation services that support the larger vessels, and leads to a decrease in price for those markets as well.

TABLE V–13.—ESTIMATED MARKET IMPACTS FOR 2011, 2016, 2030 (2005$)

Market	Average variable engineering cost per unit	Change in price		Change in variable	
		Absolute	Percent	Absolute	Percent
2011					
Rail Sector					
Locomotives	$0	−$425	−0.02	0	−0.1
Transportation Services	NA	NA[a]	0.1	NA[a]	0.1
Marine Sector					
Engines:					
C1>800 hp	0	0	0.00	0	0.0
C2>800 hp	0	0	0.00	0	0.0
Other marine	0	0	0.00	0	0.0
Vessels:					
C1>800 hp	0	0	0.00	0	0.0
C2>800 hp	0	0	0.00	0	0.0
Other marine	0	0	0.00	0	0.0
Transportation Services	NA	NA[a]	0.00	NA[a]	0.0
2016					
Rail Sector					
Locomotives	36,363	35,929	1.9	0	−0.1

[149] The market results for engines and vessels below 800 hp are provided in a Technical Support Document that can be found in the docket for this rule.

TABLE V–13.—ESTIMATED MARKET IMPACTS FOR 2011, 2016, 2030 (2005$)—Continued

Market	Average variable engineering cost per unit	Change in price		Change in variable	
		Absolute	Percent	Absolute	Percent
Transportation Services	NA	NA [a]	0.1	NA [a]	−0.1
Marine Sector [a]					
Engines:					
C1>800 hp	18,105	17,330	11.0	−7	−1.7
C2>800 hp	64,735	64,073	24.6	−1	−0.9
Other marine	0	0	0.00	0	0.0
Vessels:					
C1>800 hp	2,980	20,898	1.5	−9	−1.7
C2>800 hp	6,515	188,559	4.8	−1	−0.9
Other marine	0	−1	0.00	−0	0.0
Transportation Services	NA	NA [a]	0.1	NA [a]	−0.1
2030					
Rail Sector					
Locomotives	50,291	49,087	2.6	0	−0.2
Transportation Services	NA	NA [a]	0.4	NA [a]	−0.2
Marine Sector					
Engines:					
C1>800 hp	13,885	13,261	8.4	−6	−1.4
C2>800 hp	49,360	48,692	18.7	−1	−0.9
Other marine	0	0	0.0	0	0.0
Vessels:					
C1>800 hp	2,979	16,155	1.1	−8	−1.5
C2>800 hp	6,516	141,563	3.6	−1	−0.9
Other marine	0	−4	0.0	−2	0.0
Transportation Services	NA	NA [a]	0.6	NA [a]	−0.3

[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 quanitity; see 7.3.1.5.

(b) Economic Welfare Analysis

In the economic welfare analysis we look at the costs to society of the proposed program in terms of losses to key stakeholder groups that are the producers and consumers in the rail and marine markets. The estimated surplus losses presented below reflect all engineering costs associated with the proposed program (fixed, variable, operating, and remanufacturing costs). Detailed economic welfare results for the proposed program for all years are presented in Chapter 7 of the RIA.

A summary of the estimated annual net social costs is presented in Table V–14. This table shows that total social costs for each year are slightly less than the total engineering costs. This is because the total engineering costs do not reflect the decreased sales of locomotives, engines and vessels that are incorporated in the total social costs. In addition, in the early years of the program the estimated social costs of the proposed program are not expected to increase regularly over time. This is because the compliance costs for the locomotive remanufacture program are not constant over time.

TABLE V–14.—ESTIMATED ANNUAL ENGINEERING AND SOCIAL COSTS, THROUGH 2040 (2005)

Year	Engineering costs						Total social costs
	Marine operating costs	Marine engine and vessel costs	Rail operating costs	Rail remanuf. costs	Rail new locomotive costs	Total	
2007	$0.0	$25.0	$0.0	$0.0	$3.2	$28.2	$28.2
2008	$0.0	$25.0	$1.3	$56.7	$3.2	$86.1	$86.1
2009	$0.0	$25.0	$1.4	$33.2	$3.2	$62.7	$62.7
2010	$0.0	$25.0	$3.8	$51.5	$7.3	$87.5	$87.5
2011	$0.0	$86.0	$7.9	$96.9	$10.8	$201.6	$201.5
2012	$0.0	$41.2	$9.7	$74.3	$12.3	$137.5	$137.5
2013	$0.0	$41.2	$12.0	$62.4	$12.3	$127.9	$127.9
2014	$2.8	$41.2	$12.6	$40.0	$16.9	$113.5	$113.5
2015	$5.6	$74.1	$14.9	$29.1	$48.8	$172.5	$172.5
2016	$14.8	$48.6	$19.0	$55.5	$55.3	$193.1	$192.6
2017	$23.9	$44.9	$32.7	$39.3	$66.5	$207.3	$206.7
2018	$36.0	$33.9	$44.6	$41.9	$67.9	$224.3	$223.9
2019	$48.0	$34.2	$56.5	$36.7	$61.9	$237.4	$236.9
2020	$60.0	$34.5	$68.5	$12.9	$64.0	$239.9	$239.5

TABLE V–14.—ESTIMATED ANNUAL ENGINEERING AND SOCIAL COSTS, THROUGH 2040 (2005)—Continued

Year	Engineering costs						Total social costs
	Marine operating costs	Marine engine and vessel costs	Rail operating costs	Rail remanuf. costs	Rail new locomotive costs	Total	
2021	$72.0	$34.8	$80.8	$14.9	$66.2	$268.7	$268.2
2022	$83.9	$35.1	$93.6	$37.4	$68.1	$318.1	$317.6
2023	$95.7	$35.4	$106.7	$83.2	$69.8	$390.8	$390.2
2024	$107.5	$35.7	$120.1	$72.0	$70.8	$406.0	$405.4
2025	$119.1	$35.9	$133.8	$76.5	$72.5	$437.9	$437.2
2026	$130.6	$36.2	$147.7	$63.2	$73.5	$451.2	$450.4
2027	$141.9	$33.6	$161.5	$64.6	$74.7	$476.3	$475.5
2028	$153.0	$33.9	$175.5	$80.3	$75.6	$518.2	$517.3
2029	$163.3	$34.2	$189.4	$81.8	$76.3	$544.9	$544.0
2030	$172.6	$34.5	$203.3	$81.2	$76.8	$568.3	$567.3
2031	$181.2	$34.8	$217.1	$81.4	$77.6	$592.1	$591.1
2032	$189.0	$35.1	$231.1	$77.2	$78.5	$610.9	$609.8
2033	$196.4	$35.4	$244.9	$133.5	$78.9	$689.2	$688.0
2034	$203.6	$35.7	$258.7	$142.6	$79.6	$720.1	$718.8
2035	$210.4	$36.0	$272.4	$150.1	$79.8	$748.8	$747.4
2036	$216.9	$36.4	$285.8	$143.2	$77.5	$759.7	$758.3
2037	$222.7	$36.7	$299.2	$145.9	$75.8	$780.3	$778.8
2038	$227.9	$37.0	$312.0	$148.8	$73.9	$799.6	$798.1
2039	$232.4	$37.3	$324.4	$152.0	$71.8	$818.0	$816.4
2040	$236.3	$37.7	$336.3	$155.0	$69.5	$834.7	$833.2
2040 NPV at 3% [a,b]						$6,907.8	$6,896.8
2040 NPV at 7% [a,b]						$3,107.7	$3,103.2
2030 NPV at 3% [a,b]						$3,938.7	$3,932.6
2030 NPV at 7% [a,b]						$2,175.5	$2,172.5

[a] EPA EPA presents the present value of cost and benefits estimates using both a three percent and a seven percent social discount rate. According to OMB Circular A–4, ''the 3 percent discount rate represents the 'social rate of time preference'* * * * * [which] means the rate at which 'society' discounts future consumption flows to their present value''; ''the seven percent rate is an estimate of the average before-tax rate of return to private capital in the U.S. economy '' [that] approximates the opportunity cost of capital.

[b] *Note:* These NPV calculations are based on the period 2006–2040, reflecting the period when the analysis was completed. This has the consequence of discounting the current year costs, 2007, and all subsequent years are discounted by an additional year. The result is a smaller stream of social costs than by calculating the NPV over 2007–2040 (3% smaller for 3% NPV and 7% smaller for 7% NPV).

Table V–15 shows how total social costs are expected to be shared across stakeholders, for selected years. According to these results, the rail sector is expected to bear most of the social costs of the program, ranging from 57.3 percent in 2011 to 67.3 percent in 2016. Producers and consumers of locomotive transportation services are expected to bear most of those social costs, ranging from 51.9 percent in 2011 to 63.3 percent in 2030. As explained above, these results assume the railroads absorb all remanufacture kit compliance costs (the remanufacture kit manufacturers pass all costs of the new standards to the railroads). The marine sector is expected to bear the remaining social costs, ranging from 42.7 percent in 2011 to 32.7 percent in 2016. Producers of marine diesel engines are expected to bear more of the program costs in the early years (42.7 percent in 2011), but by 2020 producers and consumers in the marine transportation services market are expected to bear a larger share of the social costs, 31.5 percent.

TABLE V–15.—SUMMARY OF ESTIMATED SOCIAL COSTS FOR 2011, 2016, 2020, 2030

[2005$, $million]

Stakeholder group	2011		2016	
	Surplus change	Percent	Surplus change	Percent
Locomotives				
Locomotive producers	−$11.1	5.5	−$13.4	7.0
Rail transportation service providers	−$47.5	23.6	−$52.9	27.5
Rail transportation service consumers	−$57.0	28.3	−$63.5	33.0
Total locomotive sector	−$115.6	57.3	−$129.7	67.3
Marine				
Marine engine producers	−$86.0	42.7	−$0.9	0.5
C1 > 800 hp	−$22.8		−$0.7	
C2 > 800 hp	−$27.8		−$0.2	
Other marine	−$35.4		−$0.0	

TABLE V–15.—SUMMARY OF ESTIMATED SOCIAL COSTS FOR 2011, 2016, 2020, 2030—Continued

[2005$, $million]

Stakeholder group	2011		2016	
	Surplus change	Percent	Surplus change	Percent
Marine vessel producers	−$0	0.0	−$18.0	9.3
C1 > 800 hp	−$0		−$13.6	
C2 > 800 hp	−$0		−$4.4	
Other marine	−$0		−$0.0	
Recreational and fishing vessel consumers	−$0	0.0	−$9.6	5.0
Marine transportation service providers	−$0	0.0	−$15.6	8.1
Marine transportation service consumers	−$0	0.0	−$18.7	9.7
Total marine sector	−$86.0	42.7	−$62.9	32.7
Total Program	−$201.5		−$192.6	

Stakeholder group	2020		2030	
	Surplus change	Percent	Surplus change	Percent
Locomotives				
Locomotive producers	−$0.7	0.3	−$1.8	0.3
Rail transportation service providers	−$65.8	27.5	−$163.2	28.8
Rail transportation service consumers	−$78.9	32.9	−$195.9	34.5
Total locomotive sector	−$145.3	60.7	−$360.9	63.6
Marine				
Marine engine producers	−$0.8	0.3	−$0.9	0.2
C1 > 800 hp	−$0.6		−$0.7	
C2 > 800 hp	−$0.2		−$0.2	
Other marine	−$0.0		−$0.0	
Marine vessel producers	−$10.1	4.2	−$8.2	1.4
C1 > 800 hp	−$7.8		−$6.4	
C2 > 800 hp	−$2.3		−$1.6	
Other marine	−$0.1		−$0.1	
Recreational and fishing vessel consumers	−$7.8	3.3	−$8.5	1.5
Marine transportation service providers	−$34.3	14.3	−$85.8	15.1
Marine transportation service consumers	−$41.2	17.2	−$103.0	18.2
Total marine sector	−$94.1	39.3	−$206.5	36.4
Total Program	−$239.5	100.0	−$567.3	100.0

Table V–16 provides additional detail about the sources of surplus changes, for 2020 when the per unit compliance costs are stable. On the marine side, this table shows that engine and vessel producers are expected to pass along much of the engine and vessel compliance costs to the marine transportation service providers who purchase marine vessels. These marine transportation service providers, in turn, are expected to pass some of the costs to their customers. This is also expected to be the case in the rail sector.

TABLE V–16.— DISTRIBUTION OF ESTIMATED SURPLUS CHANGES BY MARKET AND STAKEHOLDER FOR 2020

[2005$, million$]

	Total engineering costs	Surplus change
Marine Markets		
Engine Producers	$29.3	−$0.8
Vessel Producers	$5.2	−$10.1
Engine price changes		−$8.1
Equipment cost changes		−$2.0
Recreational and Fishing Consumers		−$7.8
Engine price changes		−$6.2
Equipment cost changes		−$1.6
Transportation Service Providers	$60.0	−$34.3
Increased price vessels		−$6.9

TABLE V–16.— DISTRIBUTION OF ESTIMATED SURPLUS CHANGES BY MARKET AND STAKEHOLDER FOR 2020—Continued

[2005$, million$]

	Total engineering costs	Surplus change
Operating costs		−$27.4
Users of Transportation Service		−$41.2
Increased price vessels		−$8.2
Operating costs		−$32.9
Rail Markets		
Locomotive Producers	$64.0	−$0.7
Rail Service Providers	$81.4	−$65.8
Increased price new locomotives		−$28.8
Remanufacturing costs	$9.5	−$8.1
Operating costs	$63.6	−$28.9
Users of Rail Transportation Service		−$78.9
Increased price new locomotives		−$34.6
Remanufacturing costs		−$9.7
Operating costs		−$34.7
Total	$239.9	$239.6

The present value of net social costs of the proposed standards through 2040, shown in Table V–14, is estimated to be $6.9 billion (2005$).[150] This present value is calculated using a social discount rate of 3 percent and the stream of social welfare costs from 2006 through 2040. We also performed an analysis using a 7 percent social discount rate.[151] Using that discount rate, the present value of the net social costs through 2040 is estimated to be $3.1 billion (2005$).

Table V–17 shows the distribution of total surplus losses for the program from 2006 through 2040. This table shows that the rail sector is expected to bear about 65 percent of the total program social costs through 2040, and that most of the costs are expected to be borne by the rail transportation service producers and consumers. On the marine side, most of the marine sector costs are expected to be borne by the marine transportation service providers and consumers. This is consistent with the structure of the program, which leads to high compliance costs for those stakeholder groups.

TABLE V–17.—ESTIMATED NET SOCIAL COSTS THROUGH 2040 BY STAKEHOLDER

($million, 2005$)

Stakeholder groups	Surplus change NPV 3%	Percent of total surplus	Surplus change NPV 7%	Percent of total surplus
Locomotives				
Locomotive producers	$92.8	1.3%	$63.5	2.0%
Rail transportation service providers	$1,988.8	28.8%	$878.1	28.3%
Rail transportation service consumers	$2,386.4	34.6%	$1,053.7	33.9%
Total locomotive sector	$4,468.1	64.8%	$1,995.4	64.4%
Marine				
Marine engine producers	$313.3	4.5%	$242.3	7.8%
C1 > 800 hp	$102.1		$73.9	
C2 > 800 hp	$112.4		$84.4	
Other marine	$98.7		$84.0	
Marine vessel producers	$143.8	2.1%	$71.3	2.3%
C1 > 800 hp	$110.1		$54.3	
C2 > 800 hp	$32.4		$16.5	
Other marine	$1.3		$0.5	
Recreational and fishing vessel consumers	$110.0	1.6%	$51.0	1.6%
Marine transportation service providers	$846.2	12.3%	$338.2	10.9%
Marine transportation service consumers	$1,015.4	14.7%	$405.9	13.1%
Total marine sector	$2,428.7	35.2%	$1,107.7	35.7%
Total Program	$6,896.8		$3,103.1	

[150] **Note:** These NPV calculations are based on the period 2006–2040, reflecting the period when the analysis was completed. This has the consequence of discounting the current year costs, 2007, and all subsequent years are discounted by an additional year. The result is a smaller stream of social costs than by calculating the NPV over 2007–2040 (3% smaller for 3% NPV and 7% smaller for 7% NPV).

[151] EPA has historically presented the present value of cost and benefits estimates using both a 3 percent and a 7 percent social discount. The 3 percent rate represents a demand-side approach and reflects the time preference of consumption (the rate at which society is willing to trade current consumption for future consumption). The 7 percent rate is a cost-side approach and reflects the shadow price of capital.

(7) 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 proposed 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.

Where possible, the EIA relies on published price elasticities of supply and demand. For those cases where there are no published sources, we estimated these parameters (see Appendix 7F of the RIA prepared for this rule). The methods used for estimation include a production fuction approach using data at the industry level (engines and recreational vessels) and a calibration approach (locomotiove supply). These methods were chosen because of limitations with the available data, which was limited to industry-level data. However, the use of aggregate industry level data may not be appropriate or an accurate way to estimate the price elasticity of supply compared to firm-level or plant-level data. This is because, at the aggregate industry level, the size of the data sample is limited to the time series of the available years and because aggregate industry data may not reveal each individual firm or plant production function (heterogeneity). There may be significant differences among the firms that may be hidden in the aggregate data but that may affect the estimated elasticity. In addition, the use of time series aggregate industry data may introduce time trend effects that are difficult to isolate and control.

To address these concerns, EPA intends to investigate estimates for the price elasticity of supply for the affected industries for which published estimates are not available, using an alternative method and data inputs. This research program will use the cross-sectional data model at either the firm level or the plant level from the U.S. Census Bureau to estimate these elasticities. We plan to use the results of this research provided the results are robust and they are available in time for the analysis for the final rule.

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.

To explore the effects of key sources of uncertainty, we performed a sensitivity analysis in which we examine the results of using alternative values for the price elasticity of suppy and demand and alternative methods to incorporate operational costs (across a larger group of marine vessels). 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 proposed 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

A. Overview

This section presents our analysis of the health and environmental benefits that can be expected to occur as a result of the proposed locomotive and marine engine standards throughout the period from initial implementation through 2030. Nationwide, the engines that are subject to the proposed emission standards in this rule are a significant source of mobile source air pollution. The proposed standards will reduce exposure to NO_X and direct PM emissions and help avoid a range of adverse health effects associated with ambient ozone and $PM_{2.5}$ levels. In addition, the proposed standards will help reduce exposures to diesel PM exhaust, various gaseous hydrocarbons and air toxics. As described below, the reductions in ozone and PM from the proposed 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.

To estimate the net benefits of the proposed standards, we use the estimated costs presented in section V and sophisticated air quality and benefit modeling tools. The benefit 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 generally consistent with benefits analyses performed for the recent analysis of the Clean Air Interstate Rule (CAIR) standards and the recently finalized PM NAAQS analysis.[152,153] They are described in detail in the RIA prepared for this rule.

EPA typically quantifies PM- and ozone-related benefits in its regulatory impact analyses (RIAs) when possible. In the analysis of past air quality regulations, ozone-related benefits have included morbidity endpoints and welfare effects such as damage to commercial crops. EPA has not recently included a separate and additive mortality effect for ozone, independent of the effect associated with fine particulate matter. For a number of

[152] U.S. Environmental Protection Agency. March 2005. Regulatory Impact Analysis for the Final Clean Air Interstate Rule. *Prepared by:* Office of Air and Radiation. Available at *http://www.epa.gov/cair.*

[153] 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.*

reasons, including (1) advice from the Science Advisory Board (SAB) Health and Ecological Effects Subcommittee (HEES) that EPA consider the plausibility and viability of including an estimate of premature mortality associated with short-term ozone exposure in its benefits analyses and (2) conclusions regarding the scientific support for such relationships in EPA's 2006 Air Quality Criteria for Ozone and Related Photochemical Oxidants (the CD), EPA is in the process of determining how to appropriately characterize ozone-related mortality benefits within the context of benefits analyses for air quality regulations. As part of this process, we are seeking advice from the National Academy of Sciences (NAS) regarding how the ozone-mortality literature should be used to quantify the reduction in premature mortality due to diminished exposure to ozone, the amount of life expectancy to be added and the monetary value of this increased life expectancy in the context of health benefits analyses associated with regulatory assessments. In addition, the Agency has sought advice on characterizing and communicating the uncertainty associated with each of these aspects in health benefit analyses.

Since the NAS effort is not expected to conclude until 2008, the agency is currently deliberating how best to characterize ozone-related mortality benefits in its rulemaking analyses in the interim. For the analysis of the proposed locomotive and marine standards, we do not quantify an ozone mortality benefit. So that we do not provide an incomplete picture of all of the benefits associated with reductions in emissions of ozone precursors, we have chosen not to include an estimate of total ozone benefits in the proposed RIA. By omitting ozone benefits in this proposal, we acknowledge that this analysis underestimates the benefits associated with the proposed standards. Our analysis, however, indicates that the rule's monetized $PM_{2.5}$ benefits alone substantially exceed our estimate of the costs.

The range of benefits associated with the proposed program are estimated based on the risk of several sources of PM-related mortality effect estimates, along with all other PM non-mortality related benefits information. These benefits are presented in Table VI–1. The benefits reflect two different sources of information about the impact of reductions in PM on reduction in the risk of premature death, including both the American Cancer Society (ACS) cohort study and an expert elicitation study conducted by EPA in 2006. In order to provide an indication of the sensitivity of the benefits estimates to alternative assumptions, 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 expert elicitation. 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. These estimates, and all monetized benefits presented in this section, are in year 2005 dollars.

TABLE VI–1.—ESTIMATED MONETIZED PM-RELATED HEALTH BENEFITS OF THE PROPOSED LOCOMOTIVE AND MARINE ENGINE STANDARDS

	Total benefits[a b c d] (billions 2005$)	
	2020	2030
PM mortality derived from the ACS cohort study; Morbidity functions from epidemiology literature		
Using a 3% discount rate	$4.4+B	$12+B
Confidence Intervals (5th–95th %ile)	($1.0–$10)	($2.1–$27)
Using a 7% discount rate	$4.0+B	$11+B
Confidence Intervals (5th–95th %ile)	($1.0–$9.2)	($1.8–$25)
PM mortality derived from lower bound and upper bound expert-based result;[e] Morbidity functions from epidemiology literature		
Using a 3% discount rate	$1.7+B − $12+B	$4.6+B − $33+B
Confidence Intervals (5th–95th %ile)	($0.2 − $8.5) − ($2.0 − $27)	($1.0 − $23) − ($5.4 − $72)
Using a 7% discount rate	$1.6+B − $11+B	$4.3+B − $30+B
Confidence Intervals (5th–95th %ile)	($0.2 − $7.8) − ($1.8 − $24)	($1.0 − $21) − ($4.9 − $65)

[a] Benefits include avoided cases of mortality, chronic illness, and other morbidity health endpoints.

[b] PM-related mortality benefits estimated using an assumed PM threshold of 10 μ/m^3. There is uncertainty about which threshold to use and this may impact the magnitude of the total benefits estimate. For a more detailed discussion of this issue, please refer to Section 6.6.1.3 of the RIA.

[c] For notational purposes, unquantified benefits are indicated with a "B" to represent the sum of additional monetary benefits and disbenefits. A detailed listing of unquantified health and welfare effects is provided in VI–4.

[d] Results reflect the use of two different discount rates: 3 and 7 percent, which are 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.

[e] The effect estimates of nine 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 two 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. Likewise the 5th and 95th percentiles for these highest and lowest judgments of the effect estimate do not imply any particular distribution within those bounds. The distribution of benefits estimates associated with each of the twelve expert responses can be found in Tables 6.4–3 and 6.4–4 in the RIA.

B. Quantified Human Health and Environmental Effects of the Proposed Standards

In this section we discuss the $PM_{2.5}$ benefits of the proposed standards. We discuss how these benefits 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 emission control program being proposed. 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. Section 3.6 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 proposed emission control scenario.

(1) Estimated PM Benefits

To model the 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 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 the Clean Air Interstate Rule (CAIR).[154] The grid resolution for the PM modeling domain was 36 x 36 km. More detailed information 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).[155] 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.

Table VI–2 presents the estimates of reduced incidence of PM-related health effects for the years 2020 and 2030, which are based on the modeled air quality improvements between a baseline, pre-control scenario and a post-control scenario reflecting the proposed emission control strategy.

Since the publication of CAIR, we have completed the full-scale expert elicitation assessing the uncertainty in the concentration-response function for PM-related premature mortality. Consistent with the recommendations of the National Research Council (NRC) report ''Estimating the Public Health Benefits of Proposed Air Pollution Regulations,'' [156] we are integrating the results of this probabilistic assessment into the main benefits analysis as an alternative to the epidemiologically-derived range of mortality incidence provided by the ACS and Six-cities cohort studies (Pope et al., 2002 and Laden et al., 2006). Of the twelve experts included in the panel of experts, average premature mortality incidence derived from eleven of the experts are larger than the ACS-based estimate. One expert's average effect estimate falls below the ACS-based estimate. Details on the PM-related mortality incidence derived from each expert are presented in the draft RIA.

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 annual benefits would result in 1,500 fewer premature fatalities. When the range of expert opinion is used, we estimate between 460 and 4,600 fewer premature mortalities in 2030. We also estimate 940 fewer cases of chronic bronchitis, 3,300 fewer non-fatal heart attacks, 1,100 fewer hospitalizations (for respiratory and cardiovascular disease combined), one million fewer days of restricted activity due to respiratory illness and approximately 170,000 fewer work-loss days. We also estimate 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 draft RIA.

TABLE VI–2 ESTIMATED REDUCTION IN INCIDENCE OF ADVERSE HEALTH EFFECTS RELATED TO THE PROPOSED 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 [b c] Adult, age 30±Range based on ACS cohort study (Pope *et al.* 2002	570 (220–920)	1,500 (590–2,400)
Infant, age <1 year—Woodruff *et al.* 1997	1 (1–2)	2 (1–4)
Premature Mortality—Derived from Expert Elicitation [c d] Adult, age 25±Lower and Upper Bound EE Results, Respectively.	180–1,700 (0–830)—(870–2,600)	460–4,600 (0–2,200)–(2,300–6,900)
Chronic bronchitis (adult, age 26 and over)	370 (68– 670)	940 (170–1,700)
Acute myocardial infarction (adults, age 18 andolder)	1,200 (640–1,700)	3,300 (1,800–4,800)
Hospital admissions—respiratory (all ages) [e]	130 (65–200)	350 (170–510)
Hospital admissions—cardiovascular (adults, age >18) [f]	270 (170–380)	770 (490–1,100)

[154] See the technical support document for the Final Clean Air Interstate Rule Air Quality Modeling. This document is available in Docket EPA–HQ–OAR–2004–0008.

[155] Information on BenMAP, including downloads of the software, can be found at *http://www.epa.gov/ttn/ecas/* benmodels.html.

[156] National Research Council (NRC). 2002. Estimating the Public Health Benefits of Proposed Air Pollution Regulations. Washington, DC: The National Academies Press.

TABLE VI–2 ESTIMATED REDUCTION IN INCIDENCE OF ADVERSE HEALTH EFFECTS RELATED TO THE PROPOSED LOCOMOTIVE AND MARINE ENGINE STANDARDS [a]—Continued

	2020	2030
Emergency room visits for asthma (age 18 years and younger)	460 (270–650)	1,000 (620–1,500)
Acute bronchitis (children, age 8–12)	1,000 (0–2,100)	2,600 (0–5,300)
Lower respiratory symptoms (children, age 7–14)	11,000 (5,400–17,000)	28,000 (14,000–43,000)
Upper respiratory symptoms (asthmatic children, age 9–18)	8,300 (2,600–14,000)	21,000 (6,600–35,000)
Asthma exacerbation (asthmatic children, age 6–18)	10,000 (1,100–29,000)	26,000 (2,800–74,000)
Work loss days (adults, age 18–65)	71,000 (62,000–81,000)	170,000 (150,000–190,000)
Minor restricted-activity days (adults, age 18–65)	420,000 (360,000–490,000)	1,000,000 (850,000–1,200,000)

[a] Incidence is rounded to two significant digits. PM estimates represent benefits from the proposed standards nationwide.
[b] Based on application of the effect estimate derived fromthe ACS study.[157] Infant premature mortality based upon studies by Woodruff, *et al.* 1997.[158]
[c] PM-related mortality benefits estimated using an assumed PM threshold at 10 $\mu g/m^3$. There is uncertainty about which threshold to use and this may impact the magnitude of the total benefits estimate. For a more detailed discussion of this issue, please refer to Chapter 6 of the RIA.
[d] 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).[159] The effect estimates of 11 of the 12 experts included in the elicitation panel falls estimate derived from the ACS study. One of the experts fall below the ACS estimate.
[e] Respiratory hospital admissions for PM include admissions for COPD, pneumonia, and asthma.
[f] Cardiovascular hospital admissions for PM include total cardiovascular and subcategories for ischemic heart disease, dysrhythmias, and heart failure.

C. Monetized Benefits

Table VI–3 presents the estimated monetary value of reductions in the incidence of health and welfare effects. Total annual PM-related health benefits are estimated to be between $4.6 and $33 billion in 2030, using a three percent discount rate (or $4.3 and $30 billion assuming a 7 percent discount rate). This estimate is based on the opinions of outside experts on PM and therisk of premature death, alongwith other non-mortality related benefits results. When the range of premature fatalities based on the ACS cohort study is used, we estimate the total benefits related to the proposed standards to be approximately $12 billion in 2030, using a three percent discount rate (or $11 assuming a 7 percent discount rate). All monetized estimates are stated in 2005 dollars. These estimates account for growth in real gross domestic product (GDP) per capita between the present and the years 2020 and 2030. As the table indicates, total benefits are driven primarily by the reduction in premature fatalities each year, which accounts for well over 90 percent of total benefits.

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 proposed 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 $150 million in 2020 and $400 million in 2030, as shown in Table VI–3.

Table VI–3 also indicates with a ''B'' 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 proposed 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–4. Second, the CMAQ air quality model only captures the benefits of air quality improvements in the 48 states and DC; benefits for Alaska and Hawaii are not reflected in the estimate of benefits.

[157] Pope, C.A., III, R.T. Burnett, M.J. Thun, E.E. Calle, D. Krewski, K. Ito, and G.D. Thurston. 2002. ''Lung Cancer, Cardiopulmonary Mortality, and Long-term Exposure to Fine Particulate Air Pollution.'' Journal of the American Medical association 287: 1132–1141.

[158] Woodruff, T.J., J. Grillo, and K.C. Schoendorf. 1997. ''The Relationship Between Selected Causes of Postneonatal Infant Mortality and Particulate Air Pollution in the United States.'' Environmental Health Perspectives 105(6): 608–612.

[159] 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

[in millions of 2005$][a,b]

$PM_{2.5}$-related health effect	2020	2030
		Estimated mean value of reductions (5th and 95th %ile)
Premature mortality—Derived from Epidemiology Studies[c,d,e]		
Adult, age 30+—ACS study (Pope et al. 2002)		
3% discount rate	$3,900	$10,000
	($500–$8,800)	($1,500–$24,000)
7% discount rate	$3,700	$9,400
	($500–$7,900)	($1,300–$21,000)
Infant Mortality,<1 year —Woodruff et al. 1997		
3% discount rate	$8	$17
	($1–$18)	($3–$37)
7% discount rate	$7	$15
	($1–$16)	($2–$33)
Premature mortality—Derived from Expert Elicitation[c,d,e,f]		
Adult, age 25+—Lower bound EE result		
3% discount rate	$1,200	$3,300
	($0–$7,200)	($0–$20,000)
7% discount rate	$1,100	$3,000
	($0–$6,500)	($0–$18,000
Adult, age 25+—Upper bound EE result		
3% discount rate	$12,000	$31,000
	($1,800–$25,000)	($4,800–$68,000)
7% discount rate	$11,000	$28,000
	($1,600–$23,000)	($4,400–$62,000)
Chronic bronchitis (adults, 26 and over)	$200	$500
	($10–$800)	($26–$2,100)
Non-fatal acute myocardial infarctions		
3% discount rate	$123	$330
	($32–$270)	($80–$730)
7% discount rate	$119	$320
	($30–$270)	($76–$720)
Hospital admissions for respiratory causes	$2.7	$7.2
	($1.3–$4.0)	($3.6–$11)
Hospital admissions for cardiovascular causes	$7.3	$21
	($4.6–$10)	($13–$28)
Emergency room visits for asthma	$0.16	$0.37
	($0.09–$0.26)	($0.20–$0.60)
Acute bronchitis (children, age 8–12)	$0.44	$1.1
	($0–$1.2)	($0–$3.1)
Lower respiratory symptoms (children, 7–14)	$0.21	$0.53
	($0.07–$0.43)	($0.18–$1.1)
Upper respiratory symptoms (asthma, 9–11)	$0.24	$0.62
	($0.05–$0.59)	($0.14–$1.5)
Asthma exacerbations	$0.53	$1.4
	($0.04–$2.0)	($0.10–$5.1)
Work loss days	$11	$27
	($9.6–$12)	($23–$30)
Minor restricted-activity days (MRADs)	$12	$29
	($0.61–$25)	($1.5–$60)
Recreational Visibility, 86 Class I areas	$150	$400
	(na)[f]	(na)
Monetized Total—PM-Mortality Derived from ACS Study; Morbidity Functions.		
3% discount rate	$4.4	$12 Billion
	($1.0–$10)	($2.1–$27)
7% discount rate Billion	$4.0 Billion	$11 Billion
	($1.0–$9.2)	($1.8–$25)
Monetized Total—PM-Mortality Derived from Expert Elicitation[g]; Morbidity Functions.		
3% discount rate	$1.7–$12 Billion	$4.6–$33 Billion
	($0.2–$8.5)—($2.0–$27)	($1.0–$23)—($5.4–$72)
7% discount rate	$1.6–$11 Billion	$4.3–$30 Billion
	($0.2–$7.8)—($1.8–$24)	($1.0–$21)—($4.9–$65)

[a] Monetary benefits are rounded to two significant digits for ease of presentation and computation. PM 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] PM-related mortality benefits estimated using an assumed PM threshold of 10 μ/m^3. There is uncertainty about which threshold to use and this may impact the magnitude of the total benefits estimate.

[d] 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).

[e] 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.

[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.

[g] It should be noted that the effect estimates of nine of the twelve experts included in the elicitation panel falls within the scientific study-based range provided by Pope and Laden. One of the experts fall below this range and two of the experts are above this range.

TABLE V1–4.—UNQUANTIFIED AND NON-MONETIZED POTENTIAL EFFECTS OF THE PROPOSED LOCOMOTIVE AND MARINE ENGINE STANDARDS

Pollutant/effects	Effects not included in analysis—changes in:
Ozone Health [a]	Premature mortality: short-term exposures
	Hospital admissions: respiratory
	Emergency room visits for asthma
	Minor restricted-activity days
	School loss days
	Asthma attacks
	Cardiovascular emergency room visits
	Acute respiratory symptoms
	Chronic respiratory damage
	Premature aging of the lungs
	Non-asthma respiratory emergency room visits
	Exposure to UVb (+/−) [d]
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 (+/−)
PM Health [b]	Premature mortality—short term exposures [c]
	Low birth weight
	Pulmonary function
	Chronic respiratory diseases other than chronic bronchitis
	Non-asthma respiratory emergency room visits
	Exposure to UVb (+/−)
PM Welfare	Residential and recreational visibility in non-Class I areas
	Soiling and materials damage
	Damage to ecosystem functions
	Exposure to UVb (+/−)
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 [e]	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

[a] In addition to primary economic endpoints, there are a number of biological responses that have been associated with ozone health effects including increased airway responsiveness to stimuli, inflammation in the lung, acute inflammation and respiratory cell damage, and increased susceptibility to respiratory infection. The public health impact of these biological responses may be partly represented by our quantified endpoints.

[b] 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.

[c] 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.
[d] May result in benefits or disbenefits.
[e] Many of the key hydrocarbons related to this rule are also hazardous air pollutants listed in the Clean Air Act.

D. 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 proposed 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 fatalities 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 draft RIA for the proposed 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/m3). 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.

Despite these uncertainties, we believe this benefit-cost analysis provides a conservative estimate of the estimated economic benefits of the proposed 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). EPA has also addressed many of the comments made by the National Academy of Sciences (NAS) in a September 26, 2002 report on its review of the Agency's methodology for analyzing the health benefits of measures taken to reduce air pollution in our analysis of the final PM NAAQS.[160] The analysis of the proposed standards incorporates this most recent work to the extent possible.

E. Benefit-Cost Analysis

In estimating the net benefits of the proposed 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–5 contains the estimates of monetized benefits and estimated social welfare costs for the proposed rule and each of the proposed control programs. The annual social welfare costs of all provisions of this proposed rule are described more fully in section V of this preamble.[161]

The results in Table VI–5 suggest that the 2020 monetized benefits of the proposed standards are greater than the expected social welfare costs. Specifically, the annual benefits of the total program would be $4.4 + B billion annually in 2020 using a three percent discount rate (or $4.2 billion assuming a 7 percent discount rate), compared to estimated social costs of approximately $250 million in that same year. These benefits are expected to increase to $12 + B billion annually in 2030 using a three percent discount rate (or $11 billion assuming a 7 percent discount rate), while the social costs are estimated to be approximately $600 million. Though there are a number of health and environmental effects associated with the proposed standards that we are unable to quantify or monetize (represented by ''+B''; see Table VI–4), the benefits of the proposed standards far outweigh the projected costs. When we examine the benefit-to-

[160] 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*.

[161] The estimated 2030 social welfare cost of 267.3 million is based on an earlier version of the engineering costs of the rule which estimated $568.3 million engineering costs in 2030 (see table 5–17). The current engineering cost estimate for 2030 is $605 million. See Section V.C.5 for an explanation of the difference. The estimated social costs of the program will be updated for the final rule.

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–5.—SUMMARY OF ANNUAL BENEFITS, COSTS, AND NET BENEFITS OF THE PROPOSED LOCOMOTIVE AND MARINE ENGINE STANDARDS

(Millions, 2005$)[a]

Description	2020	2030
Estimated Social Costs[b]		
Locomotive	$150	$380
Marine	100	220
Total Social Costs	250	605
Estimated Health Benefits of the ProposedStandards[c d e]		
Locomotive		
3 percent discount rate	2,300+B	4,700+B
7 percent discount rate	2,100+B	4,300+B
Marine		
3 percent discount rate	2,100+B	7,100+B
7 percent discount rate	1,900+B	$6,400+B
Total Benefits		
3 percent discount rate	4,400+B	12,000+B
7 percent discount rate	4,000+B	11,000+B
Annual Net Benefits (Total Benefits—Total Costs)		
3 percent discount rate	4,150+B	11,000+B
7 percent discount rate	3,750+B	10,000+B

[a] All estimates represent annualized benefits and costs anticipated for the years 2020 and 2030. Totals may not sum due to rounding.

[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 D, 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] 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 (U.S. EPA, 2000 and OMB, 2003).[162] [163]

[d] 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). Note that the benefits in this table reflect PM mortality derived from the ACS (Pope et al., 2002) study.

[e] Not all possible benefits or disbenefits are quantified and monetized in this analysis. B is the sum of all unquantified benefits and disbenefits. Potential benefit categories that have not been quantified and monetized are listed in Table V–13.

VII. Alternative Program Options

The program we have described in this proposal represents a broad and comprehensive approach to reduce emissions from locomotive and marine diesel engines. As we have developed this proposal, we have evaluated a number of alternatives with regard to the scope and timing of the standards. We have also examined an alternative that would require emission reductions from a significant fraction of the existing marine diesel engine fleet. This section presents a summary of our analysis of these alternative control scenarios. We are interested in comments on all of the alternatives presented. For a more detailed description of our analysis of these alternatives, including a year by year breakout of expected costs and emission reductions, please refer to Chapter 8 of the draft RIA prepared for this rulemaking.

A. Summary of Alternatives

We have developed emission inventory impacts, cost estimates and benefit estimates for two types of alternatives. The first type looks at the impacts of varying the timing and scope of our proposed standards. The second considers a programmatic alternative that would set emission standards for existing marine diesel engines.

(1) Alternatives Regarding Timing, Scope

(a) *Alternative 1:* Exclusion of Locomotive Remanufacturing

Alternative 1 examines the potential impacts of the locomotive remanufacturing program by excluding it from the analysis (see section III.C.(1)(a)(i) for more details on the remanufacturing standards). Compared to the primary program, this analysis shows that through 2040 the locomotive remanufacturing program by itself would reduce $PM_{2.5}$ emissions by 65,000 tons NPV 3% (35,000 tons NPV 7%) and NO_X emissions by nearly 690,000 tons NPV 3% (400,000 tons NPV 7%) at a cost of $800 million NPV 3% ($530 million NPV 7%). The monetized health and welfare benefits of the locomotive remanufacturing program in 2030 are $2.9 billion at a 3% discount rate (DR) or $2.7 at a 7% DR. While this alternative could have the advantage of enabling industry to focus its resources on Tier 3 and Tier 4 technology development, given its substantial benefits in the early years of the program which are critical for NAAQS achievement and maintenance, we have decided to retain the locomotive remanufacturing program in our proposal.

(b) *Alternative 2:* Tier 4 Advanced One Year

Alternative 2 considers the possibility of pulling ahead the Tier 4 standards by one year for both the locomotive and marine programs, while leaving the rest of the proposed program unchanged. This alternative represents a more environmentally protective set of standards, and we have given strong consideration to proposing it. However, our review of the technical challenges to introduce the Tier 4 program, especially considering the locomotive remanufacturing program and the Tier 3 standards which go before it, leads us to

[162] U.S. Environmental Protection Agency, 2000. Guidelines for Preparing Economic Analyses. *www.yosemite1.epa.gov/ee/epa/eed/hsf/pages/Guideline.html.*

[163] Office of Management and Budget, The Executive Office of the President, 2003. Circular A–4. *http://www.whitehouse.gov/omb/circulars.*

conclude that introducing Tier 4 a year earlier is not feasible. We have included this alternative analysis here because of the strong consideration we have given it, and to provide commenters with an opportunity to comment on the timing of the Tier 4 standards within the context of the additional benefits that such a pull ahead could realize. Our analysis suggests that introducing Tier 4 one year earlier than our proposal could reduce emissions by an additional 9,000 tons of $PM_{2.5}$ NPV 3% (5,000 tons NPV 7%) and 420,000 tons of NO_X NPV 3% (210,000 tons NPV 7%) through 2040. We are unable to make an accurate estimate of the cost for such an approach since we do not believe it to be feasible at this time. However, we have reported a cost in the summary table reflecting the same cost estimation method we have 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 one year earlier. While we are unable to conclude that this alternative is feasible at this time, we request comment on that aspect of this alternative including what additional costs might be incurred in order to have Tier 4 start one year earlier.

(c) *Alternative 3:* Tier 4 Exclusively in 2013

Alternative 3 most closely reflects the program we 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 (3 months after the introduction of 15 ppm ULSD in this sector). Alternative 3 eliminates our proposed Tier 3 standards and locomotive remanufacturing standards, while pulling the Tier 4 standards ahead to 2013 for all portions of the Tier 4 program. As with alternative 2, we are concerned that it may not be feasible to introduce Tier 4 technologies on locomotive and marine diesel engines earlier than the proposal specifies. However, eliminating the technical work necessary to develop the Tier 3 and locomotive remanufacturing programs would certainly go a long way towards making such an approach possible. This alternative would actually result in substantially higher PM emissions than our primary case although it would provide additional reductions in NO_X emissions. Through 2040 this alternative would decrease $PM_{2.5}$ reductions by more than 60,000 NPV 3% tons (31,000 NPV 7%) while only adding approximately 180,000 additional tons NPV 3% (100,000 NPV 7%) of NO_X reductions. As a result in 2030 alone, this alternative realizes approximately $0.6 billion less at a 3% DR ($0.5 billion less at a 7% DR) in public health and welfare benefits than does our proposal. As was the case with alternative 2, we have used the same cost estimation approach for this alternative as that of our proposal, and have denoted the unestimated costs that are necessary to accelerate the development of Tier 4 technologies with a 'C' in the summary tables. While alternative 3 could have been considered the Agency's leading option going into this rulemaking process, our review of the technical challenges necessary to introduce Tier 4 technologies and the substantial additional benefits that a more comprehensive solution can provide has lead us to drop this approach in favor of the comprehensive proposal we have laid out today.

(d) Alternative 4: Elimination of Tier 4

Alternative 4 would eliminate the Tier 4 standards and retain the Tier 3 and locomotive remanufacturing requirements. This alternative allows us to consider the value of combining the Tier 3 and locomotive remanufacturing standards together as one program, and conversely, allows us to see the additional benefits gained when combining them with the Tier 4 standards. As a stand-alone alternative, the combined Tier 3 and locomotive remanufacturing program is very attractive, resulting in large emission reductions through 2040 of 207,000 tons of $PM_{2.5}$ NPV 3% (94,000 NPV 7%) and 2,910,000 tons NPV 3% (1,310,000 NPV 7%) of NO_X at an estimated cost of $950 million NPV 3% ($650 million NPV 7%) through the same time period. In 2030 alone, such a program is projected to realize health and welfare benefits of $6.2 billion at a 3% DR ($5.7 billion at a 7% DR). Yet, this alternative falls well short of the total benefits that our comprehensive program is expected to realize. Elimination of Tier 4 would result in the loss of 108,000 tons NPV 3% (41,000 tons at NPV 7%) of $PM_{2.5}$ reductions and almost 4,960,000 tons NPV 3% (1,870,000 tons at NPV 7%) of NO_X reductions as compared to our proposal through 2040. Through the addition of the Tier 4 standards, the estimated health and welfare benefits are nearly doubled in 2030. As these alternatives show, each element of our comprehensive program: The locomotive remanufacturing program, the Tier 3 emission standards, and the Tier 4 emission standards, represent a valuable emission control program on its own, while the collective program results in the greatest emission reductions we believe to be possible giving consideration to all of the elements described in today's proposal.

(2) Standards for Engines on Existing Vessels

We are also considering a fifth alternative that would address emissions from certain marine diesel engines installed on vessels that are currently in the fleet. Many of the large marine diesel engines installed on commercial vessels remain in the fleet in excess of 20 years and the contribution of these engines to air pollution inventories can be substantial. This alternative seeks to reduce these impacts.

This section describes the background for such a program and discusses how it could be designed. While this is an alternative under active consideration, we are seeking further information about this market to develop a complete regulatory program. We obtained information from marine transportation stakeholders about their remanufacturing practices that leads us to believe that, for engines above 800 hp, these practices are very similar to those in the rail transportation sector. However, the information we have about the structure of marine remanufacturing market does not provide a complete picture regarding the economic response of the market to such a program. Therefore, we request comment on the characteristics of the marine remanufacturing market with regard to its sensitivity to price changes. We also encourage comments on all aspects of the program described below, including the need for it and the design of its components.

(a) Background

As discussed in section III.C.(1)(b), we currently regulate remanufactured locomotive engines under section 213(a)(5) of the Clean Air Act as new locomotive engines. Specifically, in our 1998 rule we defined ''new locomotive'' and ''new locomotive engine'' to mean a locomotive or locomotive engine which has been remanufactured. Remanufactured was defined as meaning (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; or (ii) to upgrade a locomotive or locomotive engine; or (iii) to convert a locomotive or locomotive engine to

enable it to operate using a fuel other than it was originally manufactured to use; or (iv) to install a remanufactured engine or a freshly manufactured engine into a previously used locomotive. As we explained in that rule, any of these events would result in a locomotive that is essentially new.

We believe a similar situation exists for large marine diesel engines installed on certain types of commercial marine vessels, including tugs, towboats, ferries, crewboats, and supply boats. The engines used for propulsion power in these vessels are often large and are used at high load to provide power for pulling or pushing barges or for assisting ocean-going vessels in harbor. These engines tend to be integral to the vessel and are therefore designed to last the life of the vessel, often 30 or more years. These engines are also relatively expensive, costing from tens of thousands of dollars for a small tug or ferry to several hundred thousand dollars for larger tugs, ferries, and cargo vessels. Because it is very difficult to remove the engines from these vessels (the engines are typically below deck and replacement requires cutting the hull or the deck), owners insist that these marine diesel engines last as long as the vessel. Therefore, these engines are usually characterized by an extremely durable engine block and internal parts.

Marine propulsion engines are frequently remanufactured to provide dependable power, and it is not unusual for an older vessel to have its original propulsion engines which have been remanufactured. Those parts or systems that experience high wear rates are designed to be easily replaced so as to minimize the time that the unit is out of service for repair or remanufacture. This includes power assemblies, which consists of the pistons, piston rings, cylinder liners, fuel injectors and controls, fuel injection pump(s) and controls, and valves. The power assemblies can be remanufactured to bring them back to as-new condition or they can be upgraded to incorporate the latest design configuration for that engine. As part of the routine remanufacturing process, power assemblies and key engine components are disassembled and replaced or requalified (i.e. determined to be within original manufacturing tolerances).

Marine engine remanufacturing procedures have improved to the point that engine performance for rebuilt engines is equivalent to that of new engines. Therefore, we believe it may be appropriate to consider a program that would set emission requirements for certain types of marine diesel engines that would apply when they are remanufactured. The program under consideration is described below. We request comment on whether marine remanufacturing processes should subject remanufactured engines to standards under the Act. We also request comment on any and all aspects of the program described below, including the appropriateness of applying such a program, the standards, and its certification and compliance procedures.

(b) Other Marine Engine Remanufacture Programs

The impact of engines on existing vessels on ambient air quality was recognized in MARPOL Annex VI. Although not specifically referred to as a remanufacturing program, Regulation 13 contains requirements for existing engines by requiring that the Regulation 13 NO_X limits apply to any engine above 130 kW that undergoes a major conversion on or after January 1, 2000. Major conversion is defined as (i) replacing the engine with a new engine (i.e., a repower); (ii) increasing the maximum continuous rating of the engine by more than 10 percent; or (iii) making a substantial modification to the engine (i.e., a change to the engine that would alter its emission characteristics).

EPA also recognized the importance of the inventory contribution from existing marine engines in our 1999 rule, and we requested comment on national requirements for existing marine diesel engines that would be similar to the locomotive remanufacturing program.[164] While we noted the potential advantages of such a program, we did not finalize a remanufacturing program for existing marine diesel engines. At the time we did not have a good understanding of the differences between the large marine diesel engines used on tugs, towboats, crew and supply boats, cargo boats, and ferries and the smaller engines used on fishing vessels and patrol boats, and the lack of uniformity in the remanufacturing practices used by owners of smaller engines led us to conclude that the industry was too fractured to allow a remanufactured engine program. However, we acknowledged the continuing importance of the contribution of existing marine diesel engines and noted in section VI of our 1999 rule (Areas for Future Action) that we would consider this issue again in the future.

Since we finalized our 1999 rule many states have continued to express concern about emissions from existing marine diesel engines and the impact of these emissions on their ability to attain and maintain their air quality goals. More recently, these states submitted comments to the ANPRM and letters to the Agency expressing the need for controlling existing engines. California is considering a program that would require all existing harborcraft (including tug/tow, ferries, crew, supply, pilot, work, and other vessels) to repower with an engine certified to the then-applicable federal standards. They are considering effective dates from 2008 through 2014, depending on the age of an existing vessel and its size. Alternatively, California would allow vessel owners to apply a retrofit technology that achieves equivalent emission reductions, or adopt an alternative compliance plan. The requirements under consideration for fishing vessels would be less stringent and phase in from 2011 through 2018.

We've also received information from vessel owner groups that suggests that the obstacles to a marine diesel engine remanufacturing program we noted in our 1999 rule may be less than critical, particularly for larger engines. Specifically, as noted above, many owners of large marine diesel engines have their engines rebuilt on a routine schedule and this maintenance is often performed by companies that also remanufacture locomotive engines. In addition, many owners of marinized locomotive engines use parts from the same remanufacturing kits that would apply to locomotives. Various retrofit programs, such as the Carl Moyer program in California, the TERP program in Texas, and EPA's retrofit program, may also make it easier to identify and install retrofit technologies on existing marine engines when they are remanufactured.

(c) Marine Diesel Engines To Be Included in the Program

The program for remanufactured marine diesel engines described below would apply to engines above 800 hp. We believe this threshold is appropriate because discussions with various user groups have indicated that these engines are most likely to be subject to the regular remanufacturing events described above. Engines below 800 hp are more likely to be installed on vessels used in fishing or recreational applications. These vessels often do not

[164] Pursuant to 40 CFR 92.2, remanufacture means ''(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; or (ii) to upgrade a locomotive or locomotive engine; or (iii) to convert nally manufactured to use; or (iv) to install a remanufactured engine or a freshly manufactured engine into a previously used locomotive.''

have the intense usage as tug/tow/pushboats, ferries, crew/supply vessels or cargo vessels. Maintenance is more likely to be ad hoc and performed only when there is a problem with the performance of the engine. These vessels are also most likely to be owner operated, and any maintenance that occurs may be performed by the owner. In addition, as explained elsewhere in this preamble, marine diesel engines above 800 hp are the largest contributors to national inventories of NO_X and PM emissions. Many of the vessels that use these engines, including tugs, ferries, crew and supply boats and cargo vessels, are in direct competition with locomotives, providing transportation services for passengers or bulk goods and materials.

A random sample of nearly 400 vessels from the Inland River Record (2006) suggests that the average age of vessels in that fleet is 30 years (with vessels built between 1944 and 2004), and the average horsepower of these vessels is 1709 hp (with a range of 165 to 9,180 hp). About 72 percent of the vessels have horsepower at or above 800 hp, with about 75% of those being built after 1973. In addition, about 60 percent of the vessels with engines at or above 800 hp have engines derived from locomotive engines. This suggests that there are significant emission reductions that may be achieved by setting requirements similar to the locomotive program for these engines.

Although the analysis of this alternative includes all engines above 800 hp, this remanufacturing program for marine diesel engines could further be limited to a subset of engines above 800 hp, for example those manufactured after 1973. The locomotive remanufacturing program has this age limitation, reflecting the fact that older locomotives are expected to be retired out of the Class I line haul fleet relatively soon. However, this may not make sense in the marine sector as there are a lot of vessels older than 1973 in the fleet (about 130 in our sample of about 400 vessels), and they are not systematically retired to lower use applications.

On the other hand, this option could be expanded to include other marine diesel engines including those below 800 horsepower. We do not believe this expansion is appropriate, for the reasons outlined above (i.e., maintenance may be more ad hoc and performed by the owner/operator instead of by a professional remanufacturer at a shipyard). However, we request comment on this issue.

The program described in this alternative could be further modified by specifying that all engines on a vessel would be considered to be subject to the remanufacturing requirements if the main propulsion engine falls under the scope of the program. In essence, this approach would treat all engines onboard a vessel as a system. While remanufacture kits may not be available for smaller auxiliary engines, it may be possible to retrofit them with emission controls that will achieve the 25 percent PM reduction. In addition, repowering auxiliary engines onboard these vessels may not be a limiting factor as these engines are often removed to be rebuilt and other engines installed in their place. We request comment on this aspect of expanding the program.

(d) Alternative 5: Existing Engines

Due to the impact of marine diesel engines on the environment, the need for reductions for states to achieve their attainment goals, and our better understanding of the marine remanufacturing sector, we are considering a programmatic alternative that would set emission requirements for marine diesel engines on existing vessels when they are remanufactured.

The program under consideration in this alternative would apply to marine diesel engines above 800 hp. We believe this is a reasonable threshold because of the long hours of use of these engines, often at high load, and their long service lives. The program would draw on features of the locomotive remanufacturing program, in that it would apply when a marine diesel engine is remanufactured. It would also draw on the certification requirements of the urban bus retrofit program (see 58 FR 21359 (April 21, 1993), 63 FR 14626 (March 26, 1998), 40 CFR part 85 subpart O), in that the standard would in part be a function of the emissions from the base engine and that the standard might be subject to a cost threshold.

This marine engine remanufacturing alternative consists of a two-part program. In the first part, which could begin as early as 2008, vessel owners and rebuilders (also called remanufacturers) would be required to use a certified kit when the engine is rebuilt (or remanufactured) if such a kit is available. Initially, these kits would be expected to be locomotive kits and therefore applicable only to those engines derived from similar locomotive engines. Eventually, however, it is expected that the large engine manufacturers would also provide kits for their engines. Kit availability would be expected to track the relative share of models to the total population of engines, so that kits for the most popular engine models would be made available first. Because the potential for emission reductions are expected to be quite varied across the diverse range of existing marine diesel engines, we could consider setting a multi-stepped emission standard similar to the Urban Bus program. For example, the program could set standards based on reductions of 60%, 40% and 20% with a requirement that a rebuilder must use a certified kit meeting the most stringent of these three standards if available. If no kit is available meeting the 60% reduction, then the rebuilder can use one meeting the 40% reduction, and similarly, if no kits are available meeting the 40% or 60% standards, then the rebuilder can use a kit meeting the 20% reduction. In this way, engines which can achieve a 60% reduction are likely to realize that reduction because a kit builder will be motivated to develop a kit meeting the most stringent standard possible. We request comment regarding the appropriateness of such an approach, and were we to adopt such a structure, the need for greater or less stratification across the potential emission standards.

In the second part, which could begin in 2013, the remanufacturer/owner of a marine diesel engine identified by the EPA as a high-sales volume engine model would have to meet specified emission requirements when the engine is remanufactured. Specifically, the remanufacturer or owner would be required to use a system certified to meet the standard; if no certified system is available, he or she would need to either retrofit an emission reduction technology for the engine that demonstrates at least a 25 percent reduction or repower (replace the engine with a new one). The mandatory use of an available kit is intended to create a market for kits to help ensure their development over the initial five years of the program.

To ensure that the program results in the expected emission reductions, an emission threshold could be set as well such that the retrofit technology would be required to demonstrate a 25 percent reduction with emissions not to exceed 0.22 g/kW-hr PM (equivalent to the new Tier 0/1 PM limit). We believe a threshold, if one is included, should focus on PM emissions over NO_X because PM reductions can be accomplished through the use of improved engine components, for example changing cylinder rings or liners to reduce oil consumption and PM emissions. We do not believe a NO_X threshold is appropriate because technologies to reduce NO_X may not be as amenable to a remanufacturing kit

approach. However, we would welcome comments regarding the need for a threshold, and the limit at which it should be set, and the appropriateness of a NO_X standard as well.

The second part of the program is contingent on EPA developing a list of high volume marine diesel engines for which a remanufacture certificate must be available by 2013. EPA will continue to work with engine manufactures and other interested stakeholders to develop such a list, and seeks comment on the engine models that should be included. The goal of this list is to identify those engine models that occur frequently enough in the market to justify the development of a remanufacture kit; engine models with just a few units in the population may not be required to comply with the requirements.

Finally, the second step of the program could be made subject to a technical review in 2011. The object of such a review would be for EPA to assess the current and future availability of certified kits and to determine if any adjustments are necessary for the program including the effective date of the mandatory repower requirement and whether any change in the list of high-volume engine models is warranted due to new information.

With regard to technological feasibility, we believe engine manufacturers would utilize incremental improvements to existing engine components. Because such a remanufactured marine engine program would parallel our existing remanufactured locomotive program, we expect a direct transfer of emissions control technology from locomotives to marine engines for similar engines. In fact, in our discussions with vessel operators, they indicated that they are sometimes already using the EPA-certified lower emissions remanufacturing kits that are currently on the market to meet our locomotive remanufacturing program.

Engines that do not have a locomotive counterpart will in many cases start at a cleaner baseline than locomotive-based marine engines. Therefore, the same total reduction that could be expected from the locomotive remanufacture kits could not be expected from these engines. However, we would expect that similar PM emissions control technologies would be used to meet the requirements of the program. Technologies to achieve PM reductions include existing low-oil-consumption piston ring-pack designs and existing closed crankcase systems. Our discussions with marine diesel engine manufacturers suggest reductions of 25 percent with emissions not to exceed 0.22 g/kW-hr PM are feasible. These technologies would provide significant near-term PM reductions. Because all of the aforementioned technologies to reduce emissions already exist or can be developed and introduced into the market within a very short time period, we believe some of this technology could be implemented on a limited basis as early as 2008 on remanufactured marine engines. We also believe that these technologies could be fully implemented in a marine remanufacturing program by the end of 2012. In addition, it may be possible to include NO_X emission control technologies in these kits to achieve greater reductions.

To help ensure the remanufacturer's solutions are reasonably priced, the program could set a limit on the price the owner/remanufacturer could be expected to pay for the kit, similar to the urban bus program. Such a limit may be necessary because a program that would require the use of a certified kit may provide a potential short-term monopoly for kit certifiers, at least until other kits are certified. Such a monopoly environment may create the potential for kit prices to be unrelated to actual kit cost. However, unlike the urban bus program, the diverse nature of marine diesel engines makes setting a single cost limit per engine unreasonable. Instead, we would look to develop a factor that corresponds to engine size, power, or emissions. For example, we could consider setting a limit based on the PM reduction (the cost per ton of PM reduced). We could consider a limit of $45,000 per ton of PM reduced. This cost is far below the monetized health and welfare benefits we have estimated will be realized from a reduction in diesel PM emissions. We request comment on such an approach for setting a reasonable cost threshold.

As in the locomotive remanufacturing program, anyone could certify a remanufacturing kit, but only certified kits may be used to comply with the requirement. We expect this to be primarily engine manufacturers or aftermarket part manufacturers. However, a fleet owner with several vessels with the same model engine could choose to certify a kit, the use of which would then become mandatory for all engines of that model, unless another equivalent kit is also available for that model. In addition, certification could be streamlined for kit manufacturers. We would look to the Agency's past practices with the Urban Bus Program and the Voluntary Retrofit Verification Program when designing a certification procedure. However, as in the locomotive remanufacture program, the certifier is deemed to be a ''manufacturer'' subject to the emission standards and as such would be subject to all of the obligations on such an entity under our primary program, including warranty, recall, in-use liability, among others. With regard to the retrofit requirement, we request comment on how we could streamline the certification for these technologies such that their use will not impose a larger certification burden on the owner of the vessel. We welcome comments on all aspects of the implementation of this possible remanufacturing program.

The costs and benefits of a program as outlined above are included in Table VII–1 and Table VII–2. We estimate that the compliance costs for the marine remanufacturing program would be around $10 million per year in 2030. Using the benefits transfer approach from the primary control scenario to estimate the benefits of these inventory reductions, the additional monetized benefits would be expected to be about $0.3 billion at a 3% DR ($0.3 at a 7% DR) in 2030.

With regard to benefits, the application of locomotive remanufacture kits to similar marine diesel engines would be expected to result in similar reductions in PM and NO_X emissions. In some cases, this could be as much as 60 percent reduction for PM and 25 percent reduction for NO_X. However, because many marine diesel engines start at a cleaner baseline, we would not expect to accomplish the same reductions from all engines that would be subject to the program. Based on a minimal control case of a 25 percent PM reduction from existing marine diesel engines above 800 hp, we estimate about an additional 27,000 tons NPV 3% (16,000 tons at NPV 7%) of $PM_{2.5}$ reductions, and an additional 320,000 tons NPV 3% (220,000 tons at NPV 7%) of NO_X reductions through 2040.

B. Summary of Results

A summary of the five alternatives is contained in Table VII–1 and Table VII–2 below. Table VII–1 includes the expected emission reductions associated with each alternative, including: the estimated PM and NO_X reductions through 2040 for each alternative expressed as a net present value (NPV) using discounting rates of 3% and 7%. It also includes the estimated costs through 2040 associated with each alternative again expressed at 3% NPV and 7% NPV. For additional comparison, Table VII–2 shows the PM and NO_X inventory reductions, costs,

and benefits of each alternative estimated for the year 2030.

TABLE VII–1.—SUMMARY OF INVENTORY AND COSTS AT NPV 3% AND 7%

Alternatives	Standards	Estimated $PM_{2.5}$ reductions 2006–2040 NPV 3% (7%)	Estimated NO_X reductions 2006–2040 NPV 3% (7%)	Total costs millions 2006–2040 NPV 3% (7%) [a]
Primary Case	• Locomotive Remanufacturing • Tier 3 Near-term program • Tier 4 Long-term standards	315,000 (135,000)	7,870,000 (3,180,000)	$7,230 ($3,230)
Alternative 1: Exclusion of Locomotive Remanufacturing.	• Tier 3 Near-term program • Tier 4 Long-term standards	250,000 (100,000)	7,180,000 (2,780,000)	$6,430 ($2,700)
Alternative 2: Tier 4 Advanced One Year	• Locomotive Remanufacturing • Tier 3 Near-term program • Tier 4 Long-term standards advanced one year.	324,000 (140,000)	8,290,000 (3,390,000)	$7,590+C ($3,440)+C
Alternative 3: Tier 4 Exclusively in 2013	• Tier 4 Long-term standards only in 2013	255,000 (104,000)	8,050,000 (3,280,000)	$7,410+C ($3,220)+C
Alternative 4: Elimination of Tier 4	• Locomotive Remanufacturing • Tier 3 Near-term program	207,000 (94,000)	2,910,000 (1,310,000)	$950 ($650)
Alternative 5: Inclusion of Marine Remanufacturing.	• Locomotive Remanufacturing • Tier 3 Near-term program • Tier 4 Long-term standards • Addition of Marine Remanufacturing	342,000 (151,000)	8,190,000 (3,400,000)	$7,650 ($3,510)

[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, COSTS AND BENEFITS FOR 2030

	2030 $PM_{2.5}$ Emissions reductions (tons)	2030 NO_X Emissions reductions (tons)	2030 Total costs (millions)	2030 Benefits [a] [b] (billions) $PM_{2.5}$ only 3% (7%)
Primary Case	28,000	770,000	$610	$12 ($11)
Alternative 1: Exclusion of Locomotive Remanufacturing	25,000	740,000	$580	$8.8 ($8.0)
Alternative 2: Tier 4 Advanced One Year	28,000	790,000	$620	$12 ($11)
Alternative 3: Tier 4 Exclusively in 2013	25,000	770,000	$630	$11 ($10)
Alternative 4: Elimination of Tier 4	17,000	240,000	$22	$6.2 ($5.7)
Alternative 5: Inclusion of Marine Remanufacturing	29,000	770,000	$620	$12 ($11)

[a] 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).

[b] 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

We request comment on all aspects of this proposal. This section describes how you can participate in this process.

A. How Do I Submit Comments?

We are opening a formal comment period by publishing this document. We will accept comments during the period indicated in the **DATES** section at the beginning of this document. If you have an interest in the proposed emission control program described in this document, we encourage you to comment on any aspect of this rulemaking. We also request comment on specific topics identified throughout this proposal.

Your comments will be most useful if you include appropriate and detailed supporting rationale, data, and analysis. Commenters are especially encouraged to provide specific suggestions for any changes to any aspect of the regulations that they believe need to be modified or improved. You should send all comments, except those containing proprietary information, to our Air Docket (see **ADDRESSES** located at the beginning of this document) before the end of the comment period.

You may submit comments electronically, by mail, or through hand delivery/courier. To ensure proper receipt by EPA, identify the appropriate docket identification number in the subject line on the first page of your comment. Please ensure that your comments are submitted within the specified comment period. Comments received after the close of the comment period will be marked ''late.'' EPA is not required to consider these late comments. If you wish to submit Confidential Business Information (CBI) or information that is otherwise protected by statute, please follow the instructions in section VIII.B.

B. How Should I Submit CBI to the Agency?

Do not submit information that you consider to be CBI electronically through the electronic public docket, *http://www.regulations.gov*, or by e-mail. Send or deliver information identified as CBI only to the following address: U.S. Environmental Protection Agency, Assessment and Standards Division, 2000 Traverwood Drive, Ann Arbor, MI 48105, Attention Docket ID EPA–HQ–OAR–2005–0036. You may claim information that you submit to EPA as CBI by marking any part or all of that information as CBI (if you submit CBI on disk or CD ROM, 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 CBI). Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

In addition to one complete version of the comment that includes any 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. If you submit the copy that does not contain CBI on disk or CD ROM, mark the outside of the disk or CD ROM clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket without prior notice. If you have any questions about CBI or the procedures for claiming CBI, please consult the person identified in the **FOR FURTHER INFORMATION CONTACT** section at the beginning of this document.

C. Will There Be a Public Hearing?

We will hold a public hearing on Tuesday, May 8, 2007 at the Hilton Seattle Airport & Conference Center, 17620 International Boulevard, Seattle, WA 98188–4001, *Telephone:* 206–244–4800. We will also hold a public hearing on Thursday, May 10, 2007 at the Sheraton Gateway Suites Chicago O'Hare, 6501 North Mannheim Road, Rosemont, IL 60018, *Telephone:* 847–699–6300. These hearings will both start at 10 a.m. local time and continue until everyone has had a chance to speak.

If you would like to present testimony at the public hearing, we ask that you notify the contact person listed under **FOR FURTHER INFORMATION CONTACT** at least ten days before the hearing. You should estimate the time you will need for your presentation and identify any needed audio/visual equipment. We suggest that you bring copies of your statement or other material for the EPA panel and the audience. It would also be helpful if you send us a copy of your statement or other materials before the hearing.

We will make a tentative schedule for the order of testimony based on the notifications we receive. This schedule will be available on the morning of the hearing. In addition, we will reserve a block of time for anyone else in the audience who wants to give testimony.

We will conduct the hearing informally, and technical rules of evidence won't apply. We will arrange for a written transcript of the hearing and keep the official record of the hearing open for 30 days to allow you to submit supplementary information. You may make arrangements for copies of the transcript directly with the court reporter.

D. Comment Period

The comment period for this rule will end on July 2, 2007.

E. What Should I Consider as I Prepare My Comments for EPA?

You may find the following suggestions helpful for preparing your comments:

- Explain your views as clearly as possible.
- Describe any assumptions that you used.
- Provide any technical information and/or data you used that support your views.
- If you estimate potential burden or costs, explain how you arrived at your estimate.
- Provide specific examples to illustrate your concerns.
- Offer alternatives.
- Make sure to submit your comments by the comment period deadline identified.
- To ensure proper receipt by EPA, identify the appropriate docket identification number in the subject line on the first page of your response. It would also be helpful if you provided the name, date, and **Federal Register** citation related to your comments.

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 in response to OMB recommendations 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 draft Regulatory Impact Analysis that was prepared, and is available in the docket for this rulemaking and at the docket internet address listed under **ADDRESSES** above.

B. Paperwork Reduction Act

The information collection requirements in this proposed 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.* The Information Collection Request (ICR) document prepared by EPA has been assigned EPA ICR numbers 1800.04 for locomotives and 1684.10 for marine diesels.

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. Recordkeeping and reporting requirements for manufacturers would be pursuant to the authority of section 208 of the Clean Air Act.

The total annual burden associated with this proposal is about 25,209 hours for locomotives and 35,030 hours for marine diesels; $2,724,503 for locomotives, based on a projection of 7 respondents; and $2,018,607 for marine diesels based on a projection of 13 respondents. The estimated burden is a total estimate for both new and existing reporting requirements. 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.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this rule, which includes this ICR, under Docket ID number EPA–HQ–OAR–2003–0190. Submit any comments related to the ICR for this proposed rule to EPA and OMB. See **ADDRESSES**

section at the beginning of this notice for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, Attention: Desk Office for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after April 3, 2007, a comment to OMB is best assured of having its full effect if OMB receives it by May 3, 2007. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

C. Regulatory Flexibility Act

(1) Certification

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 this action on small entities, small entity is defined as: (1) A small business that meets the default definition for small business (based on SBA size standards), as described in Table IX–1; (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. The following table provides an overview of the primary SBA small business categories potentially affected by this regulation.

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, 482112	1,500 employees. 500 employees.
Engine repair and maintenance	488210	$6.5 million annual sales.
Marine:		
Manufacturers of new 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.
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.

The proposed regulations would apply to the business sectors shown in Table IX–1 and not to small governmental jurisdictions or small non-profit organizations.

After considering the economic impacts of this proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. (Our analysis of the impacts of the proposal on small entities can be found in the docket for this rulemaking.[165]) We have determined that about six small entities representing less than one percent of the total number of companies affected will have an estimated impact exceeding one percent of their annual sales revenues. About four of these small companies will have an estimated impact exceeding three percent of their annual sales revenues.

Although this proposed 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 in section IX.C.(2) below.

We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

(2) Outreach Efforts and Special Compliance Provisions for Small Entities

We sought the input of a number of small entities, which would be affected by the proposed rule, on potential regulatory flexibility provisions and the needs of 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 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.)[166]

[165] 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.

[166] 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.

The primary feedback we received from small entities was to continue the flexibility provisions that we have provided to small entities in earlier locomotive and marine diesel rulemakings; and a number of these provisions are listed below. Therefore, we propose to 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). For a complete description of the flexibilities be proposed in this notice, please refer to the Certification and Compliance Program, section IV.A.(14)—Small Business Provisions.

(a) *Transition Flexibilities*

(i) *Locomotive Sector*

• Small locomotive remanufacturers would be granted a waiver from production-line and in-use testing for up to five calendar years after this proposed program becomes effective.

• Railroads qualifying as small businesses would be exempt from new Tier 0, 1, and 2 remanufacturing requirements for locomotives in their existing fleets.

• Railroads qualifying as small businesses would 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) would be 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 800 hp (600 kW) would be 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 800 hp (600 kW) would be permitted to 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 800 hp (600 kW) could 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) would be 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) would have hardship relief provisions—i.e., apply for additional time.

EPA invites comments on all aspects of the proposal and its impacts on the regulated small entities.

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 the proposal represents the least costly, most cost-effective approach to achieve the statutory requirements of the rule. The costs and benefits associated with the proposal are included in the Draft Regulatory Impact Analysis, as required by the UMRA. EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments.

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 proposed 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).

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this 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 proposed 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 manufacturers of locomotives, locomotive engines, marine engines, and marine vessels. 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.

EPA specifically solicits additional comment on this proposed rule from tribal officials.

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 proposed rule is not subject to Executive Order 13045 because the Agency does not have reason to believe the environmental health risks or safety risks addressed by this action present a disproportionate risk to children. Nonetheless, we have evaluated the environmental health or safety effects of emissions from locomotive and marine diesels on children. The results of this evaluation are contained in the draft RIA for this proposed rule, which has been placed in the public docket under Docket ID number EPA–HQ–OAR–2003–0190.

The public is invited to submit or identify peer-reviewed studies and data, of which EPA may not be aware, that assessed results of early life exposure to the pollutants addressed by this rule.

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 Office of Information and Regulatory Affairs, Office of Management and Budget, for certain actions identified as ''significant energy actions.'' This proposed rule's potential effects on energy supply, distribution, or use have been analyzed and are discussed in detail in section 5.9 of the draft RIA. In summary, while we project that this proposed 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 2026 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 section 5.4.3 of the draft 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 the proposed 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

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.

The proposed rulemaking involves technical standards. Therefore, the Agency conducted a search to identify potentially applicable voluntary consensus standards. The International Organization for Standardization (ISO) has a voluntary consensus standard that can be used to test engines. However, the test procedures in this proposal reflect a level of development that goes substantially beyond the ISO or other published procedures. The proposed procedures incorporate new specifications for transient emission measurements, measuring PM emissions at very low levels, measuring emissions using field-testing procedures. The procedures we adopt in this rule will form the working template for ISO and national and state governments to define test procedures for measuring engine emissions. As such, we have worked extensively with the representatives of other governments, testing organizations, and the affected industries.

EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially-applicable voluntary consensus standards and to explain why such standards should be used in this regulation.

X. Statutory Provisions and Legal Authority

Statutory authority for the controls proposed in today's document 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 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, 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, Vessels, Railroads, 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

Confidential business information, Penalties, Research, Reporting and recordkeeping requirements.

40 CFR Part 1068

Confidential business information, Penalties, Reporting and recordkeeping requirements, Warranties.

Dated: March 1, 2007.

Stephen L. Johnson,

Administrator.

For the reasons set forth in the preamble, chapter I of title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 92—CONTROL OF AIR POLLUTION FROM LOCOMOTIVES AND LOCOMOTIVE ENGINES

1. The authority citation for part 92 continues to read as follows:

Authority: 42 U.S.C. 7401—7671q.

2. 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.

3. 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 requirements of Subpart F of this part (*i.e.*, production line testing) do not apply to small remanufacturers prior to January 1, 2013.

(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 or ULSD, add 0.07 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 only 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.

4. 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.

* * * * *

PART 94—CONTROL OF EMISSIONS FROM MARINE COMPRESSION-IGNITION ENGINES

5. The authority citation for part 94 continues to read as follows:

Authority: 42 U.S.C. 7401—7671q.

6. Section 94.1 is amended by adding paragraph (b)(3) to read as follows:

§ 94.1 Applicability.

(b) * * *

(3) Marine engines subject to the standards of 40 CFR part 1042.

* * * * *

7. In § 94.2, paragraph (b) is amended by adding definitions for ''Nonroad'' and ''Nonroad engine'' in alphabetical order to read as follows:

§ 94.2 Definitions.

* * * * *

(b) * * *

Nonroad means relating to nonroad engines, or vessels, or equipment that includes 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.

* * * * *

8. Section 94.12 is amended by adding paragraph (i) to read as follows:

§ 94.12 Interim provisions.

* * * * *

(i) *Subchapter U 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 subchapter U.

This paragraph (j) describes allowances for manufacturers 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 only 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 locomotive 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.

9. Section 94.108 is amended by revising paragraph (d) to read as follows:

§ 94.108 Test fuels.

* * * * *

(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:

$$PMadj = PM - [BSFC * 0.0917 * (FSF - 0.0040)]$$

Where:

PMadj = 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 may 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:

$$PMadj = PM + [BSFC * 0.0917 * (0.0020 - FSF)]$$

Where:

PMadj = 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.

* * * * *

10. 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.

* * * * *

11. 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 engines all of a manufacturers 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:

* * * * *

12. A new part 1033 is added to subchapter U of chapter I to read as follows:

PART 1033—CONTROL OF EMISSIONS FROM LOCOMOTIVES

Sec.

Subpart A—Overview and Applicability

1033.1 Applicability
1033.5 Exemptions and exclusions.
1033.10 Organization of this part.
1033.15 Do any other regulation parts apply to me?

Subpart B—Emission Standards and Related Requirements

1033.101 Exhaust emission standards.
1033.102 Transition to the standards of this part for model years before 2015.
1033.110 Emission diagnostics—general requirements.
1033.112 Emission diagnostics for SCR systems.
1033.115 Other requirements.
1033.120 Emission-related warranty requirements.
1033.125 Maintenance instructions.
1033.130 Instructions for engine remanufacturing or engine installation.
1033.135 Labeling.
1033.140 Rated power.
1033.150 Interim provisions.

Subpart C—Certifying Engine Families

1033.201 General requirements for obtaining a certificate of conformity.
1033.205 Applying for a certificate of conformity.
1033.210 Preliminary approval.
1033.220 Amending maintenance instructions.
1033.225 Amending applications for certification.
1033.230 Grouping locomotives into engine families.
1033.235 Emission testing required for certification.
1033.240 Demonstrating compliance with exhaust emission standards.
1033.245 Deterioration factors.
1033.250 Reports and recordkeeping.
1033.255 EPA decisions.

Subpart D—Manufacturer and Remanufacturer Production Line Testing and Audit Programs

1033.301 Applicability.
1033.305 General Requirements
1033.310 Sample selection for testing.
1033.315 Test procedures.
1033.325 Calculation and reporting of test results.
1033.330 Maintenance of records; submittal of information.
1033.335 Compliance with criteria for production line testing.
1033.340 Remanufactured locomotives: installation audit requirements.
1033.345 Suspension and revocation of certificates of conformity.

Subpart E—In-use Testing

1033.401 Applicability.
1033.405 General provisions.
1033.410 In-use test procedure.
1033.415 General testing requirements.
1033.420 Maintenance, procurement and testing of in-use locomotives.
1033.425 In-use test program reporting requirements.

Subpart F—Test Procedures

1033.501 General test provisions.
1033.503 Test conditions.
1033.505 Locomotive and engine testing.
1033.510 Ramped modal testing.
1033.520 Duty cycles and idle calculation.
1033.525 Adjusting emission levels to account for infrequently regenerating aftertreatment devices.

Subpart G—Special Compliance Provisions

1033.601 General compliance provisions.
1033.610 Small railroad provisions.
1033.615 Voluntarily subjecting locomotives to the standards of this part.
1033.620 Hardship provisions for manufacturers and remanufacturers.
1033.625 Design certification for non-locomotive-specific engines.
1033.630 Staged-assembly exemption.
1033.640 Provisions for repowered and refurbished locomotives.
1033.650 Incidental use exemption for Canadian and Mexican locomotives.

Subpart H—Averaging, Banking, and Trading for Certification.

1033.701 General provisions.
1033.705 Calculate emission credits.
1033.710 Averaging emission credits.
1033.715 Banking emission credits.
1033.720 Trading emission credits.
1033.722 Transferring emission credits.
1033.725 Requirements for your application for certification.
1033.730 ABT reports.
1033.735 Required records.
1033.740 Credit restrictions.
1033.745 Compliance with the provisions of this subpart.
1033.750 Changing a locomotive's FEL at remanufacture.

Subpart I—Requirements for Owners and Operators

1033.801 Applicability.
1033.805 Remanufacturing requirements.
1033.810 In-use testing program.
1033.815 Maintenance, operation, and repair.
1033.820 In-use locomotives.
1033.825 Refueling requirements.

Subpart J—Definitions and Other Reference Information

1033.901 Definitions.
1033.905 Symbols, acronyms, and abbreviations.
1033.920 How to request a hearing.

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.

(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:

(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 be 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. 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 testing or 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 testing or auditing.

(e) The provisions of this part apply as specified for locomotives manufactured or remanufactured on or after January 1, 2008. See § 1033.102 to determine the 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. To be excluded under this paragraph (b)(1), a locomotive 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 provisions of this part do not apply for any locomotive that has not become a ''new locomotive'' (as defined in § 1033.901) after December 31, 2007.

§ 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 40 CFR part 1065 describe how to test your locomotives.

(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 Do any other regulation parts apply to me?

(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 these seven 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 the model years for which emission standards of this section apply before 2015.

(a) *Emission standards for line-haul locomotives.* Exhaust emissions from your new locomotives may not exceed the applicable emission standards in Table 1 of 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 OF § 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 [f]	Tier 0 [a]	8.0	0.22	1.00	5.0
1993 [f]–2004	Tier 1 [a]	7.4	0.22	0.55	2.2
2005–2011	Tier 2 [a]	5.5	0.10 [d]	0.30	1.5
2012–2014	Tier 3 [b]	5.5	0.10	0.30	1.5
2015 or later	Tier 4	1.3 [c]	0.03	0.14 [e]	1.5

[a] Line-haul locomotives subject to the Tier 0 through Tier 2 emission standards must also meet switch standards of the same tier.
[b] Tier 3 line-haul locomotives must also meet Tier 2 switch standards.
[c] Model year 2015 and 2016 Tier 4 line-haul locomotives are subject to the Tier 3 NO_X standard at the time of initial manufacture (instead of the Tier 4 NO_X standard), but must meet the Tier 4 NO_X standard at the time of any remanufacture after January 1, 2017.
[d] The PM standard for new Tier 2 line-haul locomotives is 0.20 g/bhp-hr until January 1, 2013.
[e] 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. For model years, 2015 and 2016, manufacturers may elect to meet a combined NO_X+HC standard of 5.5 g/bhp-hr instead of the otherwise applicable NO_X and HC standards.
[f] 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) *Emission standards for switch locomotives.* Exhaust emissions from your new locomotives may not exceed the applicable emission standards in Table 2 of 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 OF § 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	0.13 [b]	0.60	2.4
2011–2014	Tier 3	5.0	0.10	0.60	2.4
2015 or later	Tier 4	1.3 [c]	0.03	0.14 [c]	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.
[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 of 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 OF § 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
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:

$$\text{Notch standard} = (E_i) \times (1.1 + (1 - ELH_i/\text{std}))$$

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 x is NO_X, HC (or NMHC or THCE, as applicable), 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 for Tier 3 or later switch locomotives, where ELH_i equals the deteriorated switch duty-cycle weighted brake-specific emission rate for pollutant I.

std = The applicable line-haul duty-cycle standard or FEL, except for Tier 3 or later switch locomotives, where std equals the switch duty-cycle standard for pollutant I.

(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 applies 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.

(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.

(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.

(iv) For Tier 2 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.

(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.

(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 locomotive 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. This petition must include the full rationale behind the request together with any other supporting evidence. Based on this or other information, we may allow a shorter useful life.

(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.

(h) *Applicability for testing.* The emission standards in this subpart apply to all testing, including certification

testing, production-line testing, selective enforcement audits, 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+NMHC standards for Tier 4.* Manufacturers/remanufacturers may certify Tier 4 locomotives to an alternate NO_X+NMHC emission standard of 1.3 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+NMHC FEL. Calculate the NO_X credits needed as specified in subpart H of this part using the NO_X+NMHC emission standard and FEL in the calculation instead of the otherwise applicable NO_X standard and FEL.

§ 1033.102 Transition to the standards of this part for model years before 2015.

(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 its emission-control system. 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.

(a) Use a malfunction-indicator light (MIL). 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) You may only illuminate the MIL for malfunctions that require maintenance action by the owner/operator. 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 must meet the requirements of this section in addition to the requirements of § 1033.110.

(a) The diagnostic system must monitor urea quality and tank levels and alert operators to the need to refill the urea tank before it is empty using a malfunction-indicator light (MIL) as specified in § 1033.110 and an audible alarm. You do not need to separately monitor urea quality if you include an exhaust NO_X sensor (or other sensor) that allows you to determine inadequate urea quality.

(b) Your onboard computer must record in nonvolatile computer memory all incidents of engine operation with inadequate urea injection or urea quality.

§ 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 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 operations 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 prior to sale, introduction into service, or return to service, must be designed to include features that compensate for changes in altitude to ensure that the locomotives will comply with the applicable emission standards when operated at any altitude less than 7000 feet above sea level.

(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.

(v) The AECD reduces urea flow for an SCR aftertreatment system and meets the requirements of this paragraph (f)(1)(v). For operation outside the range of ambient test conditions specified in § 1033.503 where emissions exceed one or more notch caps, your SCR system must function so that at least one of the following conditions is met at all applicable speeds and loads:

(A) You maintain the mass flow of urea into the catalyst in the same proportion as the same notch point under test conditions.

(B) You maintain the mass flow of urea into the catalyst at the highest level possible without emitting ammonia at excessive levels (excessive levels would generally be levels higher than would occur at other operations at the same notch point under test conditions).

(C) The temperature of the exhaust is too low to allow urea to be converted to ammonia (consistent with good engineering judgment).

(2) If your locomotive is designed to allow operation at points other than those included as test points, the provisions of paragraphs (f)(1)(iv) and (v) of this section apply as specified for the most similar test point.

(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 engine damage.

(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) and must prevent the engine(s) from being restarted to resume extended idling.

(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 brake pressure.

(iii) To perform necessary maintenance.

(iv) To otherwise comply with federal regulations.

(3) You may ask to use alternate stop/start systems that will achieve equivalent idle control.

§ 1033.120 Emission-related warranty requirements.

(a) *General requirements.* You 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 these components 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.

(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 maintenance instructions also apply to any service accumulation on your emission-data locomotives, as described in § 1033.245 and in 40 CFR part 1065.

§ 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) 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.

§ 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 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. The label may be made up of more than one piece, as long as all pieces are permanently attached to the same locomotive 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: ''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) Engine labels meeting the specifications of paragraph (c)(2) of this section shall be applied by:

(i) Every manufacturer at the point of original manufacture; and

(ii) Every remanufacturer at the point of 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 locomotive 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.

(G) Engine tune-up specifications and adjustments, as recommended by the manufacturer/remanufacturer, in accordance with the applicable emission standards. This includes but is not limited to idle speed(s), injection timing or ignition timing (as applicable), and valve lash (as applicable).

(H) Other critical operating instructions such as those related to urea use for SCR systems.

(d) Manufacturers/remanufacturers may also provide other information on the labels that they deem necessary for the proper operation and maintenance of the locomotive. Manufacturers/remanufacturers may also include other features to prevent counterfeiting of labels.

(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. Note that rated power is used as the maximum test power in subpart F of this part for testing of locomotives and locomotive engines.

(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.

§ 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.* 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 three months prior to the completion of the remanufacture. For model years 2008 through 2012, you may remanufacture Tier 2 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 three months prior to the completion of the remanufacture. For the purpose of this paragraph (a), available at a reasonable cost means available for use where all of the following are true:

(1) 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 $220,000.

(2) The initial incremental hardware costs are reasonably related to the technology included in the remanufacturing system and are less than $125,000.

(3) 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.

(4) The remanufacturer must demonstrate at the time of certification that the system meets the requirements of this paragraph (a).

(b) *Delayed NO_X standards for Tier 4.* For model years 2015 and 2016, freshly manufactured locomotives are not required to meet the Tier 4 NO_X standards, but must comply with all other applicable standards and requirements. Model year 2015 and 2016 locomotives must comply with all Tier 4 requirements when remanufactured on or after January 1, 2017.

(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/auditing 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 new 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.

(f) *In-use compliance limits.* For purposes of determining compliance after title or custody of a new Tier 4 locomotive has transferred to the ultimate purchaser (or the locomotive has been placed into service), calculate the applicable in-use compliance limits by adjusting the applicable standards/FELs. (Note that this means that these adjustments do not apply for certification or production-line testing.) The PM adjustment applies only for model year 2015–2017 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 2017–2019 line-haul locomotives and 2015–2017 switch 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.

TABLE 1 OF § 1033.150—IN-USE ADJUSTMENTS FOR TIER 4 LINE-HAUL LOCOMOTIVES

Fraction of useful life already used	In-use adjustments (g/bhp-hr)	
	For model year 2017–2019 Tier 4 NO_X standards	For model year 2015–2017 Tier 4 PM standards
0 < MW-hrs = 50% of UL	0.7	0.01
50 < MW-hrs = 75% of UL	1.0	
75 < MW-hrs = 100% of UL	1.3	

TABLE 2 OF § 1033.150.—IN-USE ADJUSTMENTS FOR TIER 4 SWITCH LOCOMOTIVES

Fraction of useful life already used	In-use adjustments (g/bhp-hr)	
	For model year 2015–2017 Tier 4 NO_X standards	For model year 2015–2017 Tier 4 PM standards
0 < useful life = 50%	0.7	0.01
50 < useful life = 75%	1.0	
75 < useful life = 100%	1.3	

(g) *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 (g), 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 (g), 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 locomotives are below the applicable standards).

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.

(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.

§ 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.

(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 obtained by the manufacturer/remanufacturer on 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.

(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 certifying that all locomotives included 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, identify the following:

(1) The port(s) at which you will import your engines.

(2) The names and addresses of the agents you have authorized to import your engines.

(3) The location of test facilities 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, subpart E.

§ 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 disapprove your request if we determine that the amended instructions are inconsistent with maintenance you performed on emission-data locomotives. 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 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.

(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 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. 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 five calendar years after a new tier of standards become applicable, remanufactured engines may be included in the same engine family as freshly manufactured locomotives, provided such engines 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) Test your emission-data locomotives using the procedures and equipment specified in subpart F of this part.

(b) 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.

(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) 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.

(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.

§ 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 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.

§ 1033.245 Deterioration factors.

Establish deterioration factors for each pollutant to determine whether your locomotives will meet emission standards for each pollutant throughout the useful life, as described in §§ 1033.101 and 1033.240. 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 use 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

onengineering 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.

(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 subpart 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, 1033.325, and 1033.335 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 §§ 1033.305, 1033.310, 1033.315, 1033.320, 1033.325, and 1033.335 will apply as specified in the notice.

(b) The requirements of § 1033.340 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 test locomotive engines instead of testing locomotives, unless we specifically require you to conduct production line testing on locomotives. If we determine that locomotive testing is required, we will notify you and will specify how to complete the testing (including specifying the time period in which you must complete the testing).

(b) Remanufacturers are required to conduct audits according to the

requirements of § 1033.340 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 for testing production-line locomotives. In your request, you must show us that the alternate program gives equal assurance that your locomotives meet the requirements of this part. If we approve your alternate program, we may waive some or all of this subpart's requirements.

§ 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.

(1) The required sample size for an engine family (provided that no engine 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. For example, if you are required to test 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 locomotive pass all standards, you are required to test two additional locomotive. 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 test other 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.

(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 § 1033.325(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.

§ 1033.325 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 the number of decimal places in the applicable emission standard expressed to one additional significant figure.

(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 the same number of decimal places in the applicable standard expressed to one additional significant figure.

(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 the same number of decimal places in the applicable standard expressed to one additional significant figure.

(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.

(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 subpart.

(5) For each failed locomotive as defined in § 1033.335(a), a description of the remedy and test results for all retests as required by § 1033.345(g).

(6) 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)

§ 1033.330 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 to 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.

§ 1033.335 Compliance with 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 § 1033.325(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.

§ 1033.340 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 summit audits performed by the owners or operators of the locomotives, provided the audits are performed in accordance with the provisions of this section.

(b) Audit at least five percent of your annual sales 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).

(c) The remanufactured locomotive may accumulate no more than 10,000 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 30 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) Engine identification number;

(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 § 1033.345(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)

§ 1033.345 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 § 1033.335(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 § 1033.340(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 § 1033.335(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 § 1033.340(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 an engine family is deemed to be in noncompliance under §§ 1033.325(d), 1033.335(a), 1033.335(b), or 1033.340(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 we may allow) after the notification, our decision to suspend or revoke a certificate of conformity in whole or in part pursuant to paragraphs (b), (c), or (f) of 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 portions of the applicable test procedure that are 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 carry over 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 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 as described in § 1033.110 and the MIL is illuminated, you may read the code and repair the malfunction 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 are 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 locomotives 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. 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 § 1033.514, 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) [Reserved]

(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.

(d) For locomotives subject to smoke standards, measure smoke emissions using the procedures in § 1033.520.

(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). For example, do not test with ultra low-sulfur diesel fuel if you intend to label your locomotives to allow use of diesel fuel with sulfur concentrations up to 500 ppm.

(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. 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 § 1033.504 for information about allowable ambient testing conditions for testing.

(g) 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.

(h) 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.

(i) We may also perform other testing as allowed by the Clean Air Act.

(j) 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.

§ 1033.503 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.

(a) Adjust the locomotive main engine's idle emission rate (g/hr) as specified in § 1033.520. 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 § 1033.520.

(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 (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.

§ 1033.504 Ambient conditions.

This section specifies the allowable ambient conditions of temperature, pressure, and humidity 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 upward 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 to 103.325 kPa. 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 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 of 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 of this section.

(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.

(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 § 1033.515 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.

(6) Proceed through each test mode in the order specified in Table 1 of 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 OF § 1033.510.—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	Not applicable
A	Low idle [2]	5 to 10	300 ± 5 seconds
B	Normal idle	5 to 10	300 ± 5 seconds
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.

(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 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 paragraphs (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 of § 1033.510.

(2) *Engines certified to a PM standard/FEL < 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 do so. 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. Vary the sample time to be proportional the applicable line-haul or switch weighting factors specified in § 1033.520 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 of § 1033.510 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 of § 1033.510, 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 within5 °C of the typical intake 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.

§ 1033.514 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 of this section. The ramped modal cycle for switch locomotives is shown in Table 2 of 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 § 1033.520. 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.

(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 of 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 § 1033.515 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 OF § 1033.514.—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
Phase 1	0.380	A	600	Low Idle [1]
(Idle test)		B	600	Normal Idle
Phase Transition				
		C	1000	Dynamic Brake [2]
		1	520	Notch 1
		2	520	Notch 2
Phase 2	0.458	3	416	Notch 3

TABLE 1 OF § 1033.514.—LINE-HAUL LOCOMOTIVE RAMPED MODAL CYCLE—Continued

RMC Test phase	Weighting factor	RMC mode	Time in mode (seconds)	Notch setting
	.....	4	352	Notch 4
	.....	5	304	Notch 5
	.....	6	312	Notch 6
	.....	7	240	Notch 7
Phase Transition				
Phase 3	0.162	8	600	Notch 8

[1] Operate at normal idle for modes A and B if not equipped with multiple idle settings.
[2] Operate at normal idle if not equipped with a dynamic brake.

TABLE 2 OF § 1033.514.—SWITCH LOMOTIVE 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
Phase 1	0.598	A	600	Low Idle [1]
(Idle test)	.....	B	600	Normal Idle
Phase Transition				
	.....	1	868	Notch 1
	.....	2	861	Notch 2
Phase 2	0.377	3	406	Notch 3
	.....	4	252	Notch 4
	.....	5	252	Notch 5
Phase Transition				
	.....	6	1080	Notch 6
Phase 3	0.025	7	144	Notch 7
	.....	8	576	Notch 8

[1] Operate at normal idle for modes A and B if not equipped with multiple idle settings.

§ 1033.515 Smoke testing.

This section describes the equipment and procedures for testing for smoke emissions when 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 the exhaust duct. The light beam must be at right angles to the axis of the plume. Where the exhaust is not circular at its discharge, align the light beam to go through the plume along the hydraulic diameter, which is defined in 1065.1001. 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 ″0.5 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, uncorrected for path length, 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.

§ 1033.520 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 OF § 1033.520.—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	C	0.125	NA	0.000
Brake	.....	.....	.....	.....
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

TABLE 2 OF § 1033.520.—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
Normal Idle	A	0.380	0.505	0.598
Dynamic	C	0.125	NA	0.000
Brake	.....	.....	.....	.....
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

(b) *Idle and dynamic brake notches.* 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 of this section for nonstandard locomotive testing subject to our prior approval.

TABLE 3 OF § 1033.520.—STANDARD NOTCH POWER LEVELS EXPRESSED AS A PERCENTAGE OF MAXIMUM TEST POWER

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 § 1033.514 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.

(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 all operating points at which any of the engines will operate when installed in the locomotive. Weight the results to reflect the power demand/power-sharing of the in-use configuration for each notch setting.

§ 1033.525 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 (EFA) based on the following equation:

$$EF_A = (F)(EF_H) + (1 - F)(EF_L)$$

Where:

F = The frequency of the regeneration event in terms of the fraction of tests during which the regeneration occurs. You may determine F from in-use operating data or running replicate tests.

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 0.1 (the regeneration occurs once for each ten tests), then:

$EF_A = (0.1)(0.5 \text{ g/bhp-hr}) + (1.0 - 0.1)(0.1 \text{ g/bhp-hr}) = 0.14 \text{ g/bhp-hr}$.

$UAF = 0.14 \text{ g/bhp-hr} - 0.10 \text{ g/bhp-hr} = 0.04 \text{ g/bhp-hr}$.

$DAF = 0.50 \text{ g/bhp-hr} - 0.14 \text{ g/bhp-hr} = 0.36 \text{ g/bhp-hr}$.

(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.

(c) *Exemptions.* (1) The exemption provisions of 40 CFR 1068.240, 1068.250, 1068.255, and 1068.260 do not apply for domestic or imported locomotives.

(2) The provisions for importing engines and equipment under the identical configuration exemption of 40 CFR 1068.315(i) do not apply for locomotives.

(3) 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, subparts E and F, apply to certificate holders for locomotives as specified in that part. 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, subparts E and F, as needed so that the certificate holder can fulfill its obligations under those subparts.

(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 some Class II and 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.

(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 and 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. Send your request for such exemptions to the Designated Compliance Officer. We may consider the issue of excessive costs in determining the availability of certified systems. If we grant this exemption, you are required to return the locomotive to its previously certified configuration.

§ 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 relief.

(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 then 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 15 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 exemption.

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 section in your application for certification, or in a separate submission.

§ 1033.640 Provisions for repowered and refurbished locomotives.

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. A single existing locomotive cannot be divided into parts and combined with new parts to create more than one remanufactured locomotive.

(a) Repowered locomotives are used locomotives in which a freshly manufactured propulsion engine is installed. Refurbished locomotives are new locomotives that are produced using more unused parts than previously used parts, as described in paragraph (b) of this section.

(b) The relative amount of previously used parts is determined 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.

(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 less than 50 percent, then the locomotive is 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 considered 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. (Note: If the weighted fraction of the locomotive that is comprised of previously used parts is greater than or equal to 25 percent, then the date of original manufacture is unchanged.) For example:

(1) If you produce a new locomotive that includes a used frame, but all other parts are unused, then the locomotive is considered to be a freshly manufactured locomotive because the value of the frame would be less than 25 percent of the total value of the locomotive. Its date of original manufacture is 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 is 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.)

§ 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.

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) *Averaging set* means a set of locomotives in which emission credits may be exchanged only with other locomotives in the same averaging set.

(3) *Broker* means any entity that facilitates a trade of emission credits between a buyer and seller.

(4) *Buyer* means the entity that receives emission credits as a result of a trade.

(5) *Reserved emission credits* means emission credits you have generated that we have not yet verified by reviewing your final report.

(6) *Seller* means the entity that provides emission credits during a trade.

(7) *Standard* means the emission standard that applies under subpart B of this part for locomotives not participating in the ABT program of this subpart.

(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 Calculate 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 standard. Calculate negative emission credits for an engine family that has an FEL above the otherwise applicable standard.

(b) For each participating engine family, calculate positive or negative emission credits relative to the otherwise applicable emission standard. Prior to 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:

$$\text{Emission credits} = (\text{Std}—\text{FEL}) \times (1.341) \times (\text{UL}) \times (\text{Production}) \times (F_p) \times (10^{-3}\ \text{kW-Mg/MW-g}).$$

Where:

Std = The applicable locomotive and locomotive engine 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 3500 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 of 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 of this section. For switch locomotives more than 40 years old, use the proration factor for 40 year old locomotives.

(3) For replacement or repower engines, the proration factor is based on the age of the locomotive chassis, not the age of the engine, except for remanufactured switch locomotives that qualify as refurbished. Use a proration factor of 0.60 for remanufactured switch locomotives meting the definition of refurbished. (Note: The proration factor is 1.00 for all refurbished locomotives that also meet the definition of freshly manufactured.)

TABLE 1 OF § 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

TABLE 1 OF § 1033.705.—PRORATION FACTORS FOR LINE-HAUL LOCOMOTIVES—Continued

Locomotive age (years)	Proration factor (F_p)
16	0.40
17	0.36
18	0.33
19	0.30
20	0.27

TABLE 2 OF § 1033.705.—PRORATION FACTORS FOR SWITCH LOCOMOTIVES

Locomotive age (years)	Proration factor
1	0.98
2	0.96
3	0.94
4	0.92
5	0.9
6	0.88
7	0.86
8	0.84
9	0.82
10	0.8
11	0.78
12	0.76
13	0.74
14	0.72
15	0.7
16	0.68
17	0.66
18	0.64
19	0.62
20	0.6
21	0.58
22	0.56
23	0.54
24	0.52
25	0.5
26	0.48
27	0.46
28	0.44
29	0.42
30	0.4
31	0.38
32	0.36
33	0.34
34	0.32
35	0.3
36	0.28
37	0.26
38	0.24
39	0.22
40	0.2

(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 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) [Reserved]

(5) 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 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 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) In your application for certification, designate any emission credits you intend to bank. These emission credits will be considered reserved credits. During the model year and before the due date for the final report, you may redesignate these emission credits for averaging or trading.

(c) 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.

(d) 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 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. If your engine family will generate positive emission credits, state specifically where the emission credits will be applied (for example, to which engine family they will be applied in averaging, whether they will be traded, or whether they will be reserved for banking). If you have projected negative emission credits for an engine family, state the source of positive emission credits to offset the negative emission credits. Describe whether the emission credits are actual or reserved and whether they will come from averaging, banking, trading, transferring or a combination of these. Identify from which of your engine families or from which manufacturer/remanufacturer the emission credits will come.

§ 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 reserve 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 decrease 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 increase 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 § 1033.725 and § 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.

(3) FEL.

(4) Rated power and useful life.

(5) Build date and assembly plant.

(6) Purchaser and destination.

(e) We may require you to keep additional records or to send us relevant information not required by this section.

§ 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.* (1) PM credits generated under 40 CFR part 92 may not be used under this part.

(2) NO_X credits generated under 40 CFR part 92 may be used under this part in the same manner as NO_X 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 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 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 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 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.

(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) Contact a certifying remanufacturer to have your locomotive included under its certificate of conformity. You must comply with the certificate holder's emission-related installation instructions.

(e) 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 0.15 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 0.0015 and rounding up to the next whole number).

(2) In certain cases, you may test fewer locomotives:

(i) If during the previous 5 years, no new locomotive emission standards have taken effect, the locomotive emission controls have not changed fundamentally (in any manner that could reasonably be expected to have the potential to significantly affect emissions durability), and testing has shown that the degree of compliance for tested locomotives is sufficiently high, then you are only required to test 0.10 percent of the locomotives in your fleet.

(ii) If during the previous 5 years, no new locomotive emission standards have taken effect, the locomotive emission controls have not changed fundamentally (in any manner that could reasonably be expected to have the potential to significantly affect emissions durability), testing has shown that the degree of compliance for tested locomotives is sufficiently high, and you have fewer than 500 locomotives in your fleet, then you are not required to test any locomotives.

(iii) 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.* 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. You may not exclude locomotives because of visible smoke, a history of durability problems, or other evidence of malmaintenance.

(1) If possible, select locomotives that have been certified in compliance with requirements in this part (or 40 CFR part 92), and that have been operated for at least 100 percent of their useful lives. 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) We may require that you test specific locomotives, including locomotives that do not meet the criteria specified in paragraph (c)(1) of this section. Otherwise, where there are multiple locomotives meeting the requirements of this paragraph (c), randomly select the locomotives to be tested from among those locomotives.

(d) *Reporting requirements.* Report all testing done in compliance with the provisions of this section to us within 30 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 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.

(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) 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.

(c) 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.

(d) In addition, for locomotives equipped with emission controls requiring the use of specific fuels, lubricants, or other fluids, you must comply with the manufacturer/remanufacturer's specifications for such fluids when operating the locomotives. For locomotives equipped with SCR systems requiring the use of urea or other reductants, you must report to us within 30 days of any operation of such locomotives without the appropriate urea other reductants.

(e) 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 and remanufacturers of locomotives 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.

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, motive 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.

Auxiliary power means the power provided by the main propulsion engine to operate accessories such as cooling fans.

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 fuel, lubricate, heat, or cool the engine or to 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.

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.

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–), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

Designated Enforcement Officer means the Director, Air Enforcement Division (2242A), 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 § 1033.510.

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.

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.

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 which is 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.

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).

Low-sulfur diesel fuel means one of the following:

(1) For in-use fuels, low-sulfur diesel fuel means a diesel fuel marketed as low-sulfur fuel with a sulfur concentration of 15 to 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 the remanufacturer of a remanufactured locomotive, as applicable.

Model year means a calendar year in which a locomotive is manufactured or remanufactured.

New when relating to a locomotive or 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 (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 at the time of importation, and that was manufactured or remanufactured

after the effective date of the emission standards in this part which is applicable to such locomotive or engine (or which would be 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 been remanufactured into a certified configuration.

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 a 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 § 1033.515.

Oxides of nitrogen has the meaning given in 40 CFR part 1065.

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 § 1033.655. 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. See also § 1033.640

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.

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, or a repowered 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 railroad means a railroad meeting the criterion of paragraph (1) or (2) of this definition, but not the criterion of paragraph (3) of this definition. For the purpose of this part, the number of employees includes all employees of the railroad's parent company, if applicable.

(1) Line-haul railroads with 1,500 or fewer employees are small railroads.

(2) Local and terminal railroads with 500 or fewer employees are small railroads.

(3) Intercity passenger and commuter railroads are excluded from this definition of small railroad.

Small manufacturer 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.

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 experiences a significant drop in emission control performance or emission-system durability when a locomotive 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.

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.

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 1 means relating to the Tier 1 emission standards, as shown in § 1033.101.

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 a hydrogen-to-carbon mass 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 with 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 to modify 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. Upgrading is a type of remanufacturing. See § 1033.615.

U.S.-directed production volume means the number of locomotives, subject to the requirements of this part, produced by a manufacturer/remanufacturer for which the manufacturer/remanufacturer 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 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.
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.
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.

13. 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

Sec.

Subpart A—Overview and Applicability

1042.1 Applicability.
1042.2 Who is responsible for compliance?
1042.5 Exclusions.
1042.10 Organization of this part.
1042.15 Do any other regulation parts apply to me?

Subpart B—Emission Standards and Related Requirements

1042.101 Exhaust emission standards.
1042.107 Evaporative emission standards.
1042.110 Recording urea use and other diagnostic functions.
1042.115 Other requirements.
1042.120 Emission-related warranty requirements.
1042.125 Maintenance instructions for Category 1 and Category 2 engines.
1042.130 Installation instructions for vessel manufacturers.
1042.135 Labeling.
1042.140 Maximum engine power, displacement, and power density.
1042.145 Interim provisions.

Subpart C—Certifying Engine Families

1042.201 General requirements for obtaining a certificate of conformity.
1042.205 Application requirements.
1042.210 Preliminary approval.
1042.220 Amending maintenance instructions.
1042.225 Amending applications for certification.
1042.230 Engine families.
1042.235 Emission testing required for a certificate of conformity.
1042.240 Demonstrating compliance with exhaust emission standards.
1042.245 Deterioration factors.
1042.250 Recordkeeping and reporting.
1042.255 EPA decisions.

Subpart D—Testing Production-line Engines

1042.301 General provisions.
1042.305 Preparing and testing production-line engines.
1042.310 Engine selection.
1042.315 Determining compliance.
1042.320 What happens if one of my production-line engines fails to meet emission standards?
1042.325 What happens if an engine family fails the production-line testing requirements?
1042.330 Selling engines from an engine family with a suspended certificate of conformity.
1042.335 Reinstating suspended certificates.
1042.340 When may EPA revoke my certificate under this subpart and how may I sell these engines again?
1042.345 Reporting.
1042.350 Recordkeeping.

Subpart E—In-use Testing

1042.401 General Provisions.

Subpart F—Test Procedures

1042.501 How do I run a valid emission test?
1042.505 Testing engines using discrete-mode or ramped-modal duty cycles.
1042.515 Test procedures related to not-to-exceed standards.
1042.520 What testing must I perform to establish deterioration factors?
1042.525 How do I adjust emission levels to account for infrequently regenerating aftertreatment devices?

Subpart G—Special Compliance Provisions

1042.601 General compliance provisions for marine engines and vessels.
1042.605 Dressing engines already certified to other standards for nonroad or heavy-duty highway engines for marine use.
1042.610 Certifying auxiliary marine engines to land-based standards.
1042.620 Engines used solely for competition.
1042.630 Personal-use exemption.
1042.640 Special provisions for branded engines.
1042.660 Requirements for vessel manufacturers, owners, and operators.

Subpart H—Averaging, Banking, and Trading for Certification

1042.701 General provisions.
1042.705 Generating and calculating emission credits.
1042.710 Averaging emission credits.
1042.715 Banking emission credits.
1042.720 Trading emission credits.
1042.725 Information required for the application for certification.
1042.730 ABT reports.
1042.735 Recordkeeping.
1042.745 Noncompliance.

Subpart I—Definitions and Other Reference Information

1042.801 Definitions.
1042.805 Symbols, acronyms, and abbreviations.
1042.810 Reference materials.
1042.815 Confidential information.
1042.820 Hearings.
1042.825 Reporting and recordkeeping requirements.

Appendix I to Part 1042—Summary of Previous Emission Standards

Appendix II to Part 1042—Steady-State Duty Cycles

Appendix III to Part 1042—Not-to-Exceed Zones

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 § 1042.801 for the definitions of engines and vessels considered to be new. This part 1042 applies as follows:

(a) This part 1042 applies starting with the model years noted in the following tables:

TABLE 1 OF § 1042.1.—PART 1042 APPLICABILITY BY MODEL YEAR

Engine category	Maximum engine power	Displacement (L/cyl)	Model year
Category 1[a]	kW <75	All	2009
	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	7.0 ≤ disp. <15.0	2013
Category 2	kW > 3700		2014
	All	15 ≤ disp. < 30	2014

[a] This part 1042 applies to commercial Category 1 engines with power density above 35 kW/L starting in the 2017 model year for engines above 600 kW and below 1400 kW, and in the 2016 model year for engines at or above 1400 kW and at or below 3700 kW.

(b) [Reserved]

(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 1042.801 apply for new engines used solely for competition beginning January 1, 2009.

§ 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 are generally addressed to the engine manufacturer. The term ''you'' generally means the engine manufacturer, as defined in § 1042.801, 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 § 1042.801.

(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 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) 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 CO emission standards in this paragraph (a)(2) apply starting with the applicable model year shown for Tier 3 standards in Table 1 of this section. These standards continue to apply for Tier 4 engines. The following CO emission standards apply:

(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 paragraph (a)(4) of this section, the Tier 3 standards for PM and NO_X+HC emissions are described in Tables 1 and 2 of this section, which follow.

TABLE 1 OF 1042.101.—TIER 3 STANDARDS FOR CATEGORY 1 ENGINES

Power density and application	Displacement (L/cyl)	Maximum engine power	Model year	PM (g/kW-hr)	NO_X+HC (g/kW-hr)
		kW < 19	2009	0.40	7.5
all	disp. < 0.9	19 ≤ kW < 75	2009	0.30	7.5
			2014	0.30	4.7
	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	0.11	5.6
			2018	0.10	5.6
		600 ≤ kW < 3700	2014	0.11	5.6
Commercial engines with kW/L 35	2.5 ≤ disp. < 3.5	kW < 600	2013	0.11	5.6
			2018	0.10	5.6
		600 ≤ kW ≤ 3700	2013	0.11	5.6
	3.5 ≤ disp. ≤ 7.0	kW < 600	2012	0.11	5.8
			2018	0.10	5.8
		600 ≤ kW ≤ 3700	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	kW ≡ 75	2013	0.14	5.8
	1.2 ≤ disp. < 2.5	kW ≡ 75	2014	0.12	5.8
	2.5 ≤ disp. < 3.5	kW ≡ 75	2013	0.12	5.8
	3.5 ≤ disp. < 7.0	kW ≡ 75	2012	0.12	5.4

(4) For Tier 3 engines with displacement below 0.9 L/cyl and maximum engine power above 19 kW and at or below 75 kW, you may certify 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.

TABLE 2 OF 1042.101.—TIER 3 STANDARDS FOR CATEGORY 2 ENGINES [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 ≤ 3700	2013	0.14	6.2
15.0 ≤ disp. < 20.0	kW ≤ 3300	2014	0.34	7.0
	3300 < kW ≤ 3700	2014	0.27	8.7
20.0 ≤ disp. < 25.0	kW ≤ 3700	2014	0.27	9.8
25.0 < disp. < 30.0	kW ≤ 3700	2014	0.27	11.0

[a] No Tier 3 standards apply for engines above 3700 kW. See § 1042.1(c) for the standards that apply for these engines.

(5) Except as described in paragraph (a)(6) of this section, the Tier 4 standards for PM, NO_X, and HC emissions are described in the following table:

TABLE 3 OF 1042.101.—TIER 4 STANDARDS FOR CATEGORY 1 AND CATEGORY 2 ENGINES [a]

Application	Maximum engine power	Displacement (L/cyl)	Model year	PM (g/kW-hr)	NO_X (g/kW-hr)	HC (g/kW-hr)
Commercial only	600 ≤ kW < 1400	all	2017	0.04	1.8	0.19
Commercial only	1400 ≤ kW ≤ 2000	all	2016	0.04	1.8	0.19
Commercial and recreational.	2000 < kW ≤ 3700	all	2016	0.04	1.8	0.19
		disp. < 15.0	2014	0.12	1.8	0.19
Commercial and recreational.	kW > 3700	15.0 ≤ disp. ≤ 30.0	2014	0.25	1.8	0.19
		all	2016	0.06	1.8	0.19

[a] No Tier 4 standards apply for recreational engines at or below 2000 kWor for commercial engines below 600 kW. The Tier 3 standards continue to apply for these engines.

(6) The following optional provisions apply for complying with the Tier 4 standards specified in paragraph (a)(5) of this section:

(i) You may certify Tier 4 engines to a NO_X+HC emission standard of 1.8 g/kW-hr instead of the NO_X and HC standards that would otherwise apply.

(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 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 with displacement below 15.0 L/cyl and with

maximum engine power at or below 3700 kW, you may alternatively comply with the Tier 4 PM and HC standards in the 2015 model year and delay complying with the Tier 4 NO_X standard until the 2017 model year. In the 2015 and 2016 model years, these engines must also comply with the Tier 3 NO_X+HC standard.

(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 standards in paragraph (a)(6)(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. The following FEL caps apply:

(1) FELs for Tier 3 engines may not be higher than the Tier 2 standards specified in Appendix I of this part.

(2) FELs for Tier 4 engines may not be higher than the Tier 3 standards specified in paragraph (a)(3) of this section.

(c) *Not-to-exceed standards.* Exhaust emissions from your propulsion or auxiliary engines may not exceed the not-to-exceed (NTE) standards, as described in this paragraph (c).

(1) Use the following equation to determine the NTE standards:

(i) NTE standard for each pollutant = $STD \times M$

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, as defined in Appendix III of this part 1042.

(ii) Round each NTE standard to the same number of decimal places as the emission standard.

(2) Determine the applicable NTE zone and subzones. The NTE zone and subzones for an engine family are defined in Appendix III of this part 1042, according to the applicable certification duty cycle(s). 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 that engine's in-use application. An engine family's NTE zone may be modified as follows:

(i) 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.

(ii) 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.

(iii) 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, as appropriate).

(iv) You may exclude emission data based on ambient or engine parameter limit values as follows:

(A) *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 150 °C, as measured within 30 cm downstream of the last NO_X aftertreatment device that has the greatest exhaust flow. You may request that we approve a higher minimum exhaust temperature limit at the time of certification based on the normal in-use operation of the NO_X exhaust aftertreatment system for the engine family. We will generally not approve a minimum exhaust temperature for catalytic NO_X aftertreatment greater than 250 °C.

(B) *Hydrocarbon catalytic aftertreatment minimum temperature.* For an engine equipped with a catalytic hydrocarbon aftertreatment system, exclude hydrocarbon emission data that is collected when the exhaust temperature is less than 250 °C, as measured within 30 cm downstream of the last hydrocarbon aftertreatment device that has the greatest exhaust flow.

(C) *Other parameters.* You may request our approval for other minimum or maximum ambient or engine parameter limit values at the time of certification.

(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.

(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).

(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.

(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) 10 years or 10,000 hours of operation for commercial Category 1 engines.

(iii) 10 years or 20,000 hours of operation for Category 2 engines.

(iv) [Reserved]

(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.

(a) There are no evaporative emission standards for diesel-fueled engines, or engines using other nonvolatile or nonliquid fuels (for example, natural gas).

(b) If an engine uses a volatile liquid fuel, such as methanol, the engine's fuel system and the vessel in which the engine is installed must meet the evaporative emission requirements of 40 CFR part 1045 that apply with respect to spark-ignition engines. Manufacturers subject to evaporative emission standards must meet the requirements of 40 CFR 1045.105 as described in 40 CFR part 1060 and do all the following things in the application for certification:

(1) Describe how evaporative emissions are controlled.

(2) Present test data to show that fuel systems and vessels meet the evaporative emission standards we specify in this section if you do not use design-based certification under 40 CFR 1060.240. Show these figures before and after applying deterioration factors, where applicable.

§ 1042.110 Recording urea use and other diagnostic functions.

(a) Engines equipped with SCR systems must meet the following requirements:

(1) The diagnostic system must monitor urea quality and tank levels and alert operators to the need to refill the urea tank using a malfunction-indicator light (MIL) and an audible alarm. You do not need to separately monitor urea quality if you include an exhaust NO_X sensor that allows you determine inadequate urea quality along with other SCR malfunctions.

(2) The onboard computer log must record in nonvolatile computer memory all incidents of engine operation with inadequate urea injection or urea quality.

(b) 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 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 approved 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.

(4) The auxiliary emission control device reduces urea flow for a selective catalytic reduction (SCR) aftertreatment system and meets the requirements of this paragraph (f)(4). For any operation meeting one of the conditions of paragraph (f)(4)(i) of this section, your SCR system must function so that at least one of the conditions of paragraph (ii) of this paragraph (f)(4)(ii) of this section is met at the applicable speed and loads.

(i) The provisions of this paragraph (f)(4) apply under either of the following conditions:

(A) The ambient test conditions are outside the range specified in § 1042.501.

(B) The operation is at a speed and/or load not included as a duty-cycle test point, including transient operation between test points.

(ii) Consistent with good engineering judgment, your AECD is not a defeat device where one of the following is true:

(A) You maintain the mass flow of urea into the catalyst at the highest level possible without emitting ammonia at levels higher than would occur at operation at test points under test conditions.

(B) The temperature of the exhaust is too low to allow urea to be converted to ammonia.

§ 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 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.

(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) *Owner's manual.* Describe in the owner's 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 4,500 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 for Category 2 engines.

(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 owner's 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 § 1042.801.

(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) *Owner's manual.* Explain the owner's responsibility for proper maintenance in the owner's 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. However, you may use two-piece labels for engines below 19 kW if there is not enough space on the engine to apply a one-piece label.

(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) 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) [Reserved]

(6) State the date of manufacture [MONTH and YEAR]; however, you may omit this from the label if you stamp or engrave it on the engine.

(7) State the FELs to which the engines are certified if you certified the engine using the ABT provisions of subpart H of this part.

(8) Identify the emission-control system. Use terms and abbreviations consistent with SAE J1930 (incorporated by reference in § 1042.810). You may omit this information from the label if there is not enough room for it and you put it in the owner's manual instead.

(9) 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 NONRECREATIONAL VESSEL VIOLATES FEDERAL LAW SUBJECT TO CIVIL PENALTY (40 CFR PART 1068).''.

(10) For engines requiring ULSD, state: ''ULTRA LOW SULFUR DIESEL FUEL ONLY'.

(11) Identify any additional requirements for fuel and lubricants that do not involve fuel-sulfur levels. You may omit this information from the label if there is not enough room for it and you put it in the owner's manual instead.

(12) State the useful life for your engine family.

(13) State: ''THIS ENGINE COMPLIES WITH U.S. EPA REGULATIONS FOR [MODEL YEAR] MARINE DIESEL ENGINES.''.

(14) 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 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.

(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 as defined in subpart F for testing engines.

(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: $(13.0/2)^2 \times (p) \times (15.5) \div 1000 = 2.0$ 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 standards for three model years beyond the one year delay otherwise allowed, as long as the engines meet all other requirements that apply to Tier 3 engines for the appropriate model year.

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.

(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'' in § 1042.801.

§ 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) [Reserved]

(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).

(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 not-to-exceed emission standards we specify 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. 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) Variable-pitch.

(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 estimates of U.S.-directed production volumes. If these estimates are not consistent with your actual production volumes from previous years, explain why they are different.

(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) For imported engines, identify the following:

(1) The port(s) at which you will import your engines.

(2) The names and addresses of the agents you have authorized to import your engines.

(3) The location of test facilities 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, subpart E.

§ 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. 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 disapprove your request if we determine that the amended instructions are inconsistent with maintenance you performed on emission-data engines. 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 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 any time 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 § 1042.820).

(e) For engine families already covered by a certificate of conformity, you may start producing the new or modified engine configuration any time 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 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) 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 type of engine cooling employed (air-cooled or water-cooled), and procedure(s) employed to maintain engine temperature within desired limits (thermostat, on-off radiator fan(s), radiator shutters, etc.).

(3) The 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 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).

(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 turbocharger or supercharger general performance characteristics (*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 (the fuels with which the engine is intended or designed to be operated) 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).

(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) Test your emission-data engines using the procedures and equipment specified in subpart F of this part.

(b) Select an emission-data engine from each engine family for testing. For Category 2 or Category 3 engines, 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.

(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 to determine whether your engines will meet emission standards for each pollutant throughout the useful life, as described in §§ 1042.101 and 1042.240. 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 2 NO_X+HC standard described in Appendix I of this part 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 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. Your plan must involve measuring emissions from an emission-data engine at least three times with evenly spaced intervals of service accumulation 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 use 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 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 § 1042.820).

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 the 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 engines 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 ask to use an alternate program for testing production-line engines. In your request, you must show us that the alternate program gives equal assurance that your products 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 approved 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 approved 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 category early in the model year from the engine family with the highest projected U.S.-directed production volume. 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.

(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 calendar days, which 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 the number of decimal places in the emission standard expressed to one more decimal place.

(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).

§ 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 § 1042.820). 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.

You must do all the following things unless we ask you to send us less information:

(a) Within 30 calendar 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 § 1042.815 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)(10)). 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.

(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% 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 for each mode and compare with the specified values in 40 CFR part 1065 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 engines with maximum engine power at or above 19 kW that are used with (or intended to be used with) fixed-pitch propellers, and any other engines for which the other duty cycles of this section do not apply.

(2) *Recreational engines.* Use the 5-mode duty cycle or the corresponding ramped-modal cycle described in paragraph (b) of Appendix II of this part for recreational engines with maximum engine power at or above 19 kW.

(3) *Variable-pitch and electrically coupled propellers.* (i) 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 engines that are used with (or intended to be used with) variable-pitch propellers or with electrically coupled propellers.

(ii) Use the 8-mode duty cycle or the corresponding ramped-modal cycle described in 40 CFR part 1039, Appendix IV for variable-speed propulsion engines with maximum engine power at or above 19 kW that are used with (or intended to be used with) variable-pitch propellers or with electrically coupled propellers.

(4) *Auxiliary engines.* (i) Use the 5-mode duty cycle or the corresponding ramped-modal cycle described in 40 CFR part 1039, Appendix II, for constant-speed auxiliary engines.

(ii) Use the 8-mode duty cycle or the corresponding ramped-modal cycle specified in paragraph (b)(3)(ii) of this section for variable-speed auxiliary engines with maximum engine power at or above 19 kW.

(5) *Engines below 19 kW.* Use the 6-mode duty cycle or the corresponding ramped-modal cycle described in 40 CFR part 1039, Appendix III for variable-speed engines with maximum engine power below 19 kW.

(c) During idle mode, operate the engine with the following parameters:

(1) Hold the speed within your specifications.

(2) Set the engine to operate at its minimum fueling rate.

(3) Keep engine torque under 5 percent of maximum test torque.

(d) For full-load operating modes, operate the engine at its maximum fueling rate. However, 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) Barometric pressure must be between 91.000 and 103.325 kPa.

(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 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) For analyzing data to determine compliance with the NTE standards, refer to § 1042.101(c) and Appendix III of this part 1042 for the NTE standards and the NTE zones, subzones, and any other conditions where emission data may be included or excluded.

§ 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 in terms of the fraction of tests during which the regeneration occurs.

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 set 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 marine compression-ignition engines as specified in that part, except as follows:

(a) Installing a recreational marine engine in a vessel that is not a recreational vessel is a violation of 40 CFR 1068.101(a)(1).

(b) In addition to the provisions listed for the national security exemption in

40 CFR 1068.225(b), your engine is exempt without a request if you produce it for a piece of equipment owned or used by an agency of the federal government responsible for national defense, where the equipment has specialized electronic warfare systems, unique stealth performance requirements, and/or unique combat maneuverability requirements.

(c) For replacement engines, apply the provisions of 40 CFR 1068.240(b)(3) as follows:

(1) Except as specified in paragraph (c)(2) of this section, this paragraph applies instead of the provisions of 40 CFR 1068.240(b)(3). The prohibitions in 40 CFR 1068.101(a)(1) do not apply to a new replacement engine if all of the following are true:

(i) We determine that no engine certified to the requirements of this part is produced by any manufacturer with the appropriate physical or performance characteristics to repower a vessel.

(ii) The replacement engine meets the most stringent standards possible, and at least as stringent as those of the original engine. For example, if at a time in which Tier 3 standards apply, an engine originally certified as a Tier 1 engine is being replaced, the replacement must meet the Tier 2 requirements if we determine that a Tier 2 engine can be used as a replacement; otherwise it must meet the Tier 1 requirements.

(iii) The engine manufacturer must take possession of the original engine or make sure it is destroyed.

(iv) 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.

(2) The provisions of 40 CFR 1068.240(b)(3) for replacement engines apply only if a new engine is needed to replace an engine that has experienced catastrophic failure. If this occurs, the engine manufacturer must keep records for eight years explaining why a certified engine was not available and make these records available upon request. Modifying a vessel to significantly increase its value within six months after installing replacement engines under this paragraph (c)(2) is a violation of 40 CFR 1068.101(a)(1).

(d) Misfueling a marine engine labeled as requiring the use of ultra low-sulfur diesel with higher-sulfur fuel is a violation of 40 CFR 1068.101(b)(1). 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 installation instructions when installing a certified engine in a marine vessel.

(e) The provisions of 40 CFR 1068.120 apply when rebuilding marine engines. 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 than nor lower than the manufacturer's specifications.

(3) For urea-based SCR systems 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).

§ 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) *Boat-builder 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, boat builders who 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 nonroad diesel engines (40 CFR part 89 or 1039).

(iii) Locomotives (40 CFR part 92 or 1033). To be eligible to be dressed 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 get the original manufacturer of the engine to confirm this based on its sales information.

(e) *Labeling and documentation.* If you are an engine manufacturer or boat builder 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 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 86, 89, 92, 1033, or 1039, as applicable. These engines must use emission credits under 40 CFR part 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) *Boat builder 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, boat builders who 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 boat builder 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 marine auxiliary applications.

(2) Send a signed letter to the Designated 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.

§ 1042.620 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.

(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.

§ 1042.630 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. 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.

§ 1042.640 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 and describe the arrangements you have made to meet your requirements under this section.

(c) You remain responsible for meeting all the requirements of this chapter, including warranty and defect-reporting provisions.

§ 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. 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 urea. 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 I 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) *Averaging set* means a set of engines in which emission credits may be exchanged only with other engines in the same averaging set.

(3) *Broker* means any entity that facilitates a trade of emission credits between a buyer and seller.

(4) *Buyer* means the entity that receives emission credits as a result of a trade.

(5) *Reserved emission credits* means emission credits you have generated that we have not yet verified by reviewing your final report.

(6) *Seller* means the entity that provides emission credits during a trade.

(7) *Standard* means the emission standard that applies under subpart B of this part for engines not participating in the ABT program of this subpart.

(8) *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 recreational or 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 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 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) In your application for certification, designate any emission credits you intend to bank. These emission credits will be considered reserved credits. During the model year and before the due date for the final report, you may redesignate these emission credits for averaging or trading.

(c) 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.

(d) 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. If your engine family will generate positive emission credits, state specifically where the emission credits will be applied (for example, to which engine family they will be applied in averaging, whether they will be traded, or whether they will be reserved for banking). If you have projected negative emission credits for an engine family, state the source of positive emission credits to offset the negative emission credits. Describe whether the emission credits are actual or reserved and whether they will come from averaging, banking, trading, or a combination of these. Identify from which of your engine families or from which manufacturer the emission credits will come.

§ 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 reserve 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 decrease 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 increase 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 §§ 1042.725 and 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.

(3) FEL and useful life.

(4) Maximum engine power.

(5) Build date and assembly plant.

(6) Purchaser and destination.

(e) We may require you to keep additional records or to send us relevant information not required by this section.

§ 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 § 1042.820).

Subpart I—Definitions and Other Reference Information

§ 1042.801 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:

Act means the Clean Air Act, as amended, 42 U.S.C. 7401–7671q.

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 (EGR) 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'', adopted by the International Maritime Organization (incorporated by reference in § 1042.810).

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, motive 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.

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.

Category 1 means relating to a marine engine with specific engine displacement less than 7.0 liters per cylinder.

Category 2 means relating to a marine engine with a specific engine displacement greater than or equal to 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 greater than or equal to 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.

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.

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.

Designated Enforcement Officer means the Director, Air Enforcement Division (2242A), 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, 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.

Dresser means any entity that modifies a land-based engine for use in a vessel, in compliance with the provisions of § 1042.605. This means that dressers may not modify the engine in a way that would affect emissions.

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.

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 greater than 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 300 hours of operation.

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. 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:

(1) For Category 1 engines, the power output observed at the maximum test speed with the maximum fueling rate possible.

(2) For Category 2 engines, 90 percent of 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 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.

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 a marine diesel 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) 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 marine engine 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), becomes new 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.

(iii) 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. 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 has the meaning given by 46 U.S.C. 2101 (21) and (21a). In the context of commercial vessels, this generally means that a passenger is a person that pays to be on the vessel.

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 has the meaning given in 46 U.S.C. 2101 (25), but excludes ''passenger vessels'' and ''small passenger vessels'' as defined by 46 U.S.C. 2101 (22) and (35) and excludes vessels used solely for competition. For this part, ''recreational vessel'' generally 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, excluding the following vessels:

(1) Vessels of less than 100 gross tons that carry more than 6 passengers (as defined in this section).

(2) Vessels of 100 gross tons or more that carry one or more passengers (as defined in this section).

(3) Vessels used solely for competition.

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.

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.

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 a hydrogen-to-carbon mass 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 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.

§ 1042.805 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.
EGR	exhaust gas recirculation.
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.

§ 1042.810 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 of 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 *http://www.sae.org.* Table 1 follows:

TABLE 1 OF § 1042.810—SAE MATERIALS

Document number 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 of 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 *http://www.imo.org.* Table 3 follows:

TABLE 2 OF § 1042.810.—IMO MATERIALS

Document number and name	Part 1042 reference
Resolution 2—Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, 1997.A	1042.801

§ 1042.815 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.

§ 1042.820 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.

§ 1042.825 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.

(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 marine compression-ignition 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 OF APPENDIX I.—EMISSION STANDARDS FOR ENGINES BELOW 37 KW (G/KW-HR)

Rated power (kW)	Tier	Model year1	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 least 130 but less than 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 OF 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, rated power	Maximum engine power	Category	Model year	THC+NO_X g/kW-hr	CO g/kW-hr	PM g/kW-hr
disp. < 0.9	power ≡ 37 kW	Category 1	2005	7.5	5.0	0.40
0.9 = disp. < 1.2	All	Category 1	2004	7.2	5.0	0.30
1.2 = disp. < 2.5	All	Category 1	2004	7.2	5.0	0.20
2.5 = disp. < 5.0	All	Category 1	2007	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
15.0 = disp. < 20.0	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	0.5

(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) Test commercial propulsion engines with maximum engine power at or above 19 kW that are used with (or intended to be used with) fixed-pitch propellers with one of the cycles specified in this paragraph (a). Use one of these duty cycles also for any other engines for which the other duty cycles of this appendix do not apply.

(1) The following duty cycle applies for discrete-mode testing:

E3 mode number	Engine speed [1]	Percent of maximum test power	Weighting factors
1	Maximum test	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 torquesetting 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) Test recreational engines that are used with (or intended to be used with) fixed-pitch propellers with maximum engine power at or above 19 kW with one of the following steady-state duty cycles:

(1) The following duty cycle applies for discrete-mode testing:

E5 mode number	Engine speed [1]	Percent of maximum test power	Weighting factors
1	Maximum test	100	0.08
2	91%	75	0.13
3	80%	50	0.17
4	63%	25	0.32
5	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) Test any constant-speed/propulsion engines that are used with (or intended to be used with) variable-pitch propellers or with electrically coupled propellers with one of the following steady-state duty cycles:

(1) The following duty cycle applies for discrete-mode testing:

E2 mode number	Engine speed [1]	Observed 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 Figure 1 illustrates the default NTE zone for commercial marine engines certified using the duty cycle specified in § 1042.505(b)(1):

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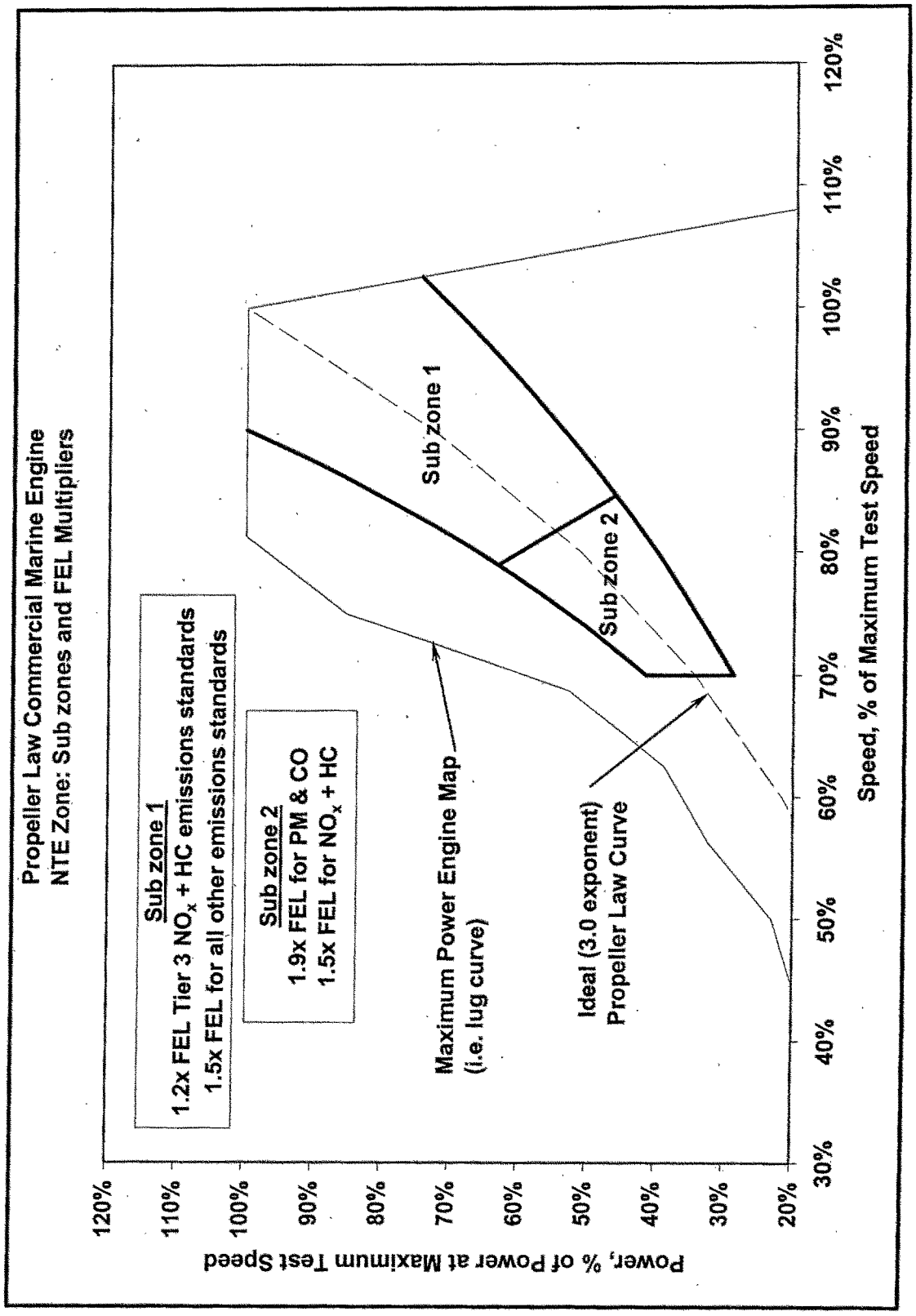

Figure 1 of Appendix III

(1) Subzone 1 is defined as follows, where percent power is equal to the percentage of the maximum power achieved at Maximum Test Speed and percent speed is the percentage of Maximum Test Speed:

(i) Percent power > 0.7 × (percent speed)^2.5, and

(ii) Percent power < (percent speed/0.9)^3.5, and

(iii) Percent power > 3.0. × (100% − percent speed).

(2) Sub zone 2 is defined as follows, where percent power is equal to the percentage of the maximum power achieved at Maximum Test Speed and percent speed is the percentage of Maximum Test Speed:

(i) Percent power > 0.7 × (percent speed)^2.5, and

(ii) Percent power < (percent speed/0.9)^3.5, and

(iii) Percent power > 3.0. × (100% − percent speed), and

(iv) Percent power > 70% of Maximum Test Speed.

(b) The following Figure 2 illustrates the defaut NTE zone for recreational marine propulsion engines that are used with (or intended to be used with) fixed-pitch propellers:

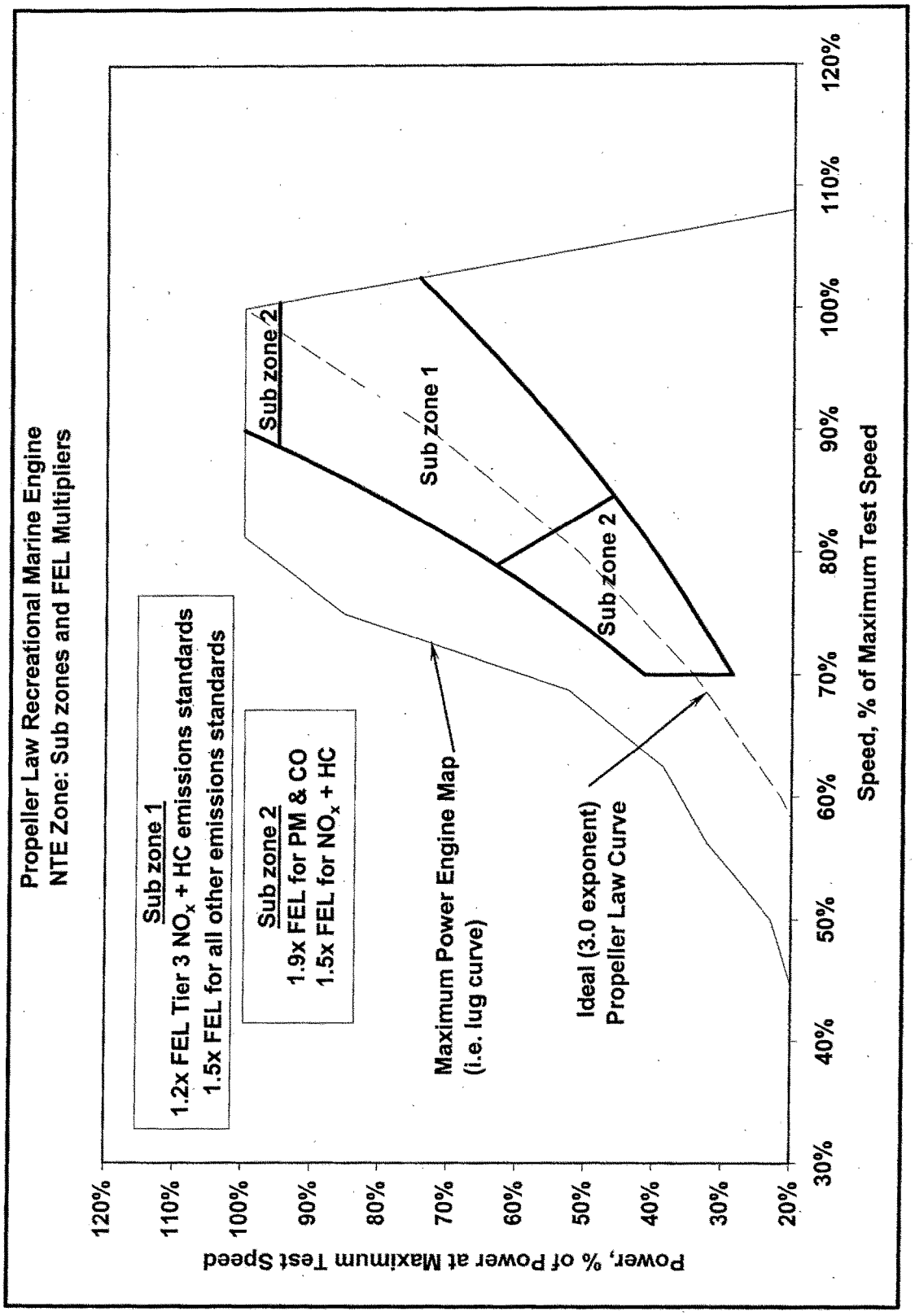

Figure 2 of Appendix III

(1) Sub zone 1 is defined as follows, where percent power is equal to the percentage of the maximum power achieved at Maximum Test Speed and percent speed is the percentage of Maximum Test Speed:

(i) Percent power > 0.7 × (percent speed)^2.5, and

(ii) Percent power < (percent speed/0.9)^3.5, and

(iii) Percent power > 3.0 × (100% − percent speed).

(iv) Percent power < 95% of the maximum power at Maximum Text Speed.

(2) Sub zone 2 is defined as follows, where percent power is equal to the percentage of the maximum power achieved at Maximum Test Speed and percent speed is the percentage of Maximum Test Speed:

(i) Percent power > 0.7 × (percent speed)^2.5, and

(ii) Percent power < (percent speed/0.9)^3.5, and

(iii) Percent power < 3.0 × (100% − percent speed), and

(iv) Percent speed > 70% of Maximum Test Speed.

(v) Any power > 95% of the maximum power at Maximum Test Speed

(c) The following Figure 3 illustrates the default NTE zone for constant speed engines certified using either the duty cycle specified in § 1042.505(b)(3)(I) or in § 1042.505(b)(4)(i):

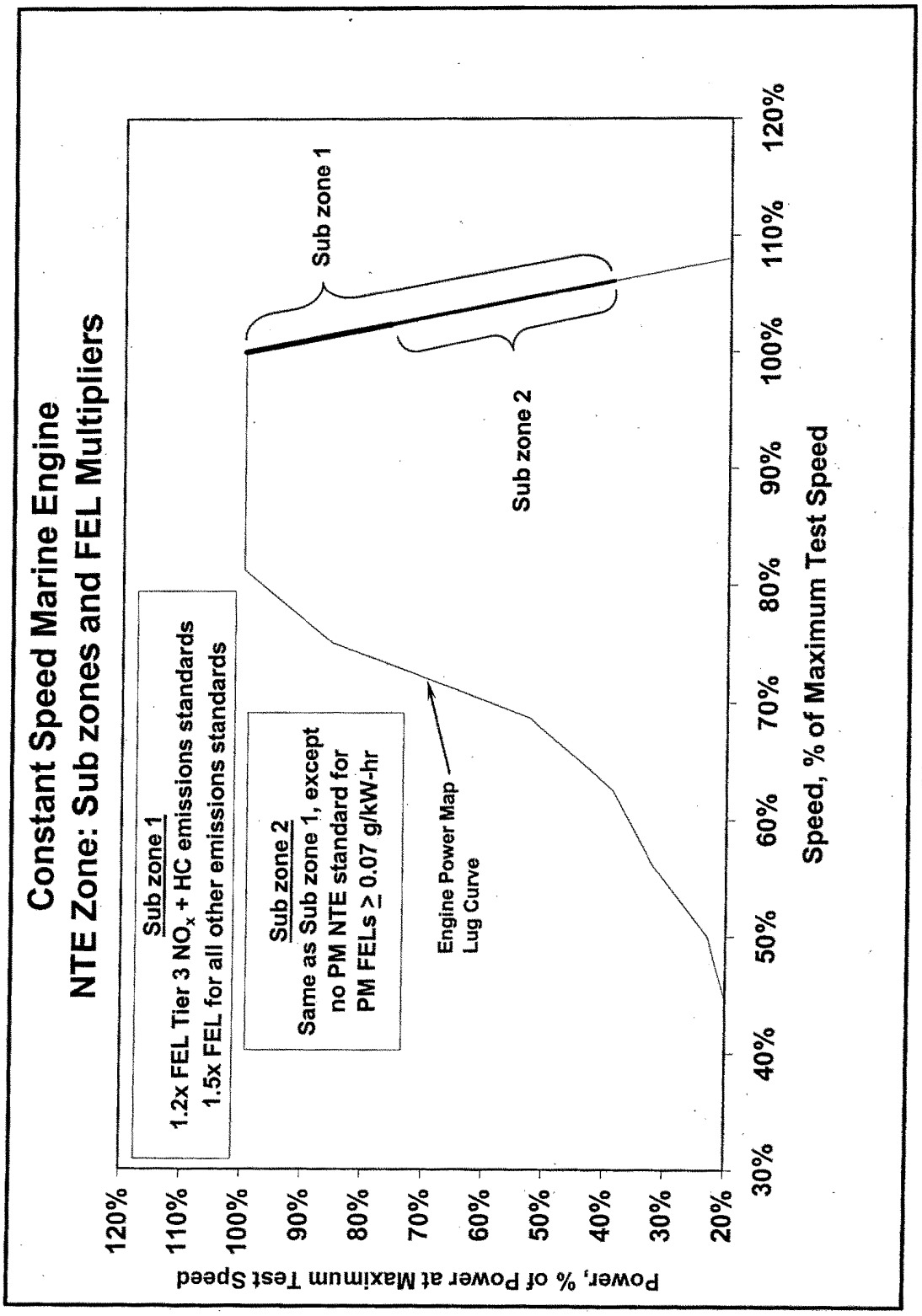

Figure 3 of Appendix III

(1) Subzone 1 is defined in § 1039.101(e).
(2) Subzone 2 is defined in § 1039.515(b).
(d) The following Figure 4 illustrates the default NTE zone for variable speed and load engines certified using either the duty cycle specified in § 1042.505(b)(3)(ii) or in § 1042.505(b)(4)(ii):

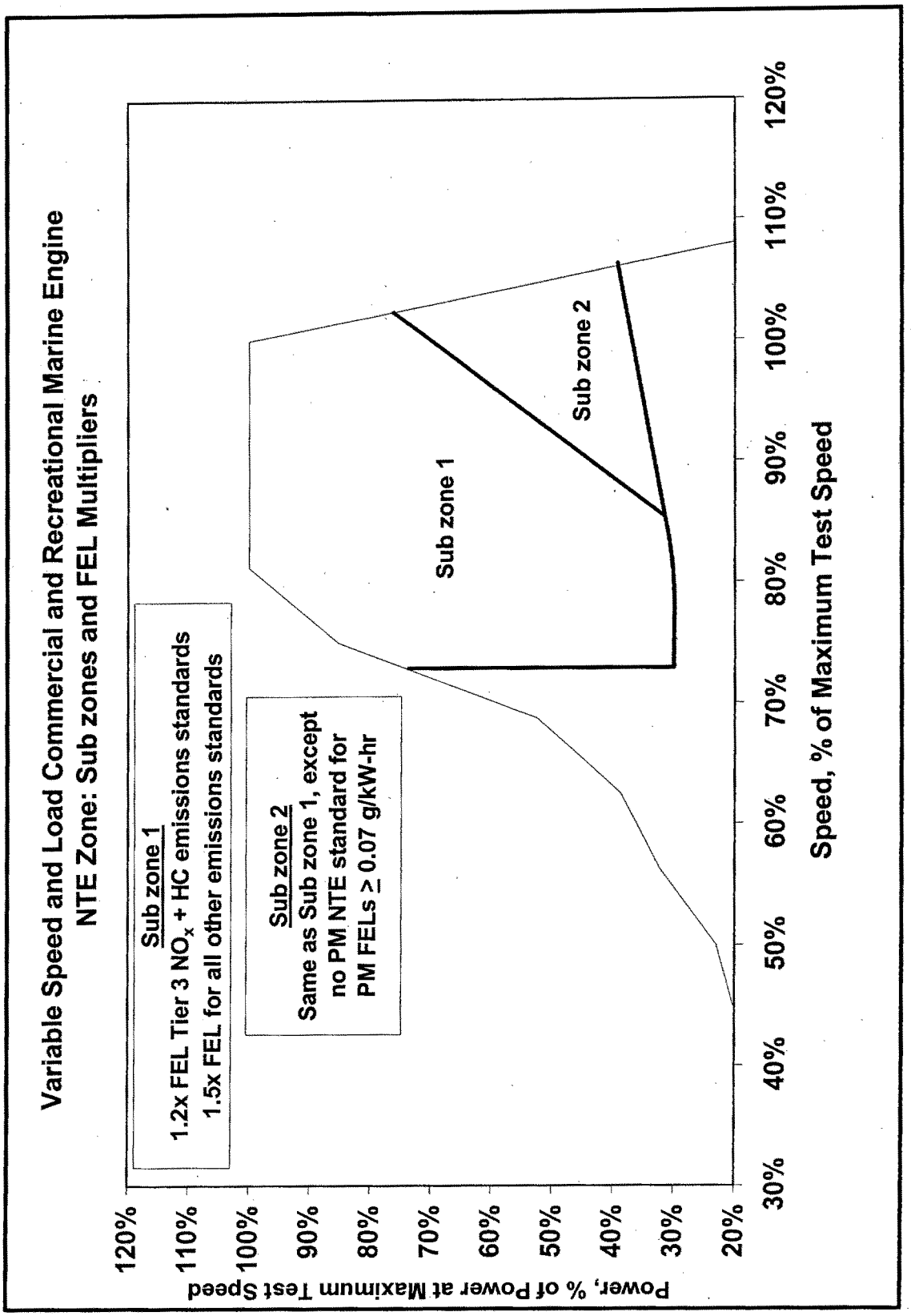

Figure 4 of Appendix III

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(1) Subzone 1 is defined in § 1039.101(e).
(2) Subzone 2 is defined in § 1039.515(b).

PART 1065—ENGINE-TESTING PROCEDURES

14. The authority citation for part 1065 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart A—[Amended]

15. 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) Marine spark-ignition engines we regulate under 40 CFR part 1045. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 91 according to § 1065.10.

(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 as 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) Small nonroad spark-ignition engines we regulate under 40 CFR part 1054 and stationary engines that are certified to the standards in 40 CFR part 1054 as specified in 40 CFR part 60, subpart JJJJ. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 90 according to § 1065.10.

(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) This part is addressed to you as a manufacturer of engines, vehicles, equipment, and vessels, but it applies equally to anyone who does testing for you. For example, if you manufacture engines that must be tested according to this part, this part applies to you. This part is also addressed 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. For example, if you are an instrument manufacturer, this part applies to you.

(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.

(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 *http://www.epa.gov,* and in particular *http://www.epa.gov/otaq/testingregs.htm.*

16. Section 1065.2 is amended by revising paragraph (c) to read as follows:

§ 1065.2 Submitting information to EPA under this part.

* * * * *

(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.

* * * * *

17. 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).

18. Section 1065.10 is amended by revising paragraphs (c)(1) introductory text 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 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:

* * * * *

(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:

* * * * *

19. 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.

* * * * *

20. Section 1065.15 is amended by revising paragraphs (c)(1) and (e) 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 during the following types of engine operation:

(i) Laboratory testing. Under this type of testing, you 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 that an engine must follow. If the standard-setting part allows it, you may also simulate field testing by running on an engine dynamometer in a laboratory or other environment.

(ii) Field testing. This type of testing consists of normal in-use engine operation while an engine is installed in a vehicle, equipment, or vessel. The standard-setting part specifies how test intervals are defined for field testing.

* * * * *

(e) The following figure illustrates the allowed measurement configurations described in this part 1065:

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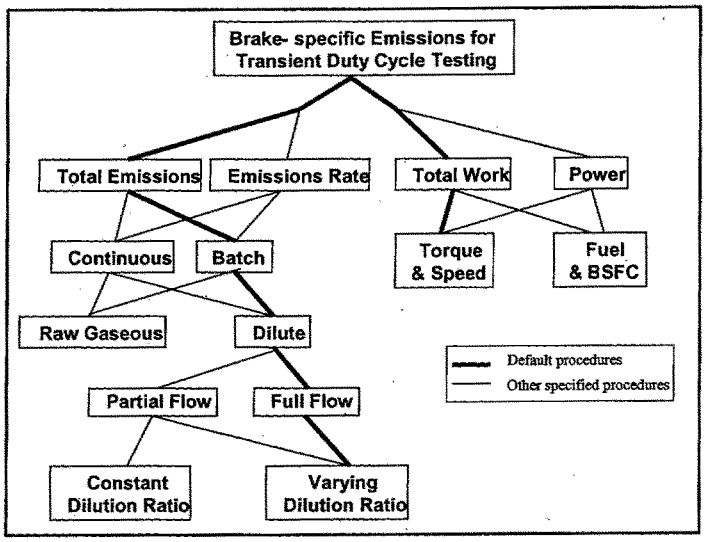
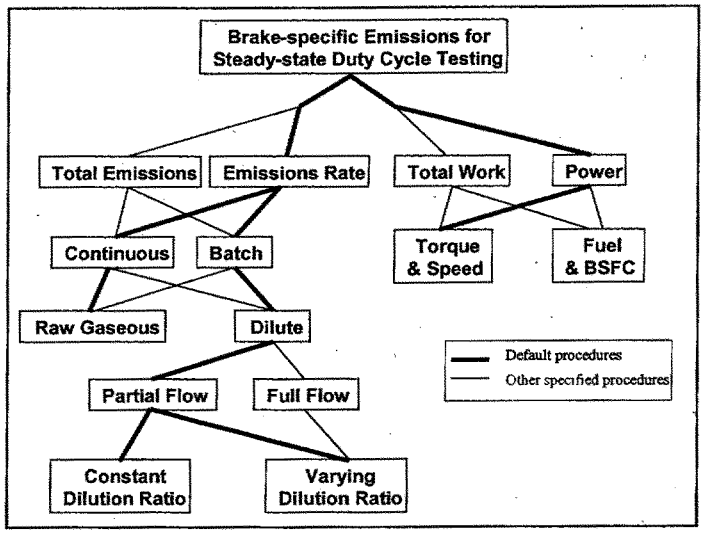
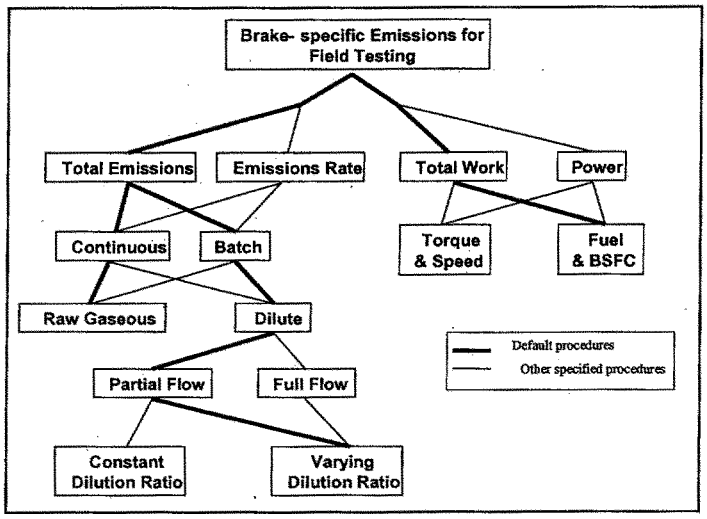
Figure 1 of §1065.15—Default test procedures and other specified procedures.







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21. Section 1065.20 is amended by revising paragraphs (f) and (g) to read as follows:

§ 1065.20 Units of measure and overview of calculations.

* * * * *

(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]

22. Section 1065.101 is amended by revising paragraph (a) 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 testing in laboratories or other environments 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.

* * * * *

23. Section 1065.110 is amended by revising paragraphs (a) and (e) 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) Shaft work. Use an engine dynamometer that is able to meet the cycle-validation criteria in § 1065.514 over each applicable duty cycle.

(i) You may use eddy-current and water-brake dynamometers for any testing that does not involve engine motoring, which is identified by negative torque commands in a reference duty cycle. See the standard setting part for reference duty cycles that are applicable to your engine.

(ii) You may use alternating-current or direct-current motoring dynamometers for any type of testing.

(iii) You may use one or more dynamometers.

(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.

(2) Electrical work. Use one or more of the following to simulate electrical work:

(i) Use storage batteries or capacitors that are of the type and capacity installed in use.

(ii) Use motors, generators, and alternators that are of the type and capacity installed in use.

(iii) Use a resistor load bank to simulate electrical loads.

(3) Pump, compressor, and turbine work. Use pumps, compressors, and turbines that are of the type and capacity installed in use. Use working fluids that are of the same type and thermodynamic state as normal in-use operation.

* * * * *

(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 at 5 Hz (or more frequently) for transient testing or 1 Hz (or more frequently) for steady-state testing. 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 at 5 Hz or more frequently for evaluating performance relative to the cycle validation criteria. 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).

24. 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.

* * * * *

25. Section 1065.122 is amended by revising paragraphs (a) introductory text and (a)(1) 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.

* * * * *

26. Section 1065.125 is revised to read as follows:

§ 1065.125 Engine intake air.

(a) Use the intake-air system installed on the engine or one that represents a typical in-use configuration. This includes the charge-air cooling and exhaust gas recirculation systems.

(b) Measure temperature, humidity, and atmospheric pressure near the entrance to the engine's air filter, or at the inlet to the air intake system for engines that have no air filter. You may use a shared atmospheric pressure meter as long as your equipment for handling intake air maintains ambient pressure where you test the engine within ±1 kPa of the shared atmospheric pressure. You may use a shared humidity measurement for intake air as long as your equipment for handling intake air maintains dewpoint where you test the engine to within ±0.5 °C of the shared humidity measurement.

(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 before emission testing. Modulate any condensate drain during an emission test as it would normally operate in use. 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 at 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.

27. 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 laboratory exhaust tubing upstream of any aftertreatment device that is of diameter(s) typical of in-use configurations. If you use laboratory exhaust tubing 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. 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.

(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 speed, torque and aftertreatment set points specified by the manufacturer. If the manufacturer does not specify any location, measure this pressure downstream of any turbocharger or exhaust gas recirculation system connection to the exhaust system. If the manufacturer does not specify speed and torque points, measure this pressure while the engine produces maximum power. Use an exhaust restriction setpoint that represents a typical in-use value, if available.

(1) If a typical in-use value for exhaust restriction is not available for exhaust systems with a fixed restriction, 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.

(2) If a typical value for exhaust restriction is not available for exhaust systems with variable restriction, set the exhaust restriction between the maximum clean and dirty values specified by the manufacturer.

(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.

28. 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. 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 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. Note paragraph (c)(6) of this section regarding aqueous condensation.

(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. 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).* You may dilute a partial flow of raw or previously diluted exhaust before measuring emissions. Section 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. An example of a varying dilution ratio PFD is a ''bag mini-diluter'' or BMD.

(1) *Applicability.* (i) You may use PFD to extract a proportional raw exhaust sample for any batch or continuous PM emission sampling over any transient duty cycle, any steady-state duty cycle or any ramped-modal cycle (RMC).

(ii) You may use PFD to extract a proportional raw exhaust sample for any batch or continuous gaseous emission sampling over any transient duty cycle, any steady-state duty cycle or any ramped-modal cycle (RMC).

(iii)You may use PFD to extract a proportional raw exhaust sample for any batch or continuous field-testing.

(iv) You may use PFD to extract a proportional diluted exhaust sample from a CVS for any batch or continuous emission sampling.

(v) You may use PFD to extract a constant raw or diluted exhaust sample for any continuous emission sampling.

(vi) You may use PFD to extract a constant raw or diluted exhaust sample for any steady-state 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 temperature control 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 batch or continuous sampling. You may change the dilution ratio between modes, but you must account for this change in dilution ratio in your emission calculations. Also, you may not sample emissions at the same time you are changing the dilution ratio from one constant dilution ratio to another.

(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.* 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. Configure dilution systems as follows:

(1) Control dilution air temperature just upstream of the mixing zones to (25 ± 5) °C. We recommend controlling dilution air temperature to within a narrower tolerance of (25 ± 1) °C.

(2) Adjust the dilution system s dilution ratio for your particular engine and duty cycle to achieve a maximum dewpoint of the diluted exhaust of (20 ±3) °C.

(3) Configure your dilution system to achieve a sample residence time of (1 to 5) seconds from the initial point at which dilution air was first introduced into the exhaust to the sample media. When calculating residence time, use an assumed flow temperature of 25 °C.

(4) Control inside wall temperature to a (42 to 52) °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. If heat must be rejected from the sample to meet this requirement, reject the heat after the point at which the last dilution air was introduced into the diluted exhaust and

reject as little heat as practical to meet this specification.

29. 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 within 12.5° of 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 NMHC or NMHCE analysis from the diluted exhaust of compression-ignition engines, 2-stroke spark-ignition engines, or 4-stroke spark-ignition engines below 19 kW, maintain a probe wall temperature tolerance of (191 ± 11) °C.

(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. 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.

(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 efficiency 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 compression 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

(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.

30. 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. If you extract from a varying flow rate, vary the sample rate in proportion to the varying flow rate. Validate proportional sampling after an emission test as described in § 1065.545. Use storage media that do 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.

* * * * *

(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

0.473 μg/mm^2 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 D 2986–95a (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 sample velocity at the filter face at or below 100 cm/s, where filter face velocity is the measured volumetric flow rate of the sample at the pressure and temperature upstream of the filter face, divided by the filter's exposed area.

(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.

* * * * *

31. Section 1065.190 is amended by revising paragraphs (e) and (g)(6) to read as follows:

§ 1065.190 PM-stabilization and weighing environments for gravimetric analysis.

* * * * *

(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 filters. We recommend that you provide 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. You may use a shared atmospheric pressure meter as long as you can show that your ventilation system for the weighing environment maintains ambient pressure at the balance within ±100 Pa of the shared atmospheric pressure meter. Provide a means to record the most recent atmospheric pressure when you weigh each PM sample. Use this value to calculate the PM buoyancy correction in § 1065.690.

* * * * *

(g) * * *

(6) We recommend that you neutralize PM sample media to within ±2.0 V of neutral. Measure static voltages as follows:

(i) Measure static voltage of PM sample media according to the electrostatic voltmeter manufacturer's instructions.

(ii) Measure static voltage of PM sample media while the media is at least 15 cm away from any grounded surfaces to avoid mirror image charge interference.

32. Section 1065.195 is amended by revising paragraph (c)(4) to read as follows:

§ 1065.195 PM-stabilization environment for in-situ analyzers.

* * * * *

(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]

33. Section 1065.201 is amended by revising paragraphs (a), (b), and (d) 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.

* * * * *

(d) *Redundant systems.* For all measurement instruments described in this subpart, you may use data from multiple instruments to calculate test results for a single test. If you use redundant systems, use good engineering judgment to use multiple measured values in calculations or to disregard individual measurements. Note that you must keep your results from all measurements, as described in § 1065.25. This requirement applies whether or not you actually use the measurements in your calculations.

* * * * *

(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.

34. 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 overestimate 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.

* * * * *

35. 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.

36. 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.

37. 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.

* * * * *

38. Section 1065.270 is amended by revising paragraph (c) 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.

* * * * *

39. 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.

40. 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]

41. 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.
§ 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 sampler and batch verification	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, 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.

42. Section 1065.305 is amended by revising paragraphs (d)(4) and (d)(8) to read as follows:

§ 1065.305 Verifications for accuracy, repeatability, and noise.

* * * * *

(d) * * *

(4) Use the instrument to quantify a NIST-traceable reference quantity, γ_{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 a 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, ($\sigma_1, \sigma_2, \sigma_i, * * * \sigma_{10}$), and ten errors ($\varepsilon_1, \varepsilon_2, \varepsilon_i, * * * \varepsilon_{10}$).

* * * * *

43. Section 1065.307 is amended by revising paragraphs (b) and (c)(6), adding paragraph (d)(8) and revising Table 1 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 except temperature, use instrument manufacturer recommendations and good engineering judgment to select at least 10 reference values, y_{refi}, that are within the range from zero to the highest values expected during emission testing. We recommend selecting a zero reference signal as one of the reference values of the linearity verification. For temperature linearity verifications, we recommend three to five reference values.

* * * * *

(13) Use the arithmetic means, $\bar{y}_i$, and reference values, 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) *Analog-to-digital conversion of stand-alone temperature signals.* For reference values, select a temperature signal calibrator to simultaneously simulate and measure an analog signal similar to your temperature sensor(s). Analog signals may include voltage, current, resistance, frequency, and pulse signals. Use a calibrator that is independently linearized and cold-junction compensated, as necessary, and is NIST-traceable within ±0.5% uncertainty.

TABLE 1 OF § 1065.307.—MEASUREMENT SYSTEMS THAT REQUIRE LINEARITY VERIFICATIONS

Measurement system	Quantity	Minimum verification frequency [a]	Linearity criteria			
			$\lvert a_0 \rvert$ [b]	a_1 [c]	SEE [b]	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 [e]	≤2% ·$\dot{m}_{max}$	≥0.990
Intake-air flow rate	$\dot{n}$	Within 370 days before testing [d]	≤1% ·$\dot{n}_{max}$	0.98–1.02 [e]	≤2% ·n_{max}	≥0.990
Dilution air flow rate	$\dot{n}$	Within 370 days before testing [d]	≤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 [d]	≤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 [d]	≤1% ·$\dot{n}_{max}$	0.98–1.02 [e]	≤2% ·$\dot{n}_{max}$	≥0.990
Batch sampler flow rates	$\dot{n}$	Within 370 days before testing [d]	≤1% ·$\dot{n}_{max}$	0.98–1.02	≤2% ·$\dot{n}_{max}$	≥0.990
Gas dividers	x	Within 370 days before testing	≤0.5% ··x_{max}.	0.98–1.02	≤2% ·x_{max}	≥0.990
All gas analyzers	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

[a] Perform a linearity verification more frequently if the instrument manufacturer recommends it or based on good engineering judgment.
[b] "max." refers to the peak value expected during testing or at the applicable standard over any test interval, whichever is greater.
[c] The specified ranges are inclusive. For example, a specified range of 0.98–1.02 for a_1 means $0.98 \le a_1 \le 1.02$.
[d] These linearity verifications are not required 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.
[e] a_1 criteria for these quantities must be met only if the absolute value of the quantity is required, as opposed to a signal that is only linearly proportional to the actual value.

44. Section 1065.308 is revised to read as follows:

§ 1065.308 Continuous gas analyzer system-response and updating-recording verification.

(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 change 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. These criteria make 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 criteria 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) For PEMS, you do not have to meet this criteria if your PEMS meets the overall PEMS check in § 1065.920.

(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.* Using minimal gas transfer line lengths between all connections, connect a zero-air source to one inlet of a fast-acting 3-way valve (2 inlets, 1 outlet). Using a gas divider, 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 N_2. Connect the gas divider outlet to the other inlet of the 3-way valve. Connect the valve outlet to an overflow at the gas analyzer system's probe or to an overflow fitting between the probe and transfer line to all the analyzers being verified. 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) Switch the valve to flow 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 valve to flow the blended span gases.

(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, $t_{90–10}$, 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.

45. Section 1065.309 is revised to read as follows:

§ 1065.309 Continuous gas analyzer uniform response verification.

(a) *Scope and frequency.* Perform this verification if you multiply or divide one continuous gas analyzer's response by another's to quantify a gaseous emission. Note that we consider water vapor a gaseous constituent. You do not have to perform this verification if you multiply one gas analyzer's response to another's to compensate for an interference that never requires a compensation more than 2% of the flow-weighted mean concentration at the applicable standard or during testing, whichever is greatest. You also 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 or major maintenance. 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 by adding a filter; or if you change the frequency at which you sample and record gas-analyzer concentrations.

(b) *Measurement principles.* This procedure verifies the time-alignment and uniform response of continuously combined gas measurements.

(c) *System requirements.* Demonstrate that continuously combined concentration measurements have a uniform rise and fall during a simultaneous step change in both concentrations. During a system response to a rapid change in multiple gas concentrations, demonstrate that the t_{50} times of all combined analyzers all occur at the same recorded second of data or between the same two recorded seconds of data.

(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.* Using a gas divider, 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 N_2. Connect the gas divider outlet to a 100 °C heated line. Connect the other end of this line to a 100 °C heated three-way tee. Next connect a dewpoint generator, set at a dewpoint of 50 °C, to one end of a heated line at 100 °C. Connect the other end of this line to the heated tee and connect a third 100 °C heated line from the tee to an overflow at the inlet of a 100 °C heated fast-acting three-way valve (two inlets, one outlet). Connect a zero-air source, heated to 100 °C, to a separate overflow at the other inlet of the three-way valve. Connect the three-way valve outlet to the gas analyzer system's probe or to an overflow fitting between the probe and transfer line to all the analyzers being verified. 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) Switch the valve to flow 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.

(iv) Switch the valve to flow span gas.

(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.* Perform the following evaluations:

(1) Uniform response evaluation. (i) Calculate the mean rise time, $t_{10–90}$, mean fall time, $t_{90–10}$ for each analyzer.

(ii) Determine the maximum mean rise and fall times for the slowest responding analyzer in each combination of continuous analyzer signals that you use to determine a single emission concentration.

(iii) If the maximum rise time or fall time is greater than one second, verify

that all other gas analyzers combined with it have mean rise and fall times of at least 75% of that analyzer's response. If the slowest analyzer has t_{10-90} and t_{90-10} values less than 1 sec, no dispersion is necessary for any of the analyzers.

(iv) If any analyzer has shorter rise or fall times, disperse that signal so that it better matches the rise and fall times of the slowest signal with which it is combined. We recommend that you perform dispersion using SAE 2001–01–3536 (incorporated by reference in § 1065.1010) as a guide.

(v) Repeat this verification after optimizing your systems to ensure that you dispersed signals correctly. If after repeated attempts at dispersing signals your system still fails this verification, you may use the continuous analyzer system if the deficiency does not adversely affect your ability to show compliance with the applicable standards.

(2) *Time alignment evaluation.* (i) After all signals are adjusted to meet the uniform response evaluation, determine the second at which—or the two seconds between which—each analyzer crossed the midpoint of its response, t_{50}.

(ii) Verify that all combined gas analyzer signals are time-aligned such that all of their t_{50} times occurred at the same second or between the same two seconds in the recorded data.

(iii) If your system fails to meet this criterion, you may change the time alignment of your system and retest the system completely. If after changing the time alignment of your system, some of the t_{50} times still are not aligned, take corrective action by dispersing analyzer signals that have the shortest rise and fall times.

(iv) If some t_{50} times are still not aligned after repeated attempts at dispersion and time alignment, you may use the continuous analyzer system if the deficiency does not adversely affect your ability to show compliance with the applicable standards.

46. 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.

47. Section 1065.340 is amended by revising paragraphs (f)(6)(ii), (f)(9), and (g)(6)(i) and Figure 1 to read as follows:

§ 1065.340 Diluted exhaust flow (CVS) calibration.

* * * * *

(f) * * *

(6) * * *

(ii) The mean dewpoint of the calibration air, $\bar{T}_{dew}$. See § 1065.640 for permissible assumptions during emission measurements.

* * * * *

(9) Determine C_d and the lowest allowable $\Delta\bar{p}_{CFV}$ according to § 1065.640.

* * * * *

(g) * * *

(6) * * *

(i) The mean flow rate of the reference flow meter, $_{nref}$. This may include several measurements of different quantities, such as reference meter pressures and temperatures, for calculating $_{nref}$.

* * * * *

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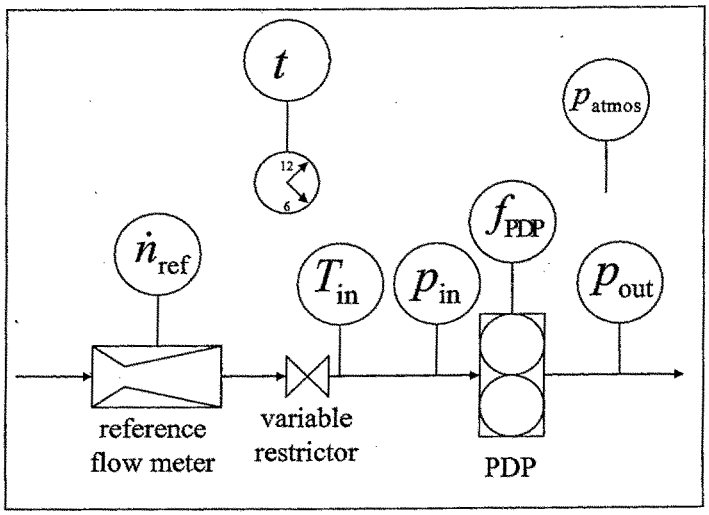
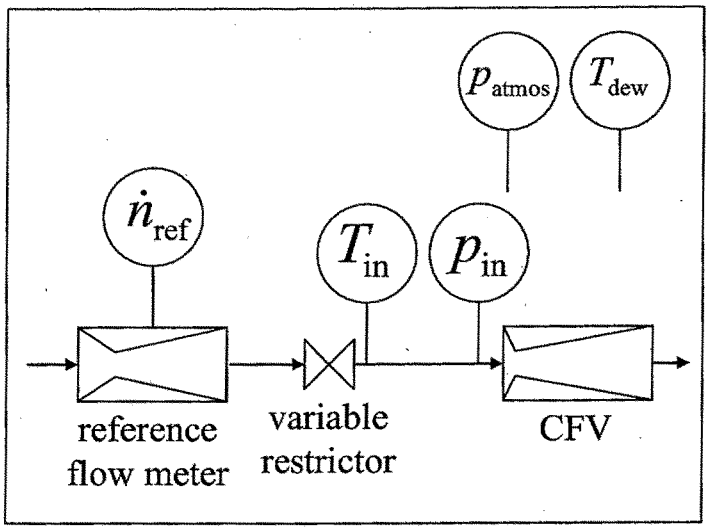
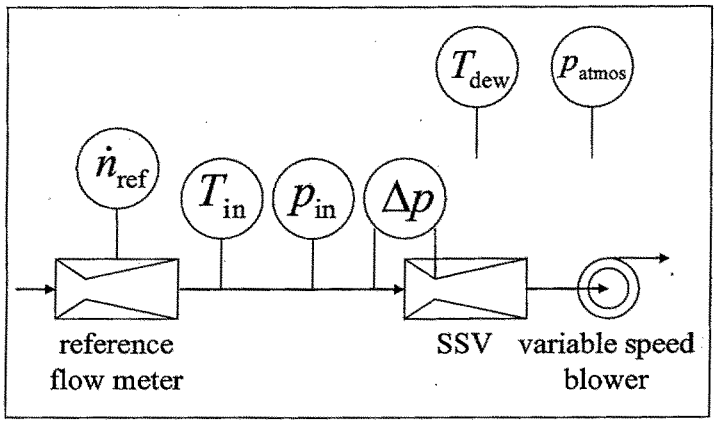
Figure 1 of 1065.340 CVS calibration configurations.







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48. Section 1065.341 is amended by revising paragraph (g) introductory text to read as follows:

§ 1065.341 CVS and batch sampler verification (propane check).

* * * * *

(g) You may repeat the propane check to verify a batch sampler, such as a PM secondary dilution system.

* * * * *

49. Section 1065.345 is revised to read as follows:

§ 1065.345 Vacuum-side leak verification.

(a) *Scope and frequency.* Upon initial sampling system installation, after major maintenance, and before each test according to subpart F of this part for laboratory tests and according to subpart J of this part for field tests, verify that there are no significant vacuum-side leaks using one of the leak tests described in this section. 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 in-line between a probe and transfer line.

(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, the time, and optionally the system absolute temperature. Wait at least 60 sec and again record the pressure, time, and optionally temperature. You may have to adjust your wait time by trial and error to accurately quantify a change in pressure over a time interval.

(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. Verify that the vacuum-decay leak flow rate is less than 0.5% of the system's normal in-use flow rate.

50. 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 ±400) μmol/mol., though we strongly recommend a lower interference that is within (0 ±200) μmol/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 at (25 ±10) °C.

(3) Downstream of the vessel, maintain the humidified test gas temperature at least 5 °C above its dewpoint. We recommend using a heated transfer line.

(4) Introduce the humidified test gas upstream of any sample dryer, if one is used during testing.

(5) Allow time for the analyzer response to stabilize. Stabilization time may include time to purge the transfer line and to account for analyzer response.

(6) 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 ±400) μmol/mol.

* * * * *

51. Section 1065.355 is amended by revising paragraphs (d) and (e)(1) 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 at (25 ±10) °C.

(3) Downstream of the vessel, maintain the humidified gas temperature at least 5 °C above its dewpoint. We recommend using a heated transfer line.

(4) Introduce the humidified CO_2 test gas upstream of any sample dryer, if one is used during testing.

(5) Measure the humidified CO_2 test gas dewpoint and pressure as close as possible to the inlet of the analyzer, or to the inlet of the sample dryer, if one is used.

(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) Scale the CO_2 interference by multiplying this mean value (from paragraph (d)(7) of this section) by the ratio of expected CO_2 to span gas CO_2 concentration. In other words, estimate the flow-weighted mean dry concentration of CO_2 expected during testing, and then divide this value by the concentration of CO_2 in the span gas used for this verification. Then multiply this ratio by the mean value recorded during this verification (from paragraph (d)(7) of this section).

(9) Scale the H_2O interference by estimating the flow-weighted mean concentration of H_2O expected during testing, then divide this value by the concentration of H_2O in the span gas used for this verification. Then multiply this ratio by the CO_2-scaled result of paragraph (d)(8) of this section.

(10) The analyzer meets the interference verification if the result of paragraph (d)(9) of this section is within ±2% of the flow-weighted mean concentration of CO expected at the standard.

(e) * * *

(1) You may omit this verification if you can show by engineering analysis that for your CO sampling system and your emission calculations procedures, the combined CO_2 and H_2O interference for your CO NDIR analyzer always affects your brake-specific CO emission results within ±0.5% of the applicable CO standard.

* * * * *

52. 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 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}, after FID optimization. Use the most recent $RFCH_4$ measured according to this section in the calculations for HC determination described in § 1065.660 to compensate for CH_4 response. Determine RF_{CH4} as follows, noting that you do not determine $RFCH_4$ 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}.

(e) *THC FID methane (CH_4) response verification.* This procedure is only for FID analyzers that measure THC. If the value of RF_{CH4} 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} 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} as follows:

(1) First verify that the pressures and flow rates 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} 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} 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} as described in paragraph (d) of this section. Use this new value of RF_{CH4} in the calculations for HC determination, as described in § 1065.660.

53. 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 two 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 two balance gas concentrations such that the concentrations of O_2 and N_2 represent the minimum and maximum O_2 concentrations expected during testing.

(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 maximum concentration of O_2 expected during testing. Record the mean response of 30 seconds of stabilized sample data as $x_{O2maxHC}$.

(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, then proceed to the next step; otherwise restart the procedure at paragraph (d)(4) of this section.

(11) Calculate the percent difference between $x_{O2maxHC}$ and its reference gas concentration. Calculate the percent difference between $x_{O2minHC}$ and its reference gas concentration. Determine the maximum percent difference of the two. This is the O_2 interference.

(12) If the O_2 interference is within ±1.5%, 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 must re-verify RF_{CH4} according to § 1065.360. Repeat the O_2 interference verification after adjustment and RF_{CH4} verification.

(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.

54. 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.* 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 cutter using a CH_4 span gas, set the product of that FID's CH_4 response factor and CH_4 penetration fraction, $RF_{CH4} \cdot PF_{CH4}$, equal to 1.0 for all emission calculations, and determine its ethane (C_2H_6) penetration fraction, PF_{C2H6} 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 penetration fraction, PF_{C2H6}. Use this penetration fraction and the product of the CH_4 response factor and CH_4 penetration fraction, $RF_{CH4} \cdot PF_{CH4}$, set to 1.0 in emission calculations according to § 1065.660 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 penetration fractions 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.

(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}. Use this penetration fraction according to § 1065.660 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}. Use this penetration fraction according to § 1065.660 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 penetration fractions 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.

(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 penetration fraction, PF_{C2H6}. Use this penetration fraction according to § 1065.660 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}. Use this penetration fraction according to § 1065.660 or § 1065.665, as applicable.

55. Section 1065.370 is amended by revising paragraphs (e) and (g)(1) to read as follows:

§ 1065.370 CLD CO_2 and H_2O quench verification.

* * * * *

(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 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. We recommend that you humidify the gas to the highest sample dewpoint that you estimate during emission sampling.

(5) Downstream of the vessel, maintain the humidified gas temperature at least 5 °C above its dewpoint.

(6) Introduce the humidified gas upstream of any sample dryer, if one is used during testing.

(7) Measure the humidified gas dewpoint, T_{dew}, and pressure, p_{total}, as close as possible to the inlet of the analyzer, or to the inlet of the sample dryer, if one is used.

(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) If your CLD is not equipped with a sample dryer, set x_{NOwet} equal to x_{NOmeas} from paragraph (e)(9) of this section.

(11) If your CLD is equipped with a sample dryer, determine x_{NOwet} from x_{NOmeas} by correcting for the removed water according to § 1065.645. Use the amount of water at the sample dryer outlet as $x_{H2Omeas}$ for this calculation. Refer to § 1065.145(d)(2) and use the humidified gas dewpoint, T_{dew}, and pressure, p_{total}, to determine x_{H2O}.

(12) 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.

* * * * *

56. Section 1065.372 is amended by revising paragraph (e)(1) to read as follows:

§ 1065.372 NDUV analyzer HC and H_2O interference verification.

* * * * *

(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.

* * * * *

57. 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.

58. 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.* Take the following steps to make adjustments:

(i) With the NO_2-to-NO converter in the bypass mode (i.e., NO mode) and the ozonator off, adjust the NO and zero-gas flows so the NO concentration at the analyzer is at the peak total NO_X concentration expected during testing.

(ii) With the NO_2-to-NO converter still in the bypass mode, turn on the ozonator and adjust the ozonator so the NO concentration measured by the analyzer decreases by the same amount as maximum concentration of NO_2 expected during testing. This ensures that the ozonator is generating NO_2 at the maximum concentration expected during testing.

(4) *Data collection.* Maintain the ozonator adjustment in paragraph (d)(3) of this section, and keep the NO_X analyzer in the NO only mode (i.e., bypass the NO_2-to-NO converter).

(i) Allow for stabilization, accounting only for transport delays and instrument response.

(ii) Calculate the mean of 30 seconds of sampled data from the analyzer and record this value as x_{NOxref}.

(iii) Switch the analyzer to the total NO_X mode (that is, sample with the NO_2-to-NO converter) and allow for stabilization, accounting only for transport delays and instrument response.

(iv) Calculate the mean of 30 seconds of sampled data from the analyzer and record this value as $x_{NOxmeas}$.

(v) Turn off the ozonator and allow for stabilization, accounting only for transport delays and instrument response.

(vi) Calculate the mean of 30 seconds of sampled data from the analyzer and record this value as x_{NOxref}.

(5) *Performance evaluation.* Divide the quantity of ($x_{NOxmeas} - x_{NOref}$) by the quantity of ($x_{NOref} - x_{NOref}$). 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.

* * * * *

59. Section 1065.390 is amended by revising paragraphs (d)(8) and (d)(9) and adding paragraph (d)(10) to read as follows:

§ 1065.390 PM balance verifications and weighing process verification.

* * * * *

(d) * * *

(8) Subtract each buoyancy-corrected reference mass from its most recent previously recorded buoyancy-corrected mass.

(9) You may discard reference PM sample media if you positively identify a cause for the media's contamination, such as the media falling onto the floor. In this case, you do not have to include the contaminated reference media when determining compliance with paragraph (d)(10) of this section.

(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 masses were determined.

Subpart E—[Amended]

60. Section 1065.405 is amended by revising paragraphs (b) and (e) introductory text to read as follows:

§ 1065.405 Test engine preparation and maintenance.

* * * * *

(b) Run the test engine, with all emission control systems operating, long enough to stabilize emission levels to appropriately apply deterioration factors. You must use the same stabilization procedures for all emission-data engines for which you apply the same deterioration factors so that all 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 if you accumulate 12 h of operation for a spark-ignition engine or 125 h for a compression-ignition engine.

(2) If the engine needs more or 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.

(3) You may stabilize emissions from a catalytic exhaust aftertreatment device by operating it on an engine that is different from the test engine, but only where it is consistent with good engineering judgment. You may alternatively stabilize emissions from a catalytic exhaust aftertreatment device by operating it on an engine-exhaust simulator if it is allowed in the standard-setting part, or if we have issued prior guidance, or if we otherwise approve of the use of an engine-exhaust simulator in advance. This process of stabilizing emissions from a catalytic exhaust aftertreatment device is often called ''degreening''. Be sure to consider whether degreening under this paragraph (b)(3) will adversely affect your ability to develop and apply appropriate deterioration factors.

* * * * *

(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 do not have to accumulate engine operation before emission testing with an installed canister. Prior to an emission test, use the following steps to attach a canister to your engine:

* * * * *

61. The heading of subpart F is revised to read as follows:

Subpart F—Performing an Emission Test Over Specified Duty Cycles

62. Section 1065.501 is revised 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.

(2) Transform normalized duty cycles into reference duty cycles for your engine by using an engine map.

(3) Prepare your engine, equipment, and measurement instruments for an emission test.

(4) Perform pre-test procedures to verify proper operation of certain equipment and analyzers.

(5) Record pre-test data.

(6) Start or restart the engine and sampling systems.

(7) Sample emissions throughout the duty cycle.

(8) Record post-test data.

(9) Perform post-test procedures to verify proper operation of certain equipment and analyzers.

(10) Weigh PM samples.

(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 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 and has one value of a speed command and one value of a torque (or power) command. Ramped-modal cycles for steady-state testing also list test times for each mode and ramps of speed and torque to follow between modes. 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. Perform a ramped-modal cycle as a sequence of second-by-second speed commands and torque (or power) commands. Proportionally sample emissions and other parameters during the cycle and use the calculations in subpart G of this part to calculate emissions.

(c) Other subparts in this part identify how to select and prepare an engine for testing (subpart E), how to perform the required engine service accumulation (subpart E), and how to calculate emission results (subpart G).

(d) Subpart J of this part describes how to perform field testing.

63. 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, within manufacturer tolerances, if specified. Apply a representative amount of torque to the engine's primary output shaft if nonzero torque at idle speed is representative of its in-use operation. For example output torque at idle speed might normally occur if the engine is always coupled to a device such as a pump or hydrostatic drive that always applies some amount of nonzero torque at idle. Record at least 30 values of speed and use the mean of those values as measured idle speed for cycle generation.

(4) Set operator demand to maximum and control engine speed at (95 ±1)% of its warm idle speed 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.

(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: at warm idle and at 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. Operate the engine at these two points at minimum operator demand. Use linear interpolation to determine intermediate values.

(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 may use test speeds and torques that you declare instead of measured speeds and torques if they meet the criteria in this paragraph (f). Otherwise, you must use speeds and torques derived from the engine map.

(1) Measured speeds and torques. Determine the applicable speeds and torques according to § 1065.610:

(i) Measured maximum test speed for variable-speed engines.

(ii) Measured maximum test torque for constant-speed engines.

(iii) Measured ''A'', ''B'', and ''C'' speeds for steady-state tests.

(iv) Measured intermediate speed for steady-state tests.

(2) *Required declared speeds.* You must declare the following speeds:

(i) Warmed-up, low-idle speed for variable-speed engines. 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.

(ii) Warmed-up, no-load, high-idle speed for constant-speed engines.

(3) *Optional declared speeds.* You may declare an enhanced idle speed according to § 1065.610. You may use a declared value for any of the following as long as the declared value is within (97.5 to 102.5)% of its corresponding measured value:

(i) Measured maximum test speed for variable-speed engines.

(ii) Measured intermediate speed for steady-state tests.

(iii) Measured ''A'', ''B'', and ''C'' speeds for steady-state tests.

(4) *Declared torques.* You may declare an enhanced idle torque according to § 1065.610. You may declare maximum test torque as long as 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.

64. 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 idle speed 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}. Note that the cycle-validation criteria in § 1065.514 allow an engine to govern itself at its in-use idle speed. 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.

(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 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 representing curb-idle transmission torque (CITT). For any negative torque commands, command minimum operator demand and use the dynamometer to control engine speed to the reference speed. Note that the cycle-validation criteria in § 1065.514 allow an engine to pass cycle statistics for torque for any data points recorded during negative torque commands. Also, use the maximum recorded 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 0 Nm when a normalized duty cycle specifies a 0% torque command.

(4) Engine power. For all engines, normalized power is expressed as a percentage of mapped power at maximum test speed, $f_{ntest.}$ Section 1065.610 describes how to transform these normalized values into a sequence of reference powers, P_{ref}. Convert these reference powers to reference speeds and torques for operator demand and dynamometer control.

(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 reference speeds and torques and the feedback speeds and torques at the same frequency. 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 reference torques and the feedback speeds and torques at the same frequency. 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.

65. 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. For any data required in this section, use the duty cycle reference and feedback values that you recorded during a test interval.

(a) *Testing performed by EPA.* Our tests must meet the specifications of paragraph (g) 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 (g) 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/or torque pairs to synchronize them with the reference sequence.

(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 $f_n > f_{nref}$ and $T > T_{ref}$.
maximum	power and either torque or speed	$f_n < f_{nref}$ or $T < T_{ref}$ but not if $f_n < f_{nref}$ and $T < T_{ref}$.
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 $f_n > f_{nref}$ and $P > P_{ref}$.

TABLE 1 OF § 1065.514.—PERMISSIBLE CRITERIA FOR OMITTING POINTS FROM DUTY-CYCLE REGRESSION STATISTICS—Continued

When operator demand is at its . . .	you may omit . . .	if . . .
maximum	power and either torque or speed	$f_n < f_{nref}$ or $P < P_{ref}$ but not if $f_n < f_{ref}$ and $P < P_{ref}$.

(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.

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, $\|a_0\|$	≤ 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.

66. Section 1065.520 is amended by revising paragraphs (b), (f)(1), (g) introductory text, and (g)(7)(iii) to read as follows:

§ 1065.520 Pre-test verification procedures and pre-test data collection.

* * * * *

(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) Intake air temperature of (20 to 30) °C upstream of all engine components.

(3) Atmospheric pressure of (80.000 to 103.325) kPa and within ±5% of the value recorded at the time of the last engine map.

(4) Dilution air conditions as specified in § 1065.140.

* * * * *

(f) * * *

(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.

* * * * *

(g) After the last practice or preconditioning cycle before an emission test, verify the amount of nonmethane contamination in the exhaust and background HC sampling systems. You may omit verifying the contamination of a background HC sampling system if its contamination was verified within ten days before testing. For any NMHC measurement system that involves separately measuring methane and subtracting it from a THC measurement, verify the amount of HC contamination using only the THC analyzer response. There is no need to operate any separate methane analyzer for this verification. Perform this verification as follows:

* * * * *

(7) * * *

(iii) 2 μmol/mol.

* * * * *

67. Section 1065.525 is revised to read as follows:

§ 1065.525 Engine starting, restarting, optional repeating of void discrete modes and shutdown.

(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:

(i) If the engine has stalled, restart the engine.

(ii) Use good engineering judgment to restart the test sequence using the appropriate steps in § 1065.530(b).

(iii) 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.

(iv) Advance to the mode at which the engine stalled and continue with the duty cycle as specified in the standard-setting part.

(v) Complete the remainder of the test according to the requirements in this subpart.

(e) Shut down the engine according to the manufacturer's specifications.

68. 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 consistently 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 but no later than 30 minutes after the duty cycle is complete, perform the following:

(i) Zero and span all batch gas analyzers.

(ii) Analyze any gaseous batch samples, including background samples.

(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).

69. Section 1065.545 is amended by revising paragraph (b)(2) to read as follows:

§ 1065.545 Validation of proportional flow control for batch sampling.

* * * * *

(b) * * *

(2) *Positive-displacement pump option.* You may use the 1 Hz (or more frequently) recorded pump-inlet conditions. 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.

* * * * *

70. 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) If the difference between the corrected and uncorrected brake-specific emissions are within ±4% of the uncorrected results or within ±4% of the applicable standard for all regulated emissions, the test is validated for drift. 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.

71. Section 1065.590 is amended by revising paragraph (j)(9) to read as follows:

§ 1065.590 PM sample preconditioning and tare weighing.

* * * * *

(j) * * *

(9) Once weighing is completed, follow the instructions given in paragraphs (g) through (i) of this section.

72. Section 1065.595 is amended by revising paragraph (e) to read as follows:

§ 1065.595 PM sample post-conditioning and total weighing.

* * * * *

(e) To stabilize PM samples, place them in one or more containers that are open to the PM-stabilization environment, which is described in § 1065.190. A PM sample is stabilized as long as it has been in the PM-stabilization environment for one of the following durations, during which the stabilization environment has been within the specifications of § 1065.190:

(1) If you expect that a filter's total surface concentration of PM will be greater than about 0.5 $\mu g/mm^2$, expose the filter to the stabilization environment for at least 60 minutes before weighing.

(2) If you expect that a filter's total surface concentration of PM will be less than about 0.5 $\mu g/mm^2$, expose the filter to the stabilization environment for at least 30 minutes before weighing.

(3) If you are unsure of a filter s total surface concentration of PM, expose the filter to the stabilization environment for at least 60 minutes before weighing.

(4) Note that 0.5 μg/mm^2 is approximately equal to 567 μg of net PM mass on a PM filter with a 38 mm diameter stain area. It is also an approximate surface concentration at 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 a light-duty vehicle tested according to 40 CFR part 86, subpart B.

* * * * *

Subpart G—[Amended]

73. Section 1065.610 is amended by revising paragraph (b)(1) before the equation to read as follows:

§ 1065.610 Duty cycle generation.

* * * * *

(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:

74. Section 1065.642 is amended as follows:

a. By revising the reference ''Eq. 1065.640–4'' to read ''Eq. 1065.640–5''.

b. By revising the reference ''Eq. 1065.640–5'' in paragraph (b) to read ''Eq. 1065.640–6''.

c. By revising the reference ''Eq. 1065.640–6'' in paragraph (b) to read ''Eq. 1065.640–7''.

75. Section 1065.650 is amended by revising the reference to ''1065.650–5'' in paragraph (e)(4) to be ''Eq. 1065.650–5'' and adding Equation 1065.650–5 after Equation 1065.650–4 in paragraph (b)(2)(i) to read as follows:

§ 1065.650 Emission calculations.

* * * * *

(b) * * *

(2) * * *

(i) * * *

Where:

$$\Delta t = 1/f_{record} \qquad \text{Eq. 1065.650–5}$$

* * * * *

76. Section 1065.655 is amended by revising paragraphs (c) introductory text and (d)(1)(ii) to read as follows:

§ 1065.655 Chemical balances of fuel, intake air, and exhaust.

* * * * *

(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_{H2O}, fraction of dilution air in diluted exhaust, x_{dil}, and the amount of products on a C_1 basis per dry mole of dry measured flow, $x_{Cproddry}$. For each emission concentration, x, and amount of water, x_{H2O}, you must determine their completely dry concentrations, x_{dry} and x_{H2Odry}. 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:

* * * * *

(d) * * *

(1) * * *

(ii) During emission testing you route open crankcase flow to the exhaust according to § 1065.130(i).

* * * * *

Subpart H—[Amended]

77. Section 1065.701 is amended by revising paragraphs (c) introductory text and (e) to read as follows:

§ 1065.701 General requirements for test fuels.

* * * * *

(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 not specified in this subpart. We will generally allow you to use the fuel if you show us all the following things are true:

(1) Show that this type of fuel is commercially available.

(2) Show that your engines will use only the designated fuel in service.

(3) Show that operating the engines on the fuel we specify would unrepresentatively increase emissions or decrease durability.

* * * * *

(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 D975–04c
	Middle distillate	ASTM D6751–03a
	Biodiesel (B100)	ASTM D6985–04a
Intermediate and residual fuel	All	See § 1065.705
Gasoline	Motor vehicle gasoline	ASTM D4814–04b
	Minor oxygenated gasoline blends	ASTM D4814–04b
Alcohol	Ethanol (Ed75–85)	ASTM D5798–99
	Methanol (M70–M85)	ASTM D5797–96
Aviation fuel	Aviation gasoline	ASTM D910–04a
	Gas turbine	ASTM D1655–04a
	Jet B wide cut	ASTM D6615–04a
Gas turbine fuel	General	ASTM D2880–03

[1] ASTM specifications are incorporated by reference in § 1065.1010.

78. 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 D 613–03b
Distillation range	°C.				
Initial boiling point	.....	171–204	171–204	171–204	ASTM D 86–04b
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 D 287–92
Total sulfur	mg/kg	7–15	300–500	2000–4000	ASTM D 2622–03
Aromatics, min. (Remainder shall be paraffins, naphthalenes, and olefins).	g/kg	100	100	100	ASTM D 5186–03
Flashpoint, min	°C	54	54	54	ASTM D 93–02a
Kinematic Viscosity	cSt	2.0–3.2	2.0–3.2	2.0–3.2	ASTM D 445–04

[1] ASTM procedures are incorporated by reference in § 1065.1010. See § 1065.701(d) for other allowed procedures.

79. Section 1065.705 is revised 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/m³	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	(m³/m³)%	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.	mg/kg	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.										
Zinc	.....	15										IP 501 or IP 470 (see ISO 8217:2005(E) 7.7).

TABLE 1 OF § 1065.705.—SERVICE ACCUMULATION AND TEST FUEL SPECIFICATIONS FOR RESIDUAL FUEL—Continued

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	
Phosphorus		15										IP 501 or IP 500 (see ISO 8217:2005(E) 7.7).
Calcium		30										IP 501 or IP 470 (see ISO 8217:2005(E) 7.7).

[1] ISO procedures are incorporated by reference in § 1065.1010. See § 1065.701(d) for other allowed procedures.

80. 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	°C.			
Initial boiling point		24–35 [2]	24–36	ASTM D 86–04b
10% point		49–57	37–48.	
50% point		93–110	82–101	
90% point		149–163	158–174	
End point		Maximum, 213	Maximum, 212	
Hydrocarbon composition:	m^3/m^3.			
Olefins		Maximum, 0.10	Maximum 0.175	ASTM D 1319–03
Aromatics		Maximum, 0.35	Maximum, 0.304.	
Saturates		Remainder	Remainder.	
Lead (organics)	g/liter	Maximum, 0.013	Maximum, 0.013	ASTM D 3237–02
Phosphorous	g/liter	Maximum, 0.0013	Maximum, 0.005	ASTM D 3231–02
Total sulfur	mg/kg	Maximum, 80	Maximum, 80	ASTM D 1266–98
Volatility (Reid Vapor Pressure).	kPa	60.0–63.4[2 3]	77.2–81.4	ASTM D 323–99a

[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.

81. 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] (mol/mol)
Methane, CH_4	Minimum, 0.87.
Ethane, C_2H_6	Maximum, 0.055.
Propane, C_3H_8	Maximum, 0.012.
Butane, C_4H_{10}	Maximum, 0.0035.
Pentane, C_5H_{12}	Maximum, 0.0013.
C_6 and higher	Maximum, 0.001.
Oxygen	Maximum, 0.001.

TABLE 1 OF § 1065.715.—TEST FUEL SPECIFICATIONS FOR NATURAL GAS—Continued

Item	Value [1] (mol/mol)
Inert gases (sum of CO_2 and N_2).	Maximum, 0.051.

[1] All parameters are based on the reference procedures in ASTM D 1945–03 (incorporated by reference in § 1065.1010). See § 1065.710(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.

82. 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 D 2163–91

TABLE 1 OF § 1065.720.—TEST FUEL SPECIFICATIONS FOR LIQUEFIED PETROLEUM GAS—Continued

Item	Value	Reference Procedure [1]
Vapor pressure at 38°C	Maximum, 1400 kPa	ASTM D 1267–02 or 2598–02[2]
Volatility residue (evaporated temperature, 35 °C)	Maximum, −38°C	ASTM D 1837–02a
Butanes	Maximum, 0.05 m^3/m^3	ASTM D 2163–91
Butenes	Maximum, 0.02 m^3/m^3	ASTM D 2163–91
Pentenes and heavier	Maximum, 0.005 m^3/m^3	ASTM D 2163–91
Propene	Maximum, 0.1 m^3/m^3	ASTM D 2163–91
Residual matter (residue on evap. of 100) ml oil stain observ.)	Maximum, 0.05 ml pass[3]	ASTM D 2158–04
Corrosion, copper strip	Maximum, No. 1	ASTM D 1838–03
Sulfur	Maximum, 80 mg/kg	ASTM D 2784–98
Moisture content	pass	ASTM D 2713–91

[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 D 1267–02.
[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.

83. Section 1065.750 is amended by revising paragraphs (a)(2), (a)(3), and (a)(4) to read as follows:

§ 1065.750 Analytical Gases.

* * * * *

(a) * * *

(2) Use the following gases with a FID analyzer:

(i) *FID fuel.* Use FID fuel with a stated H_2 concentration of (0.400 ±0.004) 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 flow-weighted mean concentration of O_2 expected 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 exhaust O_2 concentration 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 flow-weighted mean concentration of O_2 expected during testing. If the expected exhaust O_2 concentration 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 ±1.0% of the NIST accepted value or other similar standards we approve, and meet the stability requirements of paragraph (b) of this section.

* * * * *

Subpart I—[Amended]

84. Section 1065.805 is amended by revising paragraph (a) to read as follows:

§ 1065.805 Sampling system.

(a) Proportionally dilute engine exhaust, and use batch sampling to collect flow-weighted dilute samples of the applicable alcohols and carbonyls at a constant flow rate. You may not use raw sampling for alcohols and carbonyls.

* * * * *

Subpart J—[Amended]

85. Section 1065.901 is amended by revising paragraph (b) introductory text 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 the specifications for the laboratory equipment that it replaces. 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:

* * * * *

86. Section 1065.905 is amended by revising paragraph (e) introductory text to read as follows:

§ 1065.905 General provisions.

* * * * *

(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:

* * * * *

87. 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) Use flexible connectors that do not exceed a length of three times their largest inside diameter.

(iii) 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. Locate 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 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. However, you must not supply power to the vehicle, vessel, or equipment s power system under any circumstances.

88. Section 1065.915 is amended by revising paragraph (a) before the table and paragraphs (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.

* * * * *

(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 nterval (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.

* * * * *

89. Section 1065.920 is amended by revising paragraphs (a) 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) * * *

(7) The PEMS passes this verification if any one of the following are true for each constituent:

* * * * *

90. Section 1065.925 is amended by revising paragraph (h)(8) to read as follows:

§ 1065.925 PEMS preparation for field testing.

* * * * *

(h) * * *

(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.

91. Section 1065.935 is amended by revising paragraph (e)(1) 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.

* * * * *

Subpart K—[Amended]

92. Section 1065.1001 is amended by revising the definitions for ''Regression statistics'' and ''Tolerance'' and adding definitions in alphabetical order for ''Mode'', ''NIST accepted'', and ''Recommend'' to read as follows:

§ 1065.1001 Definitions.

* * * * *

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 load 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 95% of a set of recorded values of a certain quantity must lie, with the remaining 5% of the recorded values deviating from the tolerance interval. Use the specified recording frequencies and time intervals to determine if a quantity is within the applicable tolerance.

* * * * *

93. Section 1065.1005 is amended by revising paragraph (g) to add defined acronyms for ''CITT'' and ''FEL'' in the table to read as follows:

§ 1065.1005 Symbols, abbreviations, acronyms, and units of measure.

* * * * *

(g) * * *

*	*	*	*	*
CITT ...	Curb Idle Transmission Torque.			
FEL	Family Emission Limit.			
*	*	*	*	*

94. Section 1065.1010 is amended by revising paragraph (b) and adding paragraph (f) to read as follows:

§ 1065.1010 Reference materials.

* * * * *

(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 *http://www.iso.org.* Table 2 follows:

TABLE 2 OF § 1065.1010.—ISO MATERIALS

Document No. and name	Part 1065 reference
ISO 14644–1, Cleanrooms and associated controlled environments	1065.190
ISO 8217:2005, Petroleum products—Fuels (class F)—Specifications of marine fuels	1065.705
ISO 3675:1998, Crude petroleum and liquid petroleum products—Laboratory determination of density—Hydrometer method	1065.705
ISO 12185:1996/Cor 1:2001, Crude petroleum and petroleum products—Determination of density—Oscillating U-tube method	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 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 10370:1993/Cor 1:1996, Petroleum products—Determination of carbon residue—Micro method	1065.705
ISO 6245:2001, Petroleum products—Determination of ash	1065.705
ISO 3733:1999, Petroleum products and bituminous materials—Determination of water—Distillation method	1065.705
ISO 8754:2003, Petroleum products—Determination of sulfur content—Energy-dispersive X-ray fluorescence spectrometry	1065.705
ISO 14596:1998/Cor 1:1999, 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 10307–2:1993, Petroleum products—Total sediment in residual fuel oils—Part 2: Determination using standard procedures for aging	1065.705

TABLE 2 OF § 1065.1010.—ISO MATERIALS—Continued

Document No. and name	Part 1065 reference
ISO 10478:1994, Petroleum products—Determination of aluminum and silicon in fuel oils—Inductively coupled plasma emission and atomic absorption spectroscopy methods	1065.705
IP–470, Aluminum, silicon, vanadium, nickel, iron, calcium, zinc and sodium in residual fuels, by AAS finish	1065.705
IP–500 Phosphorus content of residual fuels by ultra-violet spectrometry	1065.705
IP–501 Aluminum, silicon, vanadium, nickel, iron, sodium, calcium, zinc and phosphorus in residual fuel oil, by ICP finish	1065.705

* * * * *

(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 *http://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, Aluminum, silicon, vanadium, nickel, iron, calcium, zinc and sodium in residual fuels, by AAS finish	1065.705
IP–500 Phosphorus content of residual fuels by ultra-violet spectrometry	1065.705
IP–501 Aluminum, silicon, vanadium, nickel, iron, sodium, calcium, zinc and phosphorus in residual fuel oil, by ICP finish	1065.705

95. The authority citation for part 1068 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

96. Section 1068.1 is amended by revising paragraphs (a) and (b) to read as follows:

§ 1068.1 Does this part apply to me?

(a) The provisions of this part apply to everyone with respect to the following engines and to equipment using the following engines (including owners, operators, parts manufacturers, and persons performing maintenance).

(1) Locomotives and locomotive engines we regulate under 40 CFR part 1033.

(2) Land-based nonroad compression-ignition engines we regulate under 40 CFR part 1039.

(3) Stationary compression-ignition engines certified to the provisions of 40 CFR part 1039, as indicated under 40 CFR part 60, subpart IIII.

(4) Stationary spark-ignition engines certified to the provisions of 40 CFR parts 1048 or 1054, as indicated under 40 CFR part 60, subpart JJJJ.

(5) Marine compression-ignition engines we regulate under 40 CFR part 1042.

(6) Marine spark-ignition engines we regulate under 40 CFR part 1045.

(7) Large nonroad spark-ignition engines we regulate under 40 CFR part 1048.

(8) Recreational SI engines and vehicles we regulate under 40 CFR part 1051 (such as snowmobiles and off-highway motorcycles).

(9) Small nonroad spark-ignition engines we regulate under 40 CFR part 1054.

(b) This part does not apply to any of the following engine or vehicle categories:

(1) Light-duty motor vehicles (see 40 CFR part 86).

(2) Heavy-duty motor vehicles and motor vehicle engines (see 40 CFR part 86).

(3) Aircraft engines (see 40 CFR part 87).

(4) Land-based nonroad diesel engines we regulate under 40 CFR part 89.

(5) Small nonroad spark-ignition engines we regulate under 40 CFR part 90.

(6) Marine spark-ignition engines we regulate under 40 CFR part 91.

(7) Locomotives and locomotive engines we regulate under 40 CFR part 92.

(8) Marine diesel engines we regulate under 40 CFR parts 89 or 94.

* * * * *

[FR Doc. 07–1107 Filed 4–2–07; 8:45 am]

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Federal Register

Tuesday,
April 3, 2007

Part III

Office of Personnel Management

SES Positions That Were Career Reserved During 2006; Notice

OFFICE OF PERSONNEL MANAGEMENT

SES Positions That Were Career Reserved During 2006

AGENCY: Office of Personnel Management (OPM).

ACTION: Notice.

SUMMARY: As required by the Civil Service Reform Act of 1978, this gives notice of all positions in the Senior Executive Service (SES) that were career reserved during 2006.

FOR FURTHER INFORMATION CONTACT: C. Penn, Executive Resources Services Group, Center for Human Resources, Division for Human Capital Leadership and Merit System Accountability, 202–606–2246.

SUPPLEMENTARY INFORMATION: The list below shows the titles of SES positions that were career reserved at any time during calendar year 2006, regardless of whether those positions were career reserved on December 31, 2006. Section 3132(b)(4) of Title 5, United States Code, requires that the head of each agency publish such list by March of the following year. OPM is publishing a consolidated list for all agencies.

U.S. Office of Personnel Management.

Tricia Hollis,

Chief of Staff/Director External Affairs.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006

Agency/organization	Career reserved position
ADVISORY COUNCIL ON HISTORIC PRESERVATION:	
OFFICE OF THE EXECUTIVE DIRECTOR	EXECUTIVE DIRECTOR.
DEPARTMENT OF AGRICULTURE:	
OFFICE OF THE CHIEF INFORMATION OFFICER	DEPUTY CHIEF INFORMATION OFFICER.
	ASSOCIATE CHIEF INFORMATION OFFICER.
OFFICE OF THE CHIEF FINANCIAL OFFICER	DEPUTY CHIEF FINANCIAL OFFICER.
	PROJECT MANAGER.
NATIONAL FINANCE CENTER	DIRECTOR, INFORMATION RESOURCES MANAGEMENT DIVISION.
	DIRECTOR, FINANCIAL SERVICES DIVISION.
	DEPUTY DIRECTOR.
OFFICE OF THE GENERAL COUNSEL	ASSISTANT GENERAL COUNSEL (NATURAL RESOURCES DIVISION).
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATION.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	ASSISTANT INSPECTOR GENERAL FOR POLICY DEVELOPMENT AND RESEARCH MANAGEMENT.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS, IMMEDIATE OFFICE COUNSEL TO THE INSPECTOR GENERAL.
	DEPUTY INSPECTOR GENERAL.
OFFICE OF THE CHIEF ECONOMIST	DIRECTOR, OFFICE OF RISK ASSESSMENT AND COST-BENEFIT ANALYSIS CHAIRPERSON.
	DIRECTOR GLOBAL CHANGE PROGRAM OFFICE.
	DIRECTOR, OFFICE OF ENERGY POLICY AND NEW USES.
OFFICE OF HUMAN CAPITAL MANAGEMENT	MANAGER, ENTERPRISE HUMAN RESOURCES SYSTEMS STAFF.
OFFICE OF OPERATIONS	DIRECTOR OFFICE OF OPERATIONS.
PROCUREMENT AND PROPERTY MANAGEMENT.	DIRECTOR, PROCUREMENT AND PROPERTY MANAGEMENT.
	DEPUTY DIRECTOR, OFFICE OF PROPERTY AND PROCRUEMENT MANAGEMENT.
OFFICE OF THE ASSISTANT SECRETARY FOR CIVIL RIGHTS	SPECIAL ASSISTANT FOR OUTREACH AND DIVERSITY.
RURAL HOUSING SERVICE	DEPUTY ADMINISTRATOR FOR OPERATIONS AND MANAGEMENT.
	DIRECTOR CENTRALIZED SERVICING CENTER.
	DEPUTY ADMINISTRATOR, MULTI-FAMILY HOUSING.
	CHIEF FINANCIAL OFFICER.
	BUDGET OFFICER.
RURAL BUSINESS SERVICE	DEPUTY ADMINISTRATOR FOR BUSINESS PROGRAMS.
AGRICULTURAL MARKETING SERVICE	DEPUTY ADMINISTRATOR, FRUIT AND VEGETABLE PROGRAMS.
	DEPUTY ADMINISTRATOR, DAIRY PROGRAMS.
	DEPUTY ADMINISTRATOR, LIVESTOCK AND SEED PROGRAMS.
	DEPUTY ADMINISTRATOR, TOBACCO PROGRAMS.
	DEPUTY ADMINISTRATOR, COMPLIANCE AND ANALYSIS.
	DEPUTY ADMINISTRATOR, COTTON PROGRAMS.
	DEPUTY ADMINISTRATOR, SCIENCE AND TECHNOLOGY PROGRAMS.
	DEPUTY ADMINISTRATOR, TRANSPORTATION AND MARKETING PROGRAMS.
	DEPUTY ADMINISTRATOR, POULTRY PROGRAMS
GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION.	DIRECTOR FIELD MANAGEMENT DIVISION
ANIMAL AND PLANT HEALTH INSPECTION SERVICE	DEPUTY ADMINISTRATOR FOR MARKETING AND REGULATORY PROGRAMS-BUSINESS SERVICES.
	ASSOCIATE DEPUTY ADMINISTRATOR FOR MARKETING AND REGULATORY PROGRAMS - BUSNINESS SERVICES.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY ADMINISTRATOR, ANIMAL CARE DIRECTOR, CENTER FOR PLANT HEALTH SCIENCE AND TECHNOLOGY.
	ASSISTANT DEPUTY ADMINISTRATOR, PEST DETECTION AND MANAGEMENT.
	ASSOCIATE DEPUTY ADMINISTRATOR, WILDLIFE SERVICES.
	ASSISTANT DEPUTY ADMINISTRATOR, INTERNATIONAL SERVICES.
	DEPUTY ADMINISTRATOR, BIOTECHNOLOGY REGULATORY PROGRAMS.
	DIRECTOR, EASTERN REGION, WILDLIFE SERVICES.
	DIRECTOR, WESTERN REGION, WILDLIFE SERVICES.
	ASSOCIATE DEPUTY ADMINISTRATOR, VETERINARY SERVICES, EMERGENCY PROGRAMS.
	CHIEF OPERATING OFFICER.
	DEPUTY ADMINISTRATOR, LEGISLATIVE AND PUBLIC AFFAIRS.
	DIRECTOR, CENTER FOR VETERINARY BIOLOGICS.
	ASSOCIATE DEPUTY ADMINISTRATOR, EMERGING AND INTERNATIONAL PROGRAMS.
	DIRECTOR, INFORMATION TECHNOLOGY DIVISION.
	DIRECTOR, INVESTIGATIVE AND ENFORCEMENT SERVICES.
	ANIMAL AND PLANT HEALTH INSPECTION SERVICE INTERNATIONAL ORGANIZATION COORDINATOR.
VETERINARY SERVICES	DIRECTOR, EASTERN REGION, VETERINARY SERVICES.
	DIRECTOR, WESTERN REGION, VETERINARY SERVICES.
	DEPUTY ADMINISTRATOR, WILDLIFE SERVICES.
	ASSOCIATE DEPUTY ADMINISTRATOR, NATIONAL ANIMAL HEALTH POLICY PROGRAMS.
	DIRECTOR, CENTER FOR EPIDEMIOLOGY AND ANIMAL HEALTH.
PLANT PROTECTION AND QUARANTINE SERVICE	DIRECTOR, WESTERN REGION, PLANT PROTECTION AND QUARANTINE.
	DIRECTOR, PLANT HEALTH PROGRAMS, PLANT PROTECTION AND QUARANTINE.
	DIRECTOR, EASTERN REGION, PLANT PROTECTION AND QUARANTINE.
FOOD SAFETY AND INSPECTION SERVICE	ASSISTANT ADMINISTRATOR, OFFICE OF PROGRAM EVALUATION ENFORCEMENT AND REVIEW.
	UNITED STATES MANAGER FOR CODEX.
	ASSISTANT DEPUTY ADMINISTRATOR, OFFICE OF MANAGEMENT.
	EXECUTIVE ASSOCIATE FOR REGULATORY OPERATIONS, OFFICE OF FIELD OPERATIONS.
	ASSISTANT ADMINISTRATOR, OFFICE OF PUBLIC HEALTH SCIENCE.
	EXECUTIVE ASSOCIATE FOR REGULATORY OPERATIONS, OFFICE OF FIELD OPERATIONS.
	DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF INTERNATIONAL AFFAIRS.
	EXECUTIVE ASSOCIATE FOR REGULATORY OPERATIONS, OFFICE OF FIELD OPERATIONS.
	EXECUTIVE ASSOCIATE FOR LABORATORY SERVICES, OFFICE OF PUBLIC HEALTH SCIENCE.
	ASSISTANT ADMINISTRATOR, OFFICE OF INTERNATIONAL AFFIARS.
	EXECUTIVE ASSOCIATE FOR PROGRAM DEVELOPMENT, OFFICE OF POLICY, PROGRAM AND EMPLOYEE DEVELOPMENT.
	DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF FIELD OPERATIONS.
	DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF PUBLIC HEALTH SCIENCE.
	ASSISTANT ADMINISTRATOR, OFFICE OF POLICY, PROGRAM AND EMPLOYEE DEVELOPMENT.
	DEPUTY ADMINISTRATOR.
	EXECUTIVE ASSOCIATE FOR POLICY ANALYSIS AND FORMULATIONS.
	EXECUTIVE ASSOCIATE FOR REGULATORY OPERATIONS, OFFICE OF FIELD OPERATIONS.
	DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF PROGRAM EVALUATION ENFORCEMENT AND REVIEW.
	ASSISTANT ADMINISTRATOR OFFICE OF PUBLIC AFFAIRS, EDUCATION AND OUTREACH.
	ASSISTANT ADMINISTRATOR, OFFICE OF MANAGEMENT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF FOOD SAFETY AND EMERGENCY.
	DIRECTOR, FOOD SAFETY INSTITUTE OF THE AMERICAS.
	CHIEF OPERATING OFFICER.
	ASSISTANT ADMINISTRATOR, OFFICE OF FIELD OPERATIONS.
FOOD AND NUTRITION SERVICE	DEPUTY ADMINISTRATOR FOR FINANCIAL MANAGEMENT.
	DEPUTY ADMINISTRATOR FOR MANAGEMENT.
	ASSOCIATE ADMINISTRATOR.
	DIRECTOR/OFFICE OF ANALYSIS AND EVALUATION.
FARM SERVICE AGENCY	DIRECTOR, BUDGET DIVISION.
	DEPUTY ADMINISTRATOR FOR FARM LOAN PROGRAMS.
	DIRECTOR, FINANCIAL MANAGEMENT DIVISION.
	DIRECTOR, CONSERVATION ENVIRONMENT PROGRAMS DIVISION.
FOREIGN AGRICULTURAL SERVICE	DIRECTOR, GRAIN AND FEED DIVISION.
	DIRECTOR, COTTON, OILSEEDS, TOBACCO AND SEEDS DIVISION.
RISK MANAGEMENT AGENCY	DEPUTY ADMINISTRATOR FOR RESEARCH AND DEVELOPMENT.
	DEPUTY ADMINISTRATOR FOR INSURANCE SERVICES DIVISION.
AGRICULTURAL RESEARCH SERVICE	ASSISTANT ADMINISTRATOR FOR TECHNOLOGY TRANSFER.
	DEPUTY ADMINISTRATOR FOR ADMINISTRATIVE AND FINANCIAL MANAGEMENT.
	DIRECTOR, OFFICE OF PEST MANAGEMENT POLICY.
	DIRECTOR, NATIONAL ANIMAL DISEASE CENTER CHIEF BUDGET OFFICER.
	ASSOCIATE ADMINISTRATOR, RESEARCH OPERATIONS AND MANAGEMENT.
	DEPUTY ADMINISTRATOR, ANIMAL PRODUCTION AND PROTECTION.
	DIRECTOR, OFFICE OF INTERNATIONAL RESEARCH PROGRAMS.
	DEPUTY ADMINISTRATOR, FOOD NUTRITION, SAFETY AND QUALITY.
	ASSOCIATE DEPUTY ADMINISTRATOR FOR ADMINISTRATIVE AND FINANCIAL MANAGEMENT.
NATIONAL PROGRAM STAFF OFFICE	ASSOCIATE ADMINISTRATOR, NATIONAL PROGRAMS.
	DEPUTY ADMINISTRATOR FOR NATURAL RESOURCES AND SUSTAINABLE ARGICULTURE SYSTEMS.
	DEPUTY ADMINISTRATOR, CROP PRODUCTION AND PROTECTION.
BELTSVILLE AREA OFFICE	DIRECTOR BELTSVILLE AREA OFFICE.
	ASSOCIATE DIRECTOR BELTSVILLE AREA.
	DIRECTOR UNITED STATES NATIONAL ARBORETUM.
	DIRECTOR, BELTSVILLE HUMAN NUTRITION RESEARCH CENTER.
	DIRECTOR PLANT SCIENCES INSTITUTE.
	DIRECTOR LIVESTOCK AND POULTRY SCIENCES INSTITUTE.
	CHIEF INFORMATION OFFICER.
NORTH ATLANTIC AREA OFFICE	DIRECTOR, EASTERN REGIONAL RESEARCH CENTER.
	ASSOCIATE DIRECTOR, NORTH ATLANTIC AREA.
	DIRECTOR, NORTH ATLANTIC AREA.
SOUTH ATLANTIC AREA OFFICE	ASSOCIATE DIRECTOR SOUTH ATLANTIC AREA.
	DIRECTOR, SOUTH ATLANTIC AREA.
MIDWEST AREA OFFICE	DIRECTOR, MIDWEST AREA.
	ASSOCIATE DIRECTOR, MIDWEST AREA.
	DIRECTOR, NATIONAL CENTER FOR AGRICULTURE UTILIZATION.
MIDSOUTH AREA OFFICE	DIRECTOR, SOUTHERN REGIONAL RESEARCH CENTER.
	DIRECTOR, MID-SOUTH AREA.
	ASSOCIATE DIRECTOR, MID SOUTH AREA.
SOUTHERN PLAINS AREA OFFICE	DIRECTOR SOUTHERN PLAINS AREA.
	ASSOCIATE DIRECTOR, SOUTHERN PLAINS AREA.
NORTHERN PLAINS AREA OFFICE	DIRECTOR, NORTHERN PLAINS AREA.
	ASSOCIATE DIRECTOR, NORTHERN PLAINS AREA OFFICE.
	DIRECTOR, UNITED STATES MEAT ANIMAL RESEARCH CENTER.
PACIFIC WEST AREA OFFICE	DIRECTOR, WESTERN REGIONAL RESEARCH CENTER.
	DIRECTOR, WESTERN HUMAN NUTRITION RESEARCH CENTER.
	DIRECTOR, PACIFIC WEST AREA OFFICE.
	ASSOCIATE DIRECTOR, PACIFIC WEST AREA OFFICE.
COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE.	DEPUTY ADMINISTRATOR, ECONOMIC AND COMMUNITY SYSTEMS.
	DEPUTY ADMINISTRATOR, OFFICE OF EXTRAMURAL PROGRAMS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
ECONOMIC RESEARCH SERVICE	DEPUTY ADMINISTRATOR, INFORMATION SYSTEMS AND TECHNOLOGY MANAGEMENT. ADMINISTRATOR, ECONOMIC RESEARCH SERVICE. ASSOCIATE ADMINISTRATOR, ECONOMIC RECEARCH SERVICE. DIRECTOR, RESOURCE ECONOMICS DIVISION. DIRECTOR, INFORMATION SERVICES DIVISION. BUDGET COORDINATOR AND STRATEGIC PLANNER. DIRECTOR, FOOD AND RURAL ECONOMICS DIVISION. DIRECTOR, MARKET AND TRADE ECONOMICS DIVISION.
NATIONAL AGRICULTURAL STATISTICS SERVICE	ADMINISTRATOR, NATIONAL AGRICULTURAL STATISTICS SERVICE. DEPUTY ADMINISTRATOR FOR FIELD OPERATIONS. ASSOCIATE ADMINISTRATOR. DEPUTY ADMINISTRATOR FOR PROGRAMS AND PRODUCTS. DIRECTOR, STATISTICS DIVISION. DIRECTOR, RESEARCH AND DEVELOPMENT DIVISION. DIRECTOR, CENSUS AND SURVEY DIVISION. DIRECTOR, INFORMATION TECHNOLOGY DIVISION. ASSOCIATE DEPUTY ADMINISTRATOR (WESTERN UNITED STATES). ASSOICATE DEPUTY ADMINISTRATOR (EASTERN UNITED STATES).
NATURAL RESOURCES CONSERVATION SERVICE	DIRECTOR, CONSERVATION ENGINEERING DIVISION. DIRECTOR ECOLOGICAL SCIENCES DIVISION. DIRECTOR, SOIL SURVEY DIVISION. DIRECTOR, OPERATIONS MANAGEMENT AND OVERSIGHT. ASSOCIATE DEPUTY CHIEF FOR SCIENCE AND TECHNOLOGY. DIRECTOR, EASEMENT PROGRAMS DIVISION. DEPUTY CHIEF FOR MANAGEMENT. DEPUTY CHIEF FOR STRATEGIC PLANNING AND ACCOUNTABILITY. DIRECTOR, RESOURCE CONSERVATION AND RURAL LANDS DIVISION. DIRECTOR, RESOURCE INVENTORY AND ASSESSMENT DIVISION. DIRECTOR, ANIMAL HUSBANDRY AND CLEAN WATER PROGRAMS DIVISION. ASSOCIATE DEPUTY CHIEF FOR PROGRAMS, AIR, WATER AND SOIL. DIRECTOR, CONSERVATION PLANNING AND TECHNICAL ASSISTANCE DIVISION. ASSOCIATE DEPUTY CHIEF FOR PROGRAMS. DIRECTOR, RESOURCE ECONOMICS AND SOCIAL SCIENCES DIVISION. SPECIAL ASSISTANT FOR OUTREACH AND DIVERSITY. CHIEF FINANCIAL OFFICER.
FOREST SERVICE	ASSOCIATE DEPUTY CHIEF FOR PROGRAMS ASSOCIATE DEPUTY CHIEF FOR ADMINISTRATION. DIRECTOR, FIRE AND AVIATION STAFF. ASSOCIATE DEPUTY CHIEF, BUSINESS OPERATIONS/CHIEF FINANCIAL OFFICER. DEPUTY CHIEF, BUSINESS OPERATIONS. DIRECTOR, FINANCIAL MANAGEMENT STAFF. DIRECTOR, FOREST MANAGEMENT STAFF. DIRECTOR, ACQUISITION MANAGEMENT. DIRECTOR, LAW ENFORCEMENT AND INVESTIGATIONS
RESEARCH	DIRECTOR, VEGETATION MANAGEMENT AND PROTECTION RESEARCH STAFF. DIRECTOR, RESOURCE VALUATION AND USE RESEARCH STAFF. DIRECTOR, WILDLIFE, FISH AND WATERSHED RESEARCH STAFF. DIRECTOR, SCIENCE POLICY, PLANNING, AND INFORMATION STAFF
NATIONAL FOREST SYSTEM	DIRECTOR, RANGELAND MANAGEMENT STAFF. DIRECTOR, FOREST MANAGEMENT STAFF. DIRECTOR, ENGINEERING STAFF. DIRECTOR, LANDS MANAGEMENT STAFF. DIRECTOR, ECOSYSTEM MANAGEMENT COORINATION. DIRECTOR, WATER, FISH, WASTELAND, AIR AND RARE PLANTS. DIRECTOR, MINERALS AND GEOLOGY MANAGEMENT STAFF.
STATE AND PRIVATE FORESTRY	DIRECTOR COOPERATIVE FORESTRY. DIRECTOR, FOREST HEALTH PROTECTION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
FIELD UNITS	NORTHEAST AREA DIRECTOR, STATE AND PRIVATE FORESTRY.
	STATION DIRECTOR, NORTH EASTERN FOREST EXPERIMENT STATION (NEWTOWN SQUARE).
	DIRECTOR, NORTH CENTRAL FOREST EXPERIMENT STATION (SAINT PAUL).
	DIRECTOR, PACIFIC NORTHWEST RESEARCH STATION.
	DIRECTOR, PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMINT STATION (VALLEJO).
	DIRECTOR, ROCKY MOUNTAIN FOREST AND RANGE EXPERIMINT STATION (FORT COLLINS).
	DIRECTOR, SOUTHERN RESEARCH STATION (ASHEVILLE).
	DIRECTOR, FOREST PRODUCTS LABORATORY (MADISON).
INTERNATIONAL FOREST SYSTEM	DIRECTOR INTERNATIONAL INSTITUE OF TROPICAL FOREST (RIO PIEDRAS).
AMERICAN BATTLE MONUMENTS COMMISSION:	
SECRETARIAT	EXECUTIVE DIRECTOR.
	DIRECTOR, EUROPEAN REGION.
DIRECTOR, EUROPEAN REGION	DIRECTOR, EUROPEAN REGION.
ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD (UNITED STATES ACCESS BOARD):	
ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD (UNITED STATES ACCESS BOARD).	EXECUTIVE DIRECTOR.
	DIRECTOR OFFICE OF TECHNICAL AND INFORMATION SERVICES.
BROADCASTING BOARD OF GOVERNORS:	
INTERNATIONAL BROADCASTING BUREAU	DIRECTOR ENGINEERING AND TECHNICAL OPERATIONS.
	DEPUTY FOR ENGINEERING RESOURCE CONTROL.
	DEPUTY FOR NETWORK OPERATIONS.
	ASSOCIATE DIRECTOR FOR MANAGEMENT.
CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD:	
OFFICE OF THE CHIEF OPERATING OFFICER	CHIEF OPERATING OFFICER.
DEPARTMENT OF COMMERCE:	
DEPARTMENT OF COMMERCE	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITING.
	DEPUTY CHIEF ADMINISTRATIVE OFFICER.
	DEPUTY CHIEF FINANCIAL OFFICER/DEPUTY CHIEF.
	ADMINISTRATIVE OFFICER.
	CHIEF INFORMATION OFFICER.
	DEPUTY DIRECTOR FOR FINANCIAL MANAGEMENT.
OFFICE OF THE SECRETARY	DIRECTOR, OFFICE OF INFORMATION TECHNOLOGY POLICY, AND PLANNING.
	DIRECTOR, OFFICE INFORMATION TECHNOLOGY SECURITY, INFRASTRUCTURE AND TECHNOLOGY.
OFFICE OF THE GENERAL COUNSEL	CHIEF, ETHICS DIVISION.
	ASSISTANT GENERAL COUNSEL FOR FINANCE AND LITIGATION.
	DIRECTOR, OFFICE OF EXECUTIVE SUPPORT.
OFFICE OF THE CHIEF FINANICAL OFFICER AND ASSISTANT SECRETARY FOR ADMINISTRATION.	DIRECTOR FOR Y2K OUTREACH.
	DEPUTY DIRECTOR, OFFICE OF BUDGET.
	DEPUTY CHIEF INFORMATION OFFICER.
	DEPUTY DIRECTOR FOR ADMINISTRATIVE SERVICES.
	DIRECTOR FOR ADMINISTRATIVE SERVICES.
OFFICE OF THE ASSISTANT SECRETARY FOR ADMINISTRATION.	DIRECTOR FOR SECURITY.
	DEPUTY DIRECTOR FOR ACQUISITION MANAGEMENT.
DIRECTOR FOR HUMAN RESOURCES MANAGEMENT	DIRECTOR FOR HUMAN RESOURCES MANAGEMENT.
	DEPUTY DIRECTOR OF HUMAN RESOURCES MANAGEMENT.
DIRECTOR FOR FINANCIAL MANAGEMENT	DIRECTOR FOR FINANCIAL MANAGEMENT AND DEPUTY CHIEF FINANCIAL OFFICER.
OFFICE OF BUDGET MANAGEMENT AND INFORMATION AND CHIEF INFORMATION OFFICER.	DIRECTOR, OFFICE OF BUDGET.
DIRECTOR FOR EXECUTIVE BUDGETING AND ASSISTANCE MANAGEMENT.	DIRECTOR FOR FEDERAL ASSISTANT AND MANAGEMENT SUPPORT.
OFFICE OF SECURITY AND ADMINISTRATIVE SERVICES	DEPUTY DIRECTOR FOR SECURITY.
	DIRECTOR, OFFICE OF SECURITY.
	DIRECTOR, OFFICE OF ACQUISITION MANAGEMENT
OFFICE OF THE ASSISTANT SECRETARY FOR ADMINISTRATION.	DIRECTOR FOR TECHNOLOGY MANAGEMENT.
	DEPUTY ASSISTANT SECRETARY AND DIRECTOR FOR SECURITY
OFFICE OF INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR ADMINISTRATION.
	ASSISTANT INSPECTOR GENERAL FOR SYSTEMS EVALUATION.
OFFICE OF COUNSEL TO THE INSPECTOR GENERAL	COUNSEL TO THE INSPECTOR GENERAL.
OFFICE OF INSPECTIONS AND PROGRAM EVALUATION	ASSISTANT INSPECTOR GENERAL FOR INSPECTIONS AND PROGRAM EVALUATION.
OFFICE OF AUDITS	ASSISTANT INSPECTOR GENERAL FOR AUDITING.
OFFICE OF INVESTIGATIONS	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
ECONOMICS AND STATISTICS ADMINISTRATION	DIRECTOR, STATISTICS—UNITED STATES OF AMERICA.
	CHIEF FINANCIAL OFFICER AND DIRECTOR FOR ADMINISTRATION.
	DEPUTY DIRECTOR, OFFICE OF POLICY DEVELOPMENT.
OFFICE OF POLICY DEVELOPMENT	SENIOR EXECUTIVE FOR RESEARCH.
BUREAU OF THE CENSUS	COMPTROLLER.
	ASSISTANT DIRECTOR FOR MARKETING AND CUSTOMER LIAISON.
	ASSOCIATE DIRECTOR FOR STRATEGIC PLANNING AND INNOVATION.
	POLICY ADVISOR TO THE ASSOCIATE DIRECTOR FOR ECONOMIC PROGRAMS.
	ASSISTANT DIRECTOR FOR AMERICAN COMMUNITY SURVEY AND DECENNIAL CENSUS.
	CHIEF, CENTER FOR ECONOMIC STUDIES AND CHIEF ECONOMIST.
	ASSISTANT DIRECTOR FOR DECENNIAL INFORMATION TECHNOLOGY AND GEOGRAPHIC SYSTEMS.
	ASSOCIATE DIRECTOR FOR INFORMATION TECHNOLOGY AND CHIEF INFORMATION OFFICER.
	CHIEF, FIELD DIVISION.
	CHIEF, HUMAN RESOURCES DIVISION.
	CHIEF, HUMAN RESOURCE DIVISION.
OFFICE OF THE DIRECTOR	ASSOCIATE DIRECTOR FOR FIELD OPERATIONS.
	CHIEF DECENNIAL SYSTEM AND CONTRACTS MANAGEMENT OFFICE.
	PRINCIPAL ASSOCIATE DIRECTOR AND CHIEF FINANCIAL OFFICE.
	PRINCIPAL ASSOCIATE DIRECTOR FOR PROGRAMS.
	SPECIAL ADVISOR TO THE DEPUTY DIRECTOR.
	CHIEF, POLICY AND STATEGIC PLANNING DIVISION.
ADMINISTRATIVE AND CUSTOMER SERVICES DIVISION	CHIEF ADMINISTRATOR AND CUSTOMER SERVICES DIVISION.
ASSOCIATE DIRECTOR FOR INFORMATION TECHNOLOGY	ASSISTANT TO THE DIRECTOR FOR INFORMATION TECHNOLOGY.
	ASSOCIATE DIRECTOR FOR INFORMATION TECHNOLOGY.
ASSOCIATE DIRECTOR FOR FINANCE AND ADMINISTRATION	CHIEF, ACQUISITION DIVISION.
DATA PREPARATION DIVISION	CHIEF NATIONAL PROCESSING CENTER.
ASSOCIATE DIRECTOR FOR ECONOMIC PROGRAMS	ASSOCIATE DIRECTOR FOR ECONOMIC PROGRAMS.
	ASSISTANT DIRECTOR FOR ECONOMIC PROGRAMS.
ECONOMIC PLANNING AND COORDINATION DIVISION	CHIEF, ECONOMIC PLANNING AND COORDINATION DIVISION.
ECONOMIC STATISTICAL METHODS AND PROGRAMMING DIVISION.	CHIEF, ECONOMIC STATISTICAL METHODS AND PROGRAMMING DIVISION.
AGRICULTURE AND FINANCIAL STATISTICS DIVISION	CHIEF COMPANY STATISTICS DIVISION.
SERVICES DIVISION	CHIEF SERVICE SECTOR STATISTICS DIVISION.
FOREIGN TRADE DIVISION	CHIEF, FOREIGN TRADE DIVISION.
GOVERNMENTS DIVISION	CHIEF, GOVERNMENT DIVISION.
MANUFACTURING AND CONSTRUCTION DIVISION	CHIEF, MANUFACTURING AND CONSTRUCTION DIVISION.
ASSOCIATE DIRECTOR FOR DECENNIAL CENSUS	CHIEF, AMERICAN COMMUNITY SURVEY OFFICE.
	ASSOCIATE DIRECTOR FOR DECENNIAL CENSUS.
	ASSISTANT TO THE ASSOCIATE DIRECTOR FOR CENSUS.
	ASSISTANT DIRECTOR FOR DECENNIAL CENSUS.
DECENNIAL MANAGEMENT DIVISION	CHIEF, DECENNIAL MANAGEMENT DIVISION.
GEOGRAPHY DIVISION	CHIEF, GEOGRAPHY DIVISION.
DECENNIAL STATISTICAL STUDIES DIVISION	CHIEF, DECENNIAL STATISTICAL STUDIES DIVISION.
ASSOCIATE DIRECTOR FOR DEMOGRAPHIC PROGRAMS	ASSOCIATE DIRECTOR FOR DEMOGRAPHIC PROGRAMS.
	CHIEF, POPULATION DIVISION.
	CHIEF DEMOGRAPHIC SURVEYS DIVISION.
HOUSING AND HOUSEHOLD ECONOMIC STATISTICS DIVISION.	CHIEF, HOUSING AND HOUSEHOLD ECONOMICS STATISTICS DIVISION.
DEMOGRAPHIC STATISTICAL METHODS DIVISION	CHIEF, DEMOGRAPHIC STATISTICAL METHODS DIVISION.
ASSOCIATE DIRECTOR FOR METHODOLOGY AND STANDARDS.	CHIEF, PLANNING, RESEARCH, AND EVALUATION DIVISION.
	ASSOCIATE DIRECTOR FOR METHODOLOGY AND STANDARDS.
STATISTICAL RESEARCH DIVISION	CHIEF STATISTICAL RESEARCH DIVISION.
BUREAU OF ECONOMIC ANALYSIS	Did not find title for this position.
	CHIEF INFORMATION OFFICER
OFFICE OF THE DIRECTOR	DIRECTOR.
	DEPUTY DIRECTOR, BUREAU OF ECONOMIC ANALYSIS.
	CHIEF ECONOMIST.
	CHIEF STATISTICIAN.
	ASSOCIATE DIRECTOR FOR MANAGEMENT AND CHIEF ADMINISTRATIVE OFFICER.
ASSOCIATE DIRECTOR FOR REGIONAL ECONOMICS	ASSOCIATE DIRECTOR FOR REGIONAL ECONOMICS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
ASSOCIATE DIRECTOR FOR INTERNATIONAL ECONOMICS	ASSOCIATE DIRECTOR FOR INTERNATIONAL ECONOMICS.
ASSOCIATE DIRECTOR FOR NATIONAL INCOME, EXPENDITURE AND WEALTH ACCOUNTS.	ASSOCIATE DIRECTOR FOR NATIONAL INCOME, EXPENDITURE AND WEALTH ACCOUNTS.
	CHIEF NATIONAL INCOME AND WEALTH DIVISION.
	CHIEF INTERNATIONAL INVESTMENT DIVISION.
	CHIEF, COMPUTER SYSTEMS AND SERVICES DIVISION.
DIRECTOR OF ADMINISTRATION	DIRECTOR OF ADMINISTRATION.
OFFICE OF THE ASSTISTANT SECRETARY FOR EXPORT ENFORCEMENT.	DEPUTY ASSISTANT SECRETARY FOR EXPORT ENFORCEMENT DIRECTOR OFFICE OF EXPORT ENFORCEMENT.
ECONOMIC DEVELOPMENT ADMINISTRATION	DEPUTY ASSISTANT SECRETARY FOR MANAGEMENT SERVICES AND CHIEF FINANCIAL OFFICER.
OFFICE OF THE ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT.	CHIEF FINANCIAL OFFICER/CHIEF ADMINISTRATIVE OFFICER (CHIEF FINANCIAL OFFICER/CHIEF ADMINISTRATIVE OFFICER).
INTERNATIONAL TRADE ADMINISTRATION	DIRECTOR, OFFICE OF ENVIRONMENTAL TECHNOLOGIES INDUSTRIES.
OFFICE OF THE UNDER SECRETARY	CHIEF, FINANCIAL OFFICER AND DIRECTOR OF ADMINISTRATION.
OFFICE OF THE DIRECTOR OF ADMINISTRATION	HUMAN RESOURCES MANAGER.
OFFICE OF CONSUMER GOODS	DIRECTOR OFFICE OF CONSUMER GOODS.
DEPUTY ASSISTANT SECRETARY FOR MARKET ACCESS AND COMPLIANCE.	DIRECTOR TRADE COMPLIANCE CENTER.
MARKET ACCESS AND COMPLIANCE	DIRECTOR, OFFICE OF EASTERN EUROPE, RUSSIA, AND INDEPENDENT STATES.
	DIRECTOR, OFFICE OF MULTILATERAL AFFAIRS.
DEPUTY ASSISTANT SECRETARY FOR AGREEMENT COMPLIANCE.	ASSOCIATE DIRECTOR FOR MANAGEMENT.
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION ...	CHIEF FINANCIAL OFFICER/CHIEF ADMINISTRATOR OFFICER.
	DIRECTOR STAFF OFFICE FOR INTERNATIONAL PROGRAMS.
	CHIEF FINANCIAL OFFICER.
	CHIEF INFORMATION OFFICER AND DIRECTOR FOR HIGH PERFORMANCE COMPUTING AND COMMUNICATIONS.
	DIRECTOR, OFFICE OF EDUCATION.
	DEPUTY DIRECTOR, ACQUISITION AND GRANTS OFFICE.
	DEPUTY ASSISTANT ADMINISTRATOR FOR SYSTEMS.
	DIRECTOR, SPACE ENVIRONMENT CENTER.
	DIRECTOR, OFFICE OF OPERATIONS, MANAGEMENT AND INFORMATION.
	DIRECTOR, OCEAN PREDICTION CENTER.
OFFICE OF INTERNATIONAL AFFAIRS	CHIEF FINANCIAL OFFICER/ADMINISTRATOR OFFICER.
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION COASTAL OCEAN PROGRAM OFFICE.	DIRECTOR, BUDGET OFFICE.
OFFICE OF FINANCE AND ADMINISTRATION	DIRECTOR, BUDGET OFFICE.
	DIRECTOR, MAJOR PROJECTS OFFICE.
	DIRECTOR FOR HUMAN RESOURCES MANAGEMENT.
	Did not find title for this position.
OFFICE OF HIGH PERFORMANCE COMPUTING AND COMMUNICATIONS.	DIRECTOR FOR HIGH PERFORMANCE COMPUTING AND COMMUNICATIONS.
SYSTEMS ACQUISITION OFFICE	CHIEF INFORMATION OFFICER AND INFORMATION TECHNOLOGY ACQUISITION MANAGER.
OFFICE OF ASSISTANT ADMINISTRATOR OCEAN SERVICES AND COASTAL ZONE MANAGEMENT.	SENIOR OCEAN POLICY ADVISOR.
NATIONAL OCEAN SERVICE	ASSOCIATE ASSISTANT ADMINISTRATOR FOR MANAGEMENT AND CHIEF FINANCIAL OFFICER/CHIEF ADMINISTRATIVE OFFICER.
	DIRECTOR, NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE AND SCIENTIST FOR NATIONAL OCEAN SERVICE.
	DEPUTY DIRECTOR, NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE.
	TECHNICAL DIRECTOR.
	DIRECTOR, OFFICE OF NATIONAL GEODTIC SURVEY.
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION COASTAL SERVICES CENTER.	DIRECTOR, NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE.
STRATEGIC ENVIRONMENTAL ASSESSMENTS DIVISION	CHIEF, STRATEGIC ENVIRONMENTAL ASSESSMENTS DIVISION.
COASTAL MONITORING AND BIOEFFECTS ASSESSMENT DIVISON.	CHIEF COASTAL MONITORING BIOEFFECTS ASSESSMENT DIVISION.
HAZARDOUS MATERIALS RESPONSE AND ASSESSMENT DIVISION.	CHIEF, HAZARDOUS MATERIALS RESPONES AND ASSESSMENT DIVISION.
OFFICE OF THE ASSISTANT ADMINISTRATOR FOR WEATHER SERVICES.	SENIOR ADVISOR.
	DIRECTOR, STRATEGIC PLANNING AND POLICY OFFICE.
OFFICE OF THE CHIEF INFORMATION OFFICER	CHIEF INFORMATION OFFICER FOR WEATHER SERVICE.
MANAGEMENT AND BUDGET OFFICE	DEPUTY CHIEF FINANICAL OFFICE/CHIEF ADMINISTRATOR OFFICER.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE—FEDERAL COORDINATOR—METEOROLOGY	DIRECTOR, OFFICE OF THE FEDERAL COORDINATOR FOR METEROLOGY.
OFFICE OF HYDROLOGIC DEVELOPMENT	DIRECTOR, OFFICE OF HYDROLOGIC DEVELOPMENT.
HYDROLOGY LABORATORY	DIRECTOR, HYDROLOGY LABORATORY.
OFFICE OF SCIENCE AND TECHNOLOGY	CHIEF, PROGRAMS AND PLANS DIVISION.
	DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY.
METEOROLOGICAL DEVELOPMENT LABORATORY	DIRECTOR, METEOROLOGICAL DEVELOPMENT LABORATORY.
SYSTEMS ENGINEERING CENTER	DIRECTOR, SYSTEMS ENGINEERING CENTER.
OFFICE OF OPERATIONAL SYSTEMS	DIRECTOR, OFFICE OF OPERATIONAL SYSTEMS.
FIELD SYSTEMS OPERATIONS CENTER	DIRECTOR, FIELD SYSTEMS OPERATIONS CENTER.
TELECOMMUNICATIONS OPERATIONS CENTER	CHIEF, TELECOMMUNICATIONS OPERATIONS CENTER.
MAINTENANCE, LOGISTICS, AND ACQUISITION DIVISION	CHIEF, MAINTENANCE, LOGISTICS, AND ACQUISITION DIVISION.
RADAR OPERATIONS CENTER	DIRECTOR, RADAR OPERATIONS CENTER.
NATIONAL DATA BUOY CENTER	DIRECTOR, NATIONAL DATA BUOY CENTER.
OFFICE OF CLIMATE, WATER, AND WEATHER SERVICES	DIRECTOR, OFFICE OF CLIMATE, WATER, AND WEATHER SERVICES.
	CHIEF, METEOROLOGICAL SERVICES DIVISION.
EASTERN REGION	DIRECTOR EASTERN REGION NATIONAL WEATHER SERVICE.
SOUTHERN REGION	DIRECTOR SOUTHERN REGION, FORT WORTH.
CENTERAL REGION	DIRECTOR CENTRAL REGION.
WESTERN REGION	DIRECTOR, SALT LAKE CITY REGION.
ALASKA REGION	DIRECTOR, ALASKA REGION, ANCHORAGE.
NATIONAL CENTERS FOR ENVIRONMENTAL PREDICTION	DIRECTOR NATIONAL SEVERE STORMS LABORATORY.
	DIRECTOR NATIONAL CENTER FOR ENVIRONMENTAL PREDICTION.
	DIRECTOR, ENVIRONMENTAL MODELING CENTER.
	DIRECTOR, AVIATION WEATHER CENTER.
	DIRECTOR, CENTRAL OPERATIONS.
HYDROMETEOROLOGICAL PREDICTION CENTER	CHIEF, METEOROLOGICAL OPERATIONS DIVISION.
CLIMATE PREDICTION CENTER	DIRECTOR CLIMATE PREDICTION CENTER (CLIMATE PREDICTION CENTER).
STORM PREDICTION CENTER	DIRECTOR, STORM PREDICTION CENTER.
TROPICAL PREDICTION CENTER	DIRECTOR TROPICAL PREDICTION CENTER/NATIONAL HURRICANE CENTER.
OFFICE OF ASSISTANT ADMINISTRATOR FOR FISHERIES	DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET.
NATIONAL MARINE FISHERIES SERVICE	SCIENCE AND RESEARCH DIRECTOR SOUTHWEST REGION.
	DIRECTOR SEAFOOD INSPECTION PROGRAM.
	DIRECTOR, INTERNATIONAL AFFAIRS.
	DIRECTOR OFFICE OF SUSTAINABLE FISHERIES.
	DEPUTY ASSISTANT ADMINISTRATOR FOR REGULATORY PROGRAMS.
	SENIOR ADVISOR FOR INTERGOVERNMENTAL PROGRAMS.
	SCIENCE AND RESEARCH DIRECTOR, PACIFIC ISLAND REGION.
OFFICE OF FISHERIES CONSERVATION AND MANAGEMENT	Did not find title for this position.
	DIRECTOR, SCIENTIFIC PROGRAMS' AND CHIEF SCIENCE ADVISOR.
	DIRECTOR, OFFICE OF ENFORCEMENT.
OFFICE OF PROTECTED RESOURCES	DIRECTOR OFFICE OF SCIENCE AND TECHNOLOGY.
NORTHEAST FISHERIES SCIENCE CENTER	SCIENCE AND RESEARCH DIRECTOR NORTHEAST REGION.
SOUTHEAST FISHERIES SCIENCE CENTER	SCIENCE AND RESEARCH DIRECTOR.
NORTHWEST FISHERIES SCIENCE CENTER	SCIENCE AND RESEARCH DIRECTOR.
ALASKA FOSHERIES SCIENCE CENTER	SCIENCE AND RESEARCH DIRECTOR.
OFFICE OF ASSISTANT ADMINISTRATOR SATELLITE, DATA INFORMATION SERVICE.	CHIEF FINANCIAL OFFICER/CHIEF ADMINISTRATIVE OFFICER.
	SENIOR SCIENTIST FOR ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICES (NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICES).
	SYSTEM PROGRAM DIRECTOR.
DIRECTOR NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM INTEGRATED PROGRAM.	SYSTEMS PROGRAM DIRECTOR.
NATIONAL CLIMATIC DATA CENTER	DIRECTOR, NATIONAL CLIMATIC DATA CENTER.
NATIONAL OCEANOGRAPHIC DATA CENTER	DIRECTOR, NATIONAL OCEANOGRAPHIC DATA CENTER.
NATIONAL GEOPHYSICAL DATA CENTER	DIRECTOR, NATIONAL GEOPHYSICAL DATA CENTER.
OFFICE OF SYSTEMS DEVELOPMENT	DIRECTOR, REQUIREMENTS, PLANNING AND SYSTEM INTEGRATION DIVISION.
	DIRECTOR, SATELLITE AND GROUND SYSTEMS PROGRAM.
	DIRECTOR OFFICE OF SYSTEMS DEVELOPMENT.
OFFICE OF ASSISTANT ADMINISTRATOR, OCEAN AND ATMOSPHERIC RESEARCH.	PROGRAM DIRECTOR FOR WEATHER RESEARCH.
	DEPUTY ASSISTANT ADMINISTRATOR, LABORATORIES AND COOPERATIVE INSTITUTES AND DIRECTOR.
	CHIEF FINANCIAL OFFICER/CHIEF ADMINISTRATIVE OFFICER.
	DIRECTOR, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION CLIMATE OFFICE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY ASSISTANT ADMINISTRATOR FOR EXTRAMURAL RESEARCH.
OFFICE OF OCEANIC RESEARCH PROGRAMS	DIRECTOR, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORY
NATIONAL SEA GRANT COLLEGE PROGRAM	DIRECTOR, NATIONAL SEA GRANT COLLEGE PROGRAM
AERONOMY LABORATORY	DIRECTOR, AERONOMY LABORATORY.
AIR RESOURCES LABORATORY	DIRECTOR AIR RESOURCES LABORATORY.
ATLANTIC OCEAN AND METEOROLOGY LABORATORY	DIRECTOR, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL.
GEOPHYSICAL FLUID DYNAMICS LABORATORY	DIRECTOR.
GREAT LAKE ENVIRONMENTAL RESEARCH LABORATORY	DIRECTOR GREAT LAKES ENVIRONMENTAL RESEARCH LABORATORY.
PACIFIC MARINE ENVIRONMENTAL RESEARCH LABORATORY.	DIRECTOR PACIFIC MARINE ENVIRONMENTAL LABORATORY.
ENVIRONMENTAL TECHNOLOGY LABORATORY	DIRECTOR.
FORECAST SYSTEMS LABORATORY	DIRECTOR, GLOBAL SYSTEMS DIVISION.
CLIMATE MONITORING AND DIAGNOSTICS LABORATORY	DIRECTOR CLIMATE MONITORING AND DIAGNOSTICS LABORATORY.
INSTITUTE FOR TELECOMMUNICATION SCIENCES	ASSOCIATE ADMINISTRATOR FOR TELECOMMUNICATIONS SCIENCE.
INSTITUTE FOR TELECOMMUNICATION SCIENCES, SYSTEMS AND NETWORKS DIVISION.	DEPUTY DIRECTOR FOR SYSTEMS AND NETWORKS.
PATENT AND TRADEMARK OFFICE	PATENT EXAMINING GROUP DIRECTOR.
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL FOR INTELLECTUAL PROPERTY AND SOLICITOR.
BOARD OF PATENT APPEALS AND INTERFERENCES	CHIEF ADMINISTRATIVE PATENT JUDGE.
	VICE CHIEF ADMINISTRATIVE PATENT JUDGE.
TRADEMARK TRIAL AND APPEAL BOARD	CHAIRMAN, TRADEMARK TRIAL AND APPEAL BOARD.
OFFICE OF THE CHIEF FINANCIAL OFFICER	CHIEF FINANCIAL OFFICER.
	DEPUTY CHIEF FINANCIAL OFFICER.
OFFICE OF THE CHIEF ADMINISTRATIVE OFFICER	DIRECTOR, HUMAN CAPITAL MANAGEMENT.
OFFICE OF THE COMMISSIONER FOR PATENTS	ADMINISTRATOR FOR SEARCH AND INFORMATION RESEARCH.
	DEPUTY COMMISSIONER FOR PATENT OPERATIONS.
EXAMINING GROUP DIRECTORS	GROUP DIRECTOR.
	GROUP DIRECTOR.
	DEPUTY GROUP DIRECTOR 1300.
	GROUP DIRECTOR.
	GROUP DIRECTOR.
	GROUP DIRECTOR.
	GROUP DIRECTOR.
	GROUP DIRECTOR.
	GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	PATENT EXAMINING GROUP DIRECTOR.
	EXAMINING GROUP DIRECTOR.
ELECTRICAL PATENT EXAMINING GROUPS	GROUP DIRECTOR 260.
	GROUP DIRECTOR 210.
	GROUP DIRECTOR 220.
	GROUP DIRECTOR 230.
	GROUP DIRECTOR 240.
	GROUP DIRECTOR 250.
	DEPUTY GROUP DIRECTOR 250.
	DEPUTY GROUP DIRECTOR 260.
	DEPUTY GROUP DIRECTOR 230.
MECHANICAL PATENT EXAMINING GROUPS	GROUP DIRECTOR 310.
	GROUP DIRECTOR 320.
	GROUP DIRECTOR 330.
	GROUP DIRECTOR 340.
	GROUP DIRECTOR 350.
CHEMICAL PATENT EXAMINING GROUPS	GROUP DIRECTOR 110.
	GROUP DIRECTOR 120.
	GROUP DIRECTOR 130.
	GROUP DIRECTOR 150.
	DEPUTY GROUP DIRECTOR 110.
	GROUP DIRECTOR 180.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY GROUP DIRECTOR 150.
OFFICE OF THE COMMISSIONER FOR TRADEMARKS	DEPUTY ASSISTANT COMMISSIONER FOR TRADEMARKS.
	DIRECTOR, TRADEMARK EXAMINING OPERATION GROUP.
	DIRECTOR, TRADEMARK LAW OFFICES GROUP.
	DIRECTOR, TRADEMARK LAW OFFICES.
	DEPUTY COMMISSIONER FOR TRADEMARK OPERATIONS.
	DEPUTY COMMISSIONER FOR TRADEMARK EXAMINATION POLICY.
	GROUP DIRECTOR, TRADEMARK LAW OFFICES.
	GROUP DIRECTOR, TRADEMARK LAW OFFICES.
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY	DEPUTY DIRECTOR, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY CENTER FOR NEUTRON RESEARCH.
	DIRECTOR, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY CENTER FOR NEUTRON RESEARCH.
	CHIEF OF STAFF FOR NATIONAL INSTITUTE FOR STANDARDS AND TECHNOLOGY.
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY	DIRECTOR, US MEASUREMENT SYSTEM PROGRAM.
	CHIEF SCIENTIST.
	CHIEF FACILITIES MANAGEMENT OFFICER.
	CHIEF, HUMAN CAPITAL OFFICER FOR NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.
	DIRECTOR, OFFICE OF LAW ENFORCEMENT STANDARDS.
	DIRECTOR, MANUFACTURING ENGINEERING LABORATORY.
	CHIEF, OPTICAL TECHNOLOGY DIVISION.
	DIRECTOR, INFORMATION TECHNOLOGY AND APPLICATIONS OFFICE.
	DEPUTY DIRECTOR, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY CENTER FOR NEUTRON RESEARCH.
OFFICE OF THE DIRECTOR, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.	DIRECTOR FOR ADMINISTRATION AND CHIEF FINANCIAL OFFICER.
	DEPUTY DIRETOR FOR SAFETY AND FACILITIES.
	EXECUTIVE DIRECTOR, VISITING COMMITTEE ON ADVANCED TECHNOLOGY PROGRAM.
	CHIEF INFORMATION OFFICER FOR NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.
	DIRECTOR, BOULDER LABORATORIES.
	CHIEF FINANCIAL OFFICER.
OFFICE OF QUALITY PROGRAMS	DIRECTOR FOR QUALITY PROGRAMS.
	DEPUTY DIRECTOR, OFFICE OF QUALITY PROGRAMS.
PROGRAM OFFICE	DIRECTOR, PROGRAM OFFICE.
	DEPUTY DIRECTOR, INFORMATION TECHNOLOGY LABORATORY.
OFFICE OF INTERNATIONAL AND ACADEMIC AFFAIRS	DIRECTOR INTERNATIONAL AND ACADEMIC AFFAIRS.
	CHIEF FINANCIAL OFFICER.
OFFICE OF THE DIRECTOR FOR TECHNOLOGY SERVICES	DEPUTY DIRECTOR, TECHNOLOGY SERVICES.
MANUFACTURING EXTENSION PARTNER SHIP PROGRAM	ASSOCIATE DIRECTOR FOR NATIONAL PROGRAMS.
	DIRECTOR, MANUFACTURING EXTENSION PARTNERSHIP PROGRAMS.
	DEPUTY DIRECTOR, MANUFACTURING EXTENSION PARTNERSHIP PROGRAM.
DIRECTORS OFFICE, TECHNOLOGY INNOVATION	DIRECTOR, OFFICE OF TECHNOLOGY EVALUATION AND ASSESSMENT.
DIRECTORS OFFICE, ADVANCED TECHNOLOGY PROGRAM	DIRECTOR INFORMATION TECHNOLOGY LABORATORY.
	ASSOCIATE DIRECTOR FOR POLICY AND OPERATIONS.
	DEPUTY DIRECTOR, ADVANCED TECHNOLOGY PROGRAM.
	DIRECTOR, ADVANCED TECHNOLOGY PROGRAM.
	DIRECTOR, MATERIALS AND MANUFACTURING TECHNOLOGY OFFICE.
	DIRECTOR, ELECTRONICS AND PHOTONICS TECHNOLOGY OFFICE.
ECONOMIC ASSESSMENT OFFICE	DIRECTOR, ECONOMIC ASSESSMENT OFFICE.
ELECTRONICS AND ELECTRICAL ENGINEERING LABORATORY.	DIRECTOR, ELECTRONICS AND ELECTRICAL ENGINEERING LABORATORY.
	CHIEF OPTOELECTRONICS DIVISION.
	DEPUTY DIRECTOR, ELECTRONICS AND ELECTRICAL ENGINEERING LABORATORY.
	DIRECTOR, OFFICE OF MICROELECTRONICS PROGRAMS.
MANUFACTURING ENGINEERING LABORATORY	CHIEF, OFFICE OF MANUFACTURING PROGRAMS.
	DEPUTY DIRECTOR, MANUFACTURING ENGINEERING LABORATORY.
	DEPUTY DIRECTOR, MANUFACTURING ENGINEERING LABORATORY.
PRECISION ENGINEERING DIVISION	CHIEF, PRECISION ENGINEERING DIVISION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
INTELLIGENT SYSTEMS DIVISION	CHIEF, INTELLIGENT SYSTEMS DIVISION.
CHEMICAL SCIENCE AND TECHNOLOGY LABORATORY OFFICE.	CHIEF PROCESS MEASUREMENTS DIVISION.
	DIRECTOR, CHEMICAL SCIENCE AND TECHNOLOGY LABORATORY.
	DEPUTY DIRECTOR, CHEMICAL SCIENTIST AND TECHNOLOGY LABORATORY.
PHYSICAL AND CHEMICAL PROPERTIES DIVISION	CHIEF, PHYSICAL AND CHEMICAL PROPERTIES DIVISION.
ANALYTICAL CHEMISTRY DIVISION	CHIEF, ANALYTICAL CHEMISTRY DIVISION.
PHYSICS LABORATORY OFFICE	MANAGER, FUNDAMENTAL CONSTANTS DATA CENTER.
	DIRECTOR, PHYSICS LABORATORY.
	DEPUTY DIRECTOR, PHYSICS LABORATORY.
ELECTRON AND OPTICAL PHYSICS DIVISION	CHIEF ELECTRON AND OPTICAL PHYSICS DIVISION.
ATOMIC PHYSICS DIVISION	CHIEF, ATOMIC PHYSICS DIVISION.
	CHIEF, QUANTUM METROLOGY DIVISION.
TIME AND FREQUENCY DIVISION	CHIEF, TIME AND FREQUENCY DIVISION.
QUANTUM PHYSICS DIVISION	SENIOR SCIENTIST AND FELLOW OF JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS.
	SENIOR SCIENTIST AND FELLOW OF JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS.
	CHIEF, QUANTUM PHYSICS DIVISION.
MATERIALS SCIENCE AND ENGINEERING LABORATORY OFFICE.	DIRECTOR, MATERIALS SCIENTIST AND ENGINEERING LABORATORY.
CERAMICS DIVISION	DEPUTY DIRECTOR, MATERIALS SCIENCE AND ENGINEERING LABORATORY.
	CHIEF, CERAMICS DIVISION.
MATERIALS RELIABILITY DIVISION	CHIEF MATERIALS RELIABILITY DIVISION.
REACTOR RADIATION DIVISION	CHIEF, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY CENTER FOR NEUTRON RESEARCH.
	GROUP LEADER NEUTRON CONDENSED MATTER SCIENCE.
	CHIEF, REACTOR OPERATIONS AND ENGINEERING.
BUILDING AND FIRE RESEARCH LABORATORY	CHIEF, FIRE SAFETY ENGINEERING DIVISION.
	DIRECTOR, BUILDING AND FIRE RESEARCH LABORATORY.
	DEPUTY DIRECTOR, BUILDING AND FIRE RESEARCH LABORATORY.
	CHIEF, FIRE SAFETY ENGINEERING DIVISION.
BUILDING MATERIALS DIVISION	CHIEF, BUILDING MATERIALS DIVISION.
BUILDING ENVIRONMENT DIVISION	CHIEF, BUILDING ENVIRNMENT DIVISION.
FIRE SCIENCE DIVISION	CHIEF, FIRE SCIENCE DIVISION.
COMPUTER SYSTEMS LABORATORY OFFICE	ASSOCIATE DIRECTOR FOR PROGRAM IMPLEMENTATION.
ADVANCED NETWORK TECHNOLOGIES DIVISION	CHIEF ADVANCED NETWORK TECHNOLOGIES DIVISION.
COMPUTING AND APPLIED MATHEMATICS LABORATORY OFFICE.	ASSOCIATE DIRECTOR FOR COMPUTING.
	CHIEF HIGH PERFORMANCE SYSTEMS AND SEVICES DIVISION.
NATIONAL TECHNICAL INFORMATION SERVICE	DEPUTY DIRECTOR, NATIONAL TECHNICAL INFORMATION SERVICE.
OFFICE ASSISTANT DIRECTOR FOR FINANCIAL AND ADMINISTRATIVE MANAGEMENT.	ASSOCIATE DIRECTOR FOR FINANCE AND ADMINISTRATION.
INFORMATION TECHNOLOGY LABORATORY	DIRECTOR, INFORMATION TECHNOLOGY LABORATORY.
	DEPUTY DIRECTOR, INFORMATION TECHNOLOGY LABORATORY.
CONSUMER PRODUCT SAFETY COMMISSION:	
OFFICE OF EXECUTIVE DIRECTOR	ASSISTANT EXECUTIVE DIRECTOR FOR COMPLIANCE AND ADMINISTRATIVE LITIGATION.
	ASSOCIATE EXECUTIVE DIRECTOR FOR FIELD OPERATIONS.
	ASSISTANT EXECUTIVE DIRECTOR FOR INFORMATION AND TECH SERVICES.
	EXECUTIVE ASSISTANT.
	DIRECTOR, OFFICE OF INTERNATIONAL PROGRAMS AND INTERGOVERNMENTAL AFFAIRS.
OFFICE OF HAZARD IDENTIFICATION AND REDUCTION	ASSOCIATE EXECUTIVE DIRECTOR FOR ENGINEERING SCIENCES.
	ASSOCIATE EXECUTIVE DIRECTOR FOR ECONOMIC ANALYSIS.
	ASSISTANT EXECUTIVE DIRECTOR FOR HAZARD IDENTIFICATION AND REDUCTION.
	DEPUTY ASSISTANT EXECUTIVE DIRECTOR FOR HAZARD IDENTIFICATION AND REDUCTION.
	ASSOCIATE EXECUTIVE DIRECTOR FOR EPIDEMIOLOGY.
OFFICE OF THE SECRETARY OF DEFENSE:	
OFFICE OF THE SECRETARY	DEPUTY ASSISTANT TO THE SECRETARY OF DEFENSE (INTELLIGENCE OVERSIGHT).
OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE (GLOBAL SECURITY AFFAIRS).	DEPUTY DIRECTOR, DEFENSE TECHNOLOGY SECURITY ADMINISTRATION.
OFFICE OF ASSISTANT SECRETARY OF DEFENSE (SPECIAL OPERATIONS AND LOW INTENSITY CONFLICT).	DIRECTOR, RESOURCES.
	PRINCIPAL DEPUTY, DIRECTOR FOR RESOURCES.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
DIRECTOR, OPERATIONAL TEST AND EVALUATION	DEPUTY DIRECTOR FOR LIVE FIRE TEST AND EVALUATION.
	SPECIAL ASSISTANT TO THE DIRECTOR OPERATIONAL TEST AND EVALUATION.
OFFICE OF INSPECTOR GENERAL	DIRECTOR FOR CONTRACT MANAGEMENT.
	DIRECTOR FOR READINESS AND LOGISTICS.
	DIRECTOR, DEFENSE CRIMINAL INVESTIGATIVE SERVICE.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DIRECTOR OF INVESTIGATIONS OF SENIOR OFFICIALS.
	DEPUTY INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY INSPECTOR GENERAL FOR AUDITING.
	DEPUTY INSPECTOR GENERAL FOR INSPECTIONS AND POLICY AND OVERSIGHT.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT POLICY AND OVERSIGHT.
	ASSISTANT INSPECTOR GENERAL FOR INSPECTIONS AND EVALUATIONS.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIVE POLICY AND OVERSIGHT.
	ASSISTANT INSPECTOR GENERAL FOR ACQUISITION AND TECHNOLOGY MANAGEMENT.
	ASSISTANT INSPECTOR GENERAL FOR INTELLIGENCE.
	DEPUTY INSPECTOR GENERAL FOR INTELLIGENCE.
	DEPUTY DIRECTOR, DEFENSE FINANCIAL AUDITING SERVICE.
	ASSISTANT INSPECTOR GENERAL, OFFICE OF COMMUNICATIONS AND CONGRESSIONAL LIAISON.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT FOLLOWUP AND TECHNICAL SUPPORT.
	DIRECTOR, DEFENSE FINANCIAL AUDITING SERVICE.
	DEPUTY DIRECTOR, DEFENSE CRIMINAL INVESTIGATIVE SERVICE.
	GENERAL COUNSEL AND ASSISTANT INSPECTOR GENERAL FOR THE OFFICE OF LEGAL COUNSEL.
	CRIMINAL INVESTIGATOR.
	PRINCIPAL DEPUTY INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR ADMINISTRATION AND MANAGEMENT.
OFFICE ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS).	DIRECTOR ACQUISITION MANAGEMENT AND SUPPORT.
	GENERAL COUNSEL.
	DEPUTY CHIEF, TRICARE ACQUISITIONS DIRECTORATE.
	DIRECTOR, INFORMATION MANAGEMENT, TECHNOLOGY AND REENGINEERING/MILITARY HEALTH SYSTEM CHIEF INFORMATION OFFICER.
OFFICE OF ASSISTANT SECRETARY OF DEFENSE (RESERVE AFFAIRS).	PRINCIPAL DIRECTOR (MANPOWER AND PERSONNEL).
OFFICE OF ASSISTANT SECRETARY OF DEFENSE (PUBLIC AFFAIRS).	DIRECTOR ARMED FORCES RADIO AND TELEVISION SERVICE.
	DEPUTY DIRECTOR, AMERICAN FORCES INFORMATION SERVICE.
	SPECIAL ASSISTANT TO THE ASSISTANT SECRETARY OF DEFENSE (PUBLIC AFFAIRS).
OFFICE OF THE UNDER SECRETARY OF DEFENSE (COMPTROLLER).	DIRECTOR, PROGRAM AND FINANCIAL CONTROL.
	DEPUTY DIRECTOR FOR PROGRAM AND FINANCIAL CONTROL.
	DEPUTY CHIEF FINANCIAL OFFICER.
	ASSISTANT DEPUTY COMPTROLLER (PROGRAM/BUDGET).
	FINANCIAL MANAGEMENT AND CONTROL.
OFFICE OF DIRECTOR OF ADMINISTRATION AND MANAGEMENT.	DEPUTY DIRECTOR, PENTAGON FORCE PROTECTION AGENCY.
	DIRECTOR, PENTAGON FORCE PROTECTION AGENCY.
	DEPUTY DIRECTOR, LAW ENFORCEMENT AND SECURITY, PENTAGON FORCE PROTECTION AGENCY.
WASHINGTON HEADQUARTERS SERVICES	DIRECTOR, HUMAN RESOURCES DIRECTORATE.
	DIRECTOR, FREEDOM OF INFORMATION AND SECURITY REVIEW.
	DIRECTOR, DEFENSE FACILITIES DIRECTORATE.
	DEPUTY DIRECTOR, DEFENSE FACILITIES DIRECTORATE.
	DEPUTY DIRECTOR, HUMAN RESOURCES DIRECTORATE.
	DIRECTOR, DEFENSE FACILITIES DIRECTORATE/PRINCIPAL.
	DEPUTY TO THE DIRECTOR, WASHINGTON HEADQUARTERS SERVICES.
	DIRECTOR, ACQUISITION AND PROtUREMENT OFFICE.
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL (INSPECTOR GENERAL).
	DIRECTOR DEFENSE OFFICE OF HEARINGS AND APPEALS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, OFFICE OF LITIGATION.
OFFICE OF UNDER SECRETARY OF DEFENSE (INTELLIGENCE).	DIRECTOR, TECHNOLOGY AND EVALUATION.
OFFICE OF THE UNDER SECRETARY OF DEFENSE (ACQUISITION, TECHNOLOGY, AND LOGISTICS).	DIRECTOR, PACIFIC ARMAMENTS COOPERATION.
	DIRECTOR PLANNING AND ANALYSIS.
	DIRECTOR, ACQUISITION RESOURCES AND ANALYSIS.
	DEPUTY DIRECTOR, RESOURCE ANALYSIS.
	PRINCIPAL DEPUTY, ACQUISITION RESOURCES AND ANALYSIS.
	DEPUTY DIRECTOR, OFFICE OF THE SECRETARY OF DEFENSE STUDIES AND FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER PROGRAMS.
	DIRECTOR, ENVIRONMENTAL READINESS AND SAFETY.
DEPUTY UNDER SECRETARY OF DEFENSE (ACQUISITION AND TECHNOLOGY).	DEPUTY DIRECTOR NAVAL WARFARE.
	SPECIAL ASSISTANT CONCEPTS AND PLANS.
	DEPUTY DIRECTOR AIR WARFARE.
	DEPUTY DIRECTOR (MISSILE WARFARE).
	DEPUTY DIRECTOR, DEVELOPMENTAL TEST AND EVALUATION.
	ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE (ACQUISITION PROCESS AND POLICIES).
	DEPUTY DIRECTOR, ACQUISITION MANAGEMENT.
	DEPUTY DIRECTOR, ELECTRONIC BUSINESS.
	DEPUTY DIRECTOR, DEFENSE ACQUISITION REGULATIONS SYSTEM.
	DIRECTOR, DEFENSE PROCUREMENT AND ACQUISITION POLICY.
	DEPUTY DIRECTOR, POLICY.
	DEPUTY DIRECTOR, PROGRAM ACQUISITION AND INTERNATIONAL CONTRACTING.
	DEPUTY DIRECTOR, ACQUISITION WORFORCE AND CAREER MANAGEMENT.
	DEPUTY DIRECTOR, LAND WARFARE AND MUNITIONS.
	ASSISTANT DIRECTOR, LAND SYSTEMS.
	DEPUTY DIRECTOR, TREATY COMPLIANCE.
	ASSISTANT DIRECTOR, ELECTRONIC WARFARE.
	ASSISTANT DIRECTOR, SYSTEMS ENGINEERING (ASSESSMENTS AND SUPPORT).
	DEPUTY DIRECTOR, STRATEGIC SOURCING.
ASSISTANT TO THE SECRETARY OF DEFENSE FOR NUCLEAR AND CHEMICAL AND BIOLOGICAL DEFENSE PROGRAMS.	DEPUTY ASISTANT TO THE UNDER SECRETARY OF DEFENSE (NUCLEAR MATTERS).
	DEPUTY ASSISTANT TO THE UNDER. SECRETARY OF DEFENSE (CHEMICAL AND BIOLOICAL DEFENSE).
OFFICE OF THE DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING.	DIRECTOR, SPACE AND SENSOR TECHNOLOGY.
	DIRECTOR FOR WEAPONS SYSTEMS.
	ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE (FULL DIMENSIONAL PROTECTION).
	DIRECTOR FOR BIOLOGICAL SYSTEMS.
	DIRECTOR FOR SCIENCE AND TECHNOLOGY PLANS AND PROGRAMS.
	DIRECTOR FOR TECHNOLOGY TRANSITION.
	DIRECTOR FOR INFORMATION TECHNOLOGIES.
	DIRECTOR, PLANS AND PROGRAMS
DEFENSE ADVANCED RESEARCH PROJECTS AGENCY	DIRECTOR, CONTRACTS MANAGEMENT OFFICE.
	DEPUTY DIRECTOR, DEFENSE ADVANCED RESEARCH PROJECT AGENCY.
	PROGRAM MANAGER (JOINT APPLICATIONS STUDY GROUP).
	DIRECTOR, OFFICE OF MANAGEMENT OPERATIONS JOINT APPLICATIONS STUDY GROUP PROGRAM MANAGER.
	DEPUTY DIRECTOR, ADVANCED TECHNOLOGY OFFICE.
	DEPUTY DIRECTOR, TACTICAL TECHNOLOGY OFFICE.
	DIRECTOR, SPECIAL PROJECTS OFFICE.
	DIRECTOR, ADVANCED TECHNOLOGY OFFICE.
	DIRECTOR, INFORMATION PROCESSING TECHNOLOGY OFFICE.
OFFICE OF THE JOINT CHIEFS OF STAFF	DEPUTY DIRECTOR FOR WARGAMING, SIMULATION AND ANALYSIS.
MISSILE DEFENSE AGENCY	DEPUTY FOR PROGRAM OPERATIONS.
	DIRECTOR, CONTRACTING.
	DEPUTY PROGRAM DIRECTOR, GROUND BASED MIDCOURSE DEFENSE PROGRAM OFFICE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY FOR PROGRAM INTEGRATION.
	DEPUTY DIRECTOR, JOINT NATIONAL INTEGRATION CENTER.
	DEPUTY FOR SYSTEMS ENGINEERING AND INTEGRATION.
	DEPUTY PROGRAM DIRECTOR FOR BATTLE MANAGEMENT, COMMAND AND CONTROL.
	DEPUTY FOR SYSTEM OPERATION.
	DEPUTY FOR ADVANCED TECHNOLOGY.
	ASSISTANT DEPUTY DIRECTOR, AGENCY OPERATIONS.
	CHIEF ENGINEER.
	DEPUTY FOR ACQUISITION MANAGEMENT.
	PROGRAM DIRECTOR, MULTIPLE KILL VEHICLE.
	EXECUTIVE DIRECTOR.
	DEPUTY FOR ENGINEERING.
DEFENSE CONTRACT AUDIT AGENCY	DEPUTY DIRECTOR, DEFENSE CONTRACT AUDIT AGENCY.
	ASSISTANT DIRECTOR, OPERATIONS.
	ASSISTANT DIRECTOR, POLICY AND PLANS.
	DIRECTOR, FIELD DETACHMENT.
	DIRECTOR, DEFENSE CONTRACT AUDIT AGENCY.
	DEPUTY REGIONAL DIRECTOR, WESTERN REGION.
REGIONAL MANAGERS	REGIONAL DIRECTOR, EASTERN.
	REGIONAL DIRECTOR, NORTHEASTERN.
	REGIONAL DIRECTOR, CENTRAL.
	REGIONAL DIRECTOR, WESTERN.
	REGIONAL DIRECTOR, MID-ATLANTIC.
	DEPUTY REGIONAL DIRECTOR EASTERN REGION.
	DEPUTY REGIONAL DIRECTOR NORTHEASTERN REGION.
	DEPUTY REGIONAL DIRECTOR CENTRAL REGION.
	DEPUTY REGIONAL DIRECTOR MID ATLANTIC REGION.
DEFENSE LOGISTICS AGENCY	CHIEF ACTUARY.
	DIRECTOR, DEFENSE LOGISTICS AGENCY ENTERPRISE SUPPORT.
	DEPUTY COMMANDER, DEFENSE CONSTRUCTION SUPPLY CENTER.
	DEPUTY COMMANDER, DEFENSE GENERAL SUPPLY CENTER.
	DEPUTY COMMANDER, DEFENSE PERSONNEL SUPPORT CENTER.
	DEPUTY COMMANDER DEFENSE DISTRIBUTION CENTER.
	CHIEF FINANCIAL OFFICER.
	DEPUTY COMMANDER DEFENSE LOGISTICS SUPPORT COMMAND.
	EXECUTIVE DIRECTOR, RESOURCE, PLANNING AND PERFORMANCE DIRECTORATE.
	DIRECTOR, INFORMATION OPERATIONS/CHIEF TECHNICAL OFFICER.
	EXECUTIVE DIRECTOR HUMAN RESOURCES.
	DIRECTOR, DEFENSE ENERGY SUPPORT CENTER.
	EXECUTIVE DIRECTOR, DEFENSE LOGISTICS AGENCY READINESS CENTER.
	EXECUTIVE DIRECTOR, BUSINESS MODERNIZATION.
	EXECUTIVE DIRECTOR, ACQUISITION, TECHNICAL AND SUPPLY.
	PROGRAM EXECUTIVE OFFICER.
	PRINCIPAL DEPUTY COMPTROLLER.
	DEPUTY DIRECTOR, INFORMATION OPERATIONS/CHIEF TECHNICAL OFFICER.
	EXECUTIVE DIRECTOR, ENTERPRISE SOLUTIONS.
	DIRECTOR, DEFENSE REUTILIZATION AND MARKETING SERVICES.
	DIRECTOR, DISTRIBUTION REENGINEERING DEFENSE DISTRIBUTION CENTER.
	DEPUTY DIRECTOR, CUSTOMER OPERATIONS AND READINESS.
DEFENSE HUMAN RESOURCES ACTIVITY	DIRECTOR, DEFENSE MANPOWER DATA CENTER.
	DIRECTOR, DEFENSE MANPOWER DATA CENTER.
	DIRECTOR, CIVILIAN PERSONNEL MANAGEMENT SERVICE.
	DEPUTY DIRECTOR FOR PROGRAM SUPPORT.
	DEPUTY DIRECTOR FOR ADVISORY SERVICES, DEFENSE HUMAN RESOURCES ACTIVITY.
OFFICE OF GENERAL COUNSEL	GENERAL COUNSEL.
	DEPUTY GENERAL COUNSEL (ADMINISTRATION).
OFFICE OF THE COMPTROLLER	ASSISTANT DEPUTY CHIEF FINANCIAL OFFICER.
DEFENSE CONTRACT MANAGEMENT AGENCY	DIRECTOR, DEFENSE CONTRACT.
	DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY-EAST.
	DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY-WEST.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
DEFENSE INFORMATION SYSTEMS AGENCY	DEPUTY EXECUTIVE DIRECTOR, CONTRACT MANAGEMENT OPERATIONS. DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY DISTRICT LOS ANGELES. DEPUTY DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY DISTRICT BOSTON. EXECUTIVE DIRECTOR, CONTRACT MANAGEMENT OPERATIONS. EXECUTIVE DIRECTOR, GROUND SYSTEMS AND MUNITIONS DIVISION. EXECUTIVE DIRECTOR, PROGRAM SUPPORT AND CUSTOMER RELATIONS. DEPUTY DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY. EXECUTIVE DIRECTOR, FINANCIAL AND BUSINESS OPERATIONS AND COMPTROLLER. CHIEF INFORMATION OFFICER. GENERAL COUNSEL. DEPUTY GENERAL COUNSEL. EXECUTIVE DIRECTOR, NAVAL SEA SYSTEMS DIVISION (BOSTON DIVISION). CHIEF FINANCIAL OFFICER/COMPTROLLER. DIRECTOR FOR STRATEGIC PLANS AND POLICY. INSPECTOR GENERAL. SPECIAL ASSISTANT FOR LIAISON ACTIVITIES. DIRECTOR FOR TECHNICAL INTEGRATION SERVICES. DIRECTOR FOR PROCUREMENT AND LOGISTICS. CHIEF ENGINEER, INFORMATION SYSTEMS SECURITY. CHIEF SPECTRUM ANALYSIS AND MANAGEMENT DIVISION. PRINCIPAL DIRECTOR FOR COMPUTING SERVICES. CHIEF, POLICY, PLANS, AND APPROPRIATED PROGRAMS DIVISION. CHIEF, DEFENSE COMPUTING BUSINESS OFFICE. CHIEF, DEFENSE INFORMATION SYSTEMS NETWORK BUSINESS OFFICE. CHIEF TECHNOLOGY OFFICER AND TECHNICAL DIRECTOR FOR JOINT INTEROPERABILITY ENGINEERING ORGANIZATION. DIRECTOR FOR MANPOWER, PERSONNEL AND SECURITY. PRINCIPAL DIRECTOR FOR APPLICATIONS ENGINEERING. DEPUTY CHIEF FINANCIAL EXECUTIVE/COMPTROLLER. CHIEF ENGINEER EXECUTIVE, NETWORK SERVICES DIRECORATE. CHIEF EXECUTIVE FOR INFORMATION TECHNOLOGY SYSTEMS AND PROGRAMS. PRINCIPAL DIRECTOR FOR NETWORK SERVICES. CHIEF, GLOBAL INFORMATION GRID NETWORK AND INFORMATION OPERATIONS. SPECIAL ASSISTANT TO CHIEF SATELLITE COMMUNICATIONS DIVISION. DEPUTY PORTFOLIO MANAGER, GLOBAL INFORMATION GRID ENTERPRISE SERVICES. VICE PRINCIPAL DIRECTOR, GLOBAL INFORMATION GRID COMBAT SUPPORT DIRECTORATE. DEPUTY DIRECTOR, STRATEGIC PLANNING AND INFORMATION. DIRECTOR, NET CENTRIC ENTERPRISE SERVICES SYSTEMS ENGINEERING TRANSFORMATION. EXECUTIVE CHIEF, CENTER FOR NETWORK SERVICES. DIRECTOR FOR TESTING. CHIEF, TRANSPORT ENGINEERING CENTER. PRINCIPAL DIRECTOR GLOBAL INFORMATION GRID COMBAT SUPPORT. JOINT COMMAND AND CONTROL PROGRAM EXECUTIVE OFFICER.
DEFENSE THREAT REDUCTION AGENCY	DEPUTY DIRECTOR, NET CENTRIC ENTERPRISE SERVICES. DEPUTY DIRECTOR, OPERATIONS DIRECTORATE. DIRECTOR FOR ELECTRONICS AND SYSTEMS. CHIEF, SIMULATION AND TEST DIVISION. DIRECTOR FOR PROGRAMS. COMPTROLLER. DEPUTY DIRECTOR, PLANS AND RESOURCES ON-SITE INSPECTION. DIRECTOR, COUNTERPROLIFERATION SUPPORT AND OPERATIONS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, ACQUISITION MANAGEMENT.
	DIRECTOR, SYSTEM APPLICATIONS DIVISION.
	DIRECTOR, CHEMICAL-BIOLOGICAL DEFENSE.
	DIRECTOR, NUCLEAR TECHNOLOGY DIVISION.
	CHIEF, OPERATIONAL APPLICATIONS DIVISION.
	EXECUTIVE DIRECTOR.
DEFENSE SECURITY COOPERATION AGENCY	CHIEF INFORMATION OFFICER/PRINCIPAL DIRECTOR FOR INFORMATION TECHNOLOGY.
DEFENSE FINANCE AND ACCOUNTING SERVICE	ACCOUNTING REQUIREMENTS OFFICER.
DEFENSE SECURITY SERVICE	PRINCIPAL DEPUTY CHIEF OPERATING OFFICER.
	DEPUTY DIRECTOR FOR INDUSTRIAL SECURITY.
	DIRECTOR FOR INDUSTRIAL SECURITY.
	DEPUTY DIRECTOR FOR SECURITY EDUCATION, TRAINING, AND AWARENESS.
	DIRECTOR, DEFENSE SECURITY SERVICE.
	DIRECTOR, DEFENSE SECURITY SERVICE.
	DEPUTY DIRECTOR, DEFENSE SECURITY SERVICE.
	DIRECTOR, PERSONNEL SECURITY CLEARANCE OFFICE.
DEPARTMENT OF THE AIR FORCE:	
OFFICE OF THE SECRETARY	DIRECTOR, SPACE ACQUISITION.
	DIRECTOR, COMMUNICATIONS AND INFORMATION SUPPORT.
OFFICE OF THE UNDER SECRETARY	DEPUTY UNDER SECRETARY OF THE AIR FORCE (SPACE PROGRAMS).
OFFICE OF ADMINISTRATIVE ASSISTANT TO THE SECRETARY.	ADMINISTRATIVE ASSISTANT.
	DEPUTY ADMINISTRATOR ASSISTANT.
OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION.	DIRECTOR, OFFICE OF SMALL AND DISADVANTAGED BUSNESS UTILIZATION.
AUDITOR GENERAL	AUDITOR GENERAL OF THE AIR FORCE.
AIR FORCE AUDIT AGENCY (FIELD OPERATING AGENCY)	ASSISTANT AUDITOR GENERAL (SUPPORT AND PERSONNEL AUDITS).
	ASSISTANT AUDITOR GENERAL (ACQUISITION AND LOGISTICS AUDITS).
	ASSISTANT AUDITOR GENERAL (FINANCIAL AND SYSTEMS AUDITS).
	DEPUTY AUDITOR GENERAL AND DIRECTOR OF OPERATIONS.
AIR FORCE OFFICE OF SPECIAL INVESTIGATIONS (FIELD OPERATING AGENCY).	EXECUTIVE DIRECTOR.
	EXECUTIVE DIRECTOR, DEFENSE CYBER CRIME CENTER (DEFENSE CYBER CRIME CENTER).
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL (INTERNATIONAL AFFAIRS).
	DEPUTY GENERAL COUNSEL (INSTALLATIONS AND ENVIRONMENTAL LAW).
	DEPUTY GENERAL COUNSEL (ACQUISITION).
OFFICE DEPUTY ASSISTANT SECRETARY BUDGET	CHIEF BUDGET MANAGEMENT DIVISION.
	ASSISTANT DEPUTY COMPTROLLER BUDGET.
	DIRECTOR, BUDGET INVESTMENT.
OFFICE DEPUTY ASSISTANT SECRETARY COST AND ECONOMICS.	ASSOCIATE DEPUTY ASSISTANT SECRETARY (COST AND ECONOMICS).
	DEPUTY ASSISTANT SECRETARY (COST AND ECONOMICS).
	ASSOCIATE DEPUTY ASSISTANT SECRETARY (COST AND ECONOMICS).
OFFICE DEPUTY ASSISTANT SECRETARY FINANCIAL OPERATIONS.	ASSOCIATE DEPUTY ASSISTANT SECRETARY (FINANCIAL OPERATIONS AND TECHNOLOGY).
OFFICE OF ASSISTANT SECRETARY AIR FORCE FOR ACQUISITION.	DIRECTOR, AIR FORCE RAPID CAPABILITIES OFFICE.
	DIRECTOR, INFORMATION DOMINANCE PROGRAMS.
	SENIOR ADVISOR FOR ACQUISITION MATTERS.
	ASSOCIATE DEPUTY ASSISTANT SECRETARY (ACQUISITION INTEGRATION).
	SENIOR ADVISOR FOR ACQUISITION MATTERS.
OFFICE DEPUTY ASSISTANT SECRETARY SCIENCE, TECHNOLOGY AND ENGINEERING.	DEPUTY ASSISTANT SECRETARY (SCIENCE, TECHNOLOGY AND ENGINEERING).
OFFICE DEPUTY ASSISTANT SECRETARY MANAGEMENT POLICY AND PROGRAM INTEGRATION.	DEPUTY ASSISTANT SECRETARY (MANAGEMENT POLICY AND PROGRAM INTEGRATION).
OFFICE DEPUTY ASSISTANT SECRETARY CONTRACTING	ASSOCIATE DEPUTY ASSISTANT SECRETARY (CONTRACTING).
AIR FORCE PROGRAM EXECUTIVE OFFICE (FIELD OPERATING AGENCY).	DEPUTY AIR FORCE PROGRAM EXECUTIVE OFFICER (COMBAT AND MISSION SUPPORT).
	AIR FORCE PROGRAM EXECUTIVE OFFICER (COMBAT AND MISSION SUPPORT).
AIR FORCE REVIEW BOARDS AGENCY (AIR FORCE REVIEW BOARDS AGENCY)—FIELD OPERATING AGENCY.	DEPUTY FOR AIR FORCE REVIEW BOARDS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE OF ASSISTANT SECRETARY AIR FORCE, INSTALLATIONS, ENVIRONMENT, AND LOGISTICS.	DEPUTY ASSISTANT SECRETARY (ENVIRONMENT, SAFETY AND OCCUPATIONAL HEALTH).
AIR FORCE BASE CONVERSION AGENCY (FIELD OPERATING AGENCY).	DIRECTOR AIR FORCE REAL PROPERTY AGENCY.
OFFICE DEPUTY ASSISTANT SECRETARY INSTALLATIONS	DEPUTY ASSISTANT SECRETARY (INSTALLATIONS).
OFFICE OF THE CHIEF OF STAFF	DIRECTOR, QUADRENNIAL DEFENSE REVIEW ORGANIZATION.
	DIRECTOR, AIR FORCE HISTORY OFFICE.
AIR FORCE OFFICE OF SAFETY AND AIR FORCE SAFETY CENTER (FIELD OPERATING AGENCY).	DEPUTY CHIEF OF SAFETY.
OFFICE OF THE SURGEON GENERAL	REGIONAL DIRECTOR, TRICARE REGIONAL OFFICE-SOUTH.
	REGIONAL DIRECTOR, TRICARE REGIONAL OFFICE-NORTH.
TEST AND EVALUATION	DEPUTY DIRECTOR, TEST AND EVALUATION.
AIR FORCE STUDIES AND ANALYSES AGENCY (DIRECT REPORTING UNIT (DRU)).	DIRECTOR, AIR FORCE STUDIES AND ANALYSES, ASSESSMENTS AND LESSONS LEARNED.
DEPUTY CHIEF OF STAFF, WARFIGHTING INTEGRATION	ASSISTANT DEPUTY CHIEF OF STAFF FOR WARFIGHTING INTEGRATION.
	DEPUTY DIRECTOR, INFORMATION SERVICES AND INTEGRATION.
	DIRECTOR, ARCHITECTURE AND OPERATIONAL SUPPORT MODERNIZATION.
AIR FORCE COMMAND AND CONTROL AND INTELLIGENCE SURVEILLANCE RECONAISSANCE CENTER (FIELD OPERATING AGENCY).	SENIOR TECHNICAL DIRECTOR, COMMAND AND CONTROL, INTELLIGENCE, SURVEILLANCE, AND RECONAISSANCE CENTER.
DEPUTY CHIEF OF STAFF, INSTALLATIONS AND LOGISTICS ..	ASSISTANT DEPUTY CHIEF OF STAFF, INSTALLATION AND LOGISTICS.
CIVIL ENGINEER	DEPUTY CIVIL ENGINEER.
SERVICES	DIRECTOR OF SERVICES.
MAINTENANCE	DEPUTY DIRECTOR OF MAINTENANCE.
LOGISTICS READINESS	DEPUTY DIRECTOR OF LOGISTICS READINESS.
RESOURCES	CHIEF, AIRCRAFT/MISSILE SUPPORT DIVISION.
	DEPUTY DIRECTOR OF RESOURCES.
INNOVATION AND TRANSFORMATION	DIRECTOR, INNOVATION AND TRANSFORMATION.
AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE (FIELD OPERATING AGENCY).	DIRECTOR AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE.
STRATEGIC PLANNING	DEPUTY DIRECTOR OF STRATEGIC PLANNING.
DEPUTY CHIEF OF STAFF, PERSONNEL	ASSISTANT DEPUTY CHIEF OF STAFF PERSONNEL.
	DIRECTOR, STRATEGIC PLANS AND FUTURE SYSTEMS.
	DEPUTY DIRECTOR, FORCE MANAGEMENT POLICY.
	DEPUTY DIRECTOR, AIRMAN DEVELOPMENT AND SUSTAINMENT.
	ASST DEPUTY CHIEF OF STAFF, PERSONNEL.
	DIRECTOR OF SERVICES.
	DIRECTOR, PLANS AND INTEGRATION.
DEPUTY CHIEF OF STAFF, AIR AND SPACE OPERATIONS	DEPUTY DIRECTOR OF OPERATIONAL REQUIREMENTS.
	ASSOCIATE DIRECTOR, NUCLEAR WEAPONS AND COUNTERPROLIFERATION.
	DEPUTY FOR OPERATIONS AND TRAINING, AIRSPACE, RANGES AND AIRFIELD OPERATIONS.
AIR FORCE OPERATIONAL TEST AND EVALUATION CENTER (DIRECT REPORTING UNIT).	TECHNICAL DIRECTOR.
AIR FORCE MATERIEL COMMAND	DIRECTOR, NATIONAL MUSEUM OF THE UNITED STATES AIR FORCE.
	DIRECTOR, TRANSFORMATION AND SPACE.
	EXECUTIVE DIRECTOR.
PERSONNEL	DIRECTOR, PERSONNEL.
CONTRACTING	DIRECTOR, CONTRACTING.
LOGISTICS	DEPUTY DIRECTOR FOR DEPOT MAINTENANCE.
	DEPUTY DIRECTOR FOR SUPPLY MANAGEMENT.
	DEPUTY DIRECTOR OF INSTALLATIONS AND MISSION SUPPORT.
ENGINEERING AND TECHNICAL MANAGEMENT	DIRECTOR, ENGINEERING AND TECHNICAL MANAGEMENT.
FINANCIAL MANAGEMENT AND COMPTROLLER	DEPUTY DIRECTOR, FINANCIAL MANAGEMENT AND COMPTROLLER.
PLANS AND PROGRAMS	DEPUTY DIRECTOR, PLANS AND PROGRAMS.
	ASSOCIATE DIRECTOR, PROGRAMS.
REQUIREMENTS	DEPUTY DIRECTOR CAPABILITIES INTEGRATION
OPERATIONS DIRECTORATE	DEPUTY DIRECTOR OF OPERATIONS
INFORMATION TECHNOLOGY	DIRECTOR, INFORMATION TECHNOLOGY
MISSION SUPPORT DIRECTORATE	COMMAND CIVIL ENGINEER
ELECTRONIC SYSTEMS CENTER	EXECUTIVE DIRECTOR.
	PROGRAM DIRECTOR STRATEGIC AND NUCLEAR DETERRENCE COMMAND AND CONTROL.
	DIRECTOR, MATERIEL SYSTEMS GROUP.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY FOR ACQUISITION.
	DIRECTOR, OPERATIONS SUPPORT SYSTEMS WING.
	DIRECTOR, COMBATANT COMMANDERS' COMMAND AND CONTROL SYSTEMS GROUP.
	DIRECTOR, NETWORK CENTRIC OPERATIONS AND INTEGRATION SYSTEMS WING.
STANDARD SYSTEMS CENTER	DIRECTOR HEADQUARTERS 754TH ELECTRONIC SYSTEMS GROUP.
AERONAUTICAL SYSTEMS CENTER	DEPUTY FOR SUPPORT.
	DIRECTOR FINANCIAL MANAGEMENT AND COMPTROLLER.
	EXECUTIVE DIRECTOR.
	DIRECTOR, 326TH AERONAUTICAL SYSTEMS WING.
	DIRECTOR, MOBILITY SYSTEMS WING.
DIRECTORS OF ENGINEERING	DIRECTOR OF ENGINEERING JOINT STRIKE FIGHTER.
SYSTEMS PROGRAM OFFICES	PROGRAM DIRECTOR, MOBILITY SYSTEM PROGRAM OFFICE.
	DEPUTY PROGRAM DIRECTOR, FEDERAL AVIATION-22 SYSTEMS PROGRAM OFFICE.
HUMAN SYSTEMS CENTER	DIRECTOR, 311TH HUMAN SYSTEMS CENTER.
AIR FORCE RESEARCH LABORATORY	DIRECTOR, PLANS AND PROGRAMS.
	DIRECTOR, PLANS AND PROGRAMS.
	DIRECTOR, REQUIREMENTS EXECUTIVE.
	DIRECTOR, AIR FORCE RESEARCH LABORATORY.
AIR VEHICLES DIRECTORATE	ASSOCIATE DIRECTOR FOR AIR PLATFORMS.
AIR FORCE RESEARCH LABORATORY—MUNITIONS DIRECTORATE.	ASSOCIATE DIRECTOR FOR WEAPONS.
SPACE VEHICLES DIRECTORATE	ASSOCIATE DIRECTOR FOR SPACE TECHNOLOGY.
INFORMATION DIRECTORATE	DIRECTOR INFORMATION.
DIRECTED ENERGY DIRECTORATE	DIRECTOR, DIRECTED ENERGY.
MATERIALS AND MANUFACTURING DIRECTORATE	DIRECTOR, MATERIALS AND MANUFACTURING.
SENSORS DIRECTORATE	DIRECTOR SENSORS.
HUMAN EFFECTIVENESS DIRECTORATE	DIRECTOR, HUMAN EFFECTIVENESS DIRECTORATE.
ARNOLD ENGINEERING DEVELOPMENT CENTER	ASSOCIATE DIRECTOR FOR PROGRAM INTEGRATION.
AIR FORCE FLIGHT TEST CENTER	EXECUTIVE DIRECTOR.
AIR LOGISTICS CENTER, OKLAHOMA CITY	PRODUCT GROUP MANAGER, PROPULSION SYSTEMS.
	DIRECTOR, LOGISTICS MANAGEMENT.
	DIRECTOR, ENGINEERING.
	EXECUTIVE DIRECTOR.
	DIRECTOR, 448TH COMBAT SUSTAINMENT WING.
	DIRECTOR, OKLAHOMA CITY, AIR LOGISTICS CENTER.
	DIRECTOR, CONTRACTING.
AIR LOGISTICS CENTER, WARNER ROBINS	DIRECTOR, LOGISTICS MANAGEMENT.
	DIRECTOR, ENGINEERING.
	EXECUTIVE DIRECTOR.
	DIRECTOR, CONTRACTING.
AIR LOGISTICS CENTER, OGDEN	DIRECTOR, LOGISTICS MANAGEMENT.
	DIRECTOR, ENGINEERING.
	EXECUTIVE DIRECTOR.
	DIRECTOR, CONTRACTING.
AIR ARMAMENT CENTER	DEPUTY FOR ACQUISITION.
	EXECUTIVE DIRECTOR.
	DIRECTOR, AIR-TO-GROUND MUNITIONS SYSTEMS WING.
AIR ARMAMENT CENTER—SYSTEMS PROGRAM OFFICE	DIRECTOR, LETHAL STRIKE JOINT PROGRAM OFFICE.
AIR COMBAT COMMAND	DEPUTY DIRECTOR OF MAINTENANCE AND LOGISTICS.
AIR MOBILITY COMMAND	DEPUTY DIRECTOR OF LOGISTICS.
AIR EDUCATION AND TRAINING COMMAND	DIRECTOR, CENTER FOR SYSTEMS ENGINEERING.
	DIRECTOR, INTERNATIONAL TRAINING AND EDUCATION.
AIR FORCE RESERVE COMMAND	AIR COMMANDER 4TH AIR FORCE.
	AIR COMMANDER 10TH AIR FORCE.
	AIR COMMANDER 22ND AIR FORCE.
	ASSISTANT VICE COMMANDER.
	DIRECTOR, PLANS.
	DIRECTOR OF OPERATIONS.
	AIR COMMANDER 4TH AIR FORCE.
UNITED STATES CENTRAL COMMAND	DIRECTOR OF RESOURCES, REQUIREMENTS, BUDGET AND ASSESSMENT.
	DIRECTOR, JOINT INTERAGENCY COORDINATION GROUP.
	DIRECTOR OF RESOURCES, REQUIREMENTS, BUDGET AND ASSESSMENT.
UNITED STATES STRATEGIC COMMAND	DEPUTY DIRECTOR, COMMAND, CONTROL, COMMUNICATIONS, COMPUTER, AND INTELLIGENCE SYSTEMS.
	DIRECTOR, GLOBAL INNOVATION STRATEGY CENTER.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSOCIATE DIRECTOR CAPABILITY AND RESOURCE INTEGRATION.
	DEPUTY DIRECTOR, PLANS AND POLICY DIRECTOR, CAPABILITY AND RESOURCE INTEGRATION.
UNITED STATES TRANSPORTATION COMMAND	DEPUTY DIRECTOR, COMMAND, CONTROL, COMMUNICATIONS, AND COMPUTER SYSTEMS DIRECTORATE.
	DEPUTY FOR MILITARY SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND.
	DEPUTY DIRECTOR FOR DISTRIBUTION PORTFOLIO MANAGEMENT.
	DIRECTOR, PROGRAM ANALYSIS AND FINANCIAL MANAGEMENT.
	DEPUTY DIRECTOR, STRATEGIES AND POLICY.
JOINT STAFF	DIRECTOR, FINANCIAL MANAGEMENT AND COMPTROLLER.
	DIRECTOR AND CHIEF INFOMATION, OFFICER FOR SPECIAL OPERATIONS NETWORKS AND COMMUNICATIONS CENTER.
UNITED STATES NORTHERN COMMAND	DIRECTOR, PROGRAMS AND RESOURCES.
	DIRECTOR, INTERAGENCY COORDINATION.
	DIRECTOR, JOINT EXERCISES AND TRAINING.
	DIRECTOR, INTERAGENCY COORDINATION.
DEPARTMENT OF THE ARMY:	
DEPARTMENT OF THE ARMY	DIRECTOR, ARMY EVALUATION CENTER.
	ASSISTANT DEPUTY CHIEF OF STAFF FOR PERSONNEL (INSTALLATION MANAGEMENT).
	ASSISTANT DEPUTY CHEIF OF STAFF, G1.
	DIRECTOR, CHEMICAL MATERIALS AGENCY.
	ASSISTANT DEPUTY CHIEF OF STAFF, G-4.
	DIRECTOR FOR ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING.
	DIRECTOR, TEST AND EVALUATION MANAGEMENT AGENCY.
	DEPUTY TO THE COMMANDING GENERAL.
	DIRECTOR, FORCE PROJECTION AND DISTRIBUTION.
	DEPUTY ASSISTANT SECRETARY OF THE ARMY (FINANCIAL INFORMATION MANAGEMENT).
	EXECUTIVE DIRECTOR FOR LOGCAP.
	DEPUTY DIRECTOR (OPERATIONS).
	DIRECTOR, RESERVE AFFAIRS INTEGRATION OFFICE.
OFFICE OF THE SECRETARY	DIRECTOR OF ENTERPRISE SITUATIONAL AWARENESS AND DEPUTY TO THE DEPUTY UNDER SECRETARY OF THE ARMY FOR BUSINESS TRANSFORMATION.
OFFICE DEPUTY UNDER SECRETARY OF ARMY (OPERATIONS RESEARCH).	SPECIAL ASSISTANT FOR SYSTEMS.
	ASSISTANT DEPUTY UNDER SECRETARY OF THE ARMY FOR OPERATIONS RESEARCH.
	SPECIAL ASSISTANT FOR SYSTEMS.
OFFICE ADMINSTRATIVE ASSISTANT TO THE SECRETARY OF ARMY.	ADMINISTRATIVE ASSISTANT TO THE SECRETARY OF THE ARMY.
	DEPUTY ADMINISTRATIVE ASSISTANT TO THE SECRETARY OF THE ARMY/DIRECTOR FOR SHARED SERVICES.
	DEPUTY FOR SERVICES AND OPERATIONS/EXECUTIVE.
	DIRECTOR, UNITED STATES ARMY SERVICES AND OPERATIONS AGENCY.
	EXECUTIVE DIRECTOR, US ARMY INFORMATION TECHNOLOGY AGENCY.
	EXECUTIVE DIRECTOR, US ARMY RESOURCES AND PROGRAM AGENCY.
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL (ETHICS AND FISCAL).
OFFICE ASSISTANT SECRETARY ARMY (CIVIL WORKS)	DEPUTY ASSISTANT SECRETARY OF THE ARMY (MANAGEMENT AND BUDGET).
OFFICE ASSISTANT SECRETARY ARMY (FINANCIAL MANAGEMENT AND COMPTROLLER).	DEPUTY ASSISTANT SECRETARY OF THE ARMY (COST AND ECONOMICS).
	DIRECTOR OF INVESTMENT.
	DEPUTY ASSSISTANT SECRETARY OF THE ARMY (FINANCIAL OPERATIONS).
	DIRECTOR FOR BUSINESS RESOURCES.
	DIRECTOR OF MANAGEMENT AND CONTROL.
	ASSISTANT TO THE DEPUTY ASSISTANT SECRETARY OF THE ARMY (BUDGET).
	DIRECTOR, PROGRAMS AND STRATEGY.
OFFICE ASSISTANT SECRETARY ARMY (FINANCIAL MANAGEMENT AND COMPTROLLER).	DIRECTOR OF OPERATIONS AND SUPPORT.
OFFICE ASSISTANT SECRETARY ARMY (INSTALLATIONS AND ENVIRONMENT).	DEPUTY ASSISTANT SECRETARY OF THE ARMY (INFRASTRUCTURE ANALYSIS).

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE ASSISTANT SECRETARY ARMY (MANPOWER AND RESERVE AFFAIRS).	DEPUTY ASSISTANT SECRETARY OF THE ARMY (ARMY REVIEW BOARDS AGENCY).
	DEPUTY ASSISTANT SECRETARY OF THE ARMY (EQUAL EMPLOYMENT OPPORTUNITY AND CIVIL RIGHTS).
OFFICE ASSISTANT SECRETARY ARMY (ACQUISITION, LOGISTICS AND TECHNOLOGY).	DEPUTY ASSISTANT SECRETARY FOR RESEARCH AND TECHNOLOGY/CHIEF SCIENTIST.
	DEPUTY ASSISTANT SECRETARY OF THE ARMY (POLICY AND PROCUREMENT).
	DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR PLANS, PROGRAMS AND RESOURCES.
	DEPUTY ASSISTANT SECRETARY OF THE ARMY (DEFENSE EXPORTS AND COOPERATION).
	DIRECTOR FOR RESEARCH AND LABORATORY MANAGEMENT.
	DIRECTOR FOR TECHNOLOGY.
	PROGRAM MANAGER FOR CHEMICAL DEMILITARIZATION.
	DIRECTOR, ARMY CONTRACTING AGENCY.
	DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR INTEGRATED LOGISTICS SUPPORT.
	DEPUTY ASSISTANT SECRETARY OF THE ARMY (ELIMINATION OF CHEMICAL WEAPONS).
ARMY ACQUISITION EXECUTIVE	DEPUTY PROGRAM EXECUTIVE OFFICER, COMMAND CONTROL AND COMMUNICATIONS TACTICAL.
	PROGRAM EXECUTIVE OFFICER ENTERPRISE INFORMATION SYSTEMS.
	DEPUTY PROGRAM EXECUTIVE OFFICER, AIR AND MISSILE DEFENSE.
	DEPUTY PROGRAM EXECUTIVE OFFICER, TACTICAL MISSILES.
	PROGRAM EXECUTIVE OFFICER, INTELLIGENCE, ELECTRONIC WARFARE AND SENSORS.
	DEPUTY PROGRAM EXECUTIVE OFFICER AMMUNITION.
	DEPUTY PROGRAM EXECUTIVE OFFICER FOR SOLDIER.
	DEPUTY PROGRAM EXECUTIVE OFFICER, GROUND COMBAT SYSTEMS.
	PROGRAM EXECUTIVE OFFICER, GROUND COMBAT SYSTEMS.
	PROGRAM EXECUTIVE OFFICER AVIATION.
	DEPUTY PROGRAM MANAGER (OPERATIONS) PROGRAM MANAGER UNIT OF ACTION.
	PROGRAM EXECUTIVE OFFICER SIMULATION, TRAINING AND INSTRUMENTATION.
	DIRECTOR, COMBINED TEST ORGANIZATION, PROGRAM.
	MANAGER, FUTURE COMBAT SYSTEM (BRIGADE COMBAT TEAM).
	DEPUTY JOINT PROGRAM EXECUTIVE OFFICE, JOINT TACTICAL RADIO SYSTEM.
ARMY CONTRACTING AGENCY	DIRECTOR, INFORMATION TECHNOLOGY, ELECTRONIC COMMERCE AND CONTRACTING CENTER.
	DIRECTOR, NORTHERN REGION, UNITED STATES ARMY CONTRACTING AGENCY.
	DIRECTOR, SOUTHERN REGION, UNITED STATES ARMY CONTRACTING AGENCY.
CHIEF INFORMATION OFFICER/G–6	DEPUTY CHIEF INFORMATION OFFICER/G–6.
	DIRECTOR FOR ENTERPRISE MANAGEMENT.
	DIRECTOR FOR ARMY ARCHITECTURE INTEGRATION CELL.
OFFICE, CHIEF OF PUBLIC AFFAIRS	PRINCIPAL DEPUTY CHIEF OF PUBLIC AFFAIRS/DIRECTOR, SOLDIERS MEDIA CENTER.
ARMY AUDIT AGENCY	THE AUDITOR GENERAL, U.S. ARMY.
	PRINCIPAL DEPUTY AUDITOR GENERAL.
	DEPUTY AUDITOR GENERAL, ACQUISITION AND LOGISTICS AUDITS.
	DEPUTY AUDITOR GENERAL, POLICY AND OPERATIONS MANAGEMENT.
	DEPUTY AUDITOR GENERAL, FORCES AND FINANCIAL AUDITS.
OFFICE, CHIEF OF STAFF	DIRECTOR, TEST AND EVALUATION MANAGEMENT AGENCY.
	DIRECTOR, ENTERPRISE SYSTEMS TECHNOLOGY ACTIVITY
OPERATIONS TEST AND EVALUATION COMMAND (OFFICE OF THE CHIEF OF STAFF OF THE ARMY, FIELD OPERATING AGENCY).	EXECUTIVE DIRECTOR.
ARMY CENTER OF MILITARY HISTORY (OFFICE OF THE CHIEF OF STAFF OF THE ARMY, FIELD OPERATING AGENCY).	CHIEF HISTORIAN.
OFFICE, CHIEF ARMY RESERVE	DIRECTOR OF RESOURCE MANAGEMENT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE, ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT.	DEPUTY ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT.
	DEPUTY, INSTALLATION MANAGEMENT AGENCY.
	DEPUTY DIRECTOR FOR RESOURCE MANAGEMENT.
	REGIONAL DIRECTOR (NORTHEAST).
	REGIONAL DIRECTOR (NORTHWEST).
	REGIONAL DIRECTOR (SOUTHEAST).
	REGIONAL DIRECTOR (SOUTHWEST).
	REGIONAL DIRECTOR (EUROPE).
	REGIONAL DIRECTOR (PACIFIC).
OFFICE, DEPUTY CHIEF OF STAFF, G–4	ASSOCIATE DIRECTOR, FORCE PROJECTION AND DISTRIBUTION.
	EXECUTIVE DIRECTOR, STRATEGIC, LOGISTICS AGENCY.
	ASSOCIATE DIRECTOR OF SUSTAINMENT.
	SPECIAL ASSISTANT TO THE DEPUTY CHIEF OF STAFF, G–4.
	DIRECTOR FOR MAINTENANCE POLICY, PROGRAMS AND PROCESSES.
OFFICE, DEPUTY CHIEF OF STAFF, G–8	ASSISTANT DEPUTY CHIEF OF STAFF, G–8.
	DIRECTOR OF MODERNIZATION.
OFFICE, DEPUTY CHIEF OF STAFF, G–3	TECHNICAL ADVISOR TO THE DEPUTY CHIEF OF STAFF, G–3.
	DIRECTOR, ARMY MODEL AND SIMULATION OFFICE.
	DEPUTY DIRECTOR OF TRAINING.
	ASSISTANT DEPUTY CHIEF OF STAFF FOR OPERATIONS.
	DEPUTY DIRECTOR FOR PLANS AND POLICY.
OFFICE, DEPUTY CHIEF OF STAFF, G–1	DIRECTOR OF CIVILIAN PERSONNEL MANAGEMENT.
	DIRECTOR, UNITED STATES ARMY RESEARCH INSTITUTE AND CHIEF PSYCHOLOGIST.
	ASSISTANT DEPUTY CHIEF OF STAFF, G–1 FOR CIVILIAN PERSONNEL.
	DIRECTOR FOR MANPRINT DIRECTORATE.
	CHIEF, POLICY AND PROGRAM DEVELOPMENT DIVISION.
	DIRECTOR OF PLANS, RESOURCES AND OPERATIONS.
	DIRECTOR OF ARMY PERSONNEL TRANSFORMATION.
	ASSISTANT DEPUTY CHIEF OF STAFF, G–1.
ARMY RESEARCH INSTITUTE (DEPUTY CHIEF OF STAFF FOR PERSONNEL, FIELD OPERATING AGENCY).	TECHNICAL DIRECTOR.
NATIONAL GUARD BUREAU	NATIONAL GUARD BUREAU J6/CHIEF INFORMATION OFFICER.
OFFICE OF THE SURGEON GENERAL	CHIEF OF STAFF, HEALTH SYSTEM ADMIN.
UNITED STATES ARMY MEDICAL RESEARCH AND MATERIEL COMMAND.	PRINCIPAL ASSISTANT FOR ACQUISITION.
	PRINCIPAL ASSISTANT FOR RESEARCH AND TECHNOLOGY.
UNITED STATES OF AMERICA SPACE AND MISSILE DEFENSE COMMAND.	PRIN ADVISOR RESP FOR CONTRACTING.
	DIRECTOR, ADVANCED TECHNOLOGY DIRECTORATE.
	DIRECTOR, SPACE AND MISSILE DEFENSE BATTLE LABORATORY.
	DEPUTY TO THE COMMANDER, RESEARCH, DEVELOPMENT AND ACQUISITION.
	DIRECTOR, INTEGRATION AND INTEROPERABILITY FOR MISSILE DEFENSE/ASSISTANT TO THE DEPUTY COMMANDING GENERAL—RESEARCH, DEVELOPMENT AND ACOUISITION.
TRAINING AND DOCTRINE COMMAND (TRAINING AND DOCTRINE COMMAND).	ASSISTANT DEPUTY CHIEF OF STAFF FOR RESOURCES MANAGEMENT.
	ASSISTANT DEPUTY CHIEF OF STAFF FOR TRAINING POLICY PLANS AND PROGRAMS.
	DEPUTY TO THE COMMANDING GENERAL, COMBINED ARMS SUPPORT COMMAND.
	ASSISTANT DEPUTY CHIEF OF STAFF FOR BASE OPERATIONS SUPPORT.
	ASSISTANT DEPUTY CHIEF OF STAFF FOR COMBAT DEVELOPMENT.
	DEPUTY CHIEF OF STAFF FOR BASE OPERATIONS SUPPORT.
	DEPUTY CHIEF OF STAFF FOR PERSONNEL, ENGINEERING, ENVIRONMENTAL AND LOGISTICS.
	DEPUTY TO THE COMMANDING GENERAL FIRES/DIRECTOR, CAPABILITIES, DEVELOPMENT AND INTEGRATION.
TRAINING AND DOCTRINE COMMAND ANALYSIS CENTER	DIRECTOR OF OPERATIONS.
	DIRECTOR OF OPERATIONS.
	DIRECTOR.
UNITED STATES ARMY NUCLEAR AND CHEMICAL AGENCY	DIRECTOR, UNITED STATES ARMY NUCLEAR AND CHEMICAL AGENCY.
MILITARY TRAFFIC MANAGEMENT COMMAND	SPECIAL ASSISTANT FOR TRANSPORTATION ENGINEERING.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
UNITED STATES ARMY FORCES COMMAND	ASSISTANT DEPUTY CHIEF OF STAFF FOR PERSONNEL AND INSTALLATION MANAGEMENT.
	ASSISTANT DEPUTY CHIEF OF STAFF FOR LOGISTICS AND READINESS.
	DEPUTY CHIEF OF STAFF FOR RESOURCE MANAGEMENT.
	CHIEF EXECUTIVE OFFICER.
UNITED STATES ARMY NETWORK ENTERPRISE TECHNOLOGY COMMAND/9TH ARMY SIGNAL COMMAND.	DEPUTY TO COMMANDER/SENIOR TECHNICAL DIRECTOR/CHIEF ENGINEER.
UNITED STATES ARMY CORPS OF ENGINEERS	DIRECTOR, REAL ESTATE.
	DIRECTOR OF HUMAN RESOURCES.
	DIRECTOR OF RESOURCE MANAGEMENT.
	PRINCIPAL ASSISTANT RESPONSIBLE FOR CONTRACTING.
	DIRECTOR OF CORPORATE INFORMATION.
	REGIONAL BUSINESS DIRECTOR.
	REGIONAL BUSINESS DIRECTOR.
	PROGRAMS DIRECTOR.
	PROGRAMS DIRECTOR.
	DIRECTOR OF CONTRACTING.
	DIRECTOR, RESEARCH AND DEVELOPMENT AND DIRECTOR, ENGINEERING RESEARCH AND DEVELOPMENT CENTER.
DIRECTORATE OF RESEARCH AND DEVELOPMENT	DIRECTOR OF RESEARCH AND DEVELOPMENT.
	DEPUTY DIRECTOR.
DIRECTORATE OF CIVIL WORKS	CHIEF, PROGRAMS MANAGEMENT DIVISION.
	PRINCIPAL ASSISTANT FOR CIVIL WORKS.
	CHIEF, ENGINEERING AND CONSTRUCTION DIVISION.
	CHIEF, OPERATIONS DIVISION.
	CHIEF, PLANNING AND POLICY DIVISION.
DIRECTORATE OF MILITARY PROGRAMS	DEPUTY DIRECTOR OF MILITARY PROGRAMS.
	CHIEF, PROGRAMS MANAGEMENT DIVISION.
	CHIEF, ENVIRONMENTAL DIVISION.
	CHIEF, INTERAGENCY AND INTERNATIONAL SERVICES DIVISION.
	CHIEF, INSTALLATION SUPPORT DIVISION.
DIRECTORS OF PROGRAMS MANAGEMENT	PROGRAMS DIRECTOR.
	PROGRAMS DIRECTOR.
	PROGRAMS DIRECTOR.
	PROGRAMS DIRECTOR.
	PROGRAMS DIRECTOR.
	PROGRAMS DIRECTOR.
DIRECTORS OF ENGINEERING AND TECHNICAL SERVICES	REGIONAL BUSINESS DIRECTOR.
	REGIONAL BUSINESS DIRECTOR.
	REGIONAL BUSINESS DIRECTOR.
	REGIONAL BUSINESS DIRECTOR.
	REGIONAL BUSINESS DIRECTOR.
	REGIONAL BUSINESS DIRECTOR.
ENGINEER RESEARCH AND DEVELOPMENT CENTER	DIRECTOR, ENVIRONMENTAL LABORATORY.
	DIRECTOR, COASTAL AND HYDRAULICS LABORATORY.
	DIRECTOR, ENGINEER RESEARCH AND DEVELOPMENT.
	DEPUTY DIRECTOR ENGINEER RESEARCH AND DEVELOPMENT CENTER.
	DIRECTOR, INFORMATION TECHNOLOGY LABORATORY.
	DIRECTOR GEOTECHNICAL AND STRUCTURES LABORATORY.
ENGINEER TOPOGRAPHIC LABORATORIES, CENTER OF ENGINEERS.	DIRECTOR.
CONSTRUCTION ENGINEERING RESEARCH LABORATORY CHAMPAIGN, ILLINOIS.	DIRECTOR, CONSTRUCTION ENGINEERING RESEARCH LABORATORIES.
COLD REGIONS RESEARCH AND ENGINEERING LABORATORY HANOVER, NEW HAMSHIRE.	DIRECTOR, COLD REGIONS RESEARCH AND ENGINEERING LABORATORY.
UNITED STATES ARMY MATERIEL COMMAND	DIRECTOR FOR CONTRACTING.
	DEPUTY CHIEF OF STAFF FOR CORPORATE INFORMATION/CHIEF INFORMATION OFFICER.
	DEPUTY FOR OPERATIONS.
	SPECIAL ASSISTANT TO THE EXECUTIVE DEPUTY TO THE COMMANDING GENERAL FOR ARMY MATERIEL COMMAND TRANSFORMATION INTEGRATION.
	DEPUTY G–3 FOR SUPPORT OPERATIONS.
	DEPUTY G–3 FOR CURRENT OPERATIONS.
	DEPUTY CHIEF OF STAFF FOR BUSINESS TRANSFORMATION, G–7.
	DIRECTOR, SIMULATION AND TRAINING TECHNOLOGY CENTER.
OFFICE OF DEPUTY CHIEF OF STAFF FOR LOGISTICS AND OPERATIONS.	DIRECTOR ARMY SINGLE STOCK FUND/DIRECTOR ARMY.
	MATERIEL COMMAND LOGISTICS SYSTEMS AND PROCESSES.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY G–3 FOR ENTERPRISE INTEGRATION.
	Did not find title for this position.
SPECIAL ANALYSIS OFFICE	CHIEF, STATEGIC ANALYSIS AND PLANNING OFFICE.
OFFICE DEPUTY COMMANDING GENERAL	PRINCIPAL DEPUTY FOR LOGISTICS.
	EXECUTIVE DEPUTY TO THE COMMANDING GENERAL.
OFFICE OF DEPUTY CHIEF OF STAFF FOR AMMUNITION	ASSISTANT DEPUTY CHIEF OF STAFF FOR AMMUNITION.
OFFICE OF DEPUTY CHIEF OF STAFF FOR PERSONNEL	DEPUTY CHIEF OF STAFF FOR PERSONNEL.
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR RESOURCE MANAGEMENT.	ASSISTANT DEPUTY CHIEF OF STAFF FOR RESOURCE.
	MANAGEMENT/EXECUTIVE DIRECTOR FOR BUSINESS.
	DEPUTY CHIEF OF STAFF FOR RESOURCE MANAGEMENT.
	DEPUTY CHIEF OF STAFF FOR RESOURCE MANAGEMENT.
UNITED STATES OF AMERICA SECURITY ASSISTANCE COMMAND.	DEPUTY.
UNITED STATES ARMY FIELD SUPPORT COMMAND	DIRECTOR OF ACQUSITION CENTER.
	DEPUTY TO THE COMMANDER.
	EXECUTIVE DIRECTOR FOR AMMUNITION.
NATICK SOLDIER CENTER	DIRECTOR, UNITED STATES ARMY NATICK RESEARCH, DEVELOPMENT AND ENGINEERING CENTER.
UNITED STATES ARMY SOLDIER AND BIOLOGICAL COMMAND (SOLDIER AND BIOLOGICAL COMMAND).	DIRECTOR, ENGINEERING DIRECTORATE.
	TECHNICAL DIRECTOR.
	DIRECTOR, UNITED STATES ARMY ROBERT MORRIS ACQUISITION CENTER.
UNITED STATES ARMY COMMUNICATIONS ELECTION COMMAND (COMMUNICATIONS ELECTION COMMAND).	DIRECTOR, COMMUNICATIONS ELECTION COMMAND ACQUISITION CENTER.
	DEPUTY TO THE COMMANDER.
COMMUNICATIONS ELECTRONICS COMMAND RESEARCH, DEVELOPMENT AND ENGINEERING CENTER.	DIRECTOR-NIGHT VISION/ELECTROMAGNETICS SENSORS DIRECTORATE.
COMMUNICATIONS ELECTRONICS COMMAND RESEARCH, DEVELOPMENT AND ENGINEERING CENTER.	DIRECTOR, SPACE AND TERRESTRIAL COMMITTEE DIRECTORATE.
	DIRECTOR, INTELLIGENCE AND INFORMATION WARFARE DIRECTORATE.
	DIRECTOR, SOFTWARE ENGINEERING DIRECTORATE.
	DIRECTOR/ARMY SYSTEMS ENGINEER.
	DIRECTOR FOR COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, INTELLIGENCE LOGISTICS AND READINESS CENTER.
	ASSOCIATE TECHNICAL DIRECTOR RESREACH DEVELOPMENT AND ENGINEERING CENTER.
	DIRECTOR, COMMAND, CONTROL AND SYSTEM INTEGRATION DIRECTORATE.
UNITED STATES ARMY RESEARCH LABORATORY	DIRECTOR UNITED STATES ARMY RESEARCH LABORATORY.
	ASSOCIATE DIRECTOR FOR PLANS, PROGRAMS AND BUDGET.
	DEPUTY DIRECTOR.
	DIRECTOR, COMPUTATIONAL AND INFORMATION SCIENCES DIRECTORATE.
SURVIVABILITY/LETHALITY ANALYSIS DIRECTORATE	DIRECTOR, SURVIVABILITY/LETHALITY ANALYSIS DIRECTORATE.
ARMY RESEARCH OFFICE	DIRECTOR.
	DIRECTOR, RESEARCH AND TECHNOLOGY INTEGRATION.
	DIRECTOR, EGINEERING SCIENCES DIRECTORATE.
	DIRECTOR, PHYSICAL SCIENCES DIRECTORATE.
SENSORS AND ELECTRON DEVICES DIRECTORATE	DIRECTOR.
COMPUTATIONAL AND INFORMATION SCIENCES DIRECTORATE.	DEPUTY DIRECTOR.
WEAPONS AND MATERIAL RESEARCH DIRECTOARATE	DEPUTY DIRECTOR AND DIRECTORATE MATERIALS RESEARCH DIRECTOR.
HUMAN RESEARCH AND ENGINEERING DIRECTORATE (ARMY RESEARCH LABORATORY).	DIRECTOR, HUMAN RESEARCH AND ENGINEERING DIRECTORATE.
UNITED STATES ARMY AVIATION AND MISSILE COMMAND (ARMY MATERIEL COMMAND).	EXECUTIVE DIRECTOR, ACQUISITION CENTER.
	DIRECTOR FOR ENGINEERING.
	EXECUTIVE DIRECTOR, INTEGRATED MATERIEL MANAGEMENT CENTER.
	DIRECTOR FOR TEST MEASUREMENT DIAGNOSTIC EQUIPMENT ACTIVITY.
	DEPUTY TO THE COMMANDER.
	DEPUTY TO THE COMMANDER.
	EXECUTIVE DIRECTOR ACQUISITION CENTER.
	EXECUTIVE DIRECTOR INTEGRATED MATERIAL MANAGEMENT CENTER.
	DEPUTY TO THE COMMANDER FOR SYSTEMS SUPPORT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
MISSILE RESEARCH DEVELOPMENT AND ENGINEERING CENTER (RESEARCH DEVELOPMENT AND ENGINEERING CENTER).	DIRECTOR FOR SYSTEMS SIMULATION AND DEVELOPMENT.
	TECHNOLOGY DIRECTOR FOR MISSILES AND DEVELOPMENT, RESEARCH, DEVELOPMENT AND ENGINEERING CENTER.
	ASSOCIATE DIRECTOR FOR AVIATION AND MISSILE SYSTEMS.
	DIRECTOR FOR WEAPONS SCIENCES.
	DIRECTOR FOR MISSILE GUIDANCE.
	DIRECTOR FOR PROPULSION AND STRUCTURES.
AVIATION RESEARCH, DEVELOPMENT AND ENGINEERING CENTER.	DIRECTOR OF AVIATION ENGINEERING.
	DIRECTOR OF AEROFLIGHT DYNAMICS.
	DIRECTOR OF ADVANCED SYSTEMS/ASSOCIATE DIRECTOR FOR TECHNOLOGY.
	ASSOCIATE DIRECTOR FOR TECHNICAL APPLIED/DIRECTOR OF SPECIAL PROGRAM.
RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND ..	DEPUTY TO THE COMMANDER.
TANK-AUTOMOTIVE AND ARMAMENTS COMMAND (TANK-AUTOMOTIVE AND ARMAMENTS COMMAND).	DIRECTOR OF ACQUISITION CENTER DIRECTOR, INTEGRATED LOGISTICS SUPPORT CENTER DEPUTY TO THE COMMANDER.
TANK-AUTOMOTIVE RESEARCH, DEVELOPMENT AND EENGINEERING CENTER (TANK-AUTOMOTIVE RESEARCH, DEVELOPMENT AND EENGINEERING CENTER).	EXECUTIVE DIRECTOR FOR RESEARCH AND TECHNICAL.
	DIRECTOR.
	DIRECTOR.
	EXECUTIVE DIRECTOR FOR ENGINEERING.
	EXECUTIVE DIRECTOR FOR PRODUCT DEVELOPMENT.
UNITED STATES ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER (ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER).	TECHNICAL DIRECTOR FOR ARMAMENT.
	ASSISTANT TECHNICAL DIRECTORATE (SYSTEMS CONCEPTS AND TECHNOLOGY).
WARHEADS, ENERGETICS AND COMBAT SUPPORT ARMAMENTS CENTER.	DIRECTOR, WARHEADS ENERGETICS AND COMBAT SUPPORT ARMAMENTS CENTER.
FIRE SUPPORT ARMAMENTS CENTERS	SENIOR TECHINCAL EXECUTIVE FOR FIRE SUPPORT.
CLOSE COMBAT ARMAMENTS CENTER	DEPUTY DIRECTOR, CLOSE COMBAT ARMAMENT.
UNITED STATES ARMY SIMULATION, TRAINING AND INSTRUMENTATION COMMAND.	DEPUTY TO THE COMMANDER.
UNITED STATES ARMY TEST AND EVALUATION COMMAND, (TEST AND EVALUATION COMMAND).	EXECUTIVE DIRECTOR.
	DIRECTOR OF TEST MANAGEMENT.
	DIRECTOR, JOINT PROGRAM OFFICE FOR TEST AND EVALUATION.
UNITED STATES ARMY MATERIEL SYSTEMS ANALYSIS ACTIVITY.	DIRECTOR.
	CHIEF, COMBAT INTEGRATION DIVISION.
HEADQUARTERS, UNITED STATES ARMY, EUROPE	ASSISTANT DEPUTY CHIEF OF STAFF, PERSONNEL (CIVILIAN PERSONNEL).
	ASSISTANT DEPUTY CHIEF OF STAFF ENGINEER FOR ENGINEERING AND HOUSING.
	DEPUTY CHIEF OF STAFF G-8.
	DEPUTY DIRECTOR, LOGISTICS AND SECURITY ASSISTANCE.
UNITED STATES ARMY MILITARY DISTRICT OF WASHINGTON	DIRECTOR OF CEMETERY OPERATIONS.
UNITED STATES SOUTHERN COMMAND	SUSTAINING BASE OPERATIONS ADVISOR.
DEPARTMENT OF THE NAVY:	
OFFICE OF THE SECRETARY	CHIEF INFORMATION OFFICER.
OFFICE OF THE UNDER SECRETARY OF THE NAVY	ASSISTANT FOR ADMINISTRATION.
	ASSISTANT FOR ADMINISTRATION.
OFFICE OF THE NAVAL INSPECTOR GENERAL	DEPUTY NAVAL INSPECTOR GENERAL.
	DEPUTY NAVAL INSPECTOR GENERAL.
OFFICE OF THE AUDITOR GENERAL	ASSISTANT AUDITOR GENERAL FOR FINANCIAL MANAGEMENT AND COMPTROLLER AUDITS.
	ASSISTANT AUDITOR GENERAL FOR MANPOWER AND RESERVE.
OFFICE OF THE AUDITOR GENERAL	AFFAIRS AUDITS.
	AUDITOR GENERAL OF THE NAVY.
	DEPUTY AUDITOR GENERAL OF THE NAVY.
	ASSISTANT AUDITOR GENERAL FOR INSTALLATION AND ENVIRONMENT AUDITS.
	ASSISTANT AUDITOR GENERAL FOR RESEARCH, DEVELOPMENT, ACQUISITION AND LOGISTICS AUDITS.
	AUDITOR GENERAL OF THE NAVY.
	DEPUTY AUDITOR GENERAL OF THE NAVY.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE OF THE ASSISTANT SECRETARY OF NAVY (MANPOWER AND RESEARCH AFFAIRS).	ASSISTANT GENERAL COUNSEL (MANPOWER AND RESERVE AFFAIRS).
	DEPUTY ASSISTANT SECRETARY OF THE NAVY (CIVILIAN HUMAN RESOURCES).
	ASSISTANT GENERAL COUNSEL (MANPOWER AND RESERVE AFFAIRS).
	DEPUTY ASSISTANT SECRETARY OF THE NAVY (CIVILIAN HUMAN RESOURES).
OFFICE OF CIVILIAN HUMAN RESOURCES	DIRECTOR, OFFICE OF CIVILIAN HUMAN RESOURCES.
	DIRECTOR, OFFICE OF CIVILIAN HUMAN RESOURCES.
	DIRECTOR, HUMAN RESOURCE POLICY AND PROGRAM DEPARTMENT.
	DIRECTOR, HUMAN RESOURCE OPERATIONS DEPARTMENT.
OFFICE ASSISTANT SECRETARY OF NAVY (INSTALLATIONS AND ENVIRONMENT).	PROGRAM MANAGER, BASE REALIGNMENT AND CLOSURE MANAGEMENT OFFICE.
	ASSISTANT GENERAL COUNSEL (INSTALLATIONS AND ENVIRONMENT).
OFFICE ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT AND ACQUISITION).	DEPUTY CHIEF ENGINEER.
	EXECUTIVE DIRECTOR FOR ACQUISITION AND BUSINESS MANAGEMENT.
	ASSISTANT GENERAL COUNSEL (RESEARCH, DEVELOPMENT AND ACQUISITION).
	DIRECTOR, ACQUISITION CAREER MANAGEMENT.
	EXECUTIVE DIRECTOR, ACQUISITION AND BUSINESS MANAGEMENT.
	DIRECTOR, PROGRAM ANALYSIS AND BUSINESS TRANSFORMATION.
	ASSISTANT GENERAL COUNSEL (RESEARCH, DEVELOPMENT AND ACQUISITION).
	DIRECTOR, PROGRAM ANALYSIS AND BUSINESS TRANSFORMATION.
	EXECUTIVE DIRECTOR, NAVY INTERNATIONAL PROGRAMS OFFICE.
	EXECUTIVE DIRECTOR, NAVY INTERNATIONAL PROGRAMS OFFICE.
	DEPUTY ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT, TEST AND EVALUATION).
PROGRAM EXECUTIVE OFFICERS	PROGRAM EXECUTIVE OFFICERS, LITTORAL AND MINE AND WARFARE.
	EXECUTIVE DIRECTOR, COMBATANTS, PROGRAM EXECUTIVE OFFICE SHIPS.
	EXECUTIVE DIRECTOR, PROGRAM EXECUTIVE OFFICE FOR AIRCRAFT CARRIERS.
	EXECUTIVE DIRECTOR FOR PROGRAM ASSESSMENT AND INTEGRATION/DEPUTY PROGRAM EXECUTIVE OFFICER FOR COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INTELLIGENCE AND SPACE.
	DIRECTOR FOR SURFACE SHIP WEAPONS DIRECTORATE.
	DIRECTOR FOR ABOVE WATER SENSORS DIRECTORATE.
	DIRECTOR FOR COMBAT SYSTEMS PROGRAMS.
	CHIEF ENGINEER, PROGRAM EXECUTIVE OFFICE (INTEGRATED WARFARE SYSTEMS).
	DEPUTY PROGRAM EXECUTIVE OFFICER FOR UNMANNED AERIAL VEHICLES.
	DIRECTOR FOR INTEGRATED COMBAT SYSTEMS FOR INTEGRATED WARFARE SYSTEMS.
	EXECUTIVE DIRECTOR, COMBATANTS, PROGRAM EXECUTIVE OFFICERS SHIPS.
	EXECUTIVE DIRECTOR, PROGRAM EXECUTIVE OFFICERS FOR AIRCRAFT CARRIERS.
	DEPUTY PROGRAM EXECUTIVE OFFICER FOR STRIKE WEAPONS.
	TECHNICAL DIRECTOR, PROGRAM EXECUTIVE OFFICER, SUBMARINES.
	EXECUTIVE DIRECTOR, PROGRAM EXECUTIVE OFFICE SUBMARINES.
	DEPUTY PROGRAM EXECUTIVE OFFICER FOR AIR ANTISUBMARINE WARFARE, ASSAULT AND SPECIAL MISSION PROGRAMS.
	DEPUTY PROGRAM EXECUTIVE OFFICER FOR TACTICAL AIR PROGRAMS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	EXECUTIVE DIRECTOR, PROGRAM EXECUTIVE OFFICER LITTORAL AND MINE WARFARE.
	EXECUTIVE DIRECTOR FOR PROGRAM ASSESSMENT AND INTEGRATION/DEPUTY PROGRAM FOR COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INTELLIGENCE AND SPACE.
	DEPUTY PROGRAM EXECUTIVE OFFICER FOR UNMANNED AERIAL VEHICLES.
	DEPUTY PROGRAM EXECUTIVE OFFICERS FOR STRIKE WEAPONS.
	PROGRAM EXECUTIVE OFFICER FOR INFORMATION TECHNOLOGY/ENTERPRISE ACQUISITION MANAGER FOR INFORMATION TECHNOLOGY.
	EXECUTIVE DIRECTOR, FLEET SUPPORT, PROGRAM EXECUTIVE OFFICE SHIPS.
	PROGRAM EXECUTIVE OFFICER FOR AIR, ANTI-SUBMARINE WARFARE, ASSAULT AND SPECIAL MISSION PROGRAMS DEPUTY PROGRAM EXECUTIVE OFFICERS FOR TACTICAL AIR PROGRAMS.
	EXECUTIVE DIRECTOR, PROGRAM EXECTIVE OFFICER LITTORAL AND MINE WARFARE.
	EXECUTIVE DIRECTOR, SPACE TECHNOLOGY SYSTEMS PROGRAM DIRECTORATE.
	PROGRAM EXECUTIVE OFFICERS FOR INFORMATION.
	EXECUTIVE DIRECTOR, FLEET SUPPORT, PROGRAM EXECUTIVE OFFICERS SHIPS.
	PROGRAM EXECUTIVE OFFICER FOR AIR ANTI-SUBMARINE WARFARE, ASSAULT AND SPECIAL MISSION PROGRAMS.
	DEPUTY PROGRAM EXECUTIVE OFFICERS FOR SPACE SYSTEMS AND EXECUTIVE DIRECTOR, SPACE AND NAVAL WARFARE SYSTEMS COMMAND, SPACE FIELD ACTIVITY.
	EXECUTIVE DIRECTOR, PROGRAM EXECUTIVE OFFICE FOR INTEGRATED WARFARE SYSTEMS.
	PROGRAM EXECUTIVE OFFICER FOR COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INTELLIGENCE AND SPACE PROGRAM MANAGER, NAVY/MARINE CORPS INTRANET.
	EXECUTIVE DIRECTOR, PROGRAM EXECUTIVE OFFICERS FOR INTEGRATED WARFARE SYSTEMS.
	PROGRAM EXECUTIVE OFFICERS FOR COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INTELLIGENCE AND SPACE.
STRATEGIC SYSTEMS PROGRAMS	DIRECTOR, PLANS AND PROGRAMS DIVISION CHIEF ENGINEER.
	ASSISTANT FOR SHIPBOARD SYSTEMS.
	BRANCH HEAD, REENTRY SYSTEMS BRANCH.
	DIRECTOR, PLANS AND PROGRAMS DIVISION.
	TECHNICAL PLANS AND PAYLOADS INTEGRATION OFFICER.
	HEAD, RESOURCES BRANCH (COMPTROLLER) AND DEPUTY DIRECTOR, PLANS AND PROGRAM DIVISION.
	ASSISTANT FOR MISSILE ENGINEERING SYSTEMS.
	CHIEF ENGINEER.
	ASSISTANT FOR SYSTEMS INTEGRATION AND COMPATIBILITY.
OFFICE OF THE ASSISTANT SECRETARY OF NAVY (FINANCIAL MANAGEMENT AND COMPTROLLER).	ASSOCIATE DIRECTOR, BUDGET AND REPORTS/FISCAL MANAGEMENT DIVISION.
	ASSISTANT GENERAL COUNSEL (FINANCIAL MANAGEMENT/COMPTROLLER).
	DIRECTOR, INVESTMENT AND DEVELOPMENT DIVISION.
	DIRECTOR, PROGRAM/BUDGET COORDINATION DIVISION.
	ASSOCIATE DIRECTOR, OFFICE OF BUDGET/FISCAL MANAGEMENT DIVISION.
	ASSISTANT GENERAL COUNSEL (FINANCIAL MANAGEMENT AND COMPTROLLER).
	DIRECTOR, INVESTMENT AND DEVELOPMENT DIVISION.
	DIRECTOR, OFFICE OF FINANCIAL OPERATIONS.
	DIRECTOR, BUDGET POLICY AND PROCEDURES DIVISION.
	DIRECTOR, PROGRAM/BUDGET COORDINATION DIVISION.
	DIRECTOR, NAVAL COST ANALYSIS DIVISION.
	DIRECTOR, OFFICE OF FINANCIAL OPERATIONS.
	DIRECTOR, BUDGET AND POLICY AND PROCEDURES DIVISION.
	DIRECTOR, CIVILIAN RESOURCES AND BUSINESS AFFAIRS DIVISION.
OFFICE OF THE GENERAL COUNSEL	SPECIAL COUNSEL FOR LITIGATION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
NAVAL CRIMINAL INVESTIGATIVE SERVICE	EXECUTIVE ASSISTANT DIRECTOR FOR CRIMINAL INVESTIGATIONS.
	EXECUTIVE ASSISTANT DIRECTOR FOR COUNTERTERRORISM.
	DIRECTOR, NAVAL CRIMINAL INVESTIGATIVE SERVICE.
	EXECUTIVE ASSISTANT DIRECTOR FOR COUNTERINTELLIGENCE.
	EXECUTIVE ASSISTANT DIRECTOR FOR CRIMINAL INVESTIGATIONS.
	EXECUTIVE ASSISTANT DIRECTOR FOR COUNTERTERRORISM.
	DIRECTOR, NAVAL CRIMINAL INVESTIGATIVE SERVICE EXECUTIVE.
	ASSISTANT DIRECTOR FOR COUNTERINTELLIGENCE.
	EXECUTIVE ASSISTANT DIRECTOR FOR ATLANTIC OPERATIONS.
	EXECUTIVE ASSISTANT DIRECTOR FOR PACIFIC OPERATIONS.
	DEPUTY DIRECTOR FOR OPERATIONS, NAVAL CRIMINAL INVESTIGATIVE SERVICE.
	DEPUTY DIRECTOR FOR OPERATIONS, NAVAL CRIMINAL INVESTIGATIVE SERVICE.
CHIEF OF NAVAL OPERATIONS	DIRECTOR, STRATEGIC PLANNING AND ANALYSIS DIVISION.
	ASSISTANT DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS).
	ASSISTANT DEPUTY CHIEF OF NAVAL OPERATION (RESOURCES, WARFARE REQUIREMENTS, AND ASSESSMENTS).
	DEPUTY TO THE DEPUTY CHIEF OF NAVAL OPERATIONS (COMMUNICATIONS AND NETWORKS).
	ASSISTANT DEPUTY CHIEF OF NAVAL OPERATIONS (MANPOWER AND PERSONNEL).
	ASSISTANT DEPUTY CHIEF OF NAVAL OPERATIONS (WARFARE REQUIREMENTS AND PROGRAMS).
	DIRECTOR, SPECIAL PROGRAMS DIVISION.
	DEPUTY DIRECTOR, WARFARE INTEGRATION AND ASSESSMENT DIVISION.
	DEPUTY DIRECTOR FOR NETWORKS INTEGRATION AND TRANSFORMATION/ASSOCIATE DIRECTOR, NAVY INFORMATION OFFICER.
	DEPUTY CHIEF OF NAVAL RESERVE.
	ASSOCIATE DIRECTOR, ASSESSMENT DIVISION.
	TECHNICAL DIRECTOR, OCEANOGRAPHER OF THE NAVY.
	ASSISTANT DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS).
	ASSISTANT DEPUTY CHIEF OF NAVAL OPERATIONS (RESOURCES, WARFARE REQUIREMENTS AND ASSESSMENTS).
	DEPUTY DIRECTOR CHIEF OF NAVAL OPERATIONS (COMMUNICATIONS AND NETWORKS).
	DIRECTOR, SPECIAL PROGRAMS DIVISION.
	DEPUTY DIRECTOR, NAVY STAFF.
	DEPUTY DIRECTOR FOR PROGRAMMING (N80) AND DEPARTMENT OF THE NAVY PROGRAM INFORMATION CENTER.
	ASSOCIATE DIRECTOR, ASSESSMENT DIVISION.
	HEAD, CAMPAIGN ANALYSIS BRANCH.
	DIRECTOR, LOGISTICS PLANNING AND INNOVATION.
	DIRECTOR NAVAL HISTORY/DIRECTOR, NAVAL HISTORICAL CENTER.
	FINANCIAL MANAGER AND CHIEF RESOURCES OFFICER FOR MANPOWER, PERSONNEL, TRAINING AND EDUCATION.
	DIRECTOR, LOGISTICS PLANNING AND INNOVATION.
	DEPUTY DIRECTOR ENVIRONMENTAL PROTECTION SAFETY OCCUPATIONAL HEALTH DIVISION.
	DIRECTOR, STRATEGIC SEALIFT DIVISION.
	DIRECTOR, STRATEGIC SEALIFT DIVISION.
BUREAU OF NAVAL PERSONNEL	FINANCIAL MANAGER AND CHIEF RESOURCES OFFICER FOR MANPOWER, PERSONNEL, TRAINING, AND EDUCATION ENTERPRISE.
	DEPUTY COMMANDER, NAVY PERSONNEL COMMAND.
COMMANDER, NAVY INSTALLATIONS	COUNSEL, COMMANDER NAVY INSTALLATIONS COMMAND.
	DEPUTY REGIONAL COMMANDER (SOUTH).
	BUSINESS MANAGER/CHIEF OPERATING OFFICER.
	COMPTROLLER.
	DEPUTY COMMANDER, NAVY INSTALLATIONS.
	BUSINESS MANAGER/CHIEF OPERATING OFFICER.
	DEPUTY COMMANDER.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
BUREAU OF MEDICINE AND SURGERY	DEPUTY COMMANDER FOR FINANCIAL MANAGEMENT AND COMPTROLLER.
	COMPTROLLER/DEPUTY CHIEF OF STAFF FOR RESOURCE MANAGEMENT.
MILITARY SEALIFT COMMAND	DIRECTOR, NAVY FLEET AUXILARY FORCE AND SPECIAL MISSION SHIPS.
	DIRECTOR, STRATEGIC SEALIFT AND PREPOSITIONING COUNSEL.
	COMPTROLLER.
	COUNSEL, MILITARY SEALIFT COMMAND.
	COMPTROLLER.
	EXECUTIVE DIRECTOR.
	EXECUTIVE DIRECTOR.
NAVAL METEOROLOGY AND OCEANOGRAPHY COMMUNICATIONS, STENNIS SPACE CENTER, MISSISSIPPI.	TECHNICAL/DEPUTY DIRECTOR.
OFFICE OF COMMANDER, UNITED STATES FLEET FORCES COMMAND/JOINT FORCES COMMAND.	CHIEF OF STAFF.
	DIRECTOR, JOINT TRAINING, ANALYSIS, AND SIMULATION CENTER.
	DEPUTY DIRECTOR FLEET MAINTENANCE.
	DEPUTY DIRECTOR, JOINT OPERATIONS AND GLOBAL FORCE MANAGEMENT.
	DIRECTOR, FLEET MANPOWER AND PERSONNEL.
	EXECUTIVE DIRECTOR, JOINT WARFARE ANALYSIS CENTER.
	DIRECTOR, JOINT DEVELOPMENT CONCEPT PATHWAY.
	DIRECTOR, JOINT PROTOTYPE PATHWAY.
	DIRECTOR, JOINT DEPLOYMENT, EMPLOYMENT, AND SUSTAINMENT.
	DEPUTY DIRECTOR, FLEET WARFARE PROGRAMS.
	DEPUTY COMMANDER, NAVAL NETWORK WARFARE COMMAND.
	CHIEF OF STAFF.
	EXECUTIVE DIRECTOR, JOINT WARFIGHTING COMMAND.
	EXECUTIVE DIRECTOR, JOINT FUTURES LAB.
	DIRECTOR, FLEET MANPOWER AND PERSONNEL.
	DIRECTOR, JOINT INTEROPERABILITY AND INTEGRATION/JOINT BATTLE MANAGEMENT COMMAND AND CONTROL.
	EXECUTIVE DIRECTOR, JOINT WARFARE ANALYSIS CENTER.
	DIRECTOR, JOINT DEVELOPMENT CONCEPT PATHWAY, JOINT FUTURES LAB.
	DIRECTOR, JOINT PROTOTYPE PATHWAY.
	DIRECTOR, JOINT DEPLOYMENT, EMPLOYMENT, AND SUSTAINMENT.
	DEPUTY COMMANDER, NAVAL NETWORK WARFARE COMMAND.
	EXECUTIVE DIRECTOR, JOINT FUTURES LAB.
	EXECUTIVE DIRECTOR, JOINT REQUIREMENTS AND INTEGRATION DIRECTORATE.
	DEPUTY DIRECTOR, FLEET READINESS AND TRAINING.
OFFICE OF THE COMMANDER, UNITED STATES PACIFIC COMMAND.	SPECIAL ADVISOR TO THE COMMANDER, U.S. PACIFIC COMMAND.
	CHIEF INFORMATION OFFICER.
OFFICE OF THE COMMANDER, UNITED STATES PACIFIC FLEET.	DEPUTY DIRECTOR FLEET MAINTENANCE.
	EXECUTIVE DIRECTOR, FLEET COMMAND, CONTROL, COMMUNICATIONS AND COMPUTER SYSTEMS AND COMMAND INFORMATION OFFICER.
	EXECUTIVE DIRECTOR, TOTAL FORCE MANAGEMENT.
	EXECUTIVE DIRECTOR, OPERATIONS, PLANS, AND POLICY.
	DEPUTY FOR FLEET ANTI-SUBMARINE WARFARE COMMAND.
	EXECUTIVE DIRECTOR, WARFARE REQUIREMENTS, PROGRAMMING, FORCE STRUCTURE AND ANALYSIS.
	DEPUTY DIRECTOR, FLEET MAINTENANCE.
	EXECUTIVE DIRECTOR, TOTAL FORCE MANAGEMENT.
	DEPUTY FOR FLEET ANTI-SUBMARINE WARFARE COMMAND.
NAVAL PERSONNEL DEVELOPMENT COMMAND	EXECUTIVE DIRECTOR.
NAVY RECRUITING COMMAND	DEPUTY COMMANDER.
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS	DIRECTOR, ENTERPRISE ANALYSIS AND PLANNING.
	DEPUTY COMMANDER FOR ACQUSITION AND OPERATIONS.
	PRINCIPAL ASSISTANT FOR AIR WARFARE ACQUISITION ANALYSIS AND PLANNING.
	DEPUTY ASSISTANT COMMANDER FOR CONTRACTS.
	COMPTROLLER.
	COUNSEL, NAVAL AIR SYSTEMS COMMAND.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, SYSTEMS ENGINEERING DEPARTMENT.
	DIRECTOR, AVIONICS DEPARTMENT.
	DIRECTOR, AIR VEHICLES AND UNMANNED AERIAL VEHICLES.
	DIRECTOR, LOGISTICS MANAGEMENT INTEGRATION
	DIRECTOR, TACTICAL AIRCRAFT AND MISSILES CONTRACTS DEPARTMENT.
	DIRECTOR, ENTERPRISE ANALYSIS, AND PLANNING.
	ASSISTANT COMMANDER FOR CORPORATE OPERATIONS AND TOTAL FORCE READINESS.
	ASSISTANT COMMANDER FOR ACQUISITION PROCESSES AND EXECUTION.
	DIRECTOR, COST ANALYSIS DEPARTMENT.
	DEPUTY ASSISTANT COMMANDER FOR ACQUISITION AND OPERATIONS.
	DEPUTY ASSISTANT COMMANDER, RESEARCH AND ENGINEERING.
	DEPUTY ASSISTANT COMMANDER FOR CONTRACTS.
	COMPTROLLER.
	COUNSEL, NAVAL AIR SYSTEMS COMMAND.
	DIRECTOR, SYSTEMS ENGINEERING DIVISION.
	DIRECTOR INDUSTRIAL OPERATIONS.
	DIRECTOR, AVIONICS DEPARTMENT.
	DIRECTOR, PROPULSION AND POWER.
	DIRECTOR, AIR PLATFORM SYSTEMS.
	DIRECTOR, AIR VEHICLES AND UNMANNED AIR VEHICLES.
	DIRECTOR, INTEGRATED SYSTEMS EVALUATION EXPERIMENTATION AND TEST DEPARTMENT.
	DIRECTOR, AVIATION READINESS AND RESOURCE ANALYSIS.
	DIRECTOR, LOGISTICS MANAGEMENT INTEGRATION.
	DIRECTOR, TACTICAL AIRCRAFT AND MISSILES CONTRACTS DEPARTMENT.
	DEPUTY COMMANDER, NAVAL AIR SYSTEM COMMAND.
	DIRECTOR, STRIKE WEAPONS, UNMANNED AVIATION, NAVAL AIR PROGRAMS CONTRACTS DEPARTMENT.
	DIRECTOR BUDGET FORMULATION JUSTIFICATION EXECUTIVE DIVISION.
	DIRECTOR, AVIATION SYSTEMS/TECHNOLOGY INTEGRATION INNOVATION AND SPECIAL PROGRAMS.
	ASSISTANT COMMANDER FOR CORPORATE OPERATIONS AND TOTAL FORCE READINESS.
	ASSISTANT COMMANDER FOR ACQUISITION PROCESSES AND EXECUTION.
	DEPUTY ASSISTANT COMMANDER FOR RESEARCH AND ENGINEERING.
	EXECUTIVE DIRECTOR, OFFICE OF COUNSEL.
	DIRECTOR NAVAL AVIATION SCIENCE AND TECHNOLOGY OFFICE.
	DIRECTOR, DESIGN INTERFACE AND MAINTAINENCE PLANNING.
	DEPUTY COMMANDER, NAVAL AIR SYSTEMS COMMAND.
	DIRECTOR, AIR ANTI-SUBMARINE WARFARE, ASSAULT AND SPECIAL MISSION PROGRAMS CONTRACTS DEPARTMENT.
	DEPUTY ASSISTANT COMMANDER FOR LOGISTICS AND INDUSTRIAL OPERATIONS.
	COMMAND INFORMATION OFFICER.
	DEPUTY ASSISTANT COMMANDER FOR LOGISTICS AND INDUSTRIAL OPERATIONS.
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION	DEPUTY ASSISTANT COMMANDER FOR TEST AND EVALUATION/EXECUTIVE DIRECTOR, NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION/DIRECTOR, TEST AND EVALUATION NAWCAD.
	DIRECTOR, AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT AND SUPPORT EQUIPMENT.
	DEPUTY ASSISTANT COMMANDER FOR TEST AND EVALUATION/EXECUTIVE DIRECTOR NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION/DIRECTOR, TEST AND EVALTUATION NAWCAD.
	DIRECTOR, AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT/SUPPORT EQUIPMENT.
	DIRECTOR, FLIGHT TEST ENGINEERING.
	DIECTOR, INTEGRATED STYSTEMS EVALUATION EXPERIMENTATION AND TEST DEPARTMENT.
	DIRECTOR, BATTLESPACE SIMULATION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
NAVAL AIR WARFARE CENTER WEAPONS DIVISION, CHINA LAKE, CALIFORNIA.	DIRECTOR, RANGE DEPARTMENT.
	DIRECTOR, ELECTRONIC WARFARE/COMBAT SYSTEMS.
	DIRECTOR, SOFTWARE ENGINEERING.
	DIRECTOR, WEAPONS AND ENERGETICS DEPARTMENT.
	EXECUTIVE DIRECTOR, NAVAL AIR WKFARE CENTER WEAPONS DIVISION/DIRECTOR, RESEARCH/ENGINEERING.
	DIRECTOR, WEAPONS AND ENERGETICS DEPARTMENT.
	EXECUTIVE DIRECTOR, NAVAL AIR WARFARE CENTER WEAPONS DIVISION/DIRECTOR, RESEARCH ENGINEERING.
	DIRECTOR, THREAT/TARGET SYSTEM DEPARARTMENT.
	DIRECTOR, WEAPONS AND ENERGETICS DEPARTMENT.
NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION	DIRECTOR, HUMAN SYSTEMS DEPARTMENT.
SPACE AND NAVAL WARFARE SYSTEMS COMMAND	COUNSEL, SPACE AND NAVAL WARFARE SYSTEMS COMMAND.
	DEPUTY DIRECTOR, SPACE, INFORMATION WARFARE, COMMAND AND CONTROL.
	DIRECTOR, CONTRACTS.
	COMPTROLLER, BUSINESS RESOURCE MANAGER.
	COUNSEL, SPACE AND NAVAL WARFARE SYSTEMS COMMAND.
	DIRECTOR, CONTRACTS.
	COMPTROLLER, BUSINESS RESOURCES MANAGER.
	DEPUTY CHIEF ENGINEER FOR INTEGRATION AND INTEROPERABILITY.
	DIRECTOR, COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE INSTALLATIONS AND LOGISTICS DIRECTORATE.
	DEPUTY COMMANDER.
	DEPUTY CHIEF ENGINEER.
	CHIEF INFORMATION OFFICER.
	DIRECTOR, COMMAND, CONTROL, COMMUNICATION, COMPUTERS, INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE INSTALLATIONS AND LOGISTICS DIRECTORATE.
	DEPUTY COMMANDER.
	DEPUTY CHIEF ENGINEER.
SPACE AND NAVAL WARFARE SYSTEMS CENTER	HEAD INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE DEPARTMENT.
	EXECUTIVE DIRECTOR.
	HEAD NAVIGATION AND APPLIED SCIENCES DEPARTMENT.
	HEAD, COMMAND AND CONTROL DEPARTMENT.
	EXECUTIVE DIRECTOR.
	DIRECTOR, SCIENCE, TECHNOLOGY, AND ENGINEERING.
	HEAD COMMUNICATION AND INFORMATION SYSTEM DEPARTMENT.
SPACE AND NAVAL WARFARE SYSTEMS CENTER, CHARLESTON.	EXECUTIVE DIRECTOR.
	EXECUTIVE DIRECTOR.
NAVAL FACILITIES ENGINEERING COMMAND	DIRECTOR, NAVY CRANE CENTER.
	DIRECTOR, SPECIAL VENTURE ACQUISITION.
	COUNSEL NAVAL FACILITIES ENGINEERING COMMAND.
	COMPTROLLER.
	DIRECTOR FOR CONTRACTS SUPPORT.
	CHIEF ENGINEER.
	DIRECTOR OF REAL ESTATE SUPPORT.
	DIRECTOR OF BASE DEVELOPMENT.
	DIRECTOR, NAVY CRANE CENTER.
	COUNSEL, NAVAL FACILITIES ENGINEERING COMMAND.
	DIRECTOR OF CONTRACTS SUPPORT.
	CHIEF ENGINEER.
	DIRECTOR OF REAL ESTATE SUPPORT.
	DIRECTOR OF ENVIRONMENT.
	EXECUTIVE DIRECTOR.
	DIRECTOR OF ENVIRONMENT.
	EXECUTIVE DIRECTOR.
NAVAL SEA SYSTEMS COMMAND	EXECUTIVE DIRECTOR.
	DIRECTOR, TASK FORCE LEAN.
	DIRECTOR, NAVAL INNOVATION LABORATORY.
	NAVAL SEA SYSTEMS COMMAND.
	COUNSEL, NAVAL SEA SYSTEMS COMMAND.
	EXECUTIVE DIRECTOR FOR CONTRACTS.
	DEPUTY COMMANDER/COMPTROLLER.
	DIRECTOR, REACTOR MATERIALS DIVISIONS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY DIRECTOR, STEAM GENERATOR DESIGN/DEVELOPMENT, PROPULSION PLANT PUMPS.
	HEAD, ADVANCED REACTOR BRANCH.
	DIRECTOR FOR HYDRODYNAMICS.
	DIRECTOR FOR SURFACE SHIP DESIGN AND SYSTEMS ENGINEERING.
	DIRECTOR COST ENGINEERING AND INDUSTRIAL ANALYSIS.
	DIRECTOR, SHIPBUILDING CONTRACTS DIVISION.
	ASSISTANT DEPUTY COMMANDER FOR INDUSTRIAL OPERATIONS.
	DIRECTOR, UNDERSEA SYSTEMS CONTRACTS DIVISION.
	DEPUTY FOR WEAPONS SAFETY.
	DEPUTY DIRECTOR, ADVANCED AIRCRAFT CARRIER SYSTEM DIVISION.
	DEPUTY FOR SCIENCE AND TECHNOLOGY.
	EXECUTIVE DIRECTOR, WARFARE SYSTEMS.
	ENGINEERING/BATTLE FORCE SYSTEMS ENGINEER.
	DEPUTY COMMANDER, CORPORATE OPERATIONS DIRECTORATE.
	EXECUTIVE DIRECTOR.
	COMMAND INFORMATION OFFICER.
	EXECUTIVE DIRECTOR FOR LOGISTICS, MAINTENANCE AND INDUSTRIAL OPERATIONS DIRECTORATE.
	COUNSEL, NAVAL SEA SYSTEMS COMMAND.
	EXECUTIVE DIRECTOR FOR CONTRACTS.
	EXECUTIVE DIRECTOR, UNDERSEA WARFARE DIRECTORATE.
	DEPUTY COMMANDER/COMPTROLLER.
	DIRECTOR FOR AIRCRAFT CARRIER DESIGN AND SYSTEMS ENGINEERING.
	DIRECTOR REACTOR PLANT COMPONENTS AUXILIARY EQUIPMENT DIVISION.
	DEPUTY DIRECTOR FOR ADVANCED SUBMARINE REACTOR SERVICING AND SPENT FUEL MANAGEMENT.
	DIRECTOR SURFACE SHIP SYSTEMS DIVISION.
	DIRECTOR, REACTOR MATERIALS DIVISION.
	DIRECTOR, REACTOR SAFETY AND ANALYSIS DIVISION.
	DIRECTOR, NUCLEAR COMPONENTS DIVISION.
	DIRECTOR FOR SHIP SURVIVABILITY AND STRUCTURAL INTEGRITY.
	DIRECTOR FOR MACHINERY SYSTEMS.
	DIRECTOR FOR SURFACE SHIP DESIGN AND SYSTEMS ENGINEERING.
	DIRECTOR, MATERIALS AND ASSURANCE ENGINEERING OFFICE.
	DIRECTOR, COST ENGINEERING AND INDUSTRIAL ANALYSIS.
	DIRECTOR, SHIPBUILDING CONTRACTS DIVISION.
	ASSISTANT DEPUTY COMMANDER FOR INDUSTRIAL OPERATIONS.
	DIRECTOR FOR SUBMARINE/SUBMERSIBLE DESIGN AND SYSTEMS ENGINEERING.
	DIRECTOR, UNDERSEA SYSTEMS CONTRACRS DIVISION.
	DEPUTY FOR WEAPONS SAFETY.
	PROGRAM MANAGER FOR COMMISSIONED SUBMARINES.
	EXECUTIVE DIRECTOR, WARFARE SYSREMS.
	ENGINEERING/BATTLE FORCE SYSTEMS ENGINEER.
	DEPUTY COMMANDER, CORPORATE OPERATIONS DIRECTORATE.
	EXECUTIVE DIRECTOR FOR LOGISTICS MAINTENANCE AND INDUSTRIAL OPERATIONS DIRECTORATE.
	DIRECTOR, SURFACE SYSTEMS CONTRACTS DIVISION.
	EXECUTIVE DIRECTOR, UNDERSEA WARFARE DIRECTORATE.
	DIRECTOR, OFFICE OF RESOURCE MANAGEMENT.
	DIRECTOR, REACTOR REFUELING DIVISION.
	DEPUTY COUNSEL, NAVAL SEA SYSTEMS COMMAND.
	ASSISTANT DEPUTY COMMANDER, MAINTENANCE, MODERNIZATION, ENVIRONMENT AND SAFETY.
	DIRECTOR, REACTOR PLANT COMPONENTS AND AUXILIARY EQUIPMENT DIVISION.
	DIRECTOR, SURFACE SHIP SYSTEMS DIVISION.
	DEPUTY DIRECTOR, ENVIRONMENTAL HEALTH AND SAFETY.
	DIRECTOR, REACTOR SAFETY AND ANALYSIS DIVISION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR FOR SUBMARINE/SUBMERSIBLE DESIGN AND SYSTEMS ENGINEERING.
	EXECUTIVE DIRECTOR, AMPHIBIOUS, AUXIILIARY AND SEALIFT SHIPS, PROGRAM EXECUTTVE OFFICER SHIPS.
	EXECUTIVE DIRECTOR, SHIP DESIGN, INTEGRATION, AND ENGINEERING DIRECTORATE.
	ASSISTANT DEPUTY COMMANDER, FLEET LOGISTICS SUPPORT.
	PROGRAM MANAGER FOR COMMISSIONED SUBMARINES.
	DIRECTOR, FLEET READINESS DIVISION.
	DEPUTY COMMANDER, HUMAN SYSTEMS INTEGRATION DIRECTORATE.
	DIRECTOR, OFFICE OF RESOURCE MANAGEMENT.
	DIRECTOR, REACTOR REFUELING DIVISION.
	EXECUTIVE DIRECTOR, AMPHIBIOUS, AUXILIARY AND SEALIFT SHIPS, PROGRAM EXECUTIVE OFFICERS SHIPS.
	DEPUTY COMMANDER, HUMAN SYSTEMS INTEGRATION DIRECTORATE.
NAVAL SHIPYARDS	NUCLEAR ENGINEERING AND PLANNING MANAGER; PEARL HARBOR NAVAL SHIPYARD.
	NUCLEAR ENGINEERING AND PLANNING MANAGER; PORTSMOUTH NAVAL SHIPYARD.
	NAVAL SHIPYARD NUCLEAR ENGINEERING AND PLANNING.
	MANAGER, NORFOLK NAVAL SHIPYARD.
	NUCLEAR ENGINEERING AND PLANNING MANAGER, PUGET SOUND NAVAL SHIPYARD.
NAVAL WARFARE CENTERS	NAVAL SEA SYSTEMS COMMAND WARFARE CENTERS BUSINESS AND WORK ASSIGNMENT EXECUTIVE.
NAVAL SURFACE WARFARE CENTER	TECHNICAL DIRECTOR.
	TECHNICAL DIRECTOR.
NAVAL UNDERSEA WARFARE CENTER	TECHNICAL DIRECTOR.
	DIRECTOR, UNDERSEA WARFARE.
	TECHNICAL DIRECTOR.
NAVAL SURFACE WARFARE CENTER, CRANE DIVISION	PRODUCT AREA DIRECTOR, SURFACE WARFARE LOGISTICS AND MAINTENANCE.
NAVAL UNDERSEA WARFARE CENTER DIVISION, KEYPORT, WASHINGTON.	PRODUCT AREA DIRECTOR, UNDERSEA WARFARE FLEET MATERIAL READINESS.
NAVAL SURFACE WARFARE CENTER, PORT HUENEME DIVISION.	PRODUCT AREA DIRECTOR, SURFACE SHIP COMBAT SYSTEMS.
	PRODUCT AREA DIRECTOR, SURFACE SHIP COMBAT SYSTEMS.
NAVAL SURFACE WARFARE CENTER, INDIAN HEAD DIVISION	PRODUCT AREA DIRECTOR, ORDNANCE.
	PRODUCT AREA DIRECTOR, ORDNANCE.
COASTAL SYSTEMS STATION, DAHLGREN DIVISION; PANAMA CITY.	PRODUCT AREA DIRECTOR, LITTORAL WARFARE SYSTEMS.
	PRODUCT AREA DIRECTOR, LITTORAL WARFARE SYSTEMS.
NAVAL SURFACE WARFARE CENTER, CARDEROCK DIVISION	PRODUCT AREA DIRECTOR, SHIPS AND SHIP SYSTEMS.
	PRODUCT AREA DIRECTOR, SHIPS AND SHIP SYSTEMS.
	DIRECTOR FOR SHIP SIGNATURES.
	EXECUTIVE DIRECTOR FOR NAVAL SHIP SYSTEMS ENGINEERING STATION/DIRECTOR FOR MACHINERY ENGINEERING.
NAVAL SURFACE WARFARE CENTER, DAHLGREN DIVISION	HEAD, ENGAGEMENT SYSTEMS DEPARTMENT.
	HEAD, COMBAT SYSTEMS DEPARTMENT.
	HEAD, SYSTEMS RESEARCH AND TECHNOLOGY DEPARTMENT.
	PRODUCT AREA DIRECTOR, FORCE LEVEL WARFARE SYSTEMS.
	PRODUCT AREA DIRECTOR, HOMELAND AND FORCE.
	PROTECTION/HEAD JOINT WARFARE APPLICATIONS DEPARTMENT.
	HEAD, WARFARE SYSTEMS DEPARTMENT.
	PRODUCT AREA DIRECTOR, NAVY STRATEGIC WEAPONS SYSTEMS/HEAD STRATEGIC AND STRIKE SYSTEMS DEPARTMENT.
	PRODUCT AREA DIRECTOR, FORCE LEVEL WARFARE SYSTEMS.
NAVAL UNDERSEA WARFARE CENTER DIVISION, NEWPORT, RHODE ISLAND.	PRODUCT AREA DIRECTOR, UNDERSEA WARFARE ANALYSIS AND ASSESSMENT.
	PRODUCT AREA DIRECTOR, UNDERSEA WARFARE ANALYSIS AND ASSESSMENT.
	PRODUCT AREA DIRECTOR, UNDERSEA WARFARE WEAPONS AND VEHICLE SYSTEMS.
	HEAD, UNDERSEA WARFARE COMBAT SYSTEMS DEPARTMENT HEAD, TORPEDO SYSTEMS DEPARTMENT.
	PRODUCT AREA DIRECTOR, UNDERSEA WARFARE WEAPONS AND VEHICLE SYSTEMS.
NAVAL SUPPLY SYSTEMS COMMAND HEADQUARTERS	DEPUTY COMMANDER, FINANCIAL MANAGEMENT/COMPTROLLER.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, DEFENSE TECHNOLOGY ANALYSIS OFFICE.
	COUNSEL.
	DEPUTY COMMANDER, FINANCIAL MANAGEMENT/COMPTROLLER.
	COUNSEL, NAVAL SUPPLY SYSTEMS COMMAND.
	DEPUTY COMMANDER, CORPORATE OPERATIONS.
	EXECUTIVE DIRECTOR OFFICE OF SPECIAL PROJECTS.
	COMMAND INFORMATION OFFICER.
	SENIOR ACQUISITION LOGISTICIAN/ENTERPRISE RESOURCES.
	PLANNING PROGRAM MANAGER.
	EXECUTIVE DIRECTOR.
	DEPUTY COMMANDER, CORPORATE.
	EXECUTIVE DIRECTOR, OFFICE OF SPECIAL PROJECTS.
	SENIOR ACQUISITION LOGISTICIAN/ENTERPRISE RESOURCE.
	PLANNING PROGRAM MANAGER.
	EXECUTIVE DIRECTOR.
NAVAL INVENTORY CONTROL POINT	VICE COMMANDER.
	VICE COMMANDER, NAVAL INVENTORY CONTROL POINT.
FLEET AND INDUSTRIAL SUPPLY CENTERS	DEPUTY COMMANDER, FLEET AND INDUSTRIAL SUPPLY CENTERS.
	DEPUTY COMMANDER, FLEET AND INDUSTRIAL SUPPLY CENTERS.
UNITED STATES MARINE CORPS HEADQUARTERS OFFICE	DEPUTY DIRECTOR FACILITIES AND SERVICES DIVISION.
	DIRECTOR, PROGRAM ASSESSMENT AND EVALUATION DIVISION.
	DIRECTOR, MANPOWER PLANS AND POLICY DIVISION.
	MARINE CORPS BUSINESS ENTERPRISE DIRECTOR.
	ASSISTANT DEPUTY COMMANDANT FOR INSTALLATIONS AND LOGISTICS (CONTRACTS).
	COUNSEL FOR THE COMMANDANT.
	DEPUTY COUNSEL FOR THE COMMANDANT.
	DEPUTY DIRECTOR, FACILITIES AND SERVICES DIVISION.
	DIRECTOR, MANPOWER PLANS AND POLICY DIVISION.
	ASSISTANT DEPUTY COMMANDANT FOR PLANS, POLICIES AND OPERATIONS (SECURITY).
	ASSISTANT DEPUTY COMMANDANT FOR PROGRAMS AND RESOURCES (RESOURCES) AND DIRECTOR, FISCAL DIVISION.
	ASSISTANT DEPUTY COMMANDANT, INSTALLATIONS AND LOGISTICS.
	ASSISTANT DEPUTY COMMANDANT, INSTALLATIONS AND LOGISTICS (CONTRACTS).
	COUNSEL FOR THE COMMANDANT.
	DEPUTY COUNSEL FOR THE COMMANDANT.
	ASSISTANT DEPUTY COMMANDANT FOR PLANS, POLICIES AND OPERATIONS (SECURITY).
	ASSISTANT DEPUTY COMMANDANT FOR PROGRAMS AND RESOURCES.
	ASSISTANT DEPUTY COMMANDANT FOR PROGRAMS AND RESOURCES (RESOURCES)/DIRECTOR, FISCAL DIVISION.
	ASSISTANT DEPUTY COMMANDANT, INSTALLATIONS AND LOGISTICS.
	ASSISTANT DEPUTY COMMANDANT FOR MANPOWER AND RESERVE AFFAIRS.
	ASSISTANT DEPUTY COMMANDANT FOR PROGRAMS AND RESOURCES.
MARINE CORPS SYSTEMS COMMAND	DEPUTY COMMANDER, COMMAND, CONTROL, COMMUNICATIONS, COMPUTER, INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE.
	DEPUTY COMMANDER.
	DEPUTY COMMANDER, COMMAND, CONTROL, COMMUNICATIONS, COMPUTER, INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE.
	DEPUTY FOR FINANCIAL MANAGEMENT.
	DEPUTY COMMANDER.
	DEPUTY FOR FINANCIAL MANAGEMENT.
MARINE CORPS LOGISTICS COMMAND ALBANY, GEORGIA	EXECUTIVE DEPUTY.
	EXECUTIVE DEPUTY.
OFFICE OF NAVAL RESEARCH	DIRECTOR, SHIP STRUCTURES AND SYSTEMS SCIENCE AND TECHNOLOGY DIVISION.
	DIRECTOR, UNDERSEA WEAPONS AND NAVAL MATERIALS.
	SCIENCE AND TECHNOLOGY DIVISION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
NAVAL RESEARCH LABORATORY	DIRECTOR, EXPEDITIONARY WARFARE OPERATIONS TECHNOLOGY DIVISION. DIRECTOR, PHYSICAL SCIENCES SCIENCE AND TECHNOLOGY DIVISION. DIRECTOR, EXPEDITIONARY WARFARE OPERATIONS TECHNOLOGY DIVISION. HEAD, NAVAL EXPEDITIONARY WARFARE SCIENCE AND TECHNOLOGY DEPARTMENT. EXECUTIVE DIRECTOR FOR ACQUISITION MANAGEMENT. COMPTROLLER. PATENT COUNSEL OF THE NAVY. COUNSEL, OFFICE OF NAVAL RESEARCH. HEAD, ENGINEERING, MATERIALS AND PHYSICAL SCIENCE AND TECHNOLOGY DEPARTMENT. DIRECTOR FOR AEROSPACE SCIENCE RESEARCH DIVISION. DIRECTOR, MATHEMATICAL, COMPUTER, AND INFORMATION SCIENCES DIVISION. DIRECTOR, OCEAN, ATMOSPHERE AND SPACE SCIENCE AND TECHNOLOGY PROCESSES AND PREDICTION DIVISION. DIRECTOR OF SCIENCE AND TECHNOLOGY. HEAD, NAVAL EXPEDITIONARY WARFARE SCIENCE AND TECHNOLOGY DEPARTMENT. EXECUTIVE DIRECTOR FOR ACQUISITION MANAGEMENT. COMPTROLLER. PATENT COUNSEL OF THE NAVY. DIRECTOR, OCEAN, ATMOSPHERE, AND SPACE SCIENCE AND TECHNOLOGY SENSING AND SYSTEMS DIVISION. HEAD, INDUSTRIAL AND CORPORATE PROGRAMS DEPARTMENT. COUNSEL, OFFICE OF NAVAL RESEARCH. DIRECTOR, LIFE SCIENCES RESEARCH DIVISION. HEAD, HUMAN SYSTEMS SCIENCE AND TECHNOLOGY DEPARTMENT. HEAD, INFORMATION, ELECTRONICS AND SURVEILLANCE SCIENCE AND TECHNOLOGY DEPARTMENT. DIRECTOR, ELECTRONICS, SENSORS, AND NETWORKS RESEARCH DIVISION. DIRECTOR, ELECTRONICS DIVISION. HEAD, ENGINEERING, MATERIALS AND PHYSICAL SCIENCE AND TECHNOLOGY DEPARTMENT. HEAD, OCEAN, ATMOSPHERE AND SPACE SCIENCE AND TECHNOLOGY DEPARTMENT. EXECUTIVE DIRECTOR. DIRECTOR OF TRANSITION. DIRECTOR, MATERIALS SICENCE AND TECHNOLOGY DIVISION. HEAD, HUMAN SYSTEMS SCIENCE AND TECHNOLOGY DEPARTMENT. HEAD, INFORMATION, ELECTRONICS AND SURVEILLANCE SCIENCE AND TECHNOLOGY DEPARTMENT. ASSOCIATE FOR INTEGRATION, OCEAN, ATMOSPHERE AND SPACE SCIENCE AND TECHNOLOGY SENSING AND SYSTEMS DIVISION. HEAD, OCEAN, ATMOSPHERE AND SPACE SCIENCE AND TECHNOLOGY DEPARTMENT. DIRECTOR OF TRANSITION. DIRECTOR, NAVAL FLEET/FORCE TECHNOLOGY INNOVATION OFFICE. DIRECTOR, MATERIALS SCIENCE AND TECHNOLOGY DIVISION. DIRECTOR OF INNOVATION. CHIEF SCIENTIST, LABORATORY FOR STRUCTURE OF MATTER. DIRECTOR OF RESEARCH. ASSOCIATE DIRECTOR OF RESEARCH FOR MATERIAL SCIENCE AND COMPONENT TECHNOLOGY. SUPERINTENDENT, CHEMISTRY DIVISION. SUPERINTENDENT, OPTICAL SCIENCES DIVISION. SUPERINTENDENT, SPACE SCIENCES DIVISION. SUPERINTENDENT, RADAR DIVISION. SUPERINTENDENT, MATERIALS SCIENCE AND TECHNOLOGY DIVISION. SUPERINTENDENT, ACOUSTICS DIVISION. SUPERINTENDENT, PLASMA PHYSICS DIVISION. SUPERINTENDENT ELECTRONICS TECHNOLOGY DIVISION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	SUPERINTENDENT, INFORMATION TECHNOLOGY DIVISION.
	SUPERINTENDENT, TACTICAL ELECTRONIC WARFARE DIVISION.
	CHIEF SCIENTIST, LABORATORY FOR COMPUTATIONAL PHYSICS AND FLUID DYNAMICS.
	SUPERINTENDENT, REMOTE SENSING DIVISION.
	ASSOCIATE DIRECTOR OF RESEARCH FOR BUSINESS OPERATIONS.
	CHIEF SCIENTIST AND HEAD, BEAM PHYSICS PROGRAM.
	SUPERINTENDENT, MARINE METEOROLOGY DIVISION.
	MANAGER, JOINT SPACE SYSTEMS TECHNOLOGY PROGRAMS.
	ASSOCIATE DIRECTOR OF RESEARCH FOR OCEAN AND ATMOSPHERIC SCIENCE AND TECHNOLOGY.
	SUPERINTENDENT, CENTER FOR BIO-MOLECULAR SCIENCE AND ENGINEERING.
	DIRECTOR OF RESEARCH.
	ASSOCIATE DIRECTOR OF RESEARCH FOR MATERIAL SCIENCE AND COMPONENT TECHNOLOGY.
	SUPERINTENDENT, CHEMISTRY DIVISION.
	SUPERINTENDENT, OPTICAL SCIENCES DIVISION.
	SUPERINTENDENT, MATERIALS SCIENCE AND TECHNOLOGY DIVISION.
	ASSOCIATE DIRECTOR OF RESEARCH FOR WARFARE SYSTEMS AND SENSORS RESEARCH.
NAVAL RESEARCH LABORATORY	SUPERINTENDENT, ACOUSTICS DIVISION.
	SUPERINTENDENT, SPACE SYSTEM DEVELOPMENT DEPARTMENT.
	SUPERINTENDENT, TACTICAL ELECTRONIC WARFARE DIVISION.
	SUPERINTENDENT, OCEANOGRAPHY DIVISION.
	SUPERINTENDENT, SPACECRAFT ENGINEERING DEPARTMENT.
	ASSOCIATE DIRECTOR OF RESEARCH FOR BUSINESS OPERATIONS.
	ASSOCIATE DIRECTOR OF RESEARCH FOR OCEAN AND ATMOSPHERIC SCIENCE AND TECHNOLOGY.
	DIRECTOR, NAVAL CENTER FOR SPACE TECHNOLOGY.
	ASSOCIATE DIRECTOR OF RESEARCH FOR WARFARE SYSTEMS AND SENSORS RESEARCH.
	SUPERINTENDENT, SPACE SYSTEMS DEVELOPMENT DEPARTMENT.
	SUPERINTENDENT, MARINE GEOSCIENCES DIVISION.
	DIRECTOR, NAVAL CENTER FOR SPACE TECHNOLOGY.
DEFENSE NUCLEAR FACILITIES SAFETY BOARD:	
DEFENSE NUCLEAR FACILITIES SAFETY BOARD	TECHNICAL DIRECTOR.
	DEPUTY TECHNICAL DIRECTOR.
	DEPUTY GENERAL COUNSEL.
	DEPUTY GENERAL MANAGER.
	TECHNICAL ADVISOR FOR ENGINEERING STUDIES.
	GROUP LEAD FOR NUCLEAR PROGRAMS AND ANALYSIS.
	GROUP LEAD FOR NUCLEAR WEAPON PROGRAMS.
	GROUP LEAD FOR NUCLEAR MATERIALS PROCESSING AND STABILIZATION.
	GROUP LEAD FOR NUCLEAR FACILITY DESIGN AND INFRASTRUCTURE.
DEPARTMENT OF EDUCATION:	
OFFICE OF THE CHIEF FINANCIAL OFFICER	DEPUTY CHIEF FINANCIAL OFFICER.
	DIRECTOR FINANCIAL MANAGEMENT OPERATIONS.
	DIRECTOR, FINANCIAL IMPROVEMENT AND POST AUDIT OPERATIONS.
	DIRECTOR, CONTRACTS AND PURCHASING OPERATIONS.
OFFICE OF THE CHIEF INFORMATION OFFICER	CHIEF INFORMATION OFFICER.
	DEPUTY CHIEF INFORMATION OFFICER FOR INFORMATION MANAGEMENT.
	DEPUTY CHIEF INFORMATION OFFICER FOR INFORMATION ASSURANCES.
OFFICE OF MANAGEMENT	CHAIRPERSON, EDUCATION APPEAL BOARD.
	DIRECTOR, HUMAN RESOURCES SERVICES.
OFFICE OF INSPECTOR GENERAL	COUNSEL TO THE INSPECTOR GENERAL.
	DEPUTY INSPECTOR GENERAL.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT SERVICES.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT SERVICES.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS SERVICES.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSISTANT INSPECTOR GENERAL FOR INFORMATION.
	TECHNOLOGY AUDITS AND COMPUTER CRIME INVESTIGATIONS.
OFFICE OF THE GENERAL COUNSEL	ASSISTANT GENERAL COUNSEL FOR BUSINESS AND ADMINISTRATION LAW.
	ASSISTANT GENERAL COUNSEL FOR EDUCTIONAL EQUITY.
	ASSISTANT GENERAL COUNSEL FOR REGULATIONS.
	ASSISTANT GENERAL COUNSEL FOR POSTSECONDARY EDUCATION AND EDUCATION RESEARCH DIVISION.
INSTITUTE OF EDUCATION SCIENCES	DEPUTY COMMISSIONER.
	ASSOCIATE COMMISSIONER FOR ASSESSMENT.
FEDERAL STUDENT AID	CHIEF FINANCIAL OFFICER.
	DIRECTOR, STUDENT AID AWARENESS.
	DEPUTY CHIEF FINANCIAL OFFICER.
DEPARTMENT OF ENERGY:	
DEPARTMENT OF ENERGY	ASSOCIATE CHIEF INFORMATION OFFICER FOR OPERATIONS.
NATIONAL NUCLEAR SECURITY ADMINISTRATION	CHIEF OF DEFENSE NUCLEAR COUNTERINTELLIGENCE.
DEPUTY ADMINISTRATOR FOR NAVAL REACTORS	DIRECTOR ADVANCED SUBMARINE SYSTEMS DIVISION.
	DEPUTY DIRECTOR FOR NAVAL REACTORS.
	DIRECTOR REACTOR ENGINEERING DIVISION.
	SENIOR NAVAL REACTORS REPRESENTATIVE.
	DIRECTOR FOR SUBMARINE REFUELINGS.
	CHIEF INFORMATION OFFICER.
	SENIOR NAVAL REACTORS REPRESENTATIVE.
	DIRECTOR REGULATORY AFFAIRS.
	SENIOR NAVAL REACTORS REPRESENTATIVE (PEARL HARBOR).
	DIRECTOR, INSTRUMENTATION AND CONTROL DIVISION.
	PROGRAM MANAGER PROTOTYPE AND MOORED TRAINING SHIP OPERATIONS/INACTIVATION PROGRAMS.
OFFICE OF INFRASTRUCTURE AND ENVIRONMENT	DIRECTOR, OFFICE OF INFRASTRUCTURE AND ENVIRONMENT.
NATIONAL NUCLEAR SECURITY ADMINISTRATION FIELD SITE OFFICES.	CHIEF COUNSEL.
	MANAGER, LIVERMORE SITE OFFICE.
	MANAGER, NEVADA SITE OFFICE.
	MANAGER, SANDIA SITE OFFICE.
NATIONAL NUCLEAR SECURITY ADMINISTRATION SERVICE CENTER.	DIRECTOR, OFFICE OF FIELD FINANCIAL MANAGEMENT.
OFFICE OF SECURITY	DEPUTY DIRECTOR, OFFICE OF SECURITY AFFAIRS.
OFFICE OF HUMAN CAPITAL MANAGEMENT	DIRECTOR, OFFICE OF HEADQUARTERS AND EXECUTIVE HUMAN RESOURCES.
OFFICE OF MANAGEMENT	DIRECTOR, OFFICE OF ADMINISTRATION.
	DEPUTY DIRECTOR, OFFICE OF MANAGEMENT, BUDGET AND EVALUATION/DEPUTY CHIEF FINANCE OFFICER.
OFFICE OF THE CHIEF FINANCIAL OFFICER	DIRECTOR OFFICE OF BUDGET.
	DIRECTOR, FINANCIAL POLICY.
OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY.	DIRECTOR, OFFICE OF ENERGY ASSURANCE.
OFFICE OF SAFEGUARDS AND SECURITY EVALUATIONS	DEPUTY DIRECTOR, OFFICE OF INDEPENDENT OVERSIGHT AND PERFORMANCE.
OFFICE OF SECURITY AND SAFETY PERFORMANCE ASSURANCE.	DIRECTOR, OFFICE OF SAFEGUARDS AND SECURITY EVALUATIONS.
	DIRECTOR, OFFICE OF HEADQUARTERS SECURITY OPERATIONS.
	DEPUTY DIRECTOR, OFFICE OF HEADQUARTERS SECURITY OPERATIONS.
	DIRECTOR, OFFICE OF SECURITY AND SAFETY PERFORMANCE.
	DIRECTOR, OFFICE OF INDEPENDENT OVERSIGHT AND PERFORMANCE.
	DIRECTOR, OFFICE OF SAFEGUARDS AND SECURITY TRAINING.
ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY.	MANAGER, GOLDEN FIELD OFFICE.
	PROGRAM MANAGER.
	PROGRAM MANAGER.
	DIRECTOR, REGIONAL OFFICE AND DEPLOYMENT OPERATIONS PROGRAM MANAGER.
ASSISTANT SECRETARY FOR ENVIRONMENT, SAFETY AND HEALTH.	DIRECTOR OFFICE OF NUCLEAR SAFETY, POLICY AND STANDARDS.
	DIRECTOR OFFICE OF REGULATORY LIAISON.
ENERGY INFORMATION ADMINISTRATION	DIRECTOR, OFFICE OF OIL AND GAS.
	DIRECTOR, ENERGY MARKETS AND CONTINGENCY INFORMATION DIVISION.
	DIRECTOR, NATURAL GAS DIVISION.
	DIRECTOR, PETROLEUM DIVISION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, OFFICE OF INTEGRATION ANALYSIS AND FORECASTING.
	DIRECTOR, ELECTRICAL POWER DIVISION.
	DIRECTOR, COAL AND ELECTRIC POWER DIVISION.
	DIRECTOR, COAL, NUCLEAR AND RENEWABLES DIVISION.
OFFICE OF ENVIRONMENTAL MANAGEMENT	SCIENCE ADVISOR.
	DIRECTOR, OFFICE OF SAFEGUARD AND SECURITY/EMERGENCY MANAGEMENT.
ENVIRONMENTAL MANAGEMENT CONSOLIDATED BUSINESS CENTER.	DEPUTY MANAGER.
OFFICE OF SCIENCE	DIRECTOR HIGH ENERGY PHYSICS DIVISION.
	SITE OFFICE MANAGER, FERMI.
	ASSOCIATE DIRECTOR, OFFICE OF RESOURCE MANAGEMENT.
	DIRECTOR, HEALTH EFFECTS AND LIFE SCIENTIST RESEARCH DIVISION.
	DIRECTOR, FINANCIAL MANAGEMENT DIVISION.
	DIRECTOR, FACILITIES DIVISION.
OFFICE OF FOSSIL ENERGY	DIRECTOR, MATERIALS PARTNERSHIPS RESEARCH CENTER.
ALBUQUERQUE OPERATIONS OFFICE	DIRECTOR TRANSPORTATION SAFEGUARDS DIVISION.
	DIRECTOR, WEAPONS PROGRAMS DIVISION.
	ASSISTANT MANAGER FOR MANAGEMENT AND ADMINISTRATION.
	CARLSBAD AREA OFFICE MANAGER.
CHICAGO OPERATIONS OFFICE	ASSISTANT MANAGER, ACQUISITION AND ASSISTANCE.
	DEPUTY MANAGER, CHICAGO OFFICE.
	DIRECTOR, NEW BRUNSWICK LABORATORY.
OHIO FIELD OFFICE	MANAGER OHIO FIELD OFFICE.
	DEPUTY MANAGER, OHIO FIELD OFFICE.
OAKLAND OPERATIONS OFFICE	ASSOCIATE MANAGER FOR SITE MANAGEMENT.
OAK RIDGE OPERATIONS OFFICE	ASSISTANT MANAGER FOR ADMINISTRATION.
	CHIEF FINANCIAL OFFICER.
ROCKY FLATS OFFICE	ASSISTANT MANAGER FOR ADMINISTRATION AND TRANSITION.
OFFICE OF GENERAL COUNSEL	ASSISTANT GENERAL COUNSEL FOR GENERAL LAW.
OFFICE OF HEARINGS AND APPEALS	DEPUTY DIRECTOR FOR LEGAL ANALYSIS.
	DEPUTY DIRECTOR FOR FINANCIAL ANALYSIS.
	DEPUTY DIRECTOR FOR ECONOMIC ANALYSIS.
OFFICE OF INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	COUNSEL TO THE INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR RESOURCE MANAGEMENT.
	PRINCIPAL DEPUTY INSPECTOR GENERAL.
	DEPUTY INSPECTOR GENERAL FOR INSPECTIONS.
	MANAGER, CAPITAL REGIONAL AUDIT OFFICE.
	ASSISTANT INSPECTOR GENERAL FOR INSPECTIONS.
	PRINCIPAL DEPUTY INSPECTOR GENERAL.
	DEPUTY INSPECTOR GENERAL FOR AUDIT SERVICES.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT SERVICES.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT PLANNING AND ADMINISTRATION.
	DIRECTOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION AUDITS DIVISION.
	DIRECTOR, ENERGY, SCIENCE AND ENVIRONMENTAL AUDITS DIVISION.
	DEPUTY INSPECTOR GENERAL FOR INVESTIGATIONS AND INSPECTIONS.
	ASSISTANT INSPECTOR GENERAL FOR PERFORMANCE AUDITS.
	DIRECTOR, FINANCIAL, TECHNOLOGY AND CORPORATE AUDITS DIVISION.
	DIRECTOR, ENERGY, SCIENCE AND ENVIRONMENTAL AUDITS DIVISION.
	ASSISTANT INSPECTOR GENERAL FOR PERFORMANCE AUDITS.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT PLANNING AND ADMINISTRATION.
	ASSISTANT INSPECTOR GENERAL FOR FINANCIAL, TECHNOLOGY AND CORPORATE AUDITS.
OFFICE OF NUCLEAR ENERGY, SCIENCE AND TECHNOLOGY	ASSOCIATE DIRECTOR FOR NUCLEAR FACILITIES MANAGEMENT.
WESTERN AREA POWER ADMINISTRATION	CHIEF OPERATING OFFICER.
	CHIEF FINANCIAL OFFICER.
ENVIRONMENTAL PROTECTION AGENCY:	
OFFICE OF HOMELAND SECURITY	DIRECTOR, OFFICE OF HOMELAND SECURITY.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE OF EXECUTIVE SUPPORT	DIRECTOR, OFFICE OF EXECUTIVE SUPPORT.
OFFICE OF REGULATORY POLICY AND MANAGEMENT	DIRECTOR, OFFICE OF REGULATORY POLICY AND MANAGEMENT.
OFFICE OF THE CHIEF FINANCIAL OFFICER	ASSOCIATE CHIEF FINANCIAL OFFICER.
	DEPUTY CHIEF FINANCIAL OFFICER.
OFFICE OF PLANNING, ANALYSIS AND ACCOUNTABILITY	DIRECTOR, OFFICE OF PLANNING, ANALYSIS AND ACCOUNTABILITY.
	DEPUTY DIRECTOR, OFFICE OF PLANNING, ANALYSIS AND ACCOUNTABILITY.
OFFICE OF ENTERPRISE TECHNOLOGY AND INNOVATION	DIRECTOR, OFFICE OF ENTERPRISE TECHNOLOGY AND INNOVATION.
	DIRECTOR, OFFICE OF BUDGET.
	DIRECTOR, SYSTEMS PLANNING AND INTEGRATION STAFF.
FINANCIAL MANAGEMENT DIVISION	DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT.
FINANCIAL SERVICES DIVISION	DIRECTOR, OFFICE OF FINANCIAL SERVICES.
OFFICE OF ENVIRONMENTAL INFORMATION	CHIEF TECHNOLOGY OFFICER.
OFFICE OF PLANNING, RESOURCES AND OUTREACH	DIRECTOR, OFFICE OF PLANNING, RESOURCES AND OUTREACH.
OFFICE OF INFORMATION ANALYSIS AND ACCESS	DEPUTY DIRECTOR, OFFICE OF INFORMATION ANALYSIS AND ACCESS.
OFFICE OF TECHNICAL OPERATIONS AND PLANNING	DEPUTY DIRECTOR, OFFICE OF TECHNICAL OPERATIONS AND PLANNING.
	DIRECTOR, OFFICE OF TECHNICAL OPERATIONS AND PLANNING.
NATIONAL TECHNOLOGY SERVICES DIVISION	DIRECTOR, NATIONAL TECHNOLOGY SERVICES DIVISION.
OFFICE OF THE ASSISTANT ADMINISTRATOR FOR ADMINISTRATION AND RESOURCES MANAGEMENT.	DEPUTY ASSISTANT ADMINISTRATOR FOR ADMINISTRATION AND RESOURCES MANAGEMENT.
	PRINCIPAL DEPUTY ASSISTANT ADMINISTRATOR FOR ADMINISTRATION AND RESOURCES MANAGEMENT.
	SENIOR POLICY ADVISOR.
OFFICE OF POLICY AND RESOURCE MANAGEMENT	DIRECTOR, OFFICE OF POLICY AND RESOURCE MANAGEMENT.
OFFICE OF ADMINISTRATIVE SERVICES	DIRECTOR, OFFICE OF ADMINISTRATIVE SERVICES.
	DEPUTY DIRECTOR, OFFICE OF ADMINISTRATIVE SERVICES.
	DIRECTOR, FACILITIES MANAGEMENT AND SERVICES DIVISION.
	DIRECTOR, SAFETY, HEALTH AND ENVIRONMENTAL MANAGEMENT DIVISION.
OFFICE OF HUMAN RESOURCES	DIRECTOR, OFFICE OF HUMAN RESOURCES.
	DEPUTY DIRECTOR, OFFICE OF HUMAN RESOURCES.
	DIRECTOR, EXECUTIVE RESOURCES DIVISION.
OFFICE OF ACQUISITION MANAGEMENT	DIRECTOR, SUPERFUND/RESOURCE CONSERVATION AND RECOVERY ACT REGIONAL PROCUREMENT OPERATIONS/DIVISION.
	DIRECTOR, OFFICE OF ACQUISITION MANAGEMENT.
	DEPUTY DIRECTOR, OFFICE OF ACQUISITION MANAGEMENT
OFFICE OF GRANTS AND DEBARMENT	DIRECTOR, GRANTS ADMINISTRATION DIVISION.
	DIRECTOR, OFFICE OF GRANTS AND DEBARMENT.
OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT—CINCINNATI, OHIO.	DIRECTOR, OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT.
OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT—RESEARCH TRIANGLE PARK, NORTH CAROLINA.	DIRECTOR, OFFICE OF ADMINISTRATION AND RESEARCH MANAGEMENT.
FEDERAL FACILITIES ENFORCEMENT OFFICE	DIRECTOR, FEDERAL FACILITIES ENFORCEMENT OFFICE.
OFFICE OF ENVIRONMENTAL JUSTICE	DIRECTOR, OFFICE OF ENVIRONMENTAL JUSTICE.
OFFICE OF COMPLIANCE	DIRECTOR, OFFICE OF COMPLIANCE.
	DIRECTOR, ENFORCEMENT TARGETING AND DATA DIVISION.
	DIRECTOR, COMPLIANCE ASSESSMENT AND MEDIA PROGRAMS DIVISION.
	DEPUTY DIRECTOR, OFFICE OF COMPLIANCE.
	DIRECTOR, NATIONAL ENFORCEMENT TRAINING INSTITUTE.
OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS AND TRAINING.	DIRECTOR, OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS AND TRAINING.
	DIRECTOR, CRIMINAL INVESTIGATION DIVISION.
	DEPUTY DIRECTOR, OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS TRAINING.
	DIRECTOR, NATIONAL ENFORCEMENT INVESTIGATIONS CENTER.
OFFICE OF FEDERAL ACTIVITIES	DIRECTOR, INTERNATIONAL COMPLIANCE ASSURANCE DIVISION.
OFFICE OF CIVIL ENFORCEMENT	DIRECTOR, OFFICE OF CIVIL ENFORCEMENT.
	DEPUTY DIRECTOR, OFFICE OF CIVIL ENFORCEMENT.
	DIRECTOR, AIR ENFORCEMENT DIVISION.
OFFICE OF SITE REMEDIATION ENFORCEMENT	DIRECTOR, OFFICE OF SITE REMEDIATION ENFORCEMENT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY DIRECTOR, OFFICE OF SITE REMEDIATION ENFORCEMENT.
OFFICE OF WESTERN HEMISPHERE AND BILATERAL AFFAIRS.	DIRECTOR, WESTERN HEMISPHERE AND BILATERAL AFFAIRS.
OFFICE OF THE INSPECTOR GENERAL	SENIOR SCIENCE ADVISOR.
	DEPUTY INSPECTOR GENERAL.
OFFICE OF COUNSEL	COUNSEL TO THE INSPECTOR GENERAL.
OFFICE OF AUDIT	ASSISTANT INSPECTOR GENERAL FOR AUDIT.
OFFICE OF INVESTIGATIONS	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
OFFICE OF PROGRAM EVALUATION	ASSISTANT INSPECTOR GENERAL FOR PROGRAM EVALUATION.
OFFICE OF HUMAN CAPITAL	ASSISTANT INSPECTOR GENERAL FOR HUMAN CAPITAL.
OFFICE OF MISSION SYSTEMS	ASSISTANT INSPECTOR GENERAL FOR MISSION SYSTEMS.
OFFICE OF PLANNING, ANALYSIS AND RESULTS	ASSISTANT INSPECTOR GENERAL FOR PLANNING, ANALYSIS AND RESULTS.
OFFICE OF CONGRESSIONAL AND PUBLIC LIAISON	ASSISTANT INSPECTOR GENERAL FOR CONGRESSIONAL AND PUBLIC LIAISON.
OFFICE OF GROUND WATER AND DRINKING WATER	DIRECTOR, STANDARDS AND RISK MANAGEMENT DIVISION.
	DIRECTOR, DRINKING WATER PROTECTION DIVISION.
OFFICE OF SCIENCE AND TECHNOLOGY	DIRECTOR, STANDARDS AND HEALTH PROTECTION.
	DIRECTOR, HEALTH AND ECOLOGICAL CRITERIA DIVISION.
	DIRECTOR, ENGINEERING AND ANALYSIS DIVISION.
OFFICE OF WASTE WATER MANAGEMENT	DIRECTOR, MUNICIPAL SUPPORT DIVISION.
	DIRECTOR, WATER PERMITS DIVISION.
OFFICE OF WETLANDS, OCEANS AND WATERSHEDS	DIRECTOR, ASSESSMENT AND WATERSHED PROTECTION DIVISION.
	DIRECTOR, OCEANS AND COASTAL PROTECTION DIVISION.
	DIRECTOR, WETLANDS DIVISION.
OFFICE OF THE ASSISANT ADMINISTRATOR FOR SOLID WASTE AND EMERGENCY RESPONSE.	DIRECTOR, LAND REVITALIZATION STAFF.
FEDERAL FACILITIES RESTORATION AND REUSE OFFICE	DIRECTOR, FEDERAL FACILITIES RESTORATION AND REUSE OFFICE.
OFFICE OF EMERGENCY MANAGEMENT	DEPUTY DIRECTOR, OFFICE OF EMERGENCY RESPONSE.
OFFICE OF BROWNFIELDS CLEANUP AND REDEVELOPMENT	DIRECTOR, OFFICE OF BROWNFIELDS CLEANUP AND REDEVELOPMENT.
OFFICE OF SUPERFUND REMEDIATION AND TECHNOLOGY INNOVATION.	DIRECTOR, ASSESSMENT AND REMEDIATION DIVISION.
	DIRECTOR, RESOURCES MANAGEMENT DIVISION.
OFFICE OF SOLID WASTE	DIRECTOR, HAZARDOUS WASTE IDENTIFICATION DIVISION.
	DIRECTOR, HAZARDOUS WASTE MINIMIZATION AND MANAGEMENT DIVISION.
	DIRECTOR, ECONOMICS, METHODS AND RISK ANALYSIS DIVISION.
	SENIOR ADVISOR FOR REVITALIZATION AND LABORATORY CAPACITY.
OFFICE OF THE ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION.	SENIOR ADVISOR.
	DIRECTOR, OFFICE OF POLICY ANALYSIS AND REVIEW.
	SENIOR POLICY ADVISOR (AGRICULTURE).
OFFICE OF AIR QUALITY PLANNING AND STANDARDS	DIRECTOR, EMISSION STANDARDS DIVISION.
	DIRECTOR, AIR QUALITY POLICY DIVISION.
	DIRECTOR, HEALTH AND ENVIRONMENTAL IMPACTS DIVISION.
	DIRECTOR, SECTOR POLICIES AND PROGRAMS DIVISION.
	DIRECTOR, AIR QUALITY STRATEGIES AND STANDARDS DIVISION.
	DIRECTOR, EMISSIONS MONITORING AND ANALYSIS DIVISION.
	DIRECTOR, INFORMATION TRANSFER AND PROGRAM INTEGRATION DIVISION.
	DEPUTY DIRECTOR, OFFICE OF AIR QUALITY PLANNING AND STANDARDS.
OFFICE OF TRANSPORTATION AND AIR QUALITY	DIRECTOR, ADVANCED TECHNOLOGY DIVISION.
	DIRECTOR, TRANSPORTATION AND REGIONAL PROGRAMS DIVISION.
	DIRECTOR, ASSESSMENT AND STANDARDS DIVISION.
	DIRECTOR, CERTIFICATION AND COMPLIANCE DIVISION.
OFFICE OF RADIATION AND INDOOR AIR	DIRECTOR, INDOOR ENVIRONMENTS DIVISION.
	DEPUTY DIRECTOR, OFFICE OF RADIATION AND INDOOR AIR.
	DIRECTOR, RADIATION PROTECTION DIVISION.
OFFICE OF ATMOSPHERIC PROGRAMS	DIRECTOR, CLEAN AIR MARKETS DIVISION.
	DIRECTOR, ATMOSPHERIC POLLUTION PREVENTION DIVISION.
OFFICE OF THE ASSISTANT ADMINISTRATOR FOR PREVENTION PESTICIDES AND TOXICS SUBSTANCES.	SPECIAL ASSISTANT TO THE ASSISTANT ADMINISTRATOR.
OFFICE OF PROGRAM MANAGEMENT OPERATIONS	ASSOCIATE ASSISTANT ADMINISTRATOR (MANAGEMENT).

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE OF PESTICIDE PROGRAMS	DIRECTOR, REGISTRATION DIVISION.
	DIRECTOR, BIOLOGICAL AND ECONOMIC ANALYSIS DIVISION.
	DIRECTOR, SPECIAL REVIEW AND REREGISTRATION DIVISION.
	DIRECTOR, ENVIRONMENTAL FATE AND EFFECTS DIVISION.
	DIRECTOR, HEALTH EFFECTS DIVISION.
	DIRECTOR, ANTIMICROBIALS DIVISION.
	DIRECTOR, FIELD AND EXTERNAL AFFAIRS DIVISION.
	DIRECTOR, INFORMATION RESOURCES AND SERVICES DIVISION.
	DIRECTOR, BIOPESTICIDES AND POLLUTION PREVENTION DIVISION.
	DEPUTY DIRECTOR, OFFICE OF PESTICIDES PROGRAMS (MANAGEMENT).
OFFICE OF POLLUTION PREVENTION AND TOXICS	DIRECTOR, ECONOMICS EXPOSURE AND TECHNOLOGY DIVISION.
	DIRECTOR, CHEMICAL CONTROL DIVISION.
	DIRECTOR, INFORMATION MANAGEMENT DIVISION.
	DIRECTOR, POLLUTION PREVENTION DIVISION.
	DIRECTOR, NATIONAL PROGRAM CHEMICALS DIVISION.
	DIRECTOR, RISK ASSESSMENT DIVISION.
	DIRECTOR, ENVIRONMENTAL ASSISTANCE DIVISION.
OFFICE OF SCIENCE COORDINATION AND POLICY	DIRECTOR, OFFICE OF SCIENCE COORDINATION AND POLICY.
OFFICE OF THE ASSISTANT ADMINISTRATOR FOR RESEARCH AND DEVELOPMENT.	DIRECTOR FOR SUSTAINABLE DEVELOPMENT.
OFFICE OF THE SCIENCE ADVISOR	CHIEF SCIENTIST TO THE SCIENCE ADVISOR.
NATIONAL HOMELAND SECURITY RESEARCH CENTER	DIRECTOR, NATIONAL HOMELAND SECURITY RESEARCH CENTER.
OFFICE OF RESOURCES MANAGEMENT AND ADMINISTRATION.	DIRECTOR, OFFICE OF RESOURCES MANAGEMENT AND ADMINISTRATION.
OFFICE OF SCIENCE POLICY	DIRECTOR, OFFICE OF SCIENCE POLICY.
NATIONAL HEALTH AND ENVIRONMENTAL EFFECTS RESEARCH LABORATORY.	DIRECTOR, NATIONAL HEALTH AND ENVIRONMENTAL EFFECTS RESEARCH LABORATORY.
	ASSOCIATE DIRECTOR FOR HEALTH.
	ASSOCIATE DIRECTOR FOR ECOLOGY.
	DEPUTY DIRECTOR FOR MANAGEMENT.
ATLANTIC ECOLOGY DIVISION	DIRECTOR, ATLANTIC ECOLOGY DIVISION.
WESTERN ECOLOGY DIVISION	DIRECTOR, WESTERN ECOLOGY DIVISION CORVALLIS.
GULF ECOLOGY DIVISION	DIRECTOR, GULF ECOLOGY DIVISION.
MID-CONTINENT ECOLOGY DIVISION	DIRECTOR, MID-CONTINENT ECOLOGY DIVISION.
EXPERIMENTAL TOXICOLOGY DIVISION	DIRECTOR, EXPERIMENTAL TOXICOLOGY DIVISION.
HUMAN STUDIES DIVISION	DIRECTOR, HUMAN STUDIES DIVISION.
NATIONAL EXPOSURE RESEARCH LABORATORY—NERL	DIRECTOR, NATIONAL EXPOSURE RESEARCH LABORATORY—RESEARCH TRIANGLE PARK.
	DEPUTY DIRECTOR FOR MANAGEMENT (NATIONAL EXPOSURE RESEARCH LABORTORY)—RESEARCH TRIANGEL PARK.
	DIRECTOR, MICROBIOLOGICAL AND CHEMICAL EXPOSURE ASSESSMENT RESEARCH DIVISION.
ENVIRONMENTAL SCIENCES DIVISION	DIRECTOR ENVIRONMENTAL SCIENCES DIVISION.
ECOSYSTEMS RESEARCH DIVISION	DIRECTOR ECOSYSTEMS RESEARCH DIVISION ATHENS.
HUMAN EXPOSURE AND ATMOSPHERIC SCIENCES DIVISION	DIRECTOR, HUMAN EXPOSURE AND ATMOSPHERIC SCIENCE DIVISION.
NATIONAL RISK MANAGEMENT RESEARCH LABORATORY—NRMRL.	DIRECTOR, NATIONAL RISK MANAGEMENT RESEARCH LABORATORY.
	DEPUTY DIRECTOR FOR MANAGEMENT.
AIR POLLUTION PREVENTION AND CONTROL DIVISION	DIRECTOR, AIR POLLUTION PREVENTION AND CONTROL DIVISION.
GROUND WATER ECOSYTEMS RESTORATION DIVISION	DIRECTOR, GROUND WATER ECOSYTEMS RESTORATION DIVISION.
WATER SUPPLY AND WATER RESOURCES DIVISION	DIRECTOR, WATER SUPPLY AND WATER RESOURCES DIVISION.
NATIONAL CENTER FOR ENVIRONMENTAL ASSESSMENT	DIRECTOR NATIONAL CENTER FOR ENVIRONMENTAL ASSESSMENT.
	ASSOCIATE DIRECTOR FOR ECOLOGY (NATIONAL CENTER FOR ENVIRONMENTAL ASSESSMENT).
	DEPUTY DIRECTOR FOR MANAGEMENT.
NATIONAL CENTER FOR ENVIRONMENTAL ASSESSMENT—WASHINGTON, DC.	DIRECTOR, NATIONAL CENTER FOR ENVIRONMENTAL ASSESSMENT.
NATIONAL CENTER FOR ENVIRONMENTAL ASSESSMENT—RESEARCH TRIANGLE PARK, NORTH CAROLINA.	DIRECTOR NATIONAL CENTER ENVIRONMENTAL ASSESSMENT.
NATIONAL CENTER FOR ENVIRONMENTAL ASSESSMENT—CINCINNATI, OHIO.	DIRECTOR, NATIONAL CENTER FOR ENVIRONMENTAL ASSESSMENT.
NATIONAL CENTER FOR ENVIRONMENTAL RESEARCH	DEPUTY DIRECTOR FOR MANAGEMENT.
	DIRECTOR, ENVIRONMENTAL ENGINEER RESEARCH DIVISION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, NATIONAL CENTER FOR ENVIRONMENTAL RESEARCH.
	DIRECTOR, ENVIRONMENTAL SCIENCES RESEARCH DIVISION.
REGION 1—BOSTON, MASSACHUSETTS	DIRECTOR, OFFICE OF ECOSYSTEM PROTECTION.
	DIRECTOR, OFFICE OF SITE REMEDIATION RESTORATION.
	DIRECTOR, OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT.
	DIRECTOR, OFFICE OF ENVIRONMENTAL STEWARDSHIP.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
REGION 2—NEW YORK, NEW YORK	ASSISTANT REGIONAL ADMINISTRATOR FOR POLICY AND MANAGEMENT.
	DIRECTOR, OFFICE OF EMERGENCY AND REMEDIAL RESPONSE.
	DIRECTOR, ENVIRONMENTAL PLANNING AND PROTECTION DIVISION.
	DIRECTOR, ENVIRONMENTAL SCIENCE AND ASSESSMENT DIVISION.
	DIRECTOR, CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION.
	DIRECTOR, ENFORCEMENT AND COMPLIANCE ASSISTANCE DIVISION.
	SENIOR ADVISOR.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
REGION 3—PHILADELPHIA, PENNSYLVANIA	DIRECTOR, WATER PROTECTION DIVISION.
	DIRECTOR, ENVIRONMENTAL ASSESSMENT AND INNOVATION DIVISION.
	ASSISTANT REGIONAL ADMINISTRATOR FOR POLICY AND MANAGEMENT.
	DIRECTOR, CHESAPEAKE BAY PROGRAM OFFICE.
	DIRECTOR, AIR PROTECTION DIVISION.
	DIRECTOR, HAZARDOUS SITE CLEANUP DIVISION.
	DIRECTOR, WASTE AND CHEMICAL MANAGEMENT DIVISION.
	DIRECTOR, ENVIRONMENTAL ASSESSMENT AND INNOVATION DIVISION.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
REGION 4—ATLANTA, GEORGIA	DIRECTOR, WATER MANAGEMENT DIVISION.
	ASSISTANT REGIONAL ADMINISTRATOR FOR POLICY AND MANAGEMENT.
	DIRECTOR, WASTE MANAGEMENT DIVISION.
	DIRECTOR, SCIENCE AND ECOSYSTEM SUPPORT DIVISION.
	DIRECTOR, AIR, PESTICIDES AND TOXICS MANAGEMENT DIVISION.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
REGION 5—CHICAGO, ILLINOIS	DIRECTOR, AIR AND RADIATION DIVISION.
	DIRECTOR, WATER DIVISION.
	DIRECTOR, WASTE, PESTICIDES AND TOXICS DIVISION.
	DIRECTOR, GREAT LAKES NATIONAL PROGRAM OFFICE.
	DIRECTOR, SUPERFUND DIVISION.
	ASSISTANT REGIONAL ADMINISTRATOR FOR RESOURCES MANAGEMENT.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
REGION 6—DALLAS, TEXAS	ASSISTANT REGIONAL ADMINISTRATOR FOR MANAGEMENT.
	DIRECTOR, COMPLIANCE ASSURANCE AND ENFORCEMENT DIVISION.
	DIRECTOR, SUPERFUND DIVISION.
	DIRECTOR, WATER QUALITY PROTECTION DIVISION.
	DIRECTOR, MULTIMEDIA PLANNING AND PERMITTING DIVISION.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
REGION 7—KANSAS CITY, KANSAS	ASSISTANT REGIONAL ADMINISTRATOR FOR POLICY AND MANAGEMENT.
	DIRECTOR, SUPERFUND DIVISION.
	DIRECTOR, AIR, RESOURCES CONVERSATION AND RECOVERY ACT AND TOXICS DIVISION.
	DIRECTOR, WATER WETLANDS AND PESTICIDES DIVISON.
	DIRECTOR, ENVIRONMENTAL SERVICES DIVISION.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
REGION 8—DENVER, COLORADO	ASSISTANT REGIONAL ADMINISTRATOR FOR ECOSYSTEMS PROTECTION AND REMEDIATION.
	ASSISTANT REGIONAL ADMINISTRATOR FOR OFFICE OF PARTNERSHIPS AND REGULATORY ASSISTANCE.
	ASSISTANT REGIONAL ADMINISTRATOR FOR TECHNICAL AND MANAGEMENT SERVICES.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
REGION 9—SAN FRANCISCO, CALIFORNIA	DIRECTOR, WATER MANAGEMENT DIVISION.
	DIRECTOR, AIR DIVISION.
	ASSISTANT REGIONAL ADMINISTRATOR FOR POLICY AND MANAGEMENT.
	DIRECTOR, OFFICE OF PLANNING AND PUBLIC AFFAIRS.
	DIRECTOR, SUPERFUND DIVISION.
	DIRECTOR, CROSS MEDIA DIVISION.
	REGIONAL CHIEF INFORMATION OFFICER (SENIOR ADVISOR).
	DIRECTOR, WASTE MANAGEMENT DIVISION.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
REGION 10—SEATTLE, WASHINGTON	ASSISTANT REGIONAL ADMINISTRATOR FOR MANAGEMENT PROGRAMS.
	DIRECTOR, OFFICE OF WATER.
	DIRECTOR, OFFICE OF ECOSYSTEMS AND COMMUNITIES.
	DIRECTOR, OFFICE OF ENVIRONMENTAL CLEANUP.
	DIRECTOR, OFFICE OF COMPLIANCE.
	DIRECTOR, OFFICE OF AIR, WASTE AND TOXICS.
OFFICE OF REGIONAL COUNSEL	REGIONAL COUNSEL.
EQUAL EMPLOYMENT OPPORTUNITY COMMISSION:	
OFFICE OF THE INSPECTOR GENERAL	INSPECTOR GENERAL.
OFFICE OF FIELD PROGRAMS	DISTRICT DIRECTOR—(BALTIMORE).
	DISTRICT DIRECTOR—(NEW YORK).
	DISTRICT DIRECTOR—(ATLANTA).
	DISTRICT DIRECTOR—(HOUSTON).
	DISTRICT DIRECTOR—(DETROIT).
	DISTRICT DIRECTOR—(SAN FRANCISCO).
	DISTRICT DIRECTOR—(DALLAS).
	DISTRICT DIRECTOR—(CHICAGO).
	DISTRICT DIRECTOR—(ST LOUIS).
	DISTRICT DIRECTOR—(MIAMI).
	DISTRICT DIRECTOR—(INDIANAPOLIS).
	DISTRICT DIRECTOR—(MEMPHIS).
	DISTRICT DIRECTOR—(LOS ANGELES).
	DISTRICT DIRECTOR—(DENVER).
	DISTRICT DIRECTOR—(BIRMINGHAM).
	DISTRICT DIRECTOR—(NEW ORLEANS).
	DISTRICT DIRECTOR—(PHOENIX).
	DISTRICT DIRECTOR—(SAN ANTONIO).
	DISTRICT DIRECTOR—(CHARLOTTE).
	NATIONAL MEDIATION EXECUTIVE ADVISOR.
	DISTRICT DIRECTOR—(CLEVELAND).
	DISTRICT DIRECTOR—(PHILADELPHIA).
	DISTRICT DIRECTOR—(MILWAUKEE).
	PROGRAM MANAGER.
FIELD MANAGEMENT PROGRAMS	DIRECTOR FIELD MANAGEMENT PROGRAMS.
FIELD COORDINATION PROGRAMS	DIRECTOR, FIELD COORDINATION PROGRAMS.
FEDERAL COMMUNICATIONS COMMISSION:	
OFFICE OF INSPECTOR GENERAL	INSPECTOR GENERAL.
OFFICE OF ENGINEERING AND TECHNOLOGY	ASSOCIATE OFFICE CHIEF.
FEDERAL ENERGY REGULATORY COMMISSION:	
OFFICE OF ENERGY PROJECTS	DIRECTOR DIVISION OF DAM SAFETY AND INSPECTIONS.
OFFICE OF MARKET OVERSIGHT AND INVESTIGATIONS	DIRECTOR, FINANCIAL AUDITS.
	DIRECTOR, OPERATIONAL AUDITS.
	CHIEF ACCOUNTANT.
	DIRECTOR, FINANCIAL AUDITS.
	CHIEF ACCOUNTANT AND DIRECTOR, DIVISION OF AUDITS AND ACCOUNTING.
OFFICE OF ENFORCEMENT	CHIEF ACCOUNTANT AND DIRECTOR, DIVISION OF FINANCIAL REGULATIONS.
	CHIEF, REGULATORY ACCOUNTING BRANCH.
FEDERAL LABOR RELATIONS AUTHORITY:	
OFFICE OF THE CHAIRMAN.	SOLICITOR.
	DIRECTOR, HUMAN RESOURCES, POLICY AND PERFORMANCE MANAGEMENT.
	CHIEF COUNSEL.
	SENIOR ADVISOR.
OFFICE OF MEMBER	CHIEF COUNSEL.
OFFICE OF MEMBER	CHIEF COUNSEL.
FEDERAL SERVICE IMPASSES PANEL	EXECUTIVE DIRECTOR, FEDERAL SERVICE IMPASSES PANEL.
OFFICE OF THE EXECUTIVE DIRECTOR	EXECUTIVE DIRECTOR.
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL.
REGIONAL OFFICES	REGIONAL DIRECTOR—WASHINGTON, D.C.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	REGIONAL DIRECTOR—BOSTON.
	REGIONAL DIRECTOR—ATLANTA.
	REGIONAL DIRECTOR—DALLAS.
	REGIONAL DIRECTOR—SAN FRANCISCO.
FEDERAL MARITIME COMMISSION:	
OFFICE OF THE SECRETARY	SECRETARY.
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL FOR REPORTS OPINIONS AND DECISIONS.
BUREAU OF CERTIFICATION AND LICENSING	DIRECTOR, BUREAU OF CERTIFICATION AND LICENSING.
BUREAU OF TRADE ANALYSIS	DIRECTOR, BUREAU OF TRADE ANALYSIS.
BUREAU OF ENFORCEMENT	DEPUTY DIRECTOR BUREAU OF ENFORCEMENT.
	DIRECTOR BUREAU OF ENFORCEMENT.
OFFICE OF ADMINISTRATION	DIRECTOR OF ADMINISTRATION.
FEDERAL MEDIATION AND CONCILIATION SERVICE:	
OFFICE OF THE DIRECTOR	CHIEF OF STAFF.
	NATIONAL REPRESENTATIVE.
FEDERAL RETIREMENT THRIFT INVESTMENT BOARD:	
FEDERAL RETIREMENT THRIFT INVESTMENT BOARD	DIRECTOR OF INVESTMENTS.
	DIRECTOR OF CONTRACTS AND ADMINISTRATION.
	CHIEF INFORMATION OFFICER.
	DIRECTOR OF ACCOUNTING.
	ASSOCIATE DIRECTOR OF PUBLICATIONS.
	ASSOCIATE GENERAL COUNSEL.
	DEPUTY DIRECTOR OF EXTERNAL AFFAIRS.
	DEPUTY DIRECTOR OF BENEFITS AND INVESTMENTS.
	CHIEF FINANCIAL OFFICER.
	DEPUTY DIRECTOR OF AUTOMATED SYSTEMS.
	DIRECTOR OF PARTICIPANT SERVICES.
	CHIEF INVESTMENT OFFICER.
FEDERAL TRADE COMMISSION:	
OFFICE OF THE INSPECTOR GENERAL	INSPECTOR GENERAL.
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL FOR POLICY STUDIES.
OFFICE OF EXECUTIVE DIRECTOR	CHIEF INFORMATION OFFICER.
	DEPUTY EXECUTIVE DIRECTOR.
BUREAU OF CONSUMER PROTECTION	ASSOCIATE DIRECTOR FOR INTERNATIONAL DIVISION OF CONSUMER PROTECTION.
GENERAL SERVICES ADMINISTRATION:	
OFFICE OF CITIZEN SERVICES AND COMMUNICATIONS	DIRECTOR FEDERAL CITIZEN INFORMATION CENTER.
OFFICE OF THE CHIEF HUMAN CAPITAL OFFICER	CHIEF HUMAN CAPITAL OFFICER.
	CHIEF INFORMATION OFFICER.
	DIRECTOR OF HUMAN RESOURCES SERVICES.
	DEPUTY CHIEF INFORMATION OFFICER.
	DIRECTOR OF HUMAN CAPITAL MANAGEMENT.
OFFICE OF GOVERNMENTWIDE POLICY	DEPUTY ASSOCIATE ADMINISTRATOR FOR ACQUISITION POLICY.
	DEPUTY ASSOCIATE ADMINISTRATOR FOR REAL PROPERTY.
	DIRECTOR OF INTERGOVERMENTAL SOLUTIONS.
	DEPUTY ASSOCIATE ADMINISTRATOR FOR TRANSPORTATION AND PERSONAL PROPERTY.
	DEPUTY ASSOCIATE ADMINISTRATOR FOR ELECTRONIC GOVERNMENT AND TECHNOLOGY.
OFFICE OF THE CHIEF ACQUISITION OFFICER	DEPUTY CHIEF ACQUISITION OFFICER.
	DIRECTOR OF ACQUISITION SYSTEMS.
OFFICE OF INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR AUDITING.
	DEPUTY INSPECTOR GENERAL.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITING.
	COUNSEL TO THE INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
OFFICE OF THE CHIEF FINANCIAL OFFICER	DEPUTY CHIEF FINANCIAL OFFICER FOR FINANCIAL POLICY AND OPERATIONS.
	DIRECTOR OF BUDGET.
	CHIEF FINANCIAL OFFICER.
	DIRECTOR OF FINANCIAL MANAGEMENT SYSTEMS.
	EXECUTIVE DIRECTOR, JOINT FINANCIAL MANAGEMENT IMPROVEMENT PROGRAM.
PUBLIC BUILDINGS SERVICE	ASSISTANT COMMISSIONER FOR FEDERAL PROTECTIVE SERVICE.
	ASSISTANT COMMISSIONER FOR PORTFOLIO MANAGEMENT.
	DEPUTY ASSISTANT COMMISSIONER FOR REAL PROPERTY DISPOSAL.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSISTANT COMMISSIONER FOR BUSINESS PERFORMANCE.
	CHIEF FINANCIAL OFFICER.
	DIRECTOR OF REALTY SERVICES.
	DEPUTY ASSISTANT COMMISSIONER FOR REAL ESTATE PORTFOLIO MANAGEMENT.
	ASSISTANT COMMISSIONER FOR REAL PROPERTY ASSET MANAGEMENT.
	ASSISTANT COMMISSIONER FOR APPLIED SCIENCE.
	ASSISTANT COMMISSIONER FOR NATIONAL CUSTOMER SERVICES MANAGEMENT.
	ASSISTANT COMMISSIONER FOR ORGANIZATIONAL RESOURCES.
	ASSISTANT COMMISSIONER FOR CAPITAL CONSTRUCTION PROGRAM MANAGEMENT.
FEDERAL TECHNOLOGY SERVICE	ASSISTANT COMMISSIONER FOR SERVICE DEVELOPMENT.
	ASSISTANT COMMISSIONER FOR SERVICE DELIVERY.
	ASSISTANT COMMISSIONER FOR INFORMATION TECHNOLOGY INTEGRATION.
	ASSISTANT COMMISSIONER FOR REGIONAL SERVICES.
	ASSISTANT COMMISSIONER FOR ACQUISITION.
	ASSISTANT COMMISSIONER FOR INFORMATION SECURITY.
	ASSISTANT COMMISSIONER FOR CUSTOMER RELATIONSHIP. MANAGEMENT AND SALES.
	DEPUTY ASSISTANT COMMISSIONER FOR INFORMATION. TECHNOLOGY INTEGRATION, FEDERAL TECHNOLOGY SERVICE.
	PROGRAM EXECUTIVE FOR E-AUTHENTICATION.
OFFICE OF THE CHIEF INFORMATION OFFICER	DIRECTOR OF INFRASTRUCTURE OPERATIONS.
	DIRECTOR OF ENTERPRISE INFORMATION TECHNOLOGY.
	INVESTMENT PORTFOLIO AND POLICY.
FEDERAL ACQUISITION SERVICE	ASSISTANT COMMISSIONER FOR INTEGRATED TECHNOLOGY SERVICES.
	CONTROLLER.
	ASSISTANT COMMISSIONER FOR ACQUISITION MANAGEMENT.
	ASSISTANT COMMISSIONER FOR ASSISTED ACQUISITION SERVICES.
	ASSISTANT COMMISSIONER FOR GENERAL SUPPLIES AND SERVICES.
	ASSISTANT COMMISSIONER FOR TRAVEL, MOTOR VEHICLE AND CARD SERVICES.
	ASSISTANT COMMISSIONER FOR CUSTOMER ACCOUNTS AND RESEARCH.
	CHIEF INFORMATION OFFICER.
FEDERAL SUPPLY SERVICE	ASSISTANT COMMISSIONER FOR COMMERCIAL ACQUISITION.
	ASSISTANT COMMISSIONER FOR TRANSPORTATION AND PROPERTY MANAGEMENT.
	ASSISTANT COMMISSIONER FOR BUSINESS MANAGEMENT AND MARKETING.
	DEPUTY ASSISTANT COMMISSIONER FOR ACQUISITION.
	FEDERAL SUPPLY SERVICE CHIEF INFORMATION OFFICER.
	ASSISTANT COMMISSIONER FOR VEHICLE ACQUISTION AND LEASING SERVICES.
	ASSISTANT COMMISSIONER FOR GLOBAL SUPPLY.
	ASSISTANT COMMISSIONER FOR ENTERPRISE PLANNING.
NEW ENGLAND REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDING SERVICE.
NORTHEAST AND CARIBBEAN REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDINGS SERVICE.
	ASSISTANT REGIONAL ADMINISTRATOR FOR FEDERAL SUPPLY SERVICE.
MID-ATLANTIC REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDINGS SERVICE.
	ASSISTANT REGIONAL ADMINISTRATOR FEDERAL SUPPLY SERVICE.
	REGIONAL COUNSEL.
NATIONAL CAPITAL REGION	ASSISTANT REGIONAL ADMINISTRATOR, PUBLIC BUILDINGS SERVICE, NATIONAL CAPITAL REGION.
	PROJECT EXECUTIVE FOR REAL ESTATE DEVELOPMENT.
	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDINGS SERVICE.
SOUTHEAST SUNBELT REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR FEDEERAL TECHNOLOGY SERVICE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSISTANT REGIONAL ADMINISTRATOR FOR FEDERAL SUPPLY AND SERVICES.
	DEPUTY ASSISTANT REGIONAL ADMINISTRATOR FOR REAL ESTATE DESIGN, CONSTRUCTION AND DEVELOPMENT.
GREAT LAKES REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDINGS SERVICE.
THE HEARTLAND REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDINGS SERVICE.
	ASSISTANT REGIONAL ADMINISTRATOR FOR FEDERAL TECHNOLOGY SERVICE, REGION—6.
GREATER SOUTHWEST REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDINGS SERVICE.
	ASSISTANT REGIONAL ADMINISTRATOR FOR FEDERAL TECHNICAL SERVICE.
	ASSISTANT REGIONAL ADMINISTRATOR FOR FEDERAL SUPPLY SERVICE.
ROCKY MOUNTAIN REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDINGS SERVICE.
PACIFIC RIM REGION	ASSISTANT REGIONAL ADMINISTRATOR FOR PUBLIC BUILDINGS SERVICES.
	ASSISTANT REGIONAL ADMINISTRATOR FOR FEDERAL SUPPLY SERVICE.
	SENIOR ADVISOR.
NORTHWEST/ARCTIC REGION	ASSISTANT REGIONAL ADMINISTRATOR, PUBLIC BUILDING SERVICES REGION 10.
DEPARTMENT OF HEALTH AND HUMAN SERVICES:	
OFFICE OF THE ASSISTANT SECRETARY FOR ADMINISTRATION AND MANAGEMENT.	PROJECT MANAGER.
	DIRECTOR, ATLANTA HUMAN RESOURCES CENTER.
OFFICE OF THE DEPUTY ASSISTANT SECRETARY FOR BUDGET.	DIRECTOR DIVISION OF INTEGRITY AND ORGAN REVIEW.
OFFICE OF THE DEPUTY ASSISTANT SECRETARY FOR FINANCE.	DEPUTY ASSISTANT SECRETARY, FINANCE.
	DIRECTOR, OFFICE OF FINANCIAL POLICY.
OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION.	DEPUTY TO THE DEPUTY ASSISTANT SECRETARY FOR PLANNING AND EVALUATION (HEALTH SERVICES POLICY).
OFFICE OF THE ASSISTANT SECRETARY FOR PUBLIC HEALTH AND SCIENCE.	DIRECTOR, OFFICE OF HUMAN IMMUNODEFICIENCY VIRUS AND ACQUIRED IMMUNODEFICIENCY VIRUS POLICY.
	DIRECTOR, OFFICE OF RESEARCH INTEGRITY.
ASSOCIATE GENERAL COUNSEL DIVISIONS	ASSOCIATE GENERAL COUNSEL, GENERAL LAW DIVISION.
	DEPUTY ASSOCIATE GENERAL COUNSEL FOR CLAIMS AND EMPLOYMENT LAW.
	DEPUTY ASSOCIATE GENERAL COUNSEL, BUSINESS AND ADMINISTRATIVE LAW DIVISION.
OFFICE OF THE INSPECTOR GENERAL	PRINCIPAL DEPUTY INSPECTOR GENERAL.
	DEPUTY INSPECTOR GENERAL FOR MANAGEMENT AND POLICY.
	DEPUTY INSPECTOR GENERAL FOR LEGAL AFFAIRS.
OFFICE OF THE DEPUTY INSPECTOR GENERAL FOR INVESTIGATIONS.	DEPUTY INSPECTOR GENERAL FOR INVESTIGATIONS.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIVE OPERATIONS.
	ASSISTANT INSPECTOR GENERAL FOR CIVIL AND ADMINISTRATIVE REMEDIES.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIVE OVERSIGHT AND SUPPORT.
	DEPUTY INSPECTOR GENERAL FOR ENFORCEMENT AND COMPLIANCE.
OFFICE OF THE DEPUTY INSPECTOR GENERAL FOR AUDIT SERVICES.	DEPUTY INSPECTOR GENERAL FOR AUDIT SERVICES.
	ASSISTANT INSPECTOR GENERAL FOR ADMINISTRATION OF CARE/FINANCING AND AGING AUDITS.
	ASSISTANT INSPECTOR GENERAL FOR MEDICARE AND MEDICAID SERVICE AUDITS.
	ASSISTANT INSPECTOR GENERAL FOR FINANCIAL MANAGEMENT AND REGIONAL OPERATIONS.
	ASSISTANT INSPECTOR GENERAL FOR GRANTS AND INTERNAL ACTIVITIES.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT MANAGEMENT AND POLICY.
OFFICE OF THE DEPUTY INSPECTOR GENERAL FOR EVALUATION AND INSPECTIONS.	DEPUTY INSPECTOR GENERAL FOR EVALUATION AND INSPECTIONS.
PROGRAM SUPPORT CENTER	DEPUTY DIRECTOR OF OPERATIONS.
	DEPUTY ASSISTANT SECRETARY FOR PROGRAM SUPPORT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE OF FINANCIAL MANAGEMENT SERVICE	DIRECTOR, FINANCIAL MANAGEMENT SERVICE.
OFFICE OF PROGRAM SUPPORT	DIRECTOR OFFICE OF FINANCIAL MANAGEMENT.
OFFICE OF THE ACTUARY	DIRECTOR, OFFICE OF THE ACTUARY (CHIEF ACTUARY).
	DIRECTOR, OFFICE OF MEDICARE AND MEDICAID COST ESTIMATES.
CENTER FOR BENEFICIARY CHOICES	DIRECTOR, MEDICARE DRUG BENEFIT GROUP.
CENTER FOR MEDICARE MANAGEMENT	DIRECTOR, MEDICARE CONTRACTOR MANAGEMENT GROUP.
CENTER FOR MEDICAID AND STATE OPERATIONS	DIRECTOR, MEDICAID INTEGRITY GROUP.
OFFICE OF ACQUISITIONS AND GRANTS MANAGEMENT	DIRECTOR, OFFICE OF ACQUISITIONS AND GRANTS.
OFFICE OF INFORMATION SERVICES	DIRECTOR, OFFICE OF INFORMATION SERVICES (CHIEF INFORMATION OFFICER).
	DEPUTY DIRECTOR, OFFICE OF INFORMATION SERVICES.
	DEPUTY DIRECTOR (TECHNOLOGY).
OFFICE OF FINANCIAL MANAGEMENT	DIRECTOR OFFICE OF FINANCIAL MANAGEMENT.
	DIRECTOR PROGRAM INTEGRITY GROUP.
	DEPUTY DIRECTOR OFFICE OF FINANCIAL MANAGEMENT.
	DIRECTOR, FINANCIAL SERVICES GROUP.
	DIRECTOR, ACCOUNTING MANAGEMENT GROUP.
OFFICE OF POLICY, PLANNING, AND BUDGET	ASSOCIATE ADMINISTRATOR FOR POLICY AND PROGRAMS COORDINATOR.
CENTER FOR MENTAL HEALTH SERVICES	DIRECTOR CENTER FOR MENTAL HEALTH SERVICES.
	DIRECTOR DIVISION OF STATE AND COMMUNITY SYSTEMS DEVELOPMENT.
CENTERS FOR DISEASE CONTROL AND PREVENTION	DIRECTOR, FINANCIAL MANAGEMENT OFFICE.
	Did not find title for this position.
	CHIEF FINANCIAL OFFICER.
	DIRECTOR, PROCUREMENT AND GRANTS OFFICE.
	DIRECTOR, INFORMATION TECHNOLOGY SERVICES OFFICE.
	CHIEF MANAGEMENT OFFICER, OFFICE OF TERRORISM.
	PREPAREDNESS AND EMERGENCY RESPONSE.
	CHIEF MANAGEMENT OFFICER, INFORMATION RESOURCES MANAGEMENT OFFICE.
CENTERS FOR DISEASE CONTROL AND PREVENTION	CHIEF MANAGEMENT OFFICER, OFFICE OF THE DIRECTOR.
	CHIEF POLICY OFFICER.
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH.	DEPUTY DIRECTOR FOR MANAGEMENT.
NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION.	DIRECTOR, OFFICE ON SMOKING AND HEALTH.
	DIRECTOR, DIVISION OF ADULT AND COMMUNITY HEALTH.
COORDINATING CENTER FOR HEALTH INFORMATION AND SERVICE.	CHIEF MANAGEMENT OFFICER, COORDINATING CENTER FOR HEALTH INFORMATION AND SERVICES.
OFFICE OF GLOBAL HEALTH	CHIEF MANAGEMENT OFFICER, OFFICE OF GLOBAL HEALTH.
COORDINATING CENTER FOR INFECTIOUS DISEASES	CHIEF MANAGEMENT OFFICER, COORDINATING CENTER FOR INFECTIOUS DISEASES.
OFFICE OF WORKFORCE AND CAREER DEVELOPMENT	CHIEF MANAGEMENT OFFICER, OFFICE OF WORKFORCE AND CAREER DEVELOPMENT.
COORDINATING CENTER FOR HEALTH PROMOTION	CHIEF MANAGEMENT OFFICER, COORDINATING CENTER FOR HEALTH PROMOTION.
COORDINATING CENTER FOR ENVIRONMENTAL HEALTH, INJURY PREVENTION, AND OCCUPATIONAL HEALTH.	CHIEF MANAGEMENT OFFICER, COORDINATING CENTER FOR ENVIRONMENTAL HEALTH, INJURY PREVENTION, AND OCCUPATIONAL HEALTH.
OFFICE OF CHIEF COUNSEL	DEPUTY CHIEF COUNSEL FOR PROGRAM REVIEW.
	ASSOCIATE DEPUTY CHIEF COUNSEL FOR DRUGS AND BIOLOGICS.
	ASSOCIATE DEPUTY CHIEF CNSEL FOR DEVICES, FOODS AND VETERINARY MEDICINE.
OFFICE OF MANAGEMENT	DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT.
	DIRECTOR, OFFICE OF ACQUISITIONS AND GRANTS SERVICES.
OFFICE OF REGULATORY AFFAIRS	ASSOCIATE COMMISSIONER FOR REGULATORY AFFAIRS.
	DEPUTY ASSOCIATE COMMISSIONER FOR REGULATORY AFFAIRS.
	REGIONAL FOOD AND DRUG DIRECTOR, NORTHEAST REGION.
	REGIONAL FOOD AND DRUG DIRECTOR, SOUTHEAST REGION.
	REGIONAL FOOD AND DRUG DIRECTOR, SOUTHWEST REGION.
	DIRECTOR OFFICE OF CRIMINAL INVESTIGATIONS.
	REGIONAL FOOD AND DRUG DIRECTOR, CENTRAL REGION.
	DISTRICT FOOD AND DRUG DIRECTOR, NEW YORK DISTRICT.
	ASSOCIATE DIRECTOR INVESTIGATIONS.
	DEPUTY DIRECTOR FOR INVESTIGATIONS.
	DISTRICT FOOD AND DRUG DIRECTOR, LOS ANGELES DISTRICT.
	ASSOCIATE DIRECTOR INVESTIGATIONS.
CENTER FOR BIOLOGICS EVALUATION AND RESEARCH	DIRECTOR, OFFICE OF COMPLIANCE AND BIOLOGICS QUALITY.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSOCIATE DIRECTOR FOR COMPLIANCE AND BIOLOGIC QUALITY.
CENTER FOR DRUG EVALUATION AND RESEARCH	DIRECTOR, OFFICE OF MANAGEMENT.
	DIRECTOR, DIVISION OF MEDICAL IMAGING SURGICAL AND DENTAL PRODUCTS.
	DIRECTOR, OFFICE OF GENERIC DRUGS.
	DIRECTOR, OFFICE OF EPIDEMIOLOGY AND BIOSTATISTICS.
	DIRECTOR, OFFICE OF COMPLIANCE.
	SENIOR ADVISOR FOR POLICY.
	DIRECTOR, OFFICE OF NEW DRUG QUALITY ASSESSMENT.
CENTER FOR DEVICES AND RADIOLOGICAL HEALTH	DIRECTOR, OFFICE OF DEVICE EVALUATION.
	DIRECTOR OFFICE OF COMPLIANCE.
	DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY.
	DIRECTOR OFFICE OF SYSTEM AND MANAGEMENT.
CENTER FOR FOOD SAFETY AND APPLIED NUTRITION	DIRECTOR, OFFICE OF SEAFOOD.
	DIRECTOR OFFICE OF PREMARKET APPROVAL.
	DIRECTOR OFFICE OF FIELD PROGRAMS.
	DIRECTOR, OFFICE OF PLANT AND DAIRY FOODS AND BEVERAGES.
	DIRECTOR, OFFICE OF REGULATIONS AND POLICY.
CENTER FOR VETERINARY MEDICINE	DIRECTOR, OFFICE OF SCIENCE.
	DIRECTOR, OFFICE OF SURVEILLANCE AND COMPLIANCE.
SPECIAL PROGRAMS BUREAU	ASSOCIATE ADMINISTRATOR, SPECIAL PROGRAMS BUREAU.
HIV/AIDS BUREAU	DIRECTOR, OFFICE OF SCIENCE AND EPIDEMIOLOGY.
NATIONAL INSTITUTES OF HEALTH	ASSOCIATE DIRECTOR FOR MANAGEMENT.
OFFICE OF THE DIRECTOR	DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT.
	DIRECTOR, OFFICE OF CONTRACTS MANAGEMENT.
	ASSOCIATE DIRECTOR FOR EXTRAMURAL AFFAIRS.
	ASSOCIATE DIRECTOR FOR DISEASE PREVENTION.
	DIRECTOR, OFFIC EOF MEDICAL APPLICATIONS OF RESEARCH.
	ASSOCIATE DIRECTOR FOR ADMINISTRATION.
	DIRECTOR, OFFICE OF POLICY FOR EXTRAMURAL RESEARCH ADMINISTRATION.
	SENIOR ADVISOR FOR POLICY.
	DIRECTOR, OFFICE OF REPORTS AND ANALYSIS.
	SCIENTIFIC ADVISOR FOR CAPACITY DEVELOPMENT.
	DIRECTOR, OFFICE OF RESEARCH FACILITIES DEVELOPMENT AND OPERATIONS.
NATIONAL HEART, LUNG AND BLOOD INSTITUTE	DIRECTOR, DIVISION OF HEART AND VASCULAR DISEASES.
	DIRECTOR, DIVISION OF LUNG DISEASES.
	DIRECTOR, DIVISION OF BLOOD DISEASES AND RESOURCES.
	DIRECTOR, DIVISION OF EXTRAMURAL AFFAIRS.
	ASSOCIATE DIRECTOR FOR INTERNATIONAL PROGRAMS.
	DIRECTOR OFFICE OF BIOSTATICS RESEARCH.
	DEPUTY DIRECTOR DIVISION OF HEART VASCULAR DISEASES.
	DEPUTY DIRECTOR DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATION.
	DIRECTOR, EPIDEMIOLOGY AND BIOMETRY PROGRAM.
	DIRECTOR, NATIONAL CENTER FOR SLEEP DISORDERS.
INTRAMURAL RESEARCH	CHIEF LABORATORY OF BIOCHEMICAL GENETICS.
	CHIEF LABORATORY OF BIOCHEMISTRY.
	CHIEF LABORATORY OF BIOPHYSICAL CHEMISTRY.
	CHIEF MACROMOLECULES SECTION.
	CHIEF, INTERMEDIARY METABOLISM AND BIOENERGETICS SECTION.
	CHIEF, LABORATORY OF KIDNEY AND ELECTROLYTE METABOLISM.
	CHIEF LABORATORY OF CARDIAC ENERGETICS.
	CHIEF, METABOLIC REGULATION SECTION.
NATIONAL CANCER INSTITUTE	ASSOCIATE DIRECTOR FOR INTRAMURAL MANAGEMENT.
	ASSOCIATE DIRECTOR FOR EXTRAMURAL MANAGEMENT.
	ASSOCIATE DIRECTOR, CANCER DIAGNOSIS PROGRAM.
	ASSOCIATE DIRECTOR FOR BUDGET AND FINANCIAL MANAGEMENT.
	DEPUTY DIRECTOR FOR MANAGEMENT.
	ASSOCIATE DIRECTOR, REFERRAL REVIEW AND PROGRAM COORDINATION.
	DEPUTY DIRECTOR FOR ADMINISTRATIVE OPERATIONS.
DIVISION OF CANCER BIOLOGY, DIAGNOSIS AND CENTERS	CHIEF, MICROBIAL GENETICS AND BIOCHEMISTRY SECTION, LABORATORY OF BIOCHEMISTRY.
	CHIEF, LABORATORY OF BIOCHEMEMISTRY INTRAMURAL RESEARCH PROGRAM.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSOCIATE DIRECTOR, EXTRAMURAL RESEARCH PROGRAM.
	DEPUTY DIRECTOR, DIVISION OF CANCER BIOLOGY DIAGNOSIS AND CENTERS.
	CHIEF DERMATOLOGY BRANCH, INTRAMURAL RESEARCH PROGRAM.
	CHIEF, CELL MEDIATED IMMUNITY SECTION.
	CHIEF, LABORATORY OF TUMOR AND BIOLOGICIAL IMMUNOLOGY, INTRAMURAL RESEARCH PROGRAMS.
	DIRECTOR, DIVISION OF CANCER BIOLOGY DIAGNOSIS AND CENTERS.
	ASSOCIATE DIRECTOR, CENTERS TRAINING AND RESOURCES PROGRAM.
DIVISION OF CANCER ETIOLOGY	CHIEF LABORATORY OF BIOLOGY.
	CHIEF LABORATORY OF MOLECULAR CARCINOGENESIS.
	CHIEF LABORATORY OF EXPERIMENTAL PATHOLOGY.
	DIRECTOR, DIVISION OF CANCER ETIOLOGY.
DIVISION OF CANCER PREVENTION AND CONTROL	DEPUTY DIRECTOR, DIVISION OF CANCER PREVENTION AND CONTROL.
	ASSOCIATE DIRECTOR, SURVEILLANCE RESEARCH PROGRAM.
	ASSOCIATE DIRECTOR, EARLY DEVELOPMENT AND CONCOLOGY PROGRAM.
DIVISION OF EXTRAMURAL ACTIVITIES	DIRECTOR, DIVISION OF EXTRAMURAL ACTIVITIES.
	DEPUTY DIRECTOR, DIVISION OF EXTRAMURAL ACTIVITIES.
DIVISION OF CANCER TREATMENT	CHIEF-RADIATION CONCOLOGY BRANCH.
	ASSOCIATE DIRECTOR, CANCER THERAPY EVALUATION PROGRAM.
NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES.	DIRECTOR, DIVISION KIDNEY UROLOGIC AND HEMATLOGIC DISEASES.
	DIRECTOR DIVISION OF EXTRAMURAL ACTIVITIES.
	ASSOCIATE DIRECTOR FOR MANAGEMENT.
	CHIEF, LABORATORY OF MOLECULAR AND CELLULAR BIOLOGY.
	DEPUTY DIRECTOR FOR MANAGEMENT AND OPERATIONS.
INTRAMURAL RESEARCH	CHIEF SECTION ON BIOCHEMICAL MECHANISMS.
	CHIEF SECTION ON METABOLIC ENZYMES.
	CHIEF SECTION ON PHYSICAL CHEMISTRY.
	CHIEF, SECTION ON MOLECULAR STRUCTURE.
	CHIEF THEORETICAL BIOPHYSICS SECTION.
	CHIEF, LABORATORY OF BIO-ORGANIC CHEMISTRY.
	CHIEF OXIDATION MECHANISMS SECTION LABORATORY OF BIO-ORGANIC BIOCHEMISTRY.
	CHIEF LABORATORY OF BIOCHEMISTRY AND METABOLISM.
	CLINICAL DIRECTOR AND CHIEF, KIDNEY DISEASE SECTION.
	CHIEF, SECTION ON MOLECULAR BIOPHYSICS.
	CHIEF, SECTION CARBOHYDRATES LABORATORY OF CHEMISTRY/NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES.
	CHIEF, LABORATORY OF NEUROSCIENCE, NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES.
	CHIEF, LABORATORY OF MEDICINAL CHEMISTRY.
	CHIEF, MORPHOGENESIS SECTION.
NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES.	DIRECTOR, EXTRAMURAL PROGRAM.
	DEPUTY DIRECTOR.
	ASSOCIATE DIRECTOR FOR MANAGEMENT AND OPERATIONS.
NATIONAL LIBRARY OF MEDICINE	DEPUTY DIRECTOR, NATIONAL LIBRARY OF MEDICINE.
	DEPUTY DIRECTOR FOR RESEARCH AND EDUCATION.
	ASSOCIATE DIRECTOR FOR LIBARY OPERATIONS.
	ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS.
	DIRECTOR, LISTER HILL NATIONAL CENTER FOR BIOMEDICAL COMMUNITY.
	DEPUTY DIRECTOR LISTER HILL NATIONAL CENTER FOR BIOMEDICAL COMMISSIONERS.
	DIRECTOR, INFORMATION SYSTEMS.
	DIRECTOR NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION.
	ASSOCIATE DIRECTOR FOR HEALTH AND INFORMATION PROGRAMS DEVELOPMENT.
	ASSOCIATE DIRECTOR FOR ADMINISTRATIVE MANAGEMENT.
NATIONAL INSTITUTES OF ALLERGY AND INFECTIOUS DISEASES.	DIRECTOR, DIVISION OF ALLERGY/IMMUNOLOGY/TRANSPLANTATION.
	CHIEF, LABORATORY OF PARASITIC DISEASES.
	DIRECTOR, DIVISION OF MICROBIOLOGY/INFECTIOUS DISEASES.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	CHIEF, LABORATORY OF IMMUNOGENETICS.
	DIRECTOR, DIVISON OF EXTRAMURAL ACTIVITIES.
	CHIEF, LABORATORY OF MICROBIAL STRUCTURE AND FUNCTION.
	CHIEF LABORATORY OF MOLECULAR MICROBIOLOGY.
	DIRECTOR, DIVISION ACQUIRED IMMUNIDEFICIENCY SYNDROME.
	CHIEF, BIOLOGICAL RESOURCES BRANCH.
	HEAD, LYMPHOCYTE BIOLOGY SECTION.
	CHIEF, LABORATORY OF INFECTIOUS DISEASES.
	DEPUTY DIRECTOR DIVISION OF ACQUIRED IMMUNODEFICIENCY.
	HEAD EPIDEMIOLOGY SECTION.
	CHIEF, LABORATORY OF MALARIA RESEARCH.
	DIRECTOR DIVISION OF INTRAMURAL RESEARCH.
	DEPUTY CHIEF LABORATORY OF IMMUNOLOGY AND HEAD LYMPHOCYTE BIOLOGY SECTION.
NATIONAL INSTITUTE ON AGING	SCIENTIFIC DIRECTOR GERONTOLOGY RESEARCH CENTER.
	CLINICAL DIRECTOR AND CHIEF CLINICAL PHYSIOLOGY BRANCH.
	DIRECTOR OF BEHAVIORAL AND SOCIAL RESEARCH PROGRAM.
	ASSOCIATE DIRECTOR BIOLOGY OF AGING PROGRAM.
	DIRECTOR OF OFFICE OF EXTRAMURAL AFFAIRS.
	ASSOCIATE DIRECTOR, EPIDEMIOLOGY, DEMOGRAPHY, AND BIOMETRY PROGRAM.
	ASSOCIATE DIRECTOR, OFFICE OF PLANNING, ANALYSIS AND INTERNATIONAL ACTIVITIES.
	DIRECTOR OF NEUROSCIENCE AND NEUROPSYCHOLGY OF AGING PROGRAM.
	DIRECTOR OF MANAGEMENT.
NATIONAL INSTITUTES OF CHILD HEALTH AND HUMAN DEVELOPMENT.	CHIEF, LABORATORY OF MOLECULAR GENETICS.
	CHIEF, ENDOCRINOLOGY AND REPRODUCTION RESEARCH BRANCH.
	DIRECTOR CENTER FOR RESEARCH FOR MOTHERS AND CHILDREN.
	DIRECTOR CENTER FOR POPULATION RESEARCH.
	CHIEF, SECTION ON GROWTH FACTORS.
	ASSOCIATE DIRECTOR FOR PREVENTION RESEARCH.
	CHIEF LABORATORY OF MAMALIAN GENES AND DEVELOPMENT.
	CHIEF, SECTION ON MOLECULAR ENDOCRINOLOGY.
	CHIEF SECTION NEUROENDOCRINOLOGY.
	CHIEF SECTION ON MICROBIAL GENETICS.
	CHIEF, LABORATORY OF COMPARATIVE ETHOLOGY.
	ASSOCIATE DIRECTOR FOR ADMINISTRATION.
	DIRECTOR, NATIONAL CENTER FOR MEDICAL REHABILITATION RESEARCH.
NATIONAL INSTITUTE OF DENTAL AND CRANIOFACIAL RESEARCH.	CHIEF, LABORATORY OF IMMUNOLOGY.
	DIRECTOR, EXTRAMURAL PROGRAM.
	ASSOCIATE DIRECTOR FOR INTERNATIONAL HEALTH.
	ASSOCIATE DIRECTOR FOR MANAGEMENT.
	ASSOCIATE DIRECTOR FOR PROGRAM DEVELOPMENT.
NATIONAL INSTITUTES OF ENVIRONMENTAL HEALTH SCIENCES.	CHIEF LABORATORY OF PULMONARY PATHOBIOLOGY.
	HEAD MUTAGENESIS SECTION.
	HEAD MAMMALIAN MUTAGENESIS SECTION.
	SENIOR SCIENTIFIC ADVISOR.
	ASSOCIATE DIRECTOR FOR MANAGEMENT.
	CHIEF LABORATORY OF MOLECULAR CARCINOGENESIS.
	DIRECTOR NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCE.
	DIRECTOR ENVIRONMENTAL TOXICOLOGY PROGRAM.
NATIONAL INSTITUTES OF GENERAL MEDICAL SCIENCES	DIRECTOR GENETICS PROGRAM.
	ASSOCIATE DIRECTOR FOR EXTRAMURAL ACTIVITIES.
	DIRECTOR, DIVISION OF PHARAMCOLOGY, PHYSIOLOGY, AND BIOLOGICAL CHEMISTRY.
	DIRECTOR BIOPHYSICS PHYSIOLOGICAL SCIENCES PROGRAM BRANCH.
	DEPUTY DIRECTOR NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, MINORITY OPPORTUNITIES IN RESEARCH PROGRAM BRANCH.
	ASSOCIATE DIRECTOR FOR ADMINISTRATION AND OPERATIONS.
NATIONAL INSTITUTES OF NEUROLOGICAL DISORDERS AND STROKE.	DIRECTOR, DIVISION OF FUNDAMENTAL NEUROSCIENCES.
	ASSOCIATE DIRECTOR FOR ADMINISTRATION.
	DIRECTOR, BASIC NEUROSCIENTIST.
	PROGRAM/CHIEF/LABORATORY OF NEUROCHEMIST.
	CHIEF, LABORATORY OF MOLECULAR AND CELLULAR NEUROBIOLOGY.
INTRAMURAL RESEARCH	CHIEF LABORATORY OF CENTRAL NERVOUS SYSTEM STUDIES.
	CHIEF, DEVELOPMENT AND METABOLIC NEUROLOGY BRANCH.
	DEPUTY CHIEF, LABORATORY OF CENTRAL NERVOUS SYSTEM STUDIES.
	CHIEF, NEUROIMAGING BRANCH.
	CHIEF, LABORTORY OF NUEROBIOLOGY.
	CHIEF, LABORATORY OF NEURA CONTROL.
	CHIEF BRAIN STRUCTURAL PLATICITY SECTION.
	CHIEF STROKE BRANCH.
NATIONAL EYE INSTITUTE	CHIEF LABORATORY OF RETINAL CELL AND MOLECULAR BIOLOGY.
	CHIEF, LABORATORY OF MOLECULAR AND DEVELOPMENT BIOLOGY.
	CHIEF, LABORATORY OF SENSORIMOTOR RESEARCH.
NATIONAL INSTITUTES ON DEAFNESS AND OTHER COMMUNICATION DISORDERS.	DIRECTOR, DIVISION OF HUMAN COMMUNICATION.
	CHIEF LABORATORY OF CELLULAR BIOLOGY.
	ASSOCIATE DIRECTOR FOR ADMINISTRATION.
	DIRECTOR, DIVISION OF EXTRAMURAL RESEARCH.
NATIONAL INSTITUTES OF HEALTH CLINICAL CENTER	ASSOCIATE DIRECTOR FOR PLANNING.
	ASSOCIATE CHIEF, POSITRON EMISSION TOMOGRAPHY AND RADIOCHEMISTRY.
	DEPUTY DIRECTOR FOR MANAGEMENT AND OPERATIONS.
	CHIEF FINANCIAL OFFICER.
	CHIEF OPERATING OFFICER.
CENTER FOR INFORMATION TECHNOLOGY	CHIEF, COMPUTER CENTER BRANCH.
	DEPUTY DIRECTOR.
	ASSOCIATE DIRECTOR OFFICE OF COMPUTING RESOURCES SERVICES.
	SENIOR ADVISOR TO DIRECTOR, CENTER FOR INFORMATION TECHNOLOGY.
JOHN E. FOGARTY INTERNATIONAL CENTER	DEPUTY DIRECTOR FOGARTY INTERNATIONAL CENTER.
	ASSOCIATE DIRECTOR FOR INTERNATIONAL ADVANCED STUDIES.
NATIONAL CENTER FOR RESEARCH RESOURCES	DIRECTOR, NATIONAL CENTER FOR RESEARCH RESOURCES.
	DIRECTOR, GENERAL CLINICAL RESEARCH CENTER FOR RESEARCH RESOURCES.
	DEPUTY DIRECTOR, NATIONAL CENTER FOR RESEARCH RESOURCES.
	ASSOCIATE DIRECTOR FOR BIOMEDICAL TECHNOLOGY.
	ASSOCIATE DIRECTOR FOR COMPARATIVE MEDICINE.
	ASSOCIATE DIRECTOR FOR RESEARCH INFRASTRUCTURE.
CENTER FOR SCIENTIFIC REVIEW	ASSOCIATE DIRECTOR FOR REFERRAL AND REVIEW.
	ASSOCIATE DIRECTOR FOR STATISTICS AND ANALYSIS.
	DIRECTOR, DIVISION OF MOLECULAR AND CELLULAR MECHANISMS.
	DIRECTOR, DIVISION OF PHYSIOLOGICAL SYSTEMS.
	DIRECTOR, DIVISION OF CLINICAL AND POPULATION-BASED STUDIES.
	DIRECTOR, DIVISION OF BIOLOGIC BASIS OF DISEASE.
NATIONAL INSTITUTE OF NURSING RESEARCH	DIRECTOR NATIONAL CENTER FOR NURSING RESEARCH.
	DEPUTY DIRECTOR/DIRECTOR, DIVISION OF EXTRAMURAL ACTIVITIES.
NATIONAL HUMAN GENOME RESEARCH INSTITUTE	DEPUTY DIRECTOR.
	DIRECTOR DIVISION OF INTRAMURAL RESEARCH NATIONAL.
	CENTER HUMAN GENOME RESEARCH.
	CHIEF DIAGNOSIS DEVELOPMENT BRANCH NATIONAL CENTER.
	HUMAN GENOME RESEARCH INSTITUTE.
	CHIEF, LABORATORY OF GENETIC DISEASE RESEARCH.
	NATIONAL CENTER FOR HUMAN GENOME RESEARCH INSTITUTE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
NATIONAL INSTITUTE ON DRUG ABUSE	ASSOCIATE DIRECTOR FOR MANAGEMENT.
	ASSOCIATE DIRECTOR FOR MANAGEMENT AND OPERATIONS.
	DIRECTOR, OFFICE OF EXTRAMURAL PROGRAM REVIEW.
	DIRECTOR DIVISION OF CLINICAL RESEARCH.
	DIRECTOR, MEDICATIONS DEVELOPMENT DIVISION.
	CHIEF, NEUROSCIENCE RESEARCH BRANCH.
	ASSOCIATE DIRECTOR FOR CLINCIAL NEUROSCIENCE AND MEDICAL AFFAIRS, DIVISION OF TREATMENT RESEARCH AND DEVELOPMENT.
	SENIOR ADVISOR AND COUNSELOR FOR SPECIAL INITIATIVES.
NATIONAL INSTITUTE OF MENTAL HEALTH	DEPUTY DIRECTOR, NATIONAL INSTITUTE OF MENTAL HEALTH.
	ASSOCIATE DIRECTOR FOR SPECIAL POPULATIONS.
	ASSOCIATE DIRECTOR FOR PREVENTION.
	EXECUTIVE OFFICER, NATIONAL INSTITUTE OF MENTAL HEALTH.
	DIRECTOR, OFFICE OF LEGISLATIVE ANALYSIS AND COORDINATOR.
	DIRECTOR, DIVISION OF NEUROSCIENCE AND BEHAVIORAL SCIENTIST.
	CHIEF, NEUROPSYCHIATRY BRANCH.
	CHIEF, CHILD PSYCHIATRY BRANCH.
	CHIEF, BIOLOGICAL PSYCHIATRY BRANCH.
	CHIEF, LABORATORY OF CLINICAL SCIENCE.
	CHIEF, SECTION ON HISTOPHARMACOLOGY.
	DIRECTOR, OFFICE ON ACQUIRED IMMUNODEFICIENCY SYNDROME.
	CHIEF, SECTION ON CLINICAL AND EXPERIMENTAL NEUROPSYCHOLOGY.
	DIRECTOR, DIVISION OF MENTAL DISORDERS, BEHAVIORAL.
	RESEARCH AND ACQUIRED IMMUNODEFICIENCY SYNDROME.
	DIRECTOR, DIVISION OF SERVICES AND INTERVENTION RESEARCH.
	CHIEF, SECTION ON COGNITIVE NEUROSCIENCE.
NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM.	DIRECTOR, DIVISION OF BASIC RESEARCH.
	ASSOCIATE DIRECTOR FOR ADMINISTRATION.
AGENCY FOR HEALTHCARE RESEARCH AND QUALITY	EXECUTIVE OFFICER.
DEPARTMENT OF HOMELAND SECURITY:	
OFFICE OF OPERATIONS COORDINATION	SENIOR DEPARTMENT OF HOMELAND SECURITY ADVISOR TO THE COMMANDER, U.S. NORTHERN COMMAND/NORTH AMERICAN AEROSPACE DEFENSE COMMAND.
OFFICE OF THE ASSISTANT SECRETARY FOR PUBLIC AFFAIRS.	DIRECTOR OF INTERNAL COMMUNICATIONS.
OFFICE OF ASSISTANT SECRETARY FOR LEGISLATIVE AFFAIRS.	DEPUTY ASSISTANT SECRETARY FOR LEGISLATIVE AFFAIRS (HOUSE).
OFFICE OF THE GENERAL COUNSEL	DEPUTY ASSOCIATE GENERAL COUNSEL FOR GENERAL LAW.
	DESIGNATED AGENCY ETHICS OFFICIAL.
OFFICE OF CIVIL RIGHTS AND CIVIL LIBERTIES	DIRECTOR, EQUAL EMPLOYMENT OPPORTUNITY PROGRAM.
DOMESTIC NUCLEAR DETECTION OFFICE	CHIEF OF STAFF.
	ASSISTANT DIRECTOR, OFFICE OF ASSESSMENTS.
	ASSISTANT DIRECTOR, OFFICE OF SYSTEMS DEVELOPMENT AND ACQUISITION.
	ASSISTANT DIRECTOR, OFFICE OF NATIONAL TECHNICAL NUCLEAR FORENSICS.
	ASSISTANT DIRECTOR, OFFICE OF TRANSFORMATIONAL RESEARCH AND DEVELOPMENT.
	ASSISTANT DIRECTOR, OFFICE OF TRANSFORMATIONAL RESEARCH AND DEVELOPMENT.
	DEPUTY DIRECTOR.
OFFICE OF SCREENING COORDINATION—POLICY	ASSOCIATE DIRECTOR, VETTING.
U.S. CITIZENSHIP AND IMMIGRATION SERVICES	CHIEF FINANCIAL OFFICER.
	DIRECTOR, SERVICE CENTER, LINCOLN, NEBRASKA.
	DIRECTOR, SERVICE CENTER, LAGUNA NIGUEL, CALIFORNIA.
	DIRECTOR, SERVICE CENTER, DALLAS, TEXAS.
	DIRECTOR, SERVICE CENTER, SAINT ALBANS, VERMONT.
	REGIONAL DIRECTOR (DALLAS, TEXAS).
	REGIONAL DIRECTOR (LAGUNA NIGUEL, CALIFORNIA).
	REGIONAL DIRECTOR (BURLINGTON, VERMONT).
	DIRECTOR, OFFICE OF REFUGEE AFFAIRS.
	DIRECTOR, SERVICE CENTER, DALLAS, TX.
	CHIEF INFORMATION OFFICER.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
UNITED STATES SECRET SERVICE	DIRECTOR, OFFICE OF FRAUD DETECTION AND NATIONAL SECURITY. DIRECTOR, OFFICE OF ADMINISTRATION. DIRECTOR, NATIONAL BENEFITS CENTER. DISTRICT DIRECTOR, MIAMI, FLORIDA. DISTRICT DIRECTOR, LOS ANGELES CALIFORNIA. DISTRICT DIRECTOR, SAN FRANCISCO CALIFORNIA. REGIONAL DIRECTOR, SOUTHEAST REGION. SENIOR MANAGEMENT COUNSEL. DEPUTY DIRECTOR, POLICY AND PLANNING. DIRECTOR, ASYLUM. DEPUTY GENERAL COUNSEL. DISTRICT DIRECTOR, NEW YORK DISTRICT. DIRECTOR OF DOMESTIC OPERATIONS. CHIEF, SERVICE CENTER OPERATIONS. DIRECTOR, INTERNATIONAL OPERATIONS. DIRECTOR, OFFICE OF FIELD OPERATIONS. DIRECTOR, NATIONAL SECURITY AND RECORDS VERIFICATION. DIRECTOR, OFFICE OF INFORMATION AND CUSTOMER SERVICE. DEPUTY ASSISTANT DIRECTOR, OFFICE OF INVESTIGATIONS. DEPUTY ASSISTANT DIRECTOR, OFFICE OF PROTECTIVE OPERATIONS. DEPUTY SPECIAL AGENT IN CHARGE, PRESIDENTIAL PROTECTIVE DIVISION. DEPUTY ASSISTANT DIRECTOR, WORKFORCE AND DIVERSITY PROGRAMS. DIRECTOR OF THE SECRET SERVICE. DEPUTY DIRECTOR. ASSISTANT DIRECTOR, INVESTIGATIONS. ASSISTANT DIRECTOR, PROTECTIVE OPERATIONS. ASSISTANT DIRECTOR, PROTECTIVE RESEARCH. ASSISTANT DIRECTOR, OFFICE OF ADMINISTRATION. ASSISTANT DIRECTOR, INSPECTION. DEPUTY ASSISTANT DIRECTOR, PROTECTIVE OPERATIONS. SPECIAL AGENT IN CHARGE—PRESIDENTIAL PROTECTIVE DIVISION. SPECIAL AGENT IN CHARGE—NEW YORK FIELD OFFICE. SPECIAL AGENT IN CHARGE, CHICAGO FIELD OFFICE. SPECIAL AGENT IN CHARGE—LOS ANGELES FIELD OFFICE. SPECIAL AGENT IN CHARGE, INTELLIGENCE DIVISION. SPECIAL AGENT IN CHARGE, SPECIAL OPERATIONS DIVISION. ASSISTANT DIRECTOR—HUMAN RESOURCES AND TRAINING. ASSISTANT DIRECTOR—GOVERNMENT AND PUBLIC AFFAIRS. SPECIAL AGENT IN CHARGE—VICE PRESIDENTIAL PROTECTIVE DIVISION. SPECIAL AGENT IN CHARGE—TECHNICAL SECURITY DIVISION. SPECIAL AGENT IN CHARGE—PHILADELPHIA FIELD OFFICE. CHIEF COUNSEL. CHIEF FINANCIAL OFFICER. SPECIAL AGENT IN CHARGE—SAN FRANCISCO FIELD OFFICE. SPECIAL AGENT IN CHARGE—DALLAS FIELD OFFICE. DEPUTY CHIEF COUNSEL. SPECIAL AGENT IN CHARGE (DIGNITARY PROTECTIVE DIVISION). DEPUTY ASSISTANT DIRECTOR—ADMINISTRATION. SPECIAL AGENT IN CHARGE—WASHINGTON FIELD OFFICE. DEPUTY SPECIAL AGENT IN CHARGE—PRESIDENTIAL PROTECTIVE DIVISION. DEPUTY ASSISTANT DIRECTOR—HUMAN RESOURCES AND TRAINING. DEPUTY ASSISTANT DIRECTOR—INVESTIGATIONS. SPECIAL AGENT IN CHARGE—HOUSTON FIELD OFFICE. DEPUTY ASSISTANT DIRECTOR—ROWLEY TRAINING CENTER. DEPUTY ASSISTANT DIRECTOR—OFFICE OF INVESTIGATIONS. DEPUTY ASSISTANT DIRECTOR—TECHNOLOGY (CHIEF TECHNOLOGY OFFICER)/PROTECTIVE RESEARCH. SPECIAL AGENT IN CHARGE—MIAMI FIELD OFFICE. DEPUTY ASSISTANT DIRECTOR, PROTECTIVE RESEARCH. CHIEF INFORMATION OFFICER. DEPUTY SPECIAL AGENT IN CHARGE—VICE PRESIDENTIAL PROTECTIVE DIVISION. SPECIAL AGENT IN CHARGE—ATLANTA FIELD OFFICE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	SPECIAL AGENT IN CHARGE—HONOLULU FIELD OFFICE.
	DEPUTY ASSISTANT DIRECTOR, POLICY.
	DEVELOPMENT/HOMELAND SECURITY.
UNITED STATES COAST GUARD	DEPUTY CHIEF FINANCIAL OFFICER.
	DEPUTY PROGRAM EXECUTIVE OFFICER (INTEGRATED DEEP-WATER SYSTEMS).
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL, AUDITS.
	ASSISTANT INSPECTOR GENERAL, COUNSEL.
	ASSISTANT INSPECTOR GENERAL, INVESTIGATIONS.
	ASSISTANT INSPECTOR GENERAL FOR INFORMATION TECH-NOLOGY.
	ASSISTANT INSPECTOR GENERAL FOR INSPECTIONS AND SPE-CIAL REVIEWS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	DEPUTY INSPECTOR GENERAL FOR DISASTER ASSISTANCE OVERSIGHT.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	ASSISTANT INSPECTOR GENERAL, ADMINISTRATIVE SERVICES.
	DEPUTY INSPECTOR GENERAL.
	DEPUTY ASSISTANT INSPECTOR GENERAL, INVESTIGATIONS.
UNDER SECRETARY FOR PREPAREDNESS	DIRECTOR, ADMINISTRATION.
OFFICE OF GRANTS AND TRAINING—PREPAREDNESS	DIRECTOR, OFFICE OF DOMESTIC PREPARENESS.
	DIRECTOR, PREPAREDNESS PROGRAMS DIVISION.
	DIRECTOR, EXERCISE AND TRAINING DIVISION.
OFFICE OF THE CHIEF MEDICAL OFFICER—PREPAREDNESS	DEPUTY CHIEF MEDICAL OFFICER.
ASSISTANT SECRETARY FOR INFRASTRUCTURE PROTEC-TION—PREPAREDNESS.	DIRECTOR, INFRASTRUCTURE PARTNERSHIPS DIVISION.
	DIRECTOR, HOMELAND INFRASTRUCTURE THREAT AND RISK ANALYSIS.
	DIRECTOR, CHEMICAL AND NUCLEAR PREPAREDNESS AND PROTECTION DIVISION.
	SPECIAL ASSISTANT, CYBER AND TELECOMMUNICATIONS.
ASSISTANT SECRETARY FOR CYBER AND TELECOMMUNI-CATIONS—PREPAREDNESS.	CHIEF OF STAFF, CYBER SECURITY AND TELECOMMUNI-CATIONS.
ASSISTANT SECRETARY FOR INTELLIGENCE AND ANAL-YSIS—IA.	CHIEF OF STAFF.
PLANS AND INTEGRATION—IA	DIRECTOR, PLANS AND INTEGRATION.
DIRECTOR, HOMELAND THREAT ANALYSIS—IA	DEPUTY DIRECTOR, HOMELAND INFRASTRUCTURE THREAT AND RISK ASSESSMENT CENTER.
OFFICE OF U.S.—VISIT PROGRAM	DEPUTY DIRECTOR, U.S.—VISIT PROGRAM.
	DIRECTOR, MISSION OPERATIONS MANAGEMENT.
U.S. IMMIGRATION AND CUSTOMS ENFORCEMENT	SPECIAL AGENT IN CHARGE, PHOENIX.
	SPECIAL AGENT IN CHARGE, EL PASO.
	SPECIAL AGENT IN CHARGE (MIAMI).
	DEPUTY ASSISTANT DIRECTOR (NATIONAL SECURITY INVES-TIGATIONS).
	SPECIAL AGENT IN CHARGE (NEW YORK).
	ASSISTANT DIRECTOR, OFFICE OF INVESTIGATION.
	DEPUTY ASSISTANT DIRECTOR, INVESTIGATIONS SERVICES.
	DEPUTY ASSISTANT SECRETARY FOR IMMIGRATION AND CUS-TOMS ENFORCEMENT.
	DEPUTY ASSISTANT DIRECTOR, SMUGGLING AND PUBLIC SAFE-TY INVESTIGATIONS.
	ASSISTANT DIRECTOR FOR MANAGEMENT, DETENTION AND RE-MOVAL OPERATIONS.
	DIRECTOR, FINANCIAL MANAGEMENT.
	SPECIAL AGENT IN CHARGE, ATLANTA.
	DIRECTOR, OFFICE OF PROCUREMENT.
	SPECIAL AGENT IN CHARGE, WASHINGTON, DC.
	DEPUTY ASSISTANT DIRECTOR, MISSION SUPPORT.
	DIRECTOR, OFFICE OF BUDGET AND PROGRAM PERFORMANCE.
	CHIEF INFORMATION OFFICER.
	DIRECTOR, OFFICE OF TRAINING AND CAREER DEVELOPMENT.
U.S. IMMIGRATION AND CUSTOMS ENFORCEMENT	EXECUTIVE DIRECTOR, NATIONAL INCIDENT RESPONSE UNIT.
	DEPUTY ASSISTANT DIRECTOR, INTERNATIONAL AFFAIRS.
	DEPUTY CHIEF FINANCIAL OFFICER.
	ASSISTANT DIRECTOR FOR OPERATIONS, DETENTION, AND RE-MOVAL OPERATIONS.
	DIRECTOR, FEDERAL PROTECTIVE SERVICE.
	SPECIAL AGENT IN CHARGE, LOS ANGELES.
	DIRECTOR, OFFICE OF PROFESSIONAL RESPONSIBILITY.
	REGIONAL SPECIAL AGENT IN CHARGE, EL PASO.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
U.S. CUSTOMS AND BORDER PROTECTION	SPECIAL AGENT IN CHARGE (SEATTLE). SPECIAL AGENT IN CHARGE, NEW ORLEANS. DEPUTY ASSISTANT DIRECTOR, FINANCE AND TRADE INVESTIGATIONS. SPECIAL AGENT IN CHARGE, SAN JUAN. SPECIAL AGENT IN CHARGE, HOUSTON. SPECIAL AGENT IN CHARGE, CHICAGO. SPECIAL AGENT IN CHARGE, SAN DIEGO. SPECIAL AGENT IN CHARGE, SAN ANTONIO. SPECIAL AGENT IN CHARGE, TAMPA. CHIEF FINANCIAL OFFICER. DEPUTY ASSISTANT DIRECTOR, MISSION SUPPORT. SPECIAL AGENT IN CHARGE, SAN FRANCISCO. CHIEF LAW ENFORCEMENT SUPPORT CENTER. EXECUTIVE DIRECTOR, BORDER SECURITY INITIATIVES. DIRECTOR, OFFICE OF INVESTIGATIONS. DIRECTOR, DETENTION AND REMOVAL OPERATIONS. DIRECTOR, FIELD LEGAL OPERATIONS. SENIOR MANAGEMENT COUNSEL. DEPUTY PRINCIPAL LEGAL ADVISOR. ASSISTANT DIRECTOR FOR INTERNATIONAL AFFAIRS. DIRECTOR, INTELLIGENCE. PORT DIRECTOR, JFK AIRPORT. EXECUTIVE DIRECTOR, FIELD AND RESOURCE MANAGEMENT. DEPUTY CHIEF COUNSEL. DIRECTOR, FIELD OPERATIONS (DETROIT). DIRECTOR, FIELD OPERATIONS (SEATTLE). DIRECTOR, FIELD OPERATIONS (BUFFALO). DIRECTOR, FIELD OPERATIONS (TUCSON). DIRECTOR, FIELD OPERATIONS (BOSTON). PORT DIRECTOR, LOS ANGELES INTERNATIONAL AIRPORT. EXECUTIVE DIRECTOR, AGRICULTURE INSPECTION POLICY AND PROGRAMS. EXECUTIVE DIRECTOR, CONTAINER SECURITY INITIATIVE. EXECUTIVE DIRECTOR, NATIONAL TARGETING CENTER. DIRECTOR, FIELD OPERATIONS (ATLANTA). CHIEF PATROL AGENT (TUCSON). PORT DIRECTOR, LOS ANGELES/LONG BEACH SEAPORT. DIRECTOR, FIELD OPERATIONS, SAN FRANCISCO PORT DIRECTOR (EL PASO). EXECUTIVE DIRECTOR, TECHNOLOGY OPERATIONS. EXECUTIVE DIRECTOR, MISSION SUPPORT. CHIEF, SOUTHWEST BORDER DIVISION. CHIEF PATROL AGENT (DEL RIO). CHIEF PATROL AGENT (YUMA). EXECUTIVE DIRECTOR, ADMISSIBILITY REQUIREMENTS AND MITGRATION CONTROL. CHIEF PATROL AGENT, MCALLEN. DEPUTY ASSISTANT COMMISSIONER, OFFICE OF INTERNATIONAL AFFAIRS. CHIEF PATROL AGENT, YUMA, ARIZONA. EXECUTIVE DIRECTOR, CARGO SYSTEMS PROGRAMS OFFICE. ASSISTANT COMMISSIONER, FINANCE. DIRECTOR, SECURE BORDERS INITIATIVE. ASSISTANT COMMISSIONER, MANAGEMENT INSPECTIONS AND INTEGRITY ASSISTANCE. ASSOCIATE CHIEF COUNSEL—ADMINISTRATION. ASSOCIATE CHIEF COUNSEL—SOUTHEAST. ASSOCIATE CHIEF COUNSEL, CHICAGO. ASSOCIATE CHIEF COUNSEL—NEW YORK. DIRECTOR, REGULATORY AUDIT. ASSOCIATE CHIEF COUNSEL—ENFORCEMENT. ASSOCIATE CHIEF COUNSEL—TRADE AND FINANCE. ASSOCIATE CHIEF COUNSEL—SOUTHWEST. DEPUTY ASSISTANT COMMISSIONER, HUMAN RESOURCES MANAGEMENT. DEPUTY ASSISTANT COMMISSIONER, CUSTOMS AND BORDER PROTECTION AIR AND MARINE. EXECUTIVE DIRECTOR, ASSET ACQUISITION MANAGEMENT. DIRECTOR, LABOR AND EMPLOYEE RELATIONS. DIRECTOR, INTERNATIONAL TRADE COMPLIANCE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, FIELD OPERATIONS (NEW YORK) AREA DIRECTOR, NEWARK.
	ASSISTANT COMMISSIONER, FIELD OPERATIONS.
	ASSISTANT COMMISSIONER, REGULATIONS AND RULINGS.
	ASSOCIATE CHIEF COUNSEL—LOS ANGELES.
	ASSISTANT COMMISSIONER, INFORMATION AND TECHNOLOGY.
	EXECUTIVE DIRECTOR, ANTI-TERRORISM.
	CHIEF PROCUREMENT OFFICER.
	EXECUTIVE DIRECTOR, LABORATORIES AND SCIENTIFIC SERVICES.
	EXECUTIVE DIRECTOR, TRADES COMPLIANCE AND FACILITATION.
	DEPUTY ASSISTANT COMMISSIONER, FIELD OPERATIONS.
	DIRECTOR, PASSENGER PROGRAMS.
	DIRECTOR, FIELD OPERATIONS (HOUSTON).
	DEPUTY CHIEF, BORDER PATROL.
	DIRECTOR, FIELD OPERATIONS (MIAMI).
	EXECUTIVE DIRECTOR, FOREIGN OPERATIONS.
	DIRECTOR, FIELD OPERATIONS (SAN DIEGO).
	EXECUTIVE DIRECTOR, BUDGET.
	DIRECTOR, FIELD OPERATIONS (CHICAGO).
	PORT DIRECTOR, SAN YSIDRO.
	DIRECTOR, FIELD OPERATIONS (LOS ANGELES).
	EXECUTIVE DIRECTOR, CARGO AND CONVEYANCE SECURITY.
	EXECUTIVE DIRECTOR, ADMISSIBILITY REQUIREMENTS AND MIGRATION CONTROL.
	DIRECTOR, FIELD OPERATIONS (LAREDO).
	ASSISTANT COMMISSIONER, STRATEGIC TRADE.
	ASSISTANT COMMISSIONER, HUMAN RESOURCES.
	PORT DIRECTOR, MIAMI INTERNATIONAL AIRPORT.
	ASSISTANT COMMISSIONER, TRAINING AND DEVELOPMENT.
	ASSISTANT COMMISSIONER, CUSTOMS AND BORDER PROTECTION AIR AND MARINE.
	CHIEF PATROL AGENT—LAREDO SECTOR.
	CHIEF, BORDER PATROL.
	DIRECTOR, FIELD OPERATIONS, EL PASO.
	CHIEF PATROL AGENT (SAN DIEGO).
	CHIEF PATROL AGENT (EL PASO).
	CHIEF PATROL AGENT (EL CENTRO).
	DEPUTY ASSISTANT COMMISSIONER, INFORMATION AND TECHNOLOGY.
	DEPUTY CHIEF FINANCIAL OFFICER.
FEDERAL LAW ENFORCEMENT TRAINING CENTER	ASSISTANT DIRECTOR, CHIEF INFORMATION OFFICER.
	ASSISTANT DIRECTOR, TRAINING INNOVATION AND.
	MANAGEMENT DIRECTORATE.
	DEPUTY DIRECTOR, FEDERAL LAW ENFORCEMENT TRAINING CENTER.
	DIRECTOR, FEDERAL LAW ENFORCEMENT TRAINING CENTER.
	SENIOR ASSISTANT DIRECTOR, WASHINGTON OPERATIONS.
	ASSISTANT DIRECTOR, TRAINING.
	ASSISTANT DIRECTOR, ADMINISTRATION.
	ASSISTANT DIRECTOR, FIELD TRAINING.
FEDERAL EMERGENCY MANAGEMENT AGENCY	DIRECTOR OF MANAGEMENT/CHIEF ACQUISITION OFFICER.
	DEPUTY DIRECTOR FOR INSURANCE.
	CHIEF FINANCIAL OFFICER.
	DEPUTY DIRECTOR FOR KATRINA/RITA PROCUREMENT.
	DEPUTY CHIEF FINANCIAL OFFICER.
	DEPUTY DIRECTOR, MITIGRATION DIVISION.
	PROCUREMENT EXECUTIVE.
OFFICE FOR INFORMATION ANALYSIS	DIRECTOR, INFORMATION ANALYSIS, REQUIREMENTS DIVISION.
OFFICE FOR INFRASTRUCTURE PROTECTION	CHIEF, TECHNOLOGY AND STANDARDS.
OFFICE OF THE CHIEF FINANCIAL OFFICER	DIRECTOR, OFFICE OF BUDGET.
	DIRECTOR, PROGRAM ANALYSIS AND EVALUATION.
	DIRECTOR, FINANCIAL MANAGEMENT.
	DIRECTOR, RESOURCE MANAGEMENT TRANSFORMATION OFFICE.
	DEPUTY DIRECTOR, FINANCIAL MANAGEMENT.
OFFICE OF PROCUREMENT	DIRECTOR, OFFICE OF PROCUREMENT OPERATIONS.
OFFICE OF THE CHIEF HUMAN CAPITAL OFFICER	DEPUTY CHIEF HUMAN CAPITAL OFFICER.
	DIRECTOR, HUMAN CAPITAL SERVICES AND ACCOUNTABILITY.
	DIRECTOR, HUMAN CAPITAL POLICY AND INNOVATION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, WORKFORCE RELATIONS AND PERFORMANCE CULTURE.
OFFICE OF THE CHIEF INFORMATION OFFICER	DIRECTOR, INFORMATION SECURITY.
	DEPUTY DIRECTOR, INFRASTRUCTURE OPERATIONS.
	DEPUTY DIRECTOR, INFRASTRUCTURE OPERATIONS.
OFFICE OF ADMINISTRATION	DEPUTY, CHIEF ADMINISTRATIVE SERVICES OFFICER.
	DIRECTOR, HEADQUARTERS ADMINISTRATIVE SERVICES CENTER.
OFFICE OF THE UNDER SECRETARY FOR SCIENCE AND TECHNOLOGY.	SCIENCE AND TECHNOLOGY CHIEF FINANCIAL OFFICER.
OFFICE OF THE DIRECTOR FOR RESEARCH AND DEVELOPMENT.	DEPUTY DIRECTOR, OFFICE OF RESEARCH AND DEVELOPMENT.
OFFICE OF THE DIRECTOR FOR SYSTEMS ENGINEERING AND DEVELOPMENT.	DIRECTOR, OFFICE OF INTEROPERABILITY AND COMPATIBILITY.
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT:	
OFFICE OF THE SECRETARY	DIRECTOR, OFFICE OF HEARINGS AND APPEALS.
OFFICE OF THE GENERAL COUNSEL	DIRECTOR, DEPARTMENTAL ENFORCEMENT CENTER.
	ASSOCIATE GENERAL COUNSEL FOR PROGRAM ENFORCEMENT.
	DEPUTY DIRECTOR, OPERATIONS AND COMPLIANCE.
	SENIOR COUNSEL (APPEALS, ODEEO ADVICE AND SPECIAL PROJECTS).
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	DEPUTY INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT AND POLICY.
	DEPUTY ASSISTANT INSPECTOR FOR INVESTIGATION.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	COUNSEL TO THE INSPECTOR GENERAL.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT AND POLICY.
	CRIMINAL INVESTIGATOR (DIRECTOR, INSPECTIONS AND EVALUATIONS).
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT (DISASTER RELIEF).
OFFICE OF THE CHIEF FINANCIAL OFFICER	ASSISTANT CHIEF FINANCIAL OFFICER FOR BUDGET.
OFFICE OF THE CHIEF FINANCIAL OFFICER	DEPUTY CHIEF FINANCIAL OFFICER.
	ASSISTANT CHIEF FINANCIAL OFFICER FOR FINANCIAL MANAGEMENT.
	ASSISTANT CHIEF FINANCIAL OFFICER FOR ACCOUNTING.
ASSISTANT SECRETARY FOR ADMINISTRATION	DIRECTOR, GRANTS MANAGEMENT CENTER.
	DEPUTY CHIEF PROCUREMENT OFFICER.
	DEPUTY CHIEF TECHNOLOGY OFFICER FOR INFORMATION TECHNOLOGY OPERATIONS.
ASSISTANT SECRETARY FOR HOUSING	HOUSING/FEDERAL HOUSING ADMINISTRATION COMPTROLLER.
	DIRECTOR, OFFICE OF ASSET MANAGEMENT.
	DIRECTOR, OFFICE OF PROGRAM SYSTEMS MANAGEMENT.
	DEPUTY ASSISTANT SECRETARY FOR FINANCE AND BUDGET.
ASSISTANT SECRETARY FOR FAIR HOUSING AND EQUAL OPPORTUNITY.	DIRECTOR, OFFICE OF ENFORCEMENT.
OFFICE OF DEPARTMENTAL EQUAL EMPLOYMENT OPPORTUNITY.	DIRECTOR, OFFICE OF DEPARTMENTAL EQUAL EMPLOYMENT OPPORTUNITY.
ASSISTANT SECRETARY FOR COMMUNITY PLANNING AND DEVELOPMENT.	DIRECTOR, OFFICE OF COMMUNITY VIABILITY.
	DEPUTY ASSISTANT SECRETARY FOR SPECIAL NEEDS PROGRAMS.
GOVERNMENT NATIONAL MORTGAGE ASSOCIATION	SENIOR VICE PRESIDENT OFFICE OF CAPITAL MARKETS AND POLICY.
	SENIOR VICE PRESIDENT, OFFICE OF FINANCE.
	SENIOR VICE PRESIDENT, OFFICE OF MANAGEMENT OPERATIONS.
	SENIOR VICE PRESIDENT, OFFICE OF PROGRAM OPERATIONS.
	SENIOR VICE PRESIDENT, OFFICE OF MORTGAGE-BACKED SECURITIES.
ASSISTANT SECRETARY FOR PUBLIC AND INDIAN HOUSING	GENERAL DEPUTY ASSISTANT SECRETARY FOR PUBLIC AND INDIAN HOUSING.
	DEPUTY ASSISTANT SECRETARY FOR THE REAL ESTATE ASSESSMENT CENTER.
	DIRECTOR, ADMINISTRATIVE OPERATIONS.
	DIRECTOR, OFFICE OF HOUSING VOUCHER PROGRAMS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
DEPARTMENT OF THE INTERIOR:	
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR AUDITING.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	ASSISTANT INSPECTOR GENERAL FOR ADMINISTRATIVE SERVICES AND INFORMATION MANAGEMENT.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR ADMINISTRATIVE.
	SERVICES AND INFORMATION MANAGEMENT.
	CHIEF INFORMATION OFFICER.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITS.
OFFICE OF THE SOLICITOR	DEPUTY ASSOCIATE SOLICITOR, GENERAL LAW.
	DEPUTY ASSOCIATE SOLICTOR, DIVISION OF PARKS AND WILDLIFE.
	DEPUTY ASSOCIATE SOLICITOR-MINERAL RESOURCES.
	ASSOCIATE SOLICITOR FOR ADMINSTRATION.
	DEPUTY ASSOCIATE SOLICITOR, DIVISION OF LAND AND WATER RESOURCES.
	DESIGNATED AGENCY ETHICS OFFICIAL.
ASSISTANT SECRETARY—POLICY, MANAGEMENT AND BUDGET.	ASSISTANT DIRECTOR FOR ECONOMICS.
	MANAGER, SCIENCE AND ENGINEERING.
	DEPUTY ASSISTANT SECRETARY—LAW ENFORCEMENT AND SECURITY.
	ASSOCIATE DIRECTOR FOR FINANCIAL REPORTING AND SYSTEMS.
	ASSOCIATE DIRECTOR FOR FINANCIAL POLICY AND OPERATIONS.
ASSISTANT SECRETARY—POLICY, MANAGEMENT AND BUDGET.	DEPUTY CHIEF HUMAN CAPITAL OFFICER.
	DEPUTY ASSISTANT SECRETARY—BUSINESS MANAGEMENT AND WILDLAND FIRE.
	DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT AND DEPUTY.
	CHIEF FINANCIAL OFFICER.
	CHIEF DIVISION OF BUDGET AND PROGRAM REVIEW.
	DIRECTOR, OFFICE OF LAW ENFORCEMENT AND SECURITY.
NATIONAL PARK SERVICE	FINANCIAL ADVISOR (COMPTROLLER).
	PARK MANAGER.
FIELD OFFICES	PARK MANAGER-YOSEMITE (SUPERINTENDENT).
	PARK MANAGER EVERGLADES.
	PARK MANAGER (SUPERINTENDENT).
	PARK MANAGER.
	SUPERINTENDENT (PARK MANAGER), EVERGLADES NATIONAL PARK.
UNITED STATES FISH AND WILDLIFE SERVICE	EXECUTIVE DIRECTOR—REGIONAL ECOSYSTEM OFFICE.
ASSISTANT SECRETARY—WATER AND SCIENCE	DEPUTY ASSISTANT SECRETARY—WATER AND SCIENCE.
FIELD OFFICES	DIRECTOR, TECHNICAL SERVICES CENTER.
	DIRECTOR, MANAGEMENT SERVICES OFFICE.
DIRECTORS OFFICE	ASSOCIATE DIRECTOR FOR GEOGRAPHIC INFORMATION.
	DEPUTY DIRECTOR, UNITED STATES GEOLOGICAL SURVEY.
	REGIONAL DIRECTOR, EASTERN REGION.
	REGIONAL DIRECTOR, WESTERN REGION.
DIRECTORS OFFICE	SENIOR LIAISON FOR INTERAGENCY PROGRAMS.
	ASSOCIATE DIRECTOR FOR ADMINISTRATIVE POLICY AND SERVICES.
	DEPUTY CHIEF, OFFICE OF ADMINISTRATIVE POLICY AND SERVICES (FINANCIAL MANAGEMENT).
	ASSOCIATE DIRECTOR FOR HUMAN CAPITAL.
	CHIEF, OFFICE OF BUDGET AND PERFORMANCE.
NATIONAL MAPPING DIVISION	ASSOCIATE DIRECTOR FOR GEOGRAPHY.
	CHIEF SCIENTIST FOR GEOGRAPHY.
FIELD OFFICES	REGIONAL GEOGRAPHER, EASTERN REGION.
	REGIONAL GEOGRAPHER, WESTERN REGION.
WATER RESOURCES DIVISION	ASSOCIATE DIRECTOR FOR WATER.
	CHIEF SCIENTIST FOR HYDROLOGY.
FIELD OFFICES	REGIONAL HYDROLOGIST CENTRAL REGION.
	REGIONAL HYDROLOGIST SOUTHEASTERN REGION.
	REGIONAL HYDROLOGIST, NORTHEASTERN REGION.
	REGIONAL HYDROLOGIST, WESTERN REGION.
GEOLOGIC DIVISION	ASSOCIATE DIRECTOR FOR GEOLOGY.
	REGIONAL GEOLOGIST WESTERN REGION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	REGIONAL GEOLOGIST, EASTERN REGION.
	CHIEF SCIENTIST FOR GEOLOGY.
BIOLOGICAL RESOURCES DIVISION	ASSOCIATE CHIEF BIOLOGIST FOR INFORMATION.
FIELD OFFICES	REGIONAL CHIEF BIOLOGIST, EASTERN REGION.
	REGIONAL BIOLOGIST, WESTERN REGION.
FIELD OFFICES	REGIONAL DIRECTOR.
	REGIONAL DIRECTOR.
MINERALS MANAGEMENT SERVICE	ASSOCIATE DIRECTOR FOR POLICY AND MANAGEMENT IMPROVEMENT.
	CHIEF, OFFSHORE ENGINEERING AND OPERATIONS DIVISION.
FIELD OFFICES	REGIONAL DIRECTOR, GULF OF MEXICO OUTER CONTINENTAL SHELF REGION.
	PROGRAM DIRECTOR FOR ONSHORE COMPLIANCE AND ASSET MANAGEMENT.
	PROGRAM DIRECTOR FOR ROYALTY-N-KIND.
	REGIONAL DIRECTOR, ALASKA OUTER CONTINENTAL SHELF REGION.
	DEPUTY ASSOCIATE DIRECTOR FOR MINERALS REVENUE MANAGEMENT.
	PROGRAM DIRECTOR FOR COMPLIANCE AND ASSET MANAGEMENT.
BUREAU OF INDIAN AFFAIRS	DEPUTY DIRECTOR, FIELD OPERATIONS.
	DEPUTY DIRECTOR, OFFICE OF INDIAN EDUCATION PROGRAMS.
OFFICE OF HEARINGS AND APPEALS	DIRECTOR, OFFICE OF HEARINGS AND APPEALS.
DEPARTMENT OF JUSTICE:	
OFFICE OF THE LEGAL COUNSEL	SPECIAL COUNSEL.
	SPECIAL COUNSEL.
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL, EVALUATION AND INSPECTIONS DIVISION.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATION.
	ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT AND PLANNING.
	DEPUTY INSPECTOR GENERAL.
	GENERAL COUNSEL.
	DIRECTOR, OFFICE OF OVERSIGHT AND REVIEW.
OFFICE OF PROFESSIONAL RESPONSIBILITY	COUNSEL ON PROFESSIONAL RESPONSIBILITY.
	DEPUTY COUNSEL ON PROFESSIONAL RESPONSIBILITY.
JUSTICE MANAGEMENT DIVISION	ASSISTANT ATTORNEY GENERAL FOR ADMINISTRATION.
	DEPUTY ASSISTANT ATTORNEY GENERAL, POLICY, MANAGEMENT, AND PLANNING.
	DIRECTOR, HUMAN RESOURCES.
	DIRECTOR, SECURITY AND EMERGENCY PLANNING STAFF.
	DIRECTOR FINANCE STAFF.
	DEPUTY ASSISTANT ATTORNEY GENERAL.
	DEPUTY ASSISTANT ATTORNEY GENERAL FOR HUMAN RESOURCES AND ADMINISTRATION.
	DIRECTOR LIBRARY STAFF.
	DIRECTOR, FACILITIES AND ADMINISTRATIVE SERVICES STAFF.
	DIRECTOR, OFFICE OF ATTORNEY PERSONNEL MANAGEMENT.
	DIRECTOR TELECOMMUNICATIONS SERVICES STAFF.
	INFORMATION TECHNOLOGY PROJECT MANAGER.
	INFORMATION TECHNOLOGY SECURITY PROJECT MANAGER.
	CHIEF OF STAFF.
	DIRECTOR, OPERATIONS SERVICES STAFF.
	DIRECTOR, INFORMATION TECHNOLOGY POLICY AND PLANNING STAFF.
	DIRECTOR MANAGEMENT AND PLANNING STAFF.
JUSTICE MANAGEMENT DIVISION	DIRECTOR, BUDGET STAFF.
	DIRECTOR, DEBT COLLECTION MANAGEMENT STAFF.
	CHIEF INFORMATION OFFICER.
	DIRECTOR PROCUREMENT SERVICES STAFF.
	GENERAL COUNSEL.
	DIRECTOR, EQUAL EMPLOYMENT OPPORTUNITY STAFF.
	DEPUTY DIRECTOR, BUDGET STAFF.
	DEPUTY DIRECTOR (PROGRAMS AND PERFORMANCE), BUDGET STAFF.
	CHIEF, TECHNOLOGY OFFICER.
	DEPUTY DIRECTOR (AUDITING).
	DEPUTY DIRECTOR, PERSONNEL STAFF.
PROFESSIONAL RESPONSIBILITY ADVISORY OFFICE	DIRECTOR, PROFESSIONAL RESPONSPONSIBILITY ADVSIORY OFFICE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE OF FEDERAL DETENTION TRUSTEE	FEDERAL DETENTION TRUSTEE.
FEDERAL BUREAU OF PRISONS	ASSISTANT DIRECTOR FOR ADMINISTRATION.
	ASSISTANT DIRECTOR CORRECTIONAL PROGRAMS DIVISION.
	GENERAL COUNSEL.
	REGIONAL DIRECTOR, NORTHEAST REGION.
	REGIONAL DIRECTOR, SOUTHEAST REGION.
	REGIONAL DIRECTOR, NORTH CENTRAL REGION.
	REGIONAL DIRECTOR, WESTERN REGION.
	REGIONAL DIRECTOR, SOUTH CENTRAL REGION.
	WARDEN, UNITED STATES PENITENTIARY, ATLANTA, GEORGIA.
	WARDEN LEAVENWORTH KANSAS.
	WARDEN, UNITED STATES PENITENTIARY, LEWISBURG, PENNSYLVANIA.
	WARDEN, LOMPOC, CALIFORNIA.
	WARDEN SPRINGFIELD MISSOURI.
	WARDEN, LEXINGTON KENTUCKY.
FEDERAL BUREAU OF PRISONS	WARDEN, UNITED STATES PENITENTIARY, MARION ILLINOIS.
	ASSOCIATE COMMISSIONER, FEDERAL PRISONS INDUSTRIES, UNICORE.
	WARDEN TERRE HAUTE, INDIANA.
	WARDEN BUTNER NORTH CAROLINA.
	WARDEN, FEDERAL MEDICAL CENTER, FORT WORTH TEXAS.
	WARDEN MARIANNA FLORIDA.
	ASSISTANT DIRECTOR FOR HUMAN RESOURCES MANAGEMENT.
	SENIOR DEPUTY ASSISTANT DIRECTOR, CORRECTIONAL PROGRAMS DIVISION.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, PHOENIX, ARIZONA.
	CORRECTIONAL INSTITUTION ADMINISTRATOR (WARDEN,.
	FEDERAL MEDICAL CENTER, ROCHESTER, MINNESOTA).
	REGIONAL DIRECTOR MIDDLE ATLANTIC DIVISION.
	WARDEN FEDERAL CORRECTIONAL INSTITUTION.
	ASSISTANT DIRECTOR, INFORMATION, POLICY, AND PUBLIC AFFAIRS DIVISION.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, TALLADEGA, ALABAMA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, FORT DIX, NEW JERSEY.
	WARDEN, FEDERAL CORRECTIONAL COMPLEX, FLOREN, COLORADO.
	WARDEN, UNITED STATES PENITENTIARY, ADMINISTRATIVE.
	DETENTION FACILITY, FLORENCE, COLORADO.
	WARDEN, FEDERAL CORRECTIONAL COMPLEX, OAKDALE, LOUISIANA.
	WARDEN, FEDERAL MEDICAL CENTER, CARSWELL, TEXAS.
	WARDEN, FEDERAL CORRECTIONAL COMPLEX, ALLENWOOD, PENNSYLVANIA.
	WARDEN, FEDERAL TRANSFER CENTER, OKLAHOMA CITY, OKLAHOMA.
	SENIOR DEPUTY ASSISTANT DIRECTOR (ADMINISTRATION).
	CORRECTIONAL INSTITUTION ADMINISTRATOR (WARDEN).
	FEDERAL CORRECTIONAL INSTITUTE/EL RENO, OKLAHOMA.
	WARDEN, FEDERAL DETENTION CENTER, MIAMI, FLORIDA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, FAIRTON, NEW JERSEY.
	CORRECTIONAL PROGRAM OFFICER/SENIOR DEPUTY REGIONAL DIRECTOR.
	CORRECTIONAL PROGRAM OFFICER/SENIOR DEPUTY ASSISTANT DIRECTOR PROGRAM REVIEW DIVISION.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, EDGEFIELD, SOUTH CAROLINA.
	CORRECTIONAL INSTITUTION ADMINISTRATOR (WARDEN, FEDERAL MEDICAL CENTER, FEDERAL TRANSFER CENTER, MASSACHUSETTS).
	CORRECTIONAL INSTITUTION ADMINISTRATOR.
	CORRECTIONAL INSTITUTION ADMINISTRATOR (WARDEN, UNITED STATES PENTENTIARY, BEAUMONT, TEXAS).
	ASSISTANT DIRECTOR, HEALTH SERVICES DIVISION.
	DEPUTY ASSISTANT DIRECTOR FOR ADMINISTRATION.
	WARDEN, METROPOLITAN DETENTION CENTER, BROOKLYN, NEW YORK.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	WARDEN, UNITED STATES PENITENTIARY, POLLOCK, LOUISIANA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, MEDIUM, BEAUMONT, TEXAS.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, BECKLEY, WEST VIRGINIA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, JESUP, GEORGIA.
	CORRECTIONAL INSTITUTION ADMINISTRATOR (WARDEN).
	WARDEN, METROPOLITAN CORRECTIONAL CENTER, NEW YORK, NEW YORK.
	WARDEN, UNITED STATES PENITENTIARY, ATWATER, CALIFORNIA.
	WARDEN, FEDERAL CORRECTIONAL COMPLEX, UNITED STATES.
	PENITENTIARY/LOW CORRECTIONAL FACILITY, COLEMAN, FLORIDA.
	WARDEN, UNITED STATES PENITENTIARY, LEE, VIRGINIA.
	SENIOR COUNSEL.
	WARDEN, FEDERAL CORRECTION INSTITUTION, PETERSBURG, VIRGINIA.
	WARDEN, UNITED STATES PENITENTIARY, BIG SANDY, KENTUCKY.
	CORRECTIONAL INSTITUTION ADMINISTRATOR (WARDEN, UNITED STATES PENITENTIARY VICTORVILLE, CALIFORNIA).
	CORRECTIONAL INSTITUTION ADMINISTRATOR (WARDEN, UNITED STATES PENITENTIARY, MCCREARY, KENTUCKY).
	WARDEN, UNITED STATES PRISON, HAZELTON, WEST VIRIGINA.
	WARDEN, FEDERAL CORRECTIONAL COMPLES, YAZOO CITY, MISSISSIPPI.
	WARDEN, UNITED STATES PENITENTIARY, WAYMART PENNSYLVANIA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, BUTNER, NORTH CAROLINA.
	WARDEN, FEDERAL CORRECTIONAL COMPLEX, U.S. PENTENTIARY AND MEDIUM FACILITY, COLEMAN, FLORIDA.
	WARDEN, UNITED STATES PENITENTIARY, TUCSON.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, CUMBERLAND, MARYLAND.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, ESTILL, SOUTH CAROLINA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, GREENVILLE, ILLINIOIS.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, MCKEAN, PENNSYLVANIA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, OXFORD, WISCONSIN.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, PEKIN, ILLINOIS.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, SCHUYLKILL, PENNSYLVANIA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, THREE RIVERS, TEXAS.
	WARDEN, METROPOLITAN DETENTION CENTER, GUAYNABO, PUERTO RICO.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, MEMPHIS, TENNESSEE.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, SHERIDAN, OREGON.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, GILMER, WEST VIRGINIA.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, MANCHESTER, KENTUCKY.
	WARDEN, FEDERAL CORRECTIONAL INSTITUTION, BENNETTSVILLE, SOUTH CAROLINA.
OFFICE OF INTELLIGENCE POLICY AND REVIEW	DEPUTY COUNSEL FOR INTELLIGENCE LAW.
EXECUTIVE OFFICE FOR IMMIGRATION REVIEW	CHIEF IMMIGRATION JUDGE.
	CHAIRMAN, BOARD OF IMIGRATION APPEALS.
	GENERAL COUNSEL.
	ASSOCIATE DIRECTOR.
	CHIEF ADMINISTRATOR HEARING OFFICER.
CRIMINAL DIVISION	SENIOR COUNSEL TO THE ASSISTANT ATTORNEY GENERAL.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, ORGANIZED CRIME DRUG ENFORCEMENT TASK FORCES.
	CHIEF PUBLIC INTEGRITY SECTION.
	DEPUTY CHIEF, FRAUD SECTION.
	CHIEF, ASSET FORFEITURE AND MONEY LAUNDERING SECTION.
	PRINCIPAL DEPUTY CHIEF PUBLIC INTEGRITY SECTION.
	SENIOR APPELLATE COUNSEL.
	EXECUTIVE OFFICER.
	DEPUTY CHIEF TERRORISM AND VIOLENT CRIME, COUNTERTERRORISM SECTION.
	DEPUTY CHIEF, COMPUTER CRIME AND INTELLECTUAL PROPERTY SECTION.
	CHIEF OF INTERNATIONAL TRAINING AND DEVELOPMENT PROGRAMS.
	SENIOR COUNSEL TO THE ASSISTANT ATTORNEY GENERAL.
	PRINCIPAL DEPUTY FOR ENFORCEMENT OPERATIONS, NARCOTIC AND DANGEROUS DRUG SECTION.
	DIRECTOR, OFFICE OF OVERSEAS PROSECUTORIAL.
	DEVELOPMENT, ASSISTANCE, AND TRAINING.
NATIONAL SECURITY DIVISION	DEPUTY ASSISTANT ATTORNEY GENERAL, FOREIGN.
	INTELLIGENCE SURVEILLANCE ACT OPERATIONS AND INTELLIGENCE OVERSIGHT.
EXECUTIVE OFFICE FOR UNITED STATES ATTORNEYS	DIRECTOR, OFFICE OF ADMINISTRATION AND REVIEW.
	DEPUTY DIRECTOR FOR OPERATIONS.
	DIRECTOR, OFFICE OF LEGAL EDUCATION.
	DEPUTY DIRECTOR, FINANCIAL MANAGEMENT STAFF.
UNITED STATES MARSHALS SERVICE	ASSISTANT DIRECTOR FOR OPERATIONS SUPPORT.
	ASSISTANT DIRECTOR FOR HUMAN RESOURCES.
	ASSISTANT DIRECTOR FOR PRISONER SERVICES.
	ASSISTANT DIRECTOR FOR BUSINESS SERVICES.
	ASSISTANT DIRECTOR FOR MANAGEMENT AND BUDGET.
	ASSISTANT DIRECTOR FOR EXECUTIVE SERVICE.
	ASSISTANT DIRECTOR FOR JUDICAL SECURITY.
	ASSISTANT DIRECTOR FOR TRAINING.
	ASSISTANT DIRECTOR, JUSTICE PRISONER AND ALIEN TRANSPORTATION SYSTEM.
	ASSISTANT DIRECTOR, FOR INVESTIGATIVE SERVICES.
	ASSISTANT DIRECTOR FOR INFORMATION TECHNOLOGY.
OFFICE OF THE ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES.	DEPUTY DIRECTOR.
	ASSISTANT DIRECTOR (FIELD OPERATIONS).
	DEPUTY ASSISTANT DIRECTOR (CRIMINAL ENFORCEMENT FIELD.
	OPERATIONS—CENTRAL).
	ASSISTANT DIRECTOR (ENFORCEMENT PROGRAMS AND SERVICES).
	DEPUTY ASSISTANT DIRECTOR (ENFORCEMENT PROGRAMS AND SERVICES)).
	ASSISTANT DIRECTOR (OFFICE OF PROFESSIONAL.
	RESPONSIBILITY AND SECURITY OPERATIONS).
	DEPUTY ASSISANT DIRECTOR (SCIENCE AND TECHNOLOGY).
	ASSISTANT DIRECTOR (SCIENCE AND TECHNOLOGY)/CHIEF INFORMATION OFFICER.
	DIRECTOR, LABORATORY SERVICES.
	ASSOCIATE CHIEF COUNSEL (ADMINISTRATION AND ETHICS).
	DEPUTY ASSISTANT DIRECTOR (FIELD OPERATIONS—WEST).
	DIVISION DIRECTOR/SPECIAL-AGENT-IN-CHARGE, LOS ANGELES.
	DIVISION DIRECTOR/SPECIAL-AGENT-IN-CHARGE, NEW YORK.
	DIVISION DIRECTOR/SPECIAL-AGENT-IN-CHARGE, WASHINGTON.
	DIVISION DIRECTOR/SPECIAL-AGENT-IN-CHARGE, HOUSTON FIELD DIVISION.
	DEPUTY ASSISTANT DIRECTOR (OFFICE OF PROFESSIONAL RESPONSIBILITY AND SECURITY OPERATIONS).
	DEPUTY ASSISTANT DIRECTOR (INDUSTRY OPERATIONS).
	DIVISION DIRECTOR, SPECIAL AGENT IN CHARGE, NASHVILLE FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, DALLAS FIELD DIVISION.
	ASSISTANT DIRECTOR (PUBLIC AND GOVERNMENTAL AFFAIRS).
	DEPUTY ASSISTANT DIRECTOR (STRATEGIC INTELLIGENCE AND INFORMATION).

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSISTANT DIRECTOR (STRATEGIC INTELLIGENCE AND INFORMATION).
	DEPUTY ASSISTANT DIRECTOR (POLICY AND GOVERNMENTAL AFFAIRS).
	SPECIAL AGENT IN CHARGE, ATLANTA FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, BOSTON FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, CHICAGO FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, KANSAS CITY FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, PHILADELPHIA FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, PHOENIX FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, SAN FRANCISCO FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, MIAMI FIELD OFFICE.
	SPECIAL AGENT IN CHARGE, CHARLOTTE FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, DETROIT FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, LOUISVILLE FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, SEATTLE FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, TAMPA FIELD DIVISION.
	SPECIAL AGENT IN CHARGE, SAINT PAUL FIELD DIVISION.
	SPECIAL AGENT IN CHARGE.
	SPECIAL AGENT IN CHARGE, COLUMBUS, FIELD OFFICE.
	SPECIAL AGENT IN CHARGE, BALTIMORE FIELD.
ANTITRUST DIVISION	DIRECTOR, ECONOMIC ENFORCEMENT.
	EXECUTIVE OFFICER.
	CHIEF, TELECOMMUNICATIONS AND MEDIA SECTION.
CIVIL DIVISION	SPECIAL LITIGATION COUNSEL (FOREIGN LITIGATION).
	SPECIAL LITIGATION COUNSEL.
	SPECIAL LITIGATION COUNSEL, COMMERCIAL LITIGATION BRANCH.
	DEPUTY BRANCH DIRECTOR/COMMERCIAL LITIGATION.
	DEPUTY BRANCH DIRECTOR.
	DIRECTOR OF MANAGEMENT PROGRAMS.
	DEPUTY BRANCH DIRECTOR.
	DEPUTY BRANCH DIRECTOR CIVIL FRAUDS.
	DEPUTY BRANCH DIRECTOR.
	DIRECTOR OFFICE OF CONSUMER LITIGATION.
	APPELLATE LITIGATION COUNSEL.
	DEPUTY BRANCH DIRECTOR.
	DEPUTY DIRECTOR, APPELLATE STAFF.
	DEPUTY DIRECTOR (OPERATIONS), OFFICE OF IMMIGRATION LITIGATION.
ENVIRONMENT AND NATURAL RESOURCES DIVISION	SENIOR LITIGATION COUNSEL ATTORNEY-EXAMINER.
	DEPUTY CHIEF, ENVIRONMENTAL ENFORCEMENT SECTION.
	EXECUTIVE OFFICER.
	DEPUTY CHIEF, ENVIRONMENTAL ENFORCEMENT SECTION.
	DEPUTY SECTION CHIEF, ENVIRONMENTAL DEFENSE SECTION.
TAX DIVISION	SPECIAL LITIGATION COUNSEL.
	SENIOR LITIGATION COUNSEL.
	CHIEF CIVIL TRIAL SECTION SOUTHWESTERN REGION.
	EXECUTIVE OFFICER.
CIVIL RIGHTS DIVISION	EXECUTIVE OFFICER.
OFFICE OF JUSTICE PROGRAMS	DIRECTOR, OFFICE OF ADMINISTRATION.
	CHIEF FINANCIAL OFFICER.
	BUDGET OFFICER.
	CHIEF FINANCIAL OFFICER.
	DEPUTY CHIEF FINANCIAL OFFICER.
OFFICE OF JUVENILE JUSTICE AND DELINQUENCY PREVENTION.	SPECIAL ADVISOR.
NATIONAL INSTITUTE OF JUSTICE	ASSISTANT DIRECTOR.
DEPARTMENT OF LABOR:	
OFFICE OF THE INSPECTOR GENERAL	DEPUTY INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	COUNSEL TO THE INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT AND POLICY.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR LABOR RACKETEERING.
OFFICE OF PUBLIC AFFAIRS	DIRECTOR, DIVISION OF ENTERPRISE COMMUNICATIONS.
OFFICE OF THE ASSISTANT SECRETARY FOR POLICY	DIRECTOR, OFFICE OF REGULATORY AND PROGRAMMATIC POLICY.
OFFICE OF THE SOLICITOR	ASSOCIATE SOLICITOR FOR LABOR-MANAGEMENT LAWS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSOCIATE SOLICITOR FOR PLAN BENEFITS SECURITY.
	REGIONAL SOLICITOR CHICAGO.
	ASSOCIATE SOLICITOR FOR CIVIL RIGHTS.
	ASSOCIATE SOLICITOR FOR OCCUPATIONAL SAFETY AND HEALTH.
	ASSOCIATE SOLICITOR FOR MINE SAFETY AND HEALTH.
	ASSOCIATE SOLICITOR FOR FAIR LABOR STANDARDS.
	REGIONAL SOLICITOR ATLANTA.
	ASSOCIATE SOLICITOR FOR FEDERAL EMPLOYEES' AND ENERGY WORKERS' COMPENSATION.
	REGIONAL SOLICITOR BOSTON.
	REGIONAL SOLICITOR NEW YORK.
	REGIONAL SOLICITOR PHILADELPHIA.
	REGIONAL SOLICITOR DALLAS.
	REGIONAL SOLICITOR KANSAS CITY.
	REGIONAL SOLICITOR SAN FRANCISCO.
	DEPUTY SOLICITOR (REGIONAL OPERATIONS).
	ASSOCIATE SOLICITOR FOR SPECIAL APPEL AND SUPREME COURT LITIGATION.
	ASSOCIATE SOLICITOR FOR BLACK LUNG BENEFITS.
	DEPUTY SOLICITOR (NATIONAL OPERATIONS).
	ASSOCIATE SOLICITOR FOR MANAGEMENT AND ADMINISTRATIVE LEGAL SERVICES.
	ASSOCIATE SOLICITOR FOR CIVIL RIGHTS AND LABOR MANAGEMENT.
	ASSOCIATE SOLICITOR FOR LEGAL COUNSEL.
	ASSOCIATE DEPUTY SOLICITOR FOR LEGAL POLICY.
	ASSOCIATE SOLICITOR FOR BLACK LUNG AND LONGSHORE LEGAL SERVICES.
OFFICE OF CHIEF FINANCIAL OFFICER	DEPUTY CHIEF FINANCIAL OFFICER.
	ASSOCIATE DEPUTY CHIEF FINANCIAL OFFICER.
	ASSOCIATE DEPUTY CHEIF FINANCIAL OFFICER FOR FINANCIAL SYSTEMS.
OFFICE OF THE ASSISTANT SECRETARY FOR ADMINISTRATION AND MANAGEMENT.	DIRECTOR, NATIONAL CAPITAL SERVICE CENTER.
	DEPUTY DIRECTOR, INFORMATION TECHNOLOGY CENTER.
	DIRECTOR OFFICE OF BUDGET.
	DIRECTOR BUSINESS OPERATIONS CENTER.
	DIRECTOR OF CIVIL RIGHTS.
	DEPUTY ASSISTANT SECRETARY FOR BUDGET AND PERFORMANCE PLANNING.
	DEPUTY ASSISTANT SECRETARY FOR OPERATIONS.
	DIRECTOR, PROGRAM PLANNING AND RESULTS CENTER.
	DEPUTY ASSISTANT SECRETARY FOR SECURITY AND EMERGENCY MANAGEMENT.
EMPLOYMENT STANDARDS ADMINISTRATION	DIRECTOR OFFICE OF MANAGEMENT, ADMINISTRATION AND PLANNING.
WAGE AND HOUR DIVISION	DEPUTY WAGE AND HOUR ADMINISTRATOR (OPERATIONS).
OFFICE OF WORKERS COMPENSATION PROGRAMS	DIRECTOR FOR FEDERAL EMPLOYEES' COMPENSATION.
	DIRECTOR COAL MINE WORKERS' COMPENSATION.
	DIRECTOR, ENERGY EMPLOYEES' OCCUPATIONAL ILLNESS COMPENATION.
	DIRECTOR, OFFICE OF ENFORCEMENT AND INTERNATIONAL UNION AUDITS.
OFFICE OF LABOR—MANAGEMENT STANDARDS	DEPUTY DIRECTOR, OFFICE OF LABOR MANAGEMENT STANDARDS.
	DIRECTOR, OFFICE OF POLICY, REPORTS AND DISCLOSURE.
EMPLOYEE BENEFITS SECURITY ADMINISTRATION	DIRECTOR OF REGULATIONS AND INTERPRETATIONS.
	DEPUTY ASSISTANT SECRETARY FOR PROGRAM OPERATIONS.
	DIRECTOR OF EXEMPTION DETERMINATIONS.
	SENIOR POLICY ADVISOR.
	REGIONAL DIRECTOR—BOSTON.
	REGIONAL DIRECTOR—ATLANTA.
	REGIONAL DIRECTOR—NEW YORK.
	REGIONAL DIRECTOR—KANSAS CITY.
	REGIONAL DIRECTOR—SAN FRANCISCO.
	DIRECTOR OF ENFORCEMENT.
	DIRECTOR OF HEALTH PLAN STANDARDS COMPLIANCE AND ASSISTANCE.
	DIRECTOR OF PARTICIPANT ASSISTANCE AND COMMUNICATIONS.
	DIRECTOR OF INFORMATION MANAGEMENT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
BUREAU OF LABOR STATISTICS	CHIEF ACCOUNTANT.
	ASSOCIATE COMMISSIONER FOR FIELD OPERATIONS.
	ASSOCIATE COMMISSIONER FOR ADMINISTRATION.
	ASSOCIATE COMMISSIONER FOR PRICES AND LIVING CONDITIONS.
	ASSOCIATE COMMISSIONER PRODUCTIVITY AND TECHNOLOGY.
	DEPUTY COMMISSIONER.
	ASSOCIATE COMMISSIONER/SURVEY METHODS RESEARCH.
	ASSOCIATE COMMISSIONER FOR EMPLOYMENT AND UNEMPLOYMENT STATISTICS.
	ASSISTANT COMMISSIONER FOR FEDERAL/STATE COOPERATIVE STATISTICS PROGRAMS.
	DIRECTOR OF SURVEY PROCESSING.
	DIRECTOR OF TECHNOLOGY AND COMPUTING SERVICES.
	ASSISTANT COMMISSIONER FOR CURRENT EMPLOYMENT ANALYSIS.
	ASSOCIATE COMMISSIONER FOR TECHNOLOGY AND SURVEY PROCESSING.
	ASSISTANT COMMISSIONER FOR COMPENSATION LEVELS AND TRENDS.
BUREAU OF LABOR STATISTICS	ASSISTANT COMMISSIONER FOR SAFETY, HEALTH AND WORKING CONDITIONS.
	ASSOCIATE COMMISSIONER COMPENSATION AND WORKING CONDITIONS.
	ASSISTANT COMMISSIONER FOR INTERNATIONAL PRICES.
	ASSOCIATE COMMISSIONER FOR PUBLICATIONS AND SPECIAL STUDIES.
	ASSISTANT COMMISSIONER FOR INDUSTRIAL PRICES AND PRICE INDEXES.
	ASSISTANT COMMISSIONER FOR OCCUPATIONAL STATISTICS AND EMPLOYMENT PROJECTIONS.
	ASSISTANT COMMISSIONER FOR CONSUMER PRICES AND PRICES INDEXES.
	ASSISTANT COMMISSIONER FOR OCCUPATIONAL STATISTICS AND EMPLOYMENT PROJECTIONS.
EMPLOYMENT AND TRAINING ADMINISTRATION	ADMINISTRATOR, OFFICE OF FINANCIAL AND ADMINISTRATIVE MANAGEMENT.
	ADMINISTRATOR, OFFICE OF PERFORMANCE AND TECHNOLOGY.
	DIRECTOR, BASE RELOCATION AND CLOSURE ACTIVITIES.
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	DIRECTOR, DIRECTORATE OF SCIENCE, TECHNOLOGY AND MEDICINE.
	DIRECTOR, DIRECTORATE OF COOPERATIVE AND STATE PROGRAMS.
	DIRECTOR, ADMINISTRATIVE PROGRAMS.
	DIRECTOR, DIRECTORATE OF EVALUATION AND ANALYSIS.
	DIRECTOR, DIRECTORATE OF STANDARDS AND GUIDANCE.
MINE SAFETY AND HEALTH ADMINISTRATION	DIRECTOR OF ADMINISTRATION AND MANAGEMENT.
	DIRECTOR OF TECHNICAL SUPPORT.
	DIRECTOR OF PROGRAM EVALUATION AND INFORMATION RESOURCES.
VETERANS EMPLOYMENT AND TRAINING SERVICE	DIRECTOR OF OPERATIONS AND PROGRAMS.
	DEPUTY ASSISTANT SECRETARY FOR OPERATIONS AND MANAGEMENT.
	DIRECTOR, DEPARTMENT OF LABOR HOMELESS ASSISTANCE PROGRAM.
OFFICE OF DISABILITY EMPLOYMENT POLICY	DIRECTOR, OFFICE OF OPERATIONS.
MERIT SYSTEMS PROTECTION BOARD:	
OFFICE OF THE CLERK OF THE BOARD	CLERK OF THE BOARD.
OFFICE OF FINANCIAL AND ADMINISTRATIVE MANAGEMENT	DIRECTOR, FINANCIAL AND ADMINISTRATIVE MANAGEMENT.
OFFICE OF POLICY AND EVALUATION	DIRECTOR, OFFICE OF POLICY AND EVALUATION.
OFFICE OF INFORMATION RESOURCES MANAGEMENT	DIRECTOR, INFORMATION RESOURCES MANAGEMENT.
OFFICE OF REGIONAL OPERATIONS	DIRECTOR, OFFICE OF REGIONAL OPERATIONS.
ATLANTA REGIONAL OFFICE	REGIONAL DIRECTOR, ATLANTA.
CENTRAL REGION, CHICAGO REGIONAL OFFICE	REGIONAL DIRECTOR, CHICAGO.
NORTHEAST REGION, PHILADELPHIA REGIONAL OFFICE	REGIONAL DIRECTOR, PHILADELPHIA.
WESTERN REGION, SAN FRANCISCO REGIONAL OFFICE	REGIONAL DIRECTOR, SAN FRANCISCO.
WASHINGTON, DC REGION, WASHINGTON REGIONAL OFFICE.	REGIONAL DIRECTOR, WASHINGTON, D.C.
DALLAS REGIONAL OFFICE	REGIONAL DIRECTOR, DALLAS.
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION:	
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	SPECIAL ASSISTANT TO THE ADMINISTRATOR.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	CHIEF, SMALL SATELLITE PROGRAMS OFFICE.
	DIRECTOR, EXPLORATION TECHNOLOGY DIRECTORATE.
OFFICE OF THE ADMINISTRATOR	SENIOR ADVISOR TO THE DEPUTY ADMINISTRATOR.
	PROGRAM DIRECTOR, INTEGRATED FINANCIAL MANAGEMENT PROGRAM.
OFFICE OF PROGRAM AND INSTITUTIONAL INTEGRATION	DIRECTOR OF PROGRAM AND INSTITUTIONAL INTEGRATION OFFICE.
	DEPUTY DIRECTOR OF THE OFFICE OF PROGRAM AND INSTITUTIONAL INTEGRATION.
OFFICE OF PROGRAM ANALYSIS AND EVALUATION	DEPUTY ASSOCIATE ADMININSTRATOR.
	SENIOR ADVISOR FOR HUMAN CAPITAL AND INSTITUTIONAL MANAGEMENT.
	SENIOR ADVISOR FOR FINANCIAL RESOURCES MANAGEMENT.
	DEPUTY CHIEF SCIENTIST.
	DIRECTOR, INDEPENDENT PROGRAM ASSESSMENT OFFICE.
	DIRECTOR, AGENCY STUDY TEAMS.
	DEPUTY DIRECTOR, STRATEGIC INVESTMENTS DIVISION.
	DIRECTOR, STRATEGIC INVESTMENT DIVISION.
	DIRECTOR, COST ANALYSIS DIVISION.
	DIRECTOR, COST ANALYSIS DIVISION.
OFFICE OF THE CHIEF INFORMATION OFFICER	DEPUTY CHIEF INFORMATION OFFICER.
OFFICE OF THE CHIEF FINANCIAL OFFICER/COMPTROLLER	DIRECTOR, FINANCIAL MANAGEMENT DIVISION.
	DIRECTOR, RESOURCES ANALYSIS DIVISION.
	DIRECTOR, POLICY AND BUSINESS INTEGRATION.
	DEPUTY CHIEF FINANCIAL OFFICER.
	DIRECTOR, CENTER FISCAL OPERATIONS.
	DIRECTOR, RESOURCE PLANNING DIVSION.
	DIRECTOR, QUALITY ASSURANCE.
	DEPUTY DIRECTOR FOR BUDGET.
	SENIOR ADVISOR TO THE DEPUTY CHIEF FINANCIAL OFFICER.
	DIRECTOR, FINANCIAL MANAGEMENT.
	DIRECTOR, QUALITY ASSURANCE.
	DIRECTOR, STRATEGIC MANAGEMENT AND PLANNING.
	DEPUTY CHIEF FINANCIAL OFFICER FOR RESOURCES (COMPTROLLER).
OFFICE OF HEADQUARTERS OPERATIONS	DIRECTOR, HUMAN RESOURCE MANGEMENT DIVISION.
	DEPUTY DIRECTOR FOR OPERATIONS.
OFFICE OF HUMAN CAPITAL MANAGEMENT	ASSISTANT ADMINISTRATOR FOR HUMAN CAPITAL MANAGEMENT.
	DIRECTOR, PERSONNEL DIVISION.
	ASSISTANT ADIMINISTRATOR FOR HUMAN CAPITAL MANAGEMENT.
	DIRECTOR, WORKFORCE STATEGY DIVISION.
	DIRECTOR, WORKFORCE SYSTEMS AND ACCOUNTABILITY DIVISION.
	DEPUTY ASSISTANT ADMINISTRATOR FOR HUMAN CAPITAL MANAGEMENT.
	DIRECTOR, WORKFORCE MANAGEMENT AND DEVELOPMENT DIVISION.
	DIRECTOR, TRAINING AND DEVELOPMENT DIVISION.
OFFICE OF PROCUREMENT	ASSISTANT ADMINISTRATOR FOR PROCUREMENT.
	DIRECTOR, PROGRAM OPERATIONS DIVISION.
	DIRECTOR, CONTRACT MANAGEMENT DIVISION.
	DIRECTOR ANALYSIS DIVISION.
OFFICE OF EXTERNAL RELATIONS	MANAGER, INTERNATIONAL TECHNOLOGY TRANSFER POLICY.
	DIRECTOR, SPACE SCIENCE AND AERONAUTICS DIVISION.
	DIRECTOR, SPACE OPERATIONS DIVISION.
	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION SPAIN REPRESENTATIVE.
OFFICE OF INSTITUTIONS AND MANAGEMENT	DIRECTOR, FACILITIES ENGINEERING DIVISION.
	DIRECTOR, HEADQUARTERS INFORMATION, TECHNOLOGY AND COMMUNICATINOS DIVISION.
	SPECIAL ASSISTANT.
	DIRECTOR, SHARED CAPABILITY ASSET PROGRAM.
	DIRECTOR, PROGRAM OPERATIONS DIVISION.
	DIRECTOR, ANALYSIS DIVISION.
	ASSISTANT ADMININSTRATOR. SMALL/DISADVANTAGED BUSINESS UTILIZATION.
	DIRECTOR ENVIRONMENTAL MANAGEMENT DIVISION.
	DIRECTOR, LOGISTICS MANAGEMENT OFFICE.
NASA SHARED SERVICES CENTER	DEPUTY DIRECTOR, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION SHARED SERVICES CENTER.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	EXECUTIVE DIRECTOR OF NATIONAL AERONAUTICS AND SPACE ADMINISTRATION SHARED SERVICE CENTER.
OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION.	ASSISTANT ADMINISTRATOR FOR SMALL AND DISADVANTAGED BUSINESS UTILIZATION.
OFFICE OF LEGISLATIVE AFFAIRS	DEPUTY COMPTROLLER FOR APPROPRIATIONS.
OFFICE OF LEGISLATIVE AFFAIRS	DEPUTY ASSOCIATE ADMINISTRATOR FOR LEGISLATIVE AFFAIRS.
SPACE OPERATION MISSION DIRECTORATE	DEPUTY ASSOCIATE ADMINISTRATOR FOR INTERAGENCY ENTERPRISE.
	DIRECTOR, INTERNATIONAL SPACE STATION AND SPACE SHUTTLE PROGRAM RESOURCE.
	DEPUTY ASSISTANT ADMINSTRATOR FOR PROGRAM INTEGRATION.
	ASSISTANT ASSOCIATE ADMININSTRATOR FOR SPACE SHUTTLE PROGRAM.
	DIRECTOR, FUNDAMENTAL AERONAUTICS.
	ASSISTANT ASSOCIATE ADMINISTRATOR FOR LAUNCH SERVICES.
	DEPUTY DIRECTOR FOR PLANNING AND BUSINESS MANAGEMENT.
	ASSISTANT ASSOCIATE ADMINISTATOR FOR POLICY AND PLANS.
	ASSISTANT ASSOCIATE ADMINISTRATOR FOR INTERNATIONAL SPACE STATION.
	ASSISTANT ASSOCIATE ADMINISTRATOR FOR SPACE SHUTTLE PROGRAM.
	ASSISTANT ASSOCIATE ADMINISTRATOR FOR LAUNCH SERVICES.
JOHNSON SPACE CENTER	CHIEF FINANCIAL OFFICER.
	DIRECTOR OF HUMAN RESOURCES.
	DIRECTOR OF TECHNICAL TRANSFER AND COMMERCIALIZATION.
	CHIEF INFORMATION OFFICER.
	DEPUTY CHIEF INFORMATION OFFICER.
	ASSOCIATE DIRECTOR (TECHNICAL).
	ASSOCIATE DIRECTOR (MANAGEMENT).
	ASSISTANT DIRECTOR FOR UNIVERSITY RESEARCH AND AFFAIRS.
	MANAGER LAUNCH INTEGRATION (KENNEDY SPACE CENTER).
	DIRECTOR, EXTERNAL RELATIONS.
	MANAGER FOR INTERNATIONAL OPERATIONS.
	CHIEF ENGINEER.
	ASSISTANT DIRECTOR FOR SPACE FLIGHT AWARENESS.
	DIRECTOR, ASTROMATERIALS RESEARCH AND EXPLORATION SCIENCE.
	ASSOCIATE DIRECTOR (SPACE DEVELOPMENT AND COMMERCE).
	MANAGER, EXPLORATION PROGRAMS OFFICE.
	CHIEF OF STAFF, INTERNATIONAL SPACE STATION.
	MANAGER, ADVANCED PLANNING.
	DEPUTY CHIEF ENGINEER.
	MANAGER, CONSTELLATION PROGRAM.
	DIRECTOR, OPERATION INTEGRATION, CONSTELLATION PROGRAM.
	MANAGER, CREW EXPLORATION VEHICLE OFFICE, CONSTELLATION PROGRAM.
	DIRECTOR, TEST AND VERIFICATION, CONSTELLATION PROGRAM.
	MANAGER, ADVANCED PROJECTS OFFICE, CONSTELLATION PROGRAM.
	DIRECTOR, SYSTEMS ENGINEERING AND INTEGRATION, CONSTELLATION.
	DIRECTOR, PROGRAM PLANNING AND CONTROL, CONSTELLATION.
	DEPUTY DIRECTOR, PROGRAM PLANNING AND CONTROL, CONSTELLATION.
	ASSOCIATE PROGRAM MANAGER, INTERNATIONAL SPACE STATION.
	DEPUTY MANAGER, CONSTELLATION OFFICE.
	DEPUTY MANAGER, ORBITER PROJECT OFFICE.
	CHIEF KNOWLEDGE OFFICER.
	MANAGER FOR TECHNOLOGY INTEGRATION, CONSTELLATION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
SPACE STATION PROGRAM OFFICE	MANAGER, VEHICLE OFFICE.
	TECHNICAL ASSISTANT TO THE MANAGER, SPACE STATION PROGRAM.
	DEPUTY PROGRAM MANAGER FOR TECHNICAL DEVELOPMENT.
	MANAGER, RESEARCH PROGRAMS.
	TECHNICAL ASSISTANT FOR EXTERNAL REVIEWS.
	MANAGER, PROGRAM PLANNING AND CONTROL OFFICE, INTERNATIONAL SPACE STATION.
	MANAGER, INTERNATIONAL SPACE STATION PROGRAM.
	DEPUTY MANAGER, INTERNATIONAL SPACE STATION PROGRAM.
	MANAGER, AVIONICS AND SOFTWARE OFFICE.
	MANAGER, PROGRAM INTEGRATION OFFICE.
	MANAGER, MISSION INTEGRATION AND OPERATIONS OFFICE.
	MANAGER, EXTERNAL RELATIONS OFFICE, INTERNATIONAL SPACE STATION.
	MANAGER, INTERNATIONAL SPACE STATION PAYLOADS OFFICE.
	ASSOCIATE MANAGER, INTERNATIONAL SPACE STATION.
	EXTERNAL INTEGRATION OFFICE.
SPACE SHUTTLE PROGRAM OFFICE	DEPUTY SPACE SHUTTLE PROGRAM MANAGER FOR KENNEDY SPACE CENTER.
	ASSISTANT MANAGER SPACE SHUTTLE PROGRAM.
	MANAGER FOR SPACE SHUTTLE PROGRAM DEVELOPMENT.
	MANAGER, SPACE SHUTTLE PROGRAM INTEGRATION.
	SPACE OPERATIONS COMMERCIALIZATION MANAGER.
	MANAGER, SPACE SHUTTLE FLIGHT OPERATIONS AND INTEGRATION.
	DEPUTY MANAGER, SPACE SHUTTLE PROGRAM.
	MANAGER, ORBITER PROJECT OFFICE.
	MANAGER, SPACE SHUTTLE BUSINESS OFFICE.
	MANAGER, SPACE SHUTTLE SYSTEMS ENGINEERING AND INTEGRATION OFFICE.
	MANAGER, SPACE SHUTTLE MANAGEMENT INTEGRATION AND PLANNING OFFICE.
MISSION OPERATIONS	DIRECTOR, MISSION OPERATIONS.
	DEPUTY DIRECTOR, MISSION OPERATIONS.
	ASSISTANT DIRECTOR FOR OPERATIONS.
	CHIEF ENGINEER, MISSION OPERATIONS DIRECTORATE.
	CHIEF FLIGHT DIRECTOR OFFICE.
	CHIEF, ADVANCED OPERATIONS AND DEVELOPMENT DIVISION.
	CHIEF, SYSTEMS DIVISION, MISSION OPERATIONS.
MISSION OPERATIONS	DIRECTORATE.
FLIGHT CREW OPERATIONS	CHIEF, AIRCRAFT OPERATIONS DIVISION.
	DEPUTY DIRECTOR, FLIGHT CREW OPERATIONS.
	CHIEF ASTRONAUT OFFICE.
ENGINEERING	CHIEF, CREW AND THERMAL SYSTEMS DIVISION.
	DEPUTY DIRECTOR, ENGINEERING.
	CHIEF, AUTOMATION, ROBOTICS AND SIMULATION DIVISION.
	DIRECTOR, ENGINEERING.
	CHIEF ENGINEER SPACE STATION PROGRAM.
	CHIEF AVIONIC SYSTEMS DIVISION.
	ASSISTANT TO THE DIRECTOR, ENGINEERING.
	DEPUTY CHIEF, AVIONIC SYSTEMS DIVISION.
	CHIEF, AEROSCIENCE AND FLIGHT MECHANICS DIVISION.
	MANAGER, ADVANCED DEVELOPMENT OFFICE.
	ASSISTANT MANAGER, ADVANCED DEVELOPMENT OFFICE.
	DEPUTY MANAGER FOR EXPLORATION.
	CHIEF ENERGY SYSTEMS DIVISION.
	DEPUTY DIRECTOR OF ENGINEERING FOR FLIGHT.
	ASSISTANT TO THE DIRECTOR.
	CHIEF, STRUCTURAL ENGINEERING DIVISION.
	SENIOR SYSTEM ENGINEER.
SPACE AND LIFE SCIENCES	CHIEF, MEDICAL SCIENCES DIVISION.
	ASSISTANT DIRECTOR FOR ENGINEERING.
	ASSISTANT DIRECTOR FOR SPACE SCIENCE.
	DEPUTY DIRECTOR, REQUIREMENTS, PLANNING, AND INTEGRATION.
	DEPUTY DIRECTOR, SPACE AND LIFE SCIENCES.
	ASSISTANT DIRECTOR FOR FLIGHT PROGRAMS.
	ASSISTANT DIRECTOR FOR SPACE MEDICINE.
SPACE AND LIFE SCIENCES	ASSISTANT DIRECTOR, SPACE AND LIFE SCIENCES.
	ASSOCIATE DIRECTOR, TECHNICAL.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY ASSOCIATE DIRECTOR, BIOLOGICAL SCIENCES AND APPLICATIONS.
	MANAGER OF OPERATIONS AND INTEGRATION.
INFORMATION RESOURCES	DEPUTY DIRECTOR, INFORMATION SYSTEMS.
	ASSISTANT TO THE DIRECTOR.
	DIRECTOR, INFORMATION RESOURCES.
OFFICE OF PROCUREMENT	SPECIAL ASSISTANT TO THE DIRECTOR.
	ASSISTANT DIRECTOR BUSINESS MANAGEMENT.
	DEPUTY DIRECTOR, OFFICE OF PROCUREMENT.
CENTER OPERATIONS	DIRECTOR CENTER OPERATIONS.
	DEPUTY DIRECTOR, CENTER OPERATIONS.
SAFETY AND MISSION ASSURANCE	DIRECTOR, SAFETY AND MISSION ASSURANCE.
	ASSOCIATE DIRECTOR FOR TECHNICAL, SAFETY AND MISSION ASSURANCE.
	DEPUTY DIRECTOR, SAFETY AND MISSION ASSURANCE.
WHITE SANDS TEST FACILITY	MANAGER, NATIONAL AERONAUTICS AND SPACE.
	ADMINISTRATION WHITE SANDS TEST FACILITY.
EVA PROJECT OFFICE	MANAGER EVA PROJECT OFFICE.
KENNEDY SPACE CENTER	DIRECTOR, JOHN F KENNEDY SPACE CENTER.
	ASSOCIATE DIRECTOR, JOHN F KENNEDY SPACE CENTER.
	CHIEF FINANCIAL OFFICER.
	SPECIAL ASSISTANT TO THE DIRECTOR.
	DEPUTY DIRECTOR, INTERNATIONAL SPACE STATION AND SPACECRAFT PROCESSING DIRECTORATE.
	DIRECTOR, CONSTELLATION PROJECT OFFICE.
	DEPUTY DIRECTOR, CONSTELLATION PROJECT OFFICE.
	DIRECTOR, CENTER OPERATIONS.
	CHIEF MEDICAL OFFICER.
	DIRECTOR, ADVANCED PLANNING.
	DEPUTY DIRECTOR, MANAGEMENT, ENGINEERING DEVELOPMENT.
	DEPUTY DIRECTOR, TECHNICAL, ENGINEERING DEVELOPMENT.
	DIRECTOR, ENGINEERING DEVELOPMENT.
	DIRECTOR, LAUNCH VEHICLE PROCESSING DIRECTORATE.
	DEPUTY DIRECTOR, LAUNCH VEHICLE PROCESSING.
	DIRECTORATE.
	DIRECTOR, INTERNATIONAL SPACE STATION AND SPACECRAFT.
	PROCESSING DIRECTORATE.
	DIRECTOR, DESIGN AND DEVELOPMENT SYSTEMS ENGINEERING.
	OFFICE, ENGINEERING DIRECTORATE.
	DEPUTY DIRECTOR, CENTER OPERATIONS.
	DIRECTOR, ENGINEERING DIRECTORATE.
CAPE CANAVERAL SPACEPORT MANAGEMENT	EXECUTIVE DIRECTOR, CAPE CANAVERAL SPACEPORT.
	MANAGEMENT OFFICE.
PROCUREMENT	DIRECTOR, PROCUREMENT OFFICE.
HUMAN RESOURCES	DIRECTOR, HUMAN RESOURCES OFFICE.
INDEPENDENT TECHNICAL AUTHORITY AND SYSTEMS MANAGEMENT.	DIRECTOR, INDEPENDENT TECHNICAL AUTHORITY AND SYSTEMS MANAGEMENT.
INFORMATION TECHNOLOGY AND COMMUNICATIONS SERVICES.	DIRECTOR, INFORMATION TECHNOLOGY AND COMMUNICATIONS SERVICES.
SHUTTLE PROCESSING	DIRECTOR OF SHUTTLE PROCESSING.
	DEPUTY DIRECTOR, SHUTTLE PROCESSING.
SAFETY AND MISSION ASSURANCE	DIRECTOR, SAFETY AND MISSION ASSURANCE.
	DEPUTY DIRECTOR OF SAFETY AND MISSION ASSURANCE.
	ASSOCIATE DIRECTOR FOR AGENCY OCCUPATIONAL HEALTH PROGRAM.
	ASSOCIATE DIRECTOR FOR SAFETY AND MISSION ASSURANCE.
	DIRECTOR FOR SAFETY AND MISSION ASSURANCE.
SPACEPORT ENGINEERING AND TECHNOLOGY	DEPUTY DIRECTOR OF SPACEPORT ENGINEERING AND TECHNOLOGY.
	ASSOCIATE DIRECTOR FOR ADVANCED SPACE TRANSPORTATION SUPPORT.
	ASSOCIATE DIRECTOR FOR SPACEPORT TECHNOLOGY PROJECTS.
SPACEPORT SERVICES	DIRECTOR, CENTER OPERATIONS.
	ASSOCIATE DIRECTOR, CENTER OPERATIONS AND CHIEF MEDICAL OFFICER.
	ASSISTANT DIRECTOR, CENTER OPERATIONS.
INTERNATIONAL SPACE STATION AND PAYLOAD PROCESSING.	DIRECTOR, INTERNATIONAL SPACE STATION/PAYLOAD PROCESSING.
KENNEDY SPACE CENTER EXPLORATION OFFICE	DIRECTOR, KENNEDY SPACE CENTER EXPLORATION OFFICE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
EXTERNAL RELATIONS	DIRECTOR, EXTERNAL RELATIONS.
	DEPUTY DIRECTOR, EXTERNAL RELATIONS AND BUSINESS DEVELOPMENT.
	ASSISTANT DIRECTOR, EXTERNAL RELATIONS.
	ASSOCIATE DIRECTOR, EXTERNAL RELATIONS AND BUSINESS DEVELOPMENT (WASHINGTON, DC).
	ASSOCIATE DIRECTOR, EXTERNAL RELATIONS AND BUSINESS.
	DEVELOPMENT AND SENIOR PUBLIC COMMUNICATIONS OFFICER.
LAUNCH SERVICES PROGRAM	MANAGER, LAUNCH SERVICES PROGRAM.
	DEPUTY MANAGER, LAUNCH SERVICES PROGRAM.
	DIRECTOR, EXPENDABLE LAUNCH VEHICLE LAUNCH SERVICES.
MARSHALL SPACE FLIGHT CENTER	ASSOCIATE DIRECTOR.
	BUSINESS INTEGRATION EXECUTIVE.
	ASSISTANT FOR PROJECT MANAGEMENT AND DEVELOPMENT.
	ASSISTANT DIRECTOR FOR SAFETY AND ENGINEERING.
	SPECIAL ASSISTANT TO THE DIRECTOR FOR SPECIAL PROJECTS.
ENGINEERING DIRECTORATE	MANAGER, MATERIALS, PROCESSES, AND MANUFACTURING DEPARTMENT.
	ASSISTANT TO THE DIRECTOR, ENGINEERING.
	SHUTTLE PROPULSION CHIEF ENGINEER.
	MANAGER, MISSION OPERATIONS LABORATORY.
	SPACE SYSTEMS CHIEF ENGINEER.
	DEPUTY DIRECTOR, ENGINEERING DIRECTORATE.
	DEPUTY DIRECTOR, ENGINEERING DIRECTORATE.
	MANAGER, TEST LABORATORY.
	DEPUTY MANAGER, TEST LABORATORY.
	MANAGER, MATERIALS AND PROCESSES LABORATORY.
	MANAGER, PROPULSION SYSTEMS DEPARTMENT.
	MANAGER, INSTRUMENT AND PAYLOAD SYSTEMS DEVELOPMENT DEPARTMENT.
	DEPUTY MANAGER, INSTRUMENT AND PAYLOAD SYSTEMS.
	DEVELOPMENT DEPARTMENT.
	DEPUTY MANAGER, PROPULSION SYSTEMS DEPARTMENT.
SPACECRAFT AND VEHICLE SYSTEMS DEPARTMENT	MANAGER, SPACECRAFT AND VEHICLE SYSTEMS DEPARTMENT.
	DEPUTY MANAGER, SPACECRAFT AND VEHICLE SYSTEMS DEPARTMENT.
OFFICE OF THE CHIEF FINANCIAL OFFICER	CHIEF FINANCIAL OFFICER.
	INTERGRATED FINANCIAL MANAGEMENT PROGRAM.
	ADMINISTRATIVE SYSTEMS IMPLEMENTATION MANAGER.
	DEPUTY CHIEF FINANCIAL OFFICER.
OFFICE OF CENTER OPERATIONS	DIRECTOR, OFFICE OF CENTER OPERATIONS.
	DEPUTY DIRECTOR, OFFICE OF CENTER OPERATIONS.
	INTERGRATED FINANCIAL MANAGEMENT PROGRAM COMPETENCY CENTER MANAGER.
	SPECIAL ASSISTANT TO THE DIRECTOR, OFFICE OF CENTER OPERATIONS.
OFFICE OF PROCUREMENT	DIRECTOR, OFFICE OF PROCUREMENT.
	DEPUTY DIRECTOR, OFFICE OF PROCUREMENT.
SHUTTLE PROPULSION OFFICE	MANAGER, EXTERNAL TANK PROJECT.
	MANAGER SOLID ROCKET BOOSTER PROJECT.
	MANAGER, SPACE SHUTTLE MAIN ENGINE PROJECT, SHUTTLE PROPULSION OFFICE.
	MANAGER, REUSABLE SOLID ROCKET MOTOR PROJECT.
	DEPUTY MANAGER, SHUTTLE PROPULSION OFFICE.
	MANAGER, SHUTTLE PROPULSION OFFICE.
	MANAGER, PROPULSION SYSTEMS INTEGRATION PROJECT.
	CHIEF OPERATING OFFICER, MICHOUD ASSEMBLY FACILITY.
SAFETY AND MISSION ASSURANCE DIRECTORATE	DIRECTOR, SAFETY AND MISSION ASSURANCE OFFICE.
	DEPUTY DIRECTOR, SAFETY AND MISSION ASSURANCE OFFICE.
	DEPUTY DIRECTOR FOR PROJECT ASSURANCE.
	ASSOCIATE DIRECTOR FOR TECHNICAL READINESS.
SCIENCE AND MISSION SYSTEMS OFFICE	DEPUTY DIRECTOR, PLANETARY SCIENCE DIVISION.
	DIRECTOR, PLANETARY SCIENCE DIVISION.
	CHIEF OPERATING OFFICER, NATIONAL SPACE SCIENCE AND TECHNOLOGY CENTER.
	MANAGER, PROPULSION RESEARCH CENTER.
	MANAGER, EXPLORATION SCIENCE AND TECHNOLOGY DIVISION.
	DEPUTY DIRECTOR, SCIENCE AND TECHNOLOGY DIRECTORATE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, SCIENCE AND TECHNOLOGY DIRECTORATE.
	MANAGER, SCIENCE AND MISSION SYSTEMS OFFICE.
	CHIEF SCIENTIST (AEROSPACE TECHNOLOGY, SCIENCE PROGRAM MANAGEMENT).
SPACE SYSTEMS PROGRAMS/PROJECTS OFFICE	DEPUTY MANAGER, SPACE SYSTEMS PROGRAMS/PROJECTS OFFICE.
	MANAGER, SPACE SYSTEMS PROGRAMS/PROJECTS OFFICE.
	MANAGER, DISCOVERY AND NEW FRONTIERS PROGRAM.
SPACE TRANSPORTATION PROGRAM/PROJECTS OFFICE	MANAGER, SYSTEMS ENGINEERING AND INTEGRATION OFFICE.
	MANAGER, SPACE TRANSPORTATION PROGRAMS/PROJECTS OFFICE.
	DEPUTY MANAGER, SPACE TRANSPORTATION.
	PROGRAMS/PROJECTS OFFICE.
OFFICE OF STRATEGIC ANALYSIS AND COMMUNICATIONS	MANAGER.
EXPLORATION LAUNCH OFFICE	DEPUTY MANAGER, EXPLORATION LAUNCH OFFICE.
	MANAGER, VEHICLE INTEGRATION OFFICE.
	MANAGER, UPPER STAGE OFFICE.
	MANAGER, UPPER STAGE ENGINE OFFICE.
	MANAGER, FIRST STAGE OFFICE.
OFFICE OF CHIEF INFORMATION OFFICER	CHIEF INFORMATION OFFICER.
	DEPUTY DIRECTOR, OFFICE OF THE CHIEF INFORMATION OFFICER.
OFFICE OF HUMAN CAPITAL	DIRECTOR.
	DEPUTY DIRECTOR.
	SPECIAL ASSISTANT TO DIRECTOR.
STENNIS SPACE CENTER	DIRECTOR, CENTER OPERATIONS DIRECTORATE.
	DIRECTOR, APPLIED SCIENCES DIRECTORATE.
	DIRECTOR, BUSINESS MANAGEMENT DIRECTORATE.
	DEPUTY DIRECTOR, STENNIS SPACE CENTER.
	ASSOCIATE DIRECTOR.
	SPECIAL ASSISTANT TO THE DIRECTOR.
	DIRECTOR, ENGINEERING AND SCIENCE DIRECTORATE.
	MANAGER, ROCKET PROPULSION TEST PROGRAM OFFICE.
	DIRECTOR, PROJECTS DIRECTORATE.
	DEPUTY DIRECTOR, ENGINEERING AND SCIENCE DIRECTORATE.
OFFICE OF PUBLIC AFFAIRS	DIRECTOR OF PROGRAM OPERATIONS.
	DIRECTOR MEDIA SERVICES DIVISION.
OFFICE OF SAFETY AND MISSION ASSURANCE	DEPUTY ASSOCIATE ADMINISTRATOR FOR SAFETY AND MISSION ASSURANCE.
	DIRECTOR, MISSION SUPPORT DIVISION.
	DIRECTOR, SAFETY AND ASSURANCE REQUIREMENTS DIVISION.
	DIRECTOR, REVIEW AND ASSESSMENT DIVISION.
AERONAUTICS RESEARCH MISSION DIRECTORATE	DIRECTOR, RESOURCES MANAGEMENT OFFICE.
	DIRECTOR, AIRSPACE SYSTEMS PROGRAM OFFICE.
	DIRECTOR, AVIATION SAFETY PROGRAM OFFICE.
	SENIOR ENGINEER.
	ASSISTANT ASSOCIATE ADMINISTRATOR (ENTERPRISE OPERATIONS).
	DIRECTOR STRATEGY COMMUNICATIONS AND PROGRAM INTEGRATION.
	DIRECTOR, AERONAUTICS TECHNOLOGY DIVISION.
AMES RESEARCH CENTER	ASSOCIATE DIRECTOR FOR SPACE PROGRAMS AND PROJECTS.
	ASSISTANT TO THE DIRECTOR FOR AVIATION SAFETY.
	DEPUTY DIRECTOR FOR RESEARCH.
	DEPUTY DIRECTOR AMES RESEARCH CENTER.
	DIRECTOR, OFFICE OF SAFETY, ENVIRONMENT AND MISSION ASSURANCE.
	ASSISTANT TO THE DIRECTOR.
	CHIEF, COMPUTATIONAL SCIENCES DIVISION.
	ASSOCIATE DIRECTOR FOR ASTROBIOLOGY AND SPACE PROGRAMS.
	CHIEF COUNSEL.
	ASSOCIATE DIRECTOR FOR SYSTEMS MANAGEMENT AND PLANNING.
	SPECIAL ASSISTANT TO THE DIRECTOR.
	CHIEF FINANCIAL OFFICER.
	DEPUTY DIRECTOR OF PROJECT MANAGEMENT AND ENGINEERING.
	ASSOCIATE DIRECTOR FOR INSTITUTIONAL MANAGEMENT.
	DIRECTOR, PROJECT MANAGEMENT AND ENGINEERING.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
AEROSPACE	DEPUTY DIRECTOR FLIGHT PROJECTS OFFICE.
	CHIEF, SPACE TECHNOLOGY DIVISION.
	CHIEF, AVIATION SYSTEMS DIVISION.
	CHIEF, ARMY/NATIONAL AERONAUTICS AND SPACE.
	ADMINISTRATION ROTORCRAFT DIVISION.
	DEPUTY DIRECTOR OF AERONAUTICS.
AEROPHYSICS	CHIEF, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION SYSTEMS DIVISION.
ASTROBIOLOGY AND SPACE RESEARCH	DIRECTOR OF ASTROBIOLOGY AND SPACE RESEARCH.
	CHIEF, LIFE SCIENCES DIVISION.
	CHIEF, SPACE SCIENCE AND ASTROBIOLOGY DIVISION.
	DEPUTY DIRECTOR OF ASTROBIOLOGY AND SPACE RESEARCH.
	DIRECTOR OF SCIENCE.
CENTER OPERATIONS	DIRECTOR OF CENTER OPERATIONS.
	DEPUTY DIRECTOR, CENTER OPERATIONS.
RESEARCH AND DEVELOPMENT SERVICES	CHIEF SYSTEMS ENGINEERING DIVISION.
	CHIEF, WIND TUNNEL OPERATIONS DIVISION.
INFORMATION SCIENCES AND TECHNOLOGY	CHIEF, HUMAN FACTORS RESEARCH AND TECHNOLOGY DIVISION.
DRYDEN FLIGHT RESEARCH CENTER	AEROSPACE ENGINEER (CHIEF ENGINEER).
	DIRECTOR RESEARCH SYSTEMS DIRECTORATE.
	CHIEF FINANCIAL OFFICER (FINANCIAL MANGER).
	DIRECTOR FLIGHT OPS DIRECTORATE.
	DIRECTOR FOR SAFETY AND MISSION ASSURANCE.
	ASSOCOATE DIRECTOR FOR OPERATIONS.
	DEPUTY ASSOCIATE DIRECTOR FOR OPERATIONS.
	ASSOCIATE DIRECTOR FOR PROGRAMS.
	DEPUTY ASSOCIATE DIRECTOR FOR PROGRAMS.
	CHIEF COUNSEL.
	CHIEF INFORMATION OFFICER.
	DIRECTOR, AEROSPACE PROJECT DIRECTORATE.
	DEPUTY, DIRECTOR, AEROSPACE PROJECTS.
LANGLEY RESEARCH CENTER	ASSOCIATE DIRECTOR OF OPERATIONS.
	CHIEF OF STAFF.
	DEPUTY ASSOCIATE DIRECTOR OF OPERATIONS FOR INTEGRATED MANAGEMENT.
	CHIEF FINANCIAL OFFICER.
	DIRECTOR, OFFICE OF STRATEGIC COMMUNICATIONS AND EDUCATION.
	DIRECTOR, STRATEGIC PARTNERSHIP, PLANNING, AND MANAGEMENT OFFICE.
	DIRECTOR, SYSTEMS ENGINEERING DIRECTORATE.
	DEPUTY DIRECTOR, SYSTEMS ENGINEERING DIRECTORATE.
	DIRECTOR, RESEARCH AND TECHNOLOGY DIRECTORATE.
	DEPUTY DIRECTOR, RESEARCH AND TECHNOLOGY DIRECTORATE.
	DIRECTOR, CENTER OPERATIONS DIRECTORATE.
	DIRECTOR, AERONAUTICS RESEARCH DIRECTORATE.
	DIRECTOR, EXPLORATION SYSTEMS AND SPACE OPERATIONS.
	TECHNOLOGY DIRECTORATE.
	DIRECTOR, SCIENCE DIRECTORATE.
	DIRECTOR, SYSTEMS ANALYSIS AND ADVANCED CONCEPTS DIRECTORATE.
	DIRECTOR, INNOVATION INSTITUTE.
	DIRECTOR, FLIGHT RESEARCH SERVICES DIRECTORATE.
	DIRECTOR, FLIGHT PROJECTS OFFICE.
	DEPUTY DIRECTOR SYSTEMS ANALYSIS AND CONCEPTS DIRECTORATE.
	ASSOCIATE DIRECTOR FOR AERODYNAMICS,.
	AEROTHERMODYNAMICS, AND ACOUSTICS.
	ASSOCIATE DIRECTOR FOR STRUCTURES AND MATERIALS.
	ASSOCIATE DIRECTOR FOR AIRBORNE SYSTEMS.
	ASSOCIATE DIRECTOR FOR TRANSFORMATION PROJECTS.
	ASSOCIATE DIRECTOR FOR FLIGHT PROJECTS.
	DEPUTY DIRECTOR, STRATEGIC PARTNERSHIP, PLANNING, AND MANAGEMENT OFFICE.
	DIRECTOR, SAFETY AND MISSION ASSURANCE OFFICE.
	DIRECTOR, OFFICE OF PROCUREMENT.
	MANAGER, SYSTEMS ENGINEERING OFFICE.
	SPECIAL ASSISTANT TO THE DIRECTOR.
	DIRECTOR, NATIONAL AERONAUTICS AND SPACE.
	ADMINISTRATION ENGINEERING AND SAFETY CENTER.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY DIRECTOR, NATIONAL AERONAUTICS AND SPACE.
	ADMINISTRATION ENGINEERING AND SAFETY CENTER.
	MANAGER, MANAGEMENT AND TECHNICAL SUPPORT OFFICE.
	DEPUTY DIRECTOR FOR SAFETY.
	DIRECTOR, OFFICE OF HUMAN RESOURCES.
	SPECIAL ASSISTANT TO THE DIRECTOR, INNOVATION INSTITUTE.
	DIRECTOR, EXPLORATION AND FLIGHT PROJECTS DIRECTORATE.
	DEPUTY DIRECTOR, EXPLORATION AND FLIGHT PROJECTS DIRECTORATE.
	DIRECTOR, EXPLORATION TECHNOLOGY DEVELOPMENT PROGRAM OFFICE.
	DEPUTY DIRECTOR FOR FLIGHT SYSTEMS.
	DEPUTY DIRECTOR, RESEARCH AND TECHNOLOGY PROGRAM IMPLEMENTATION.
	DEPUTY DIRECTOR, RESEARCH AND TECHNOLOGY TEST OPERATIONS.
	CHIEF INFORMATION OFFICER.
	DEPUTY DIRECTOR FOR ADVANCED PROJECTS.
	DEPUTY DIRECTOR, SAFETY AND MISSION ASSURANCE OFFICE.
	DIRECTOR, AVIATION SAFETY AND SECURITY PROGRAM OFFICE.
	DIRECTOR, AERODYNAMICS, AEROTHERMODYNAMIC, AND.
	AEROPROPULSION FACILITY GROUP.
	DIRECTOR NATIONAL INSTITUTE OF AEROSPACE MANAGEMENT OFFICE.
GLENN RESEARCH CENTER	DIRECTOR OF CENTER OPERATIONS.
	DEPUTY DIRECTOR OF ENGINERING AND TECHNICAL SERVICES.
	DEPUTY DIRECTOR OF PROGRAMS AND PROJECTS.
	ASSOCIATE DIRECTOR FOR EXPLORATION SYSTEMS.
	ASSOCIATE DIRECTOR FOR AERONAUTICS.
	ASSOCIATE DIRECTOR FOR SCIENCE.
	ASSOCIATE DIRECTOR FOR PARTNERSHIPS.
	CHIEF AERONAUTICS DIVISION.
	CHIEF EXPLORATION SYSTEMS DIVISION.
	CHIEF, MATERIALS AND STRUCTURES DIVISION.
	PLUM BROOK STATION MANAGER.
	CHIEF FINANCIAL OFFICER.
	ASSISTANT DEPUTY DIRECTOR FOR POLICY.
	DIRECTOR, SYSTEMS MANAGEMENT OFFICE.
RESEARCH AND TECHNOLOGY	CHIEF, TURBOMACHINERY AND PROPULSION SYSTEM DIVISION.
	CHIEF, POWER AND ON-BOARD PROPULSION TECHNICAL DIVISION.
ENGINEERING AND TECHNICAL SERVICES	CHIEF, COMPUTER SERVICES DIVISION.
	DIRECTOR OF ENGINEERING.
	CHIEF, SYSTEMS ENGINEERING DIVISION.
EXTERNAL PROGRAMS	DIRECTOR, EXTERNAL PROGRAMS.
MISSION SAFETY AND ASSURANCE	DIRECTOR, OFFICE OF SAFETY, ENVIRONMENTAL AND MISSION ASSURANCE.
SCIENCE MISSION DIRECTORATE	ASSISTANT ASSOCIATE ADMINISTRATOR FOR TECHNOLOGY.
	MARS EXPLORATION PROGRAM DIRECTOR.
	DEPUTY DIRECTOR, EARTH SCIENCE.
	DEPUTY ASSOCIATE ADMINISTRATOR FOR TECHNOLOGY.
	DIRECTOR, HELIPHYSICS DIVISION.
	DEPUTY ASSOCIATE ADMINISTRATOR FOR SPACE DEVELOPMENT.
	DIRECTOR, ADMINISTRATION AND RESOURCE MANAGEMENT DIVISION.
	ASSOCIATE DIRECTOR, SUN-EARTH CONNECTION DIVISION.
	DIRECTOR, APPLICATIONS DIVISION.
	ASSOCIATE DIRECTOR, SOLAR SYSTEM EXPLORATION DIVISION.
	DIRECTOR, UNIVERSE DIVISION.
	SPECIAL ASSISTANT TO DEPUTY ASSOCIATE ADMINISTRATOR.
	DEPUTY, DIRECTOR, ASTROPHYSICS DIVISION.
	DIRECTOR RESEARCH DIVISION.
	DEPUTY ASSOCIATE ADMINISTRATOR FOR PROGRAMS.
	DEPUTY ASSOCIATE ADMINISTRATOR (PROGRAMS).
	DIRECTOR, POLICY AND BUSINESS MANAGEMENT OFFICE.
SOLAR SYSTEM EXPLORATION	DIRECTOR, MISSION AND PAYLOAD DEVELOPMENT DIVISION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
SPACE PHYSICS	SENIOR SCIENTIST PROGRAM EXECUTIVE FOR REVIEW AND EVALUATION.
TECHNOLOGY AND INFORMATION SYSTEMS	SENIOR SCIENTIST PROGRAM EXECUTIVE FOR INFORMATION SYSTEMS.
OFFICE OF INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATION.
	COUNSEL TO THE INSPECTOR GENERAL.
	DIRECTOR, TECHNICAL SERVICES OFFICE.
	DIRECTOR, COMPUTER AND TECHNOLOGY CRIMES OFFICE.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT AND PLANNING.
OFFICE OF EARTH SCIENCE	DEPUTY ASSOCIATE ADMINISTRATOR ADVANCED PLANNING.
GODDARD SPACE FLIGHT CENTER	DIRECTOR OF UNIVERSITY PROGRAMS.
	CHIEF, NATAIONAL AERONAUTICS AND SPACE ADMINISTRATION.
	SPACE OPERATIONS MANAGEMENT OFFICE MISSION SERVICES OFFICES.
	ASSOCIATE DIRECTOR/PROGRAM MANAGER FOR EXPLORERS.
	DEPUTY ASSOCIATE DIRECTOR FOR HUBBLE SPACE TELESCOPE (HUBBLE SPACE TELESCOPE) DEVELOPMENT.
	DEPUTY DIRECTOR FOR SYSTEMS MANAGEMENT.
	SPECIAL ASSISTANT TO THE DIRECTOR.
	ASSISTANT FOR PROGRAM INTEGRATION.
	ASSISTANT TO THE DEPUTY ASSOCIATE DIRECTOR FOR HST DEVELOPMENT PROJECT.
	SENIOR ADVISOR.
	ASSISTANT TO THE DEPUTY ASSOCIATE DIRECTOR FOR EXPLORATION AND OPERATIONAL FLIGHT SYSTEMS.
	DEPUTY ASSOCIATE DIRECTOR FOR EARTH SCIENCE DIVISION.
	DEPUTY DIRECTOR, EXPLORATION OF THE UNIVERSE DIVISION.
HUMAN RESOURCES	DIRECTOR OF HUMAN RESOURCES.
COMPTROLLER	CHIEF FINANCIAL OFFICER/COMPTROLLER.
MANAGEMENT OPERATIONS	DEPUTY DIRECTOR OF MANAGEMENT OPERATIONS.
	ASSOCIATE DIRECTOR FOR ACQUISITION.
FLIGHT ASSURANCE	DIRECTOR OF SYSTEMS SAFETY AND MISSION ASSURANCE.
	DEPUTY DIRECTOR OF FLIGHT ASSURANCE.
FLIGHT PROJECTS	DEPUTY DIRECTOR OF FLIGHT PROJECTS.
	DEPUTY ASSOCIATE DIRECTOR FOR HUBBLE SPACE TELESCOPE OPERATIONS PROJECT.
	PROJECT MANAGER, EARTH OBSERVING SYSTEMS MORNING CROSSING (DESCENDING) MISSION PROJECT.
	DEPUTY ASSOCIATE DIRECTOR FOR EARTH SCIENCE OPERATIONAL PROJECTS.
	DIRECTOR OF FLIGHT PROJECTS.
	TRACKING AND DATA RELAY SATELLITE PROJECT MANAGER.
	ASSOCIATE DIRECTOR FOR EARTH SCIENTIST DATA AND INFORMATION SYSTEM.
	PROJECT MANAGER, EARTH OBSERVING SYSTEM—AFTERNOON.
	CROSSING (ASCENDING) MISSION PROJECT FLIGHT PROJ DIRECT.
	DEPUTY DIRECTOR FLIGHT PROJECTS FOR PLAN AND BUSINESS MANAGEMENT.
	PROJECT MANAGER, POLAR OPERATIONAL ENVIRONMENTAL SATELLITE PROGRAM.
	ASSOCIATE DIRECTOR FOR JAMES WEBB SPACE TELESCOPE PROJECT.
	DEPUTY ASSOCIATE DIRECTOR FOR EARTH OBSERVING SYSTEM—GODDARD DEVELOPMENT.
	ASSOCIATE DIRECTOR FOR ASTROPHYSICS DIVISION.
	ASSOCIATE DIRECTOR/PROGRAM MANAGER FOR THE EARTH EXPLORERS PROGRAM OFFICE.
	ASSOCIATE DIRECTOR FOR HELIOPHYSICS DIVISION.
	ASSOCIATE DIRECTOR FOR EXPLORERS AND PLANETARY DIVISIONS.
	SUN EARTH CONNECTION DEPUTY PROGRAM MANAGER.
	DEPUTY ASSOCIATE DIRECTOR FOR EARTH SCIENCE DATA SYSTEMS.
	DEPUTY ASSOCIATE DIRECTOR FOR EXPLORATION AND OPERATIONAL SYSTEMS.
	ASSOCIATE DIRECTOR FOR EXPLORATION, OPERATIONS,.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	COMMUNICATIONS AND NAVIGATION SYSTEMS DIVISION.
	DEPUTY ASSOCIATE DIRECTOR FOR COMMUNICATIONS AND NAVIGATION.
	ASSOCIATE DIRECTOR FOR EARTH SCIENCE DIVISION.
APPLIED ENGINEERING AND TECHNOLOGY DIRECTORATE ...	DEPUTY ASSOCIATE DIRECTOR OF FLIGHT PROJECT CORNET AND MISSION SERVICE PROJECT.
	ASSOCIATE DIRECTOR OF FLIGHT PROJECT FOR NETWORK AND MISSION SERVICE PROJECT.
	CHIEF, MECHANICAL SYSTEM CENTER.
	DEPUTY DIRECTOR OF APPLIED ENGINEERING AND TECHNOLOGY.
	CHIEF INFORMATION SYSTEMS CENTER.
	CHIEF, ELECTRICAL SYSTEMS CENTER.
	DEPUTY DIRECTOR OF APPLIED ENGINEERING AND TECHNOLOGY.
	FOR PLANNING AND DEVELOPMENT.
	CHIEF, INSTRUMENT SYSTEMS AND TECHNOLOGY DIVISION.
	CHIEF, MISSION ENGINEERING AND SYSTEMS ANALYSIS DIVISION.
SYSTEMS, TECHNOLOGY AND ADVANCED CONCEPTS	DEPUTY DIRECTOR OF SYSTEMS, TECHNOLOGY AND ADVANCED CONCEPTS.
SPACE SCIENCES	CHIEF, LABORATORY FOR ASTRONOMY AND SOLAR PHYSICS.
	CHIEF, LABORATORY FOR EXTRATERRESTRIAL PHYSICS.
	DIRECTOR OF SCIENCES AND EXPLORATION.
	CHIEF, GODDARD INSTITUTE FOR SPACE STUDIES.
	CHIEF LABORATORY FOR HIGH ENERGY ASTROPHYSICS.
	DEPUTY DIRECTOR OF SPACE SCIENCES.
	DEPUTY DIRECTOR EXPLORATION OF THE UNIVERSE DIVISION.
	DEPUTY DIRECTOR, SOLAR SYSTEM EXPLORATION DIVISION.
ENGINEERING	CHIEF ENGINEER.
	ASSOCIATE DIRECTOR OF FLIGHT PROJECTS.
	CHIEF, SYSTEMS ENGINEERING DIVISION.
	SPECIAL ASSISTANT TO DIRECTOR OF ENGINEERING (SPACE TECHNOLOGY COMMUNICATIONS).
SUBORBITAL PROJECTS AND OPERATIONS	SPECIAL ASSISTANT FOR EDUCATION.
EARTH SCIENCES	CHIEF LABORATORY FOR HYDROSPHERIC PROCESSES.
	ASSISTANT DIRECTOR OF EARTH SCIENTIST FOR PROJECTS ENGINEERING.
	CHIEF, LABORATORY FOR ATMOSPHERES.
	DEPUTY DIRECTOR FOR EARTH SCIENCES.
	DIRECTOR FOR EARTH SCIENCES.
	CHIEF LABORATORY FOR TERRESTRIAL PHYSICS.
	ASSISTANT DIRECTOR OF MISSION TO PLANET EARTH PROGRAM FOR GLOBE.
	CHIEF, EARTH AND SPACE DATA COMPUTING DIVISION.
	GLOBE PROGRAM MANAGER.
OFFICE OF SECURITY MANAGEMENT AND SAFEGUARDS	DEPUTY ASSISTANT ADMINISTRATOR FOR SECURITY AND PROGRAM PROTECTION.
OFFICE OF CHIEF EDUCATION OFFICER	ASSOCIATE ADMINISTRATOR FOR EDUCATION.
	DIRECTOR ELEMENTARY AND SECONDARY EDUCATION DIVSION.
	DEPUTY CHIEF EDUCATION OFFICER.
	ASSISTANT ASSOCIATE ADMINISTRATOR FOR EDUCATION.
	SENIOR POLICY ADVISOR.
OFFICE OF THE CHIEF ENGINEER	EXPLORATION SYSTEMS MISSION DIRECTORATE CHIEF ENGINEER.
	DEPUTY CHIEF ENGINEER, ADVANCED PLANNING, INTERGRATION, AND ENGINEERING SUPPORT.
	DEPUTY CHIEF ENGINEER, PROGRAM AND PROJECT MANAGEMENT POLICY AND SUPPORT.
OFFICE OF SECURITY MANAGEMENT AND SAFEGUARDS	ASSISTANT ADMINISTRATOR FOR SECURITY MANAGEMENT.
	DEPUTY ASSISTANT ADMINISTRATOR FOR SECURITY MANAGEMENT AND SAFEGUARDS.
OFFICE OF EXPLORATION SYSTEMS	MANAGER, ADVANCED SPACE TECHNOLGY PROGRAM.
	MANAGER, STRATEGIC PLANNING.
	DEPUTY ASSOCIATE ADMINISTRATOR FOR EXPLORATION SYSTEMS.
	ASSISTANT ASSOCIATE ADMININSTRATOR, STRATEGIC INTEGRATION AND MANAGMENT.
	DIRECTOR, ADVANCED CAPABILIITES DIVISION.
	ASSISTANT ASSOCIATE ADMINISTRATOR FOR ADMINSTRATION.
	DIRECTOR, MISSION INTEGRATION DIVISION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	SPECIAL ASSISTANT.
	DIRECTOR BUSINESS OPERATIONS DIVISION.
NATIONAL ARCHIVES AND RECORDS ADMINISTRATION:	
ARCHIVIST OF UNITED STATES AND DEPUTY ARCHIVIST OF THE UNITED STATES/CHIEF OF STAFF.	DEPUTY ARCHIVIST OF THE UNITED STATES.
OFFICE OF THE INSPECTOR GENERAL	INSPECTOR GENERAL.
OFFICE OF ADMINISTRATIVE SERVICES	ASSISTANT ARCHIVIST FOR ADMINISTRATION.
OFFICE OF THE FEDERAL REGISTER	DIRECTOR OF THE FEDERAL REGISTER.
OFFICE OF REGIONAL RECORDS SERVICES	ASSISTANT ARCHIVIST FOR REGIONAL RECORDS SERVICES.
OFFICE OF HUMAN RESOURCES AND INFORMATION SERVICES.	ASSISTANT ARCHIVIST FOR INFORMATION SERVICES.
OFFICE OF RECORDS SERVICES—WASHINGTON, DC	ASSISTANT ARCHIVIST FOR RECORDS SERVICES.
OFFICE OF PRESIDENTIAL LIBRARIES	ASSISTANT ARCHIVIST FOR PRESIDENTIAL LIBRARIES.
NATIONAL CAPITAL PLANNING COMMISSION:	
NATIONAL CAPITAL PLANNING COMMISSION STAFF	EXECUTIVE DIRECTOR.
	GENERAL COUNSEL.
	CHIEF OPERATING OFFICER.
	DEPUTY EXECUTIVE DIRECTOR.
NATIONAL ENDOWMENT FOR THE ARTS:	
NATIONAL ENDOWMENT FOR THE ARTS	DEPUTY CHAIRMAN FOR MANAGEMENT AND BUDGET.
	DEPUTY CHAIRMAN FOR GUIDELINES AND PANEL OPERATIONS.
	CHIEF INFORMATION OFFICER.
NATIONAL ENDOWMENT FOR THE HUMANITIES:	
NATIONAL ENDOWMENT FOR THE HUMANITIES	ASSISTANT CHAIRMAN FOR PLANNING AND OPERATIONS.
NATIONAL LABOR RELATIONS BOARD:	
NATIONAL LABOR RELATIONS BOARD	DEPUTY ASSOCIATE GENERAL COUNSEL, DIVISION OF ENFORCEMENT LITIGATION.
OFFICE OF THE BOARD MEMBERS	EXECUTIVE SECRETARY.
	DEPUTY EXECUTIVE SECRETARY.
	INSPECTOR GENERAL.
	CHIEF INFORMATION OFFICER.
DIVISION OF ENFORCEMENT LITIGATION	DEPUTY ASSOCIATE GENERAL COUNSEL, APPELLATE COURT BRANCH.
	DIRECTOR, OFFICE OF APPEALS.
DIVISION OF ADVICE	ASSOCIATE GENERAL COUNSEL, DIVISION OF ADVICE.
	DEPUTY ASSOCIATE GENERAL COUNSEL, DIVISION OF ADVICE.
DIVISION OF ADMINISTRATION	DIRECTOR, DIVISION OF ADMINISTRATION.
	DEPUTY DIRECTOR, DIVISION OF ADMINISTRATION.
DIVISION OF OPERATIONS MANAGEMENT	ASSOCIATE GENERAL COUNSEL, DIVISION OF OPERATION—MANAGEMENT.
	DEPUTY ASSOCIATE GENERAL COUNSEL, DIVISION OF OPERATIONS—MANAGEMENT.
	ASSISTANT GENERAL COUNSEL.
	ASSISTANT GENERAL COUNSEL.
	ASSISTANT GENERAL COUNSEL.
	ASSISTANT GENERAL COUNSEL.
	ASSISTANT GENERAL COUNSEL.
	ASSISTANT TO GENERAL COUNSEL.
REGIONAL OFFICES	REGIONAL DIRECTOR, REGION 1, BOSTON, MASSACHUSETTS.
	REGIONAL DIRECTOR REGION 2, NEW YORK.
	REGIONAL DIRECTOR, REGION 3, BUFFALO, NEW YORK.
	REGIONAL DIRECTOR, REGION 4, PHILADELPHIA, PENNSYLVANIA.
	REGIONAL DIRECTOR, REGION 5, BALTIMORE, MARYLAND.
	REGIONAL DIRECTOR, REGION 6, PITTSBURGH, PENNSYLVANIA.
	REGIONAL DIRECTOR, REGION 7, DETROIT, MICHIGAN.
	REGIONAL DIRECTOR, REGION 8, CLEVELAND, OHIO.
	REGIONAL DIRECTOR, REGION 9, CINCINNATI, OHIO.
	REGIONAL DIRECTOR, REGION 10, ATLANTA, GEORGIA.
	REGIONAL DIRECTOR, REGION 11, WINSTON SALEM, NORTH CAROLINA.
	REGIONAL DIRECTOR, REGION 12, TAMPA, FLORIDA.
	REGIONAL DIRECTOR, REGION 13, CHICAGO, ILLINOIS.
	REGIONAL DIRECTOR, REGION 14, SAINT LOUIS, MISSOURI.
	REGIONAL DIRECTOR, REGION 15, NEW ORLEANS, LOUISIANA.
	REGIONAL DIRECTOR, REGION 16, FORT WORTH, TEXAS.
	REGIONAL DIRECTOR, REGION 17, KANSAS CITY, KANSAS.
	REGIONAL DIRECTOR, REGION 18, MINNEAPOLIS, MINNESOTA.
	REGIONAL DIRECTOR, REGION 19, SEATTLE, WASHINGTON.
	REGIONAL DIRECTOR, REGION 20, SAN FRANCISCO, CALIFORNIA.
	REGIONAL DIRECTOR, REGION 21, LOS ANGELES, CALIFORNIA.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	REGIONAL DIRECTOR, REGION 22, NEWARK, NEW JERSEY.
	REGIONAL DIRECTOR, REGION 24, HATO REY, PUERTO RICO.
	REGIONAL DIRECTOR, REGION 25, INDIANAPOLIS, INDIANA.
	REGIONAL DIRECTOR, REGION 26, MEMPHIS, TENNESSEE.
	REGIONAL DIRECTOR, REGION 27, DENVER, COLORADO.
	REGIONAL DIRECTOR, REGION 28, PHOENIX, ARIZONA.
	REGIONAL DIRECTOR, REGION 29, BROOKLYN, NEW YORK.
	REGIONAL DIRECTOR, REGION 30, MILWAUKEE, WISCONSIN.
	REGIONAL DIRECTOR, REGION 32, OAKLAND, CALFORNIA.
	REGIONAL DIRECTOR, REGION 33, PEORIA, ILLINOIS.
	REGIONAL DIRECTOR, REGION 31, LOS ANGELES, CALIFORNIA.
	REGIONAL DIRECTOR, REGION 34, HARTFORD, CONNECTICUT.
NATIONAL SCIENCE FOUNDATION:	
OFFICE OF THE DIRECTOR	SENIOR ADVISOR.
	SENIOR STAFF ASSOCIATE.
	SENIOR ADVISOR.
	SENIOR ADVISOR.
OFFICE OF INTEGRATIVE ACTIVITIES	SENIOR SCIENTIST.
	SENIOR ADVISOR.
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL.
OFFICE OF POLAR PROGRAMS	HEAD POLAR RESEARCH SUPPORT SECTION.
ANTARCTIC INFRASTRUCTURE AND LOGISTICS DIVISION	DIVISION DIRECTOR, ANTARCTIC INFRASTRUCTURE AND LOGISTICS.
OFFICE OF INTERNATIONAL SCIENCE AND ENGINEERING	DEPUTY DIVISION DIRECTOR.
	SENIOR STAFF ASSOCIATE.
	SENIOR ADVISOR.
OFFICE OF THE INSPECTOR GENERAL	INSPECTOR GENERAL.
	DEPUTY INSPECTOR GENERAL.
	ASSOCIATE INSPECTOR GENERAL FOR AUDIT.
	ASSOCIATE INSPECTOR GENERAL FOR INVESTIGATIONS.
NATIONAL SCIENCE BOARD	SENIOR POLICY OFFICER.
DIVISION OF ATMOSPHERIC SCIENCES	HEAD, UPPER ATMOSPHERE SECTION.
DIVISION OF OCEAN SCIENCES	HEAD, OCEANS SECTION.
	SENIOR SCIENTIST/SECTION HEAD.
DIRECTORATE FOR ENGINEERING	SENIOR ADVISOR.
	SENIOR ADVISOR.
DIVISION OF ENGINEERING EDUCATION AND CENTERS	DEPUTY DIVISION DIRECTOR (EDUCATION).
	SENIOR STAFF ASSOCIATE.
DIVISION OF CIVIL, MECHANICAL, AND MAUFACTURING INNOVATION.	SENIOR ADVISOR, TECHNOLOGY INTEGRATION.
	SENIOR ADVISOR.
	DEPUTY DIVISION DIRECTOR.
DIVISION OF INDUSTRIAL INNOVATION AND PARTNERSHIPS	SENIOR ADVISOR.
DIVISION OF CHEMICAL, BIOENGINEERING, ENVIRONMENTAL, AND TRANSPORT SYSTEMS.	SENIOR ADVISOR.
	DEPUTY DIVISION DIRECTOR.
DIVISION OF CHEMICAL AND TRANSPORT SYSTEMS	DEPUTY DIVISION DIRECTOR.
DIRECTORATE FOR BIOLOGICAL SCIENCES	DEPUTY ASSISTANT DIRECTOR.
	EXECUTIVE OFFICER.
DIVISION OF ENVIRONMENTAL BIOLOGY	DEPUTY DIVISION DIRECTOR.
DIVISION OF INTEGRATIVE BIOLOGY AND NEUROSCIENCES	DEPUTY DIVISION DIRECTOR.
DIRECTORATE FOR MATHEMATICAL AND PHYSICAL SCIENCES.	EXECUTIVE OFFICER.
	SENIOR SCIENCE ASSOCIATE.
	SENIOR ADVISOR.
DIVISION OF PHYSICS	EXECUTIVE OFFICER.
DIVISION OF MATHEMATICAL SCIENCES	EXECUTIVE OFFICER.
DIVISION OF MATERIALS RESEARCH	EXECUTIVE OFFICER.
DIRECTORATE FOR EDUCATION AND HUMAN RESOURCES	DEPUTY ASSISTANT DIRECTOR FOR INTEGRATIVE ACTIVITIES.
DIVISION OF RESEARCH, EVALUATION AND COMMUNICATION.	SENIOR ADVISOR FOR RESEARCH.
DIRECTORATE FOR SOCIAL, BEHAVIORAL AND ECONOMIC SCIENCES.	DEPUTY ASSISTANT DIRECTOR.
DIRECTORATE FOR COMPUTER AND INFORMATION SCIENCE AND ENGINEERING.	EXECUTIVE OFFICER.
	DEPUTY ASSISTANT DIRECTOR.
	SENIOR STAFF ASSOCIATE.
OFFICE OF BUDGET, FINANCE AND AWARD MANAGEMENT	DIRECTOR, BUDGET, FINANCE AND AWARD AND CHIEF FINANCIAL OFFICER.
	DEPUTY DIRECTOR—MANAGEMENT, OPERATIONS AND POLICY.
	DEPUTY DIRECTOR-PLANNING, COORDINDATION AND ANALYSIS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	SENIOR ADVISOR.
BUDGET DIVISION	DIVISION DIRECTOR.
	DEPUTY DIRECTOR.
DIVISION OF FINANCIAL MANAGEMENT	DIVISION DIRECTOR AND DEPUTY CHIEF FINANCIAL OFFICER.
	DEPUTY DIVISION DIRECTOR, DIVISION OF FINANCIAL MANAGEMENT.
DIVISION OF GRANTS AND AGREEMENTS	DIVISION DIRECTOR.
DIVISION OF ACQUISITION AND COOPERATIVE SUPPORT	DIVISION DIRECTOR.
DIVISION OF INSTITUTIONAL AND AWARD SUPPORT	DIVISION DIRECTOR.
OFFICE OF INFORMATION AND RESOURCE MANAGEMENT	DIRECTOR.
	DEPUTY DIRECTOR.
	SENIOR STAFF ASSOCIATE.
DIVISION OF INFORMATION SYSTEMS	DEPUTY DIVISION DIRECTOR.
DIVISION OF HUMAN RESOURCE MANAGEMENT	DIVISION DIRECTOR.
	DEPUTY DIVISION DIRECTOR.
DIVISION OF ADMINISTRATIVE SERVICES	DIVISION DIRECTOR.
	DEPUTY DIVISION DIRECTOR.
NATIONAL TRANSPORTATION SAFETY BOARD:	
OFFICE OF THE MANAGING DIRECTOR	MANAGING DIRECTOR.
	ASSOCIATE MANAGING DIRECTOR FOR QUALITY ASSURANCE.
OFFICE OF ADMINSTRATION	DIRECTOR, OFFICE OF ADMINISTRATION.
	DIRECTOR BUREAU OF ACCIDENT INVESTIGATION.
OFFICE OF AVIATION SAFETY	DEPUTY DIRECTOR, TECHNOLOGY AND INVESTMENT OPERATIONS.
	DEPUTY DIRECTOR, REGIONAL OPERATIONS.
OFFICE OF RESEARCH AND ENGINEERING	DIRECTOR OFFICE OF RESEARCH AND ENGINEERING.
	DEPUTY DIRECTOR OFFICE OF RESEARCH AND ENGINEERING.
OFFICE OF CHIEF FINANCIAL OFFICER	CHIEF FINANCIAL OFFICER.
OFFICE OF SAFETY RECOMMENDATIONS AND ACCOMPLISHMENTS.	DIRECTOR OFFICE OF SAFETY RECOMMENDATIONS AND ACCOMPLISHMENTS.
OFFICE OF RAILROAD, PIPELINE AND HAZARDOUS MATERIALS INVESTIGATIONS.	DIRECTOR, OFFICE OF RAILROAD, PIPELINE AND HAZARDOUS MATERIALS INVESTIGATIONS.
NATIONAL TRANSPORTATION SAFETY BOARD ACADEMY	DIRECTOR, NATIONAL TRANSPORTATION SAFETY BOARD ACADEMY.
	PRESIDENT AND ACADEMIC DEAN.
NUCLEAR REGULATORY COMMISSION:	
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS/ADVISORY COMMITTEE ON NUCLEAR WASTE.	DEPUTY EXECUTIVE DIRECTOR.
OFFICE OF THE CHIEF FINANCIAL OFFICER	DIRECTOR, DIVISION OF PLANNING, BUDGET AND ANALYSIS.
	DIRECTOR, DIVISON OF FINANCIAL SERVICES.
	DEPUTY CHIEF FINANICAL OFFICER.
	DIRECTOR, DIVISION OF FINANCIAL MANAGEMENT.
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	DEPUTY INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
OFFICE OF THE GENERAL COUNSEL	DIRECTOR, COMMISSION ADJUDICATORY TECHNICAL SUPPORT PROGRAM.
ASSOCIATE GENERAL COUNSEL FOR LICENSING AND REGULATION.	DEPUTY ASSISTANT GENERAL COUNSEL FOR RULEMAKING AND FUEL CYCLE.
ASSOCIATE GENERAL COUNSEL FOR HEARINGS, ENFORCEMENT AND ADMINISTRATION.	DEPUTY ASSISTANT GENERAL COUNSEL FOR ADMINISTRATION.
	ASSISTANT GENERAL COUNSEL FOR OPERATING REACTORS AND HIGH LEVEL WASTE REPOSITORY PROGRAMS.
OFFICE OF COMMISSION APPELLATE ADJUDICATION	DIRECTOR, OFFICE OF COMMISSION APPELLATE ADJUDICATION.
OFFICE OF EXECUTIVE DIRECTOR FOR OPERATIONS	DIRECTOR OF NUCLEAR SECURITY PROJECTS.
OFFICE OF INFORMATION SERVICES	DIRECTOR, INFRASTRUCTURE AND COMPUTER OPERATIONS DIVISION.
	DIRECTOR, BUSINESS PROCESS IMPROVEMENT AND APPLICATIONS DIVISION.
	DIRECTOR, INFORMATION AND RECORDS SERVICES DIVISION.
	DIRECTOR, HIGH-LEVEL WASTE BUSINESS AND PROGRAM INTEGRATION STAFF.
	DIRECTOR, PROGRAM MANAGEMENT, POLICY DEVELOPMENT AND ANALYSIS STAFF.
	DEPUTY DIRECTOR, OFFICE OF INFORMATION SERVICES.
OFFICE OF ADMINISTRATION	DIRECTOR, DIVISION OF CONTRACTS.
	DIRECTOR, DIVISION OF ADMINISTRATIVE SERVICES.
	DIRECTOR, DIVISION OF FACILITIES AND SECURITY.
	DEPUTY DIRECTOR, OFFICE OF ADMINISTRATION.
OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE	DEPUTY DIRECTOR, OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, PROGRAM MANAGEMENT, POLICY DEVELOPMENT, AND ANALYSIS STAFF SPECIAL ASSISTANT.
	DEPUTY DIRECTOR, OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE.
DIVISION OF SECURITY POLICY	DIRECTOR, DIVISION OF SECURITY POLICY.
	DEPUTY DIRECTOR, DIVISION OF SECURITY POLICY.
	PROJECT DIRECTOR, NUCLEAR SECURITY POLICY.
	PROJECT DIRECTOR, NUCLEAR SECURITY OPERATIONS.
	DEPUTY DIRECTOR FOR MATERIAL SECURITY.
	DEPUTY DIRECTOR FOR REACTOR SECURITY AND RULEMAKING.
DIVISION OF PREPAREDNESS AND RESPONSE	DEPUTY DIRECTOR FOR INCIDENT RESPONSE.
	DEPUTY DIRECTOR, INCIDENT RESPONSE DIRECTORATE.
	DIRECTOR, DIVISION OF PREPAREDNESS AND RESPONSE.
	DEPUTY DIRECTOR FOR EMERGENCY PREPAREDNESS.
DIVISION OF SECURITY OPERATIONS	DIRECTOR, DIVISION OF SECURITY OPERATIONS.
	DEPUTY DIRECTOR FOR SECURITY OVERSIGHT.
	DEPUTY DIRECTOR FOR SECURITY PROGRAMS.
OFFICE OF INVESTIGATIONS	DEPUTY DIRECTOR, OFFICE OF INVESTIGATIONS.
OFFICE OF SMALL BUSINESS AND CIVIL RIGHTS	DIRECTOR, OFFICE OF SMALL BUSINESS AND CIVIL RIGHTS.
OFFICE OF NEW REACTORS	ASSISTANT TO THE DIRECTOR FOR TRANSITION MANAGEMENT.
OFFICE OF NUCLEAR REACTOR REGULATION	DEPUTY DIRECTOR, PROGRAM MANAGEMENT, POLICY DEVELOPMENT AND PLANNING STAFF/BUSINESS PROCESS INTEGRATOR FOR NEW REACTORS.
	DIRECTOR, PROGRAM MANAGEMENT, POLICY DEVELOPMENT AND PLANNING STAFF.
ASSOCIATE DIRECTOR FOR ENGINEERING AND SAFETY SYSTEMS.	ASSOCIATE DIRECTOR FOR ENGINEERING AND SAFETY SYSTEMS.
DIVISION OF SAFETY SYSTEMS	DIRECTOR, DIVISION OF SAFETY SYSTEMS.
	DEPUTY DIRECTOR, DIVISION OF SAFETY SYSTEMS.
	DEPUTY DIRECTOR, DIVISION OF SAFETY SYSTEMS.
DIVISION OF COMPONENT INTEGRITY	DIRECTOR, DIVISION OF COMPONENT INTEGRITY.
	DEPUTY DIRECTOR, DIVISION OF COMPONENT INTEGRITY.
DIVISION OF ENGINEERING	DEPUTY DIRECTOR, DIVISION OF ENGINEERING.
	DIRECTOR, DIVISION OF ENGINEERING.
	DEPUTY DIRECTOR, DIVISION OF ENGINEERING.
	DEPUTY DIRECTOR, DIVISION OF ENGINEERING.
ASSOCIATE DIRECTOR FOR OPERATING REACTOR OVERSIGHT AND LICENSING.	ASSOCIATE DIRECTOR FOR OPERATING REACTOR OVERSIGHT AND LICENSING.
DIVISION OF LICENSE RENEWAL	DIRECTOR, DIVISION OF LICENSE RENEWAL.
	DEPUTY DIRECTOR, DIVISION OF LICENSE RENEWAL.
DIVISION OF OPERATING REACTOR LICENSING	DIRECTOR, DIVISION OF OPERATING REACTOR LICENSING.
	DEPUTY DIRECTOR, DIVISION OF OPERATING REACTOR LICENSING.
	DEPUTY DIRECTOR, DIVISION OF OPERATING REACTOR LICENSING.
DIVISION OF INSPECTION AND REGIONAL SUPPORT	DIRECTOR, DIVISION OF INSPECTION AND REGIONAL SUPPORT.
	DEPUTY DIRECTOR, DIVISION OF INSPECTION AND REGIONAL SUPPORT.
	DEPUTY DIRECTOR, DIVISION OF INSPECTION AND REGIONAL SUPPORT.
ASSOCIATE DIRECTOR FOR RISK ASSESSMENT AND NEW PROJECTS.	ASSOCIATE DIRECTOR FOR RISK ASSESSMENT AND NEW PROJECTS.
DIVISION OF NEW REACTOR LICENSING	DIRECTOR, DIVISION OF NEW REACTOR LICENSING.
	DEPUTY DIRECTOR, DIVISION OF NEW REACTOR LICENSING.
	DEPUTY DIRECTOR, DIVISION OF NEW REACTOR LICENSING.
DIVISION OF RISK ASSESSMENT	DIRECTOR, DIVISION OF RISK ASSESSMENT.
	DEPUTY DIRECTOR, DIVISION OF RISK ASSESSMENT.
	DEPUTY DIRECTOR, DIVISION OF RISK ASSESSMENT.
DIVISION OF POLICY AND RULEMAKING	DIRECTOR, DIVISION OF POLICY AND RULEMAKING.
	DEPUTY DIRECTOR, DIVISION OF POLICY AND RULEMAKING.
	DEPUTY DIRECTOR, DIVISION OF POLICY AND RULEMAKING.
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS	DIRECTOR, PROGRAM PLANNING, BUDGETING, AND PROGRAM ANALYSIS STAFF.
DIVISION OF FUEL CYCLE SAFETY AND SAFEGUARDS	CHIEF SPECIAL PROJECTS BRANCH.
	CHIEF, SAFETY AND SAFEGUARDS SUPPORT BRANCH.
	CHIEF, FUEL CYCLE FACILITIES BRANCH.
DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY	CHIEF, RULEMAKING AND GUIDANCE BRANCH.
	CHIEF, MATERIALS SAFETY AND INSPECTION BRANCH.
DIVISION OF WASTE MANAGEMENT AND ENVIRONMENTAL PROTECTION.	CHIEF, ENVIRONMENTAL AND PERFORMANCE ASSESSMENT BRANCH.
	DEPUTY DIRECTOR, DECOMMISSIONING DIRECTORATE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY DIRECTOR, ENVIRONMENTAL PROTECTION AND PERFORMANCE ASSESSMENT DIRECTORATE.
DIVISION OF HIGH LEVEL WASTE REPOSITORY SAFETY	DEPUTY DIRECTOR, LICENSING AND INSPECTION DIRECTORATE.
	DEPUTY DIRECTOR, TECHNICAL REVIEW DIRECTORATE.
	DEPUTY DIRECTOR, TECHNICAL REVIEW DIRECTORATE.
SPENT FUEL PROJECT OFFICE	DEPUTY DIRECTOR, LICENSING AND INSPECTION DIRECTORATE.
	DEPUTY DIRECTOR, TECHNICAL REVIEW DIRECTORATE.
OFFICE OF FEDERAL AND STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS.	DEPUTY DIRECTOR, OFFICE OF FEDERAL AND STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS.
	DIRECTOR, PROGRAM PLANNING, BUDGETING, AND PROGRAM ANALYSIS STAFF.
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS	DIRECTOR, DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS.
	DEPUTY DIRECTOR, DIVISION OF MATERIALS SAFEETY AND STATE AGREEMENTS.
DIVISION OF INTERGOVERNMENTAL LIAISON AND RULEMAKING.	DIRECTOR, DIVISION OF INTERGOVERNMENTAL LIAISON AND RULEMAKING.
	DEPUTY DIRECTOR, DIVISION OF INTERGOVERNMENTAL LIAISON AND RULEMAKING.
DIVISION OF WASTE MANAGEMENT AND ENVIRONMENTAL PROTECTION.	DIRECTOR, DIVISION OF WASTE MANAGEMENT AND ENVIRONMENTAL PROTECTION.
	DEPUTY DIRECTOR, DECOMMISSIONING AND URANIUM RECOVERY LICENSING DIRECTORATE.
	DEPUTY DIRECTOR, ENVIRONMENTAL PROTECTION AND PERFORMANCE ASSESSMENT DIRECTORATE.
OFFICE OF NUCLEAR REGULATORY RESEARCH	DIRECTOR, PROGRAM MANAGEMENT, POLICY DEVELOPMENT AND ANALYSIS STAFF.
DIVISION OF ENGINEERING TECHNOLOGY	CHIEF, GENERIC SAFETY ISSUES BRANCH.
	CHIEF, ELECTRICAL, MECHANICAL AND MATERIALS ENGINEERING BRANCH.
	CHIEF, STRUCTURAL AND GEOLOGICAL ENGINEERING BRANCH.
	CHIEF, MATERIALS ENGINEERING BRANCH.
	CHIEF, ENGINEERING RESEARCH APPLICATIONS BRANCH.
DIVISION OF SYSTEMS ANALYSIS AND REGULATORY EFFECTIVENESS.	CHIEF, ADVANCED REACTORS AND REGULATORY EFFECTIVENESS BRANCH.
	CHIEF, SAFETY MARGINS AND SYSTEMS ANALYSIS BRANCH.
	CHIEF, RADIATION PROTECTION, ENVIRONMENTAL RISK AND WASTE MANAGEMENT BRANCH.
	DEPUTY DIRECTOR, DIVISION OF SYSTEMS ANALYSIS AND REGULATORY EFFECTIVENESS.
DIVISION OF RISK ANALYSIS AND APPLICATION	CHIEF, OPERATING EXPERIENCE RISK ANALYSIS BRANCH.
	CHIEF, PROBABILISTIC RISK ANALYSIS BRANCH.
	DEPUTY DIRECTOR, DIVISION OF RISK ANALYSIS AND APPLICATIONS.
DIVISION OF FUEL, ENGINEERING AND RADIOLOGICAL RESEARCH.	DIRECTOR, DIVISION OF FUEL, ENGINEERING AND RADIOLOGICAL RESEARCH.
	ASSISTANT DIRECTOR, DIVISION OF FUEL, ENGINEERING AND RADIOLOGICAL RESEARCH.
DEPUTY DIRECTOR FOR MATERIALS ENGINEERING	DEPUTY DIRECTOR FOR MATERIALS ENGINEERING.
DEPUTY DIRECTOR FOR ENGINEERING RESEARCH APPLICATIONS.	DEPUTY DIRECTOR FOR ENGINEERING RESEARCH APPLICATIONS.
DEPUTY DIRECTOR FOR RADIATION PROTECTION, ENVIRONMENTAL RISK AND WASTE MANAGEMENT.	DEPUTY DIRECTOR FOR RADIATION PROTECTION, ENVIRONMENTAL RISK AND WASTE MANAGEMENT.
DIVISION OF RISK ASSESSMENT AND SPECIAL PROJECTS	DIRECTOR, DIVISION OF RISK ASSESSMENT AND SPECIAL PROJECTS.
	ASSISTANT DIRECTOR, DIVISION OF RISK ASSESSMENT AND SPECIAL PROJECTS.
	ASSISTANT DIRECTOR, DIVISION OF RISK ASSESSMENT AND SPECIAL PROJECTS.
DEPUTY DIRECTOR FOR NEW REACTORS AND COMPUTATIONAL ANALYSIS.	DEPUTY DIRECTOR FOR NEW REACTORS AND COMPUTATIONAL ANALYSIS.
DEPUTY DIRECTOR FOR PROBABILISTIC RISK AND APPLICATIONS.	DEPUTY DIRECTOR FOR PROBABILISTIC RISK AND APPLICATIONS.
DEPUTY DIRECTOR FOR OPERATING EXPERIENCE AND RISK ANALYSIS.	DEPUTY DIRECTOR FOR OPERATIING EXPERIENCE AND ANALYSIS.
REGION I	DEPUTY REGIONAL ADMINISTRATOR.
	DIRECTOR, DIVISION OF NUCLEAR MATERIALS SAFETY.
	DEPUTY DIRECTOR, DIVISION OF REACTOR SAFETY.
	DIRECTOR DIVISION OF REACTOR SAFETY.
	DIRECTOR, DIVISION OF REACTOR PROJECTS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY DIRECTOR, DIVISION OF REACTOR PROJECTS.
	DEPUTY DIRECTOR, DIV OF RADIATION SAFETY AND SAFEGUARDS.
	DEPUTY DIRECTOR, DIVISION OF REACTOR PROJECTS.
REGION II	DEPUTY REGIONAL ADMINISTRATOR FOR OPERATIONS.
	DIRECTOR, DIVISION OF FUEL FACILITY INSPECTION.
	DEPUTY DIRECTOR, DIVISION OF REACTOR PROJECTS.
	DIRECTOR, DIVISION OF REACTOR PROJECTS.
	DEPUTY DIRECTOR, DIVISION OF REACTOR SAFETY.
	DIRECTOR, DIVISION OF REACTOR SAFETY.
	DEPUTY REGIONAL ADMINISTRATOR FOR CONSTRUCTION.
REGION III	DIRECTOR, DIVISION OF REACTOR SAFETY.
	DIRECTOR, DIVISION OF REACTOR PROJECTS.
	DEPUTY REGIONAL ADMINISTRATOR.
	DIRECTOR, DIVISION OF NUCLEAR MATERIALS SAFETY.
	DEPUTY DIRECTOR, DIVISION OF NUCLEAR MATERIALS SAFETY.
	DEPUTY DIRECTOR, DIVISION OF REACTOR PROJECTS.
	DEPUTY DIRECTOR, DIVISION OF REACTOR SAFETY.
REGION IV	DEPUTY REGIONAL ADMINISTRATOR.
	DIRECTOR DIVISION OF REACTOR PROJECTS.
	DIRECTOR, DIVISION OF NUCLEAR MATERIALS SAFETY.
	DIRECTOR, DIVISION OF REACTOR SAFETY.
	DEPUTY DIRECTOR, DIVISION OF REACTOR SAFETY.
	DEPUTY DIRECTOR, DIVISION OF REACTOR PROJECTS.
OFFICE OF GOVERNMENT ETHICS:	
OFFICE OF GOVERNMENT ETHICS	DEPUTY GENERAL COUNSEL.
	DEPUTY DIRECTOR FOR ADMINISTRATION AND INFORMATION MANAGEMENT.
	DEPUTY DIRECTOR, FOR GOVERNMENT RELATIONS AND SPECIAL PROJECTS.
	DEPUTY DIRECTOR FOR AGENCY PROGRAMS.
OFFICE OF MANAGEMENT AND BUDGET:	
OFFICE OF THE DIRECTOR	DEPUTY ASSISTANT DIRECTOR FOR MANAGEMENT.
	DEPUTY ASSOCIATE DIRECTOR FOR ECONOMIC POLICY.
	SENIOR ADVISOR TO THE DEPUTY DIRECTOR FOR MANAGEMENT.
	DEPUTY ASSISTANT DIRECTOR FOR ADMINISTRATION.
LEGISLATIVE REFERENCE DIVISION	ASSISTANT DIRECTOR LEGISLATIVE REFERENCE.
	CHIEF, ECONOMICS, SCIENCE AND GOVERNMENT BRANCH.
	CHIEF, RESOURCES-DEFENSE-INTERNATIONAL BRANCH.
	CHIEF, LABOR, WELFARE, PERSONNEL BRANCH.
OFFICE OF FEDERAL PROCUREMENT POLICY	ASSOCIATE ADMINISTRATOR FOR PROCUREMENT LAW AND LEGISLATION.
	ASSOCIATE ADMINISTRATOR FOR ACQUISITION IMPLEMENTATION.
	ASSOCIATE ADMINISTRATOR (ACQUISITION POLICY).
	ASSOCIATE ADMINISTRATOR FOR COMPETITIVE SOURCING.
GENERAL COUNSEL	ASSOCIATE GENERAL COUNSEL FOR BUDGET.
OFFICE OF INFORMATION AND REGULATORY AFFAIRS	CHIEF, INFORMATION POLICY AND TECHNOLOGY BRANCH.
	CHIEF STATISTICAL POLICY BRANCH.
	SENIOR ADVISOR.
	SENIOR ADVISOR.
	CHIEF, NATURAL RESOURCES, ENERGY AND AGRICULTURE BRANCH.
	CHIEF, HEALTH, TRANSPORTATION AND GENERAL GOVERNMENT.
OFFICE OF E-GOVERNMENT AND INFORMATION TECHNOLOGY.	CHIEF ARCHITECT.
OFFICE OF FEDERAL FINANCIAL MANAGEMENT	CHIEF, FINANCIAL STANDARDS AND GRANTS BRANCH.
	CHIEF FEDERAL FINANCIAL SYSTEMS BRANCH.
	SENIOR ADVISOR TO THE DIRECTOR.
	CHIEF, FINANCIAL INTEGRITY AND ANALYSIS BRANCH.
BUDGET REVIEW	DEPUTY ASSISTANT DIRECTOR FOR BUDGET REVIEW AND CONCEPTS.
	DEPUTY CHIEF BUDGET ANALYSIS BRANCH.
	CHIEF BUDGET ANALYSIS BRANCH.
	ASSISTANT DIRECTOR FOR BUDGET REVIEW.
	DEPUTY ASSISTANT DIRECTOR FOR BUDGET ANALYSIS AND SYSTEMS.
	CHIEF, BUDGET CONCEPTS BRANCH.
	CHIEF, BUDGET SYSTEMS BRANCH.
	CHIEF, BUDGET REVIEW BRANCH.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY CHIEF, BUDGET REVIEW BRANCH.
INTERNATIONAL AFFAIRS DIVISION	CHIEF, STATE/UNITED STATES INTERNATIONAL AFFAIRS BRANCH.
	CHIEF, ECONOMIC AFFAIRS BRANCH.
	DEPUTY ASSOCIATE DIRECTOR FOR INTERNATIONAL AFFAIRS.
NATIONAL SECURITY DIVISION	CHIEF, COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE BRANCH.
	CHIEF, FORCE STRUCTURE AND INVESTMENT BRANCH.
	CHIEF VETERAN AFFAIRS BRANCH.
	DEPUTY ASSOCIATE DIRECTOR FOR NATIONAL SECURITY.
	CHIEF OPERATIONS AND SUPPORT BRANCH.
HUMAN RESOURCE PROGRAMS	CHIEF, LABOR BRANCH.
	CHIEF, EDUCATION BRANCH.
	DEPUTY ASSOCIATE DIRECTOR FOR EDUCATION, INCOME MAINTAINENCE AND LABOR.
	CHIEF, INCOME MAINTENANCE BRANCH.
	CHIEF, PERSONNEL POLICY BRANCH.
	SENIOR ADVISOR.
	DEPUTY ASSOCIATE DIRECTOR, EDUCATION AND HUMAN RESOURCES DIVISION.
HEALTH DIVISION	DEPUTY ASSOCIATE DIRECTOR FOR HEALTH.
	CHIEF HEALTH AND FINANCING BRANCH.
	CHIEF, HEALTH AND HUMAN SERVICES BRANCH.
	CHIEF, PUBLIC HEALTH BRANCH.
TRANSPORTATION, HOMELAND, JUSTICE AND SERVICES DIVISION.	CHIEF TRANSPORTATION BRANCH.
	DEPUTY ASSOCIATE DIRECTOR, TRANSPORTATION, HOMELAND, JUSTICE AND SERVICES.
	CHIEF, TRANSPORTATION/GENERAL SERVICES ADMINISTRATION BRANCH.
	CHIEF, JUSTICE BRANCH.
	CHIEF, HOMELAND SECURITY.
HOUSING, TREASURY AND COMMERCE DIVISION	CHIEF, COMMERCE BRANCH.
	DEPUTY ASSOCIATE DIRECTOR FOR HOUSING, TREASURY AND COMMERCE.
	CHIEF, TREASURY BRANCH.
	CHIEF, HOUSING BRANCH.
NATURAL RESOURCE PROGRAMS	SENIOR ADVISOR.
NATURAL RESOURCES DIVISION	DEPUTY ASSOCIATE DIRECTOR FOR NATURAL RESOURCES.
	CHIEF, AGRICULTURAL BRANCH.
	CHIEF, ENVIRONMENT BRANCH.
	CHIEF INTERIOR BRANCH.
ENERGY, SCIENCE AND WATER DIVISION	CHIEF, WATER AND POWER BRANCH.
	CHIEF SCIENCE AND SPACE PROGRAMS BRANCH.
	CHIEF, ENERGY BRANCH.
	DEPUTY ASSOCIATE DIRECTOR FOR ENERGY AND SCIENCE DIVISION.
OFFICE OF NATIONAL DRUG CONTROL POLICY:	
NATIONAL YOUTH ANTI-DRUG MEDIA CAMPAIGN	ASSOCIATE DIRECTOR FOR NATIONAL YOUTH ANTI-DRUG MEDIA CAMPAIGN.
OFFICE OF SUPPLY REDUCTION	ASSISTANT DEPUTY DIRECTOR OF SUPPLY REDUCTION.
OFFICE OF PERSONNEL MANAGEMENT:	
OFFICE OF THE INSPECTOR GENERAL	DEPUTY INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	ASSISTANT INSPECTOR GENERAL FOR POLICY, RESOURCES MANAGEMENT, AND OVERSIGHT.
CENTER FOR RETIREMENT AND INSURANCE SERVICES	ASSISTANT DIRECTOR FOR RETIREMENT AND INSURANCE SERVICES SUPPORT SERVICES.
	ASSISTANT DIRECTOR FOR RETIREMENT SERVICES PROGRAMS.
FEDERAL INVESTIGATIVE SERVICES DIVISION	DEPUTY ASSOCIATE DIRECTOR FOR INVESTIGATIVE PROGRAM OPERATIONS.
CENTER FOR MERIT SYSTEM ACCOUNTABILITY	DEPUTY ASSOCIATE DIRECTOR FOR MERIT SYSTEM ACCOUNTABILITY.
OFFICE OF THE CHIEF FINANCIAL OFFICER	ASSOCIATE DIRECTOR FOR MANAGEMENT AND CHIEF FINANCIAL OFFICER.
	CHIEF FINANCIAL OFFICER.
CENTER FOR FINANCIAL SERVICES	ASSISTANT CHIEF FINANCIAL OFFICER.
	DEPUTY CHIEF FINANCIAL OFFICER FOR FINANCIAL SERVICES.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
CENTER FOR WORKFORCE PLANNING AND POLICY ANALYSIS.	DEPUTY ASSOCIATE DIRECTOR FOR WORKFORCE PLANNING AND POLICY ANALYSIS/CHIEF ACTUARY.
CENTER FOR WORKFORCE RELATIONS AND ACCOUNTABILITY POLICY.	DEPUTY ASSOCIATE DIRECTOR FOR WORKFORCE RELATIONS AND ACCOUNTABILITY POLICY.
CENTER FOR CONTRACTING, FACILITIES, AND ADMINISTRATIVE SERVICES.	DEPUTY ASSOCIATE DIRECTOR FOR CONTRACTING, FACILITIES, AND ADMINISTRATIVE SERVICES.
CENTER FOR INFORMATION SERVICES AND CHIEF INFORMATION OFFICER.	DEPUTY ASSOCIATE DIRECTOR AND CHIEF INFORMATION OFFICER.
CENTER FOR SECURITY AND EMERGENCY ACTIONS	DEPUTY ASSOCIATE DIRECTOR FOR SECURITY AND EMERGENCY ACTIONS.
OFFICE OF SPECIAL COUNSEL:	
HEADQUARTERS, OFFICE OF SPECIAL COUNSEL	ASSOCIATE SPECIAL COUNSEL FOR INVESTIGATION AND PROSECUTION.
	ASSOCIATE SPECIAL COUNSEL FOR INVESTIGATION AND PROSECUTION.
	ASSOCIATE SPECIAL COUNSEL FOR INVESTIGATION AND PROSECUTION.
	SENIOR ASSOCIATE SPECIAL COUNSEL FOR INVESTIGATION AND PROSECUTION.
	DIRECTOR OF MANAGEMENT AND BUDGET.
	ASSOCIATE SPECIAL COUNSEL PLANNING AND OVERSIGHT.
	ASSOCIATE SPECIAL COUNSEL FOR LEGAL COUNSEL AND POLICY.
OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE:	
OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE	ASSISTANT U.S. TRADE REPRESENTATIVE FOR LABOR.
RAILROAD RETIREMENT BOARD:	
BOARD STAFF	CHIEF OF TECHNOLOGY SERVICE.
	DIRECTOR OF HEARINGS AND APPEALS.
	CHIEF ACTUARY.
	DIRECTOR OF FIELD SERVICE.
	DIRECTOR OF ADMINISTRATION.
	DEPUTY GENERAL COUNSEL.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	CHIEF FINANCIAL OFFICER.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	DIRECTOR OF TAXATION.
	GENERAL COUNSEL.
	DIRECTOR OF PROGRAMS.
	CHIEF INFORMATION OFFICER.
	DIRECTOR OF OPERATIONS.
	DIRECTOR OF POLICY AND SYSTEMS.
	DIRECTOR OF FISCAL OPERATIONS.
SELECTIVE SERVICE SYSTEM:	
OFFICE OF THE DIRECTOR	ASSOCIATE DIRECTOR FOR MOBILIZATION.
SMALL BUSINESS ADMINISTRATION:	
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR AUDITING.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	COUNSEL TO THE INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT AND POLICY.
	DEPUTY INSPECTOR GENERAL.
OFFICE OF THE GENERAL COUNSEL	ASSOCIATE GENERAL COUNSEL FOR GENERAL LAW.
	ASSOCIATE GENERAL COUNSEL LITIGATION.
	ASSOCIATE GENERAL COUNSEL FOR PROCUREMENT LAW.
	ASSOCIATE GENERAL COUNSEL FOR FINANCIAL LAW AND LENDER OVERSIGHT.
OFFICE OF FIELD OPERATIONS	DISTRICT DIRECTOR.
	DISTRICT DIRECTOR.
	DISTRICT DIRECTOR.
	DISTRICT DIRECTOR.
	DISTRICT DIRECTOR.
	DISTRICT DIRECTOR.
	DISTRICT DIRECTOR.
	DISTRICT DIRECTOR.
OFFICE OF EQUAL EMPLOYMENT OPPORTUNITY AND CIVIL RIGHTS COMPLIANCE.	ASSISTANT ADMINISTRATOR FOR EQUAL EMPLOYMENT OPPORTUNITY AND CIVIL RIGHTS COMPLIANCE.
OFFICE OF HEARINGS AND APPEALS	ASSISTANT ADMINISTRATOR FOR HEARINGS AND APPEALS.
OFFICE OF THE CHIEF FINANCIAL OFFICER	DEPUTY CHIEF FINANCIAL OFFICER.
	CHIEF FINANCIAL OFFICER.
OFFICE OF CAPITAL ACCESS	DEPUTY TO THE ASSOCIATE DEPUTY ADMINISTRATOR FOR CAPITAL ACCESS.
OFFICE OF FINANCIAL ASSISTANCE	ASSOCIATE ADMINISTRATOR FOR FINANCIAL ASSISTANCE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY ASSOCIATE ADMINISTRATOR FOR FINANCIAL ASSISTANCE.
	ASSISTANT ADMINISTRATOR FOR PORTFOLIO MANAGEMENT.
OFFICE OF SURETY GUARANTEES	ASSOCIATE ADMINISTRATOR FOR SURETY GUARANTEES.
OFFICE OF ENTREPRENEURIAL DEVELOPMENT	DEPUTY TO THE ASSOCIATE DEPUTY ADMINISTRATOR FOR ENTREPRENEURIAL DEVELOPMENT.
OFFICE OF HUMAN CAPITAL MANAGEMENT	CHIEF HUMAN CAPITAL OFFICER.
OFFICE OF GOVERNMENT CONTRACTING AND BUSINESS DEVELOPMENT.	ASSOCIATE ADMINISTRATOR FOR BUSINESS DEVELOPMENT.
OFFICE OF BUSINESS DEVELOPMENT	ASSOCIATE ADMINISTRATOR FOR BUSINESS DEVELOPMENT.
OFFICE OF POLICY, PLANNING AND LIAISON	ASSOCIATE ADMINISTRATOR FOR PROCUREMENT POLICY AND LIAISON.
SOCIAL SECURITY ADMINISTRATION:	
OFFICE OF THE CHIEF INFORMATION OFFICER	DIRECTOR, OFFICE OF INFORMATION TECHNOLOGY SYSTEMS REVIEW.
	DEPUTY CHIEF INFORMATION OFFICER.
OFFICE OF THE CHIEF STRATEGIC OFFICER	CHIEF STRATEGIC OFFICER.
OFFICE OF QUALITY PERFORMANCE	CHIEF QUALITY OFFICER.
	DEPUTY CHIEF QUALITY OFFICER.
OFFICE OF QUALITY CONTROL	ASSOCIATE COMMISSIONER FOR QUALITY ASSURANCE AND PERFORMANCE ASSESSMENT.
OFFICE OF DISABILITY ADJUDICATION AND REVIEW	DEPUTY COMMISSIONER FOR DISABILITY ADJUDICATION AND REVIEW.
	ASSISTANT DEPUTY COMMISSIONER FOR DISABILITY ADJUDICATION AND REVIEW.
OFFICE OF FEDERAL REVIEWING OFFICIAL	CHIEF FEDERAL REVIEWING OFFICIAL.
OFFICE OF THE INSPECTOR GENERAL	DEPUTY INSPECTOR GENERAL.
	COUNSEL TO THE INSPECTOR GENERAL.
OFFICE OF INVESTIGATIONS	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS (FIELD OPERATIONS).
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS (NATIONAL INVESTIGATIVE OPERATIONS).
OFFICE OF AUDITS	ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITS.
OFFICE OF EXECUTIVE OPERATIONS	ASSISTANT INSPECTOR GENERAL FOR EXECUTIVE OPERATIONS.
OFFICE OF HEARINGS AND APPEALS	ASSOCIATE COMMISSIONER FOR HEARING AND APPEALS.
	DEPUTY ASSOCIATE COMMISSIONER FOR HEARINGS AND APPEALS (FIELD OPERATIONS).
	EXECUTIVE DIRECTOR, OFFICE OF APPELLATE OPERATIONS.
OFFICE OF THE CHIEF ACTUARY	CHIEF ACTUARY.
	DEPUTY CHIEF ACTUARY (LONG-RANGE).
	DEPUTY CHIEF ACTUARY (SHORT-RANGE).
OFFICE OF DISABILITY DETERMINATIONS	ASSOCIATE COMMISSIONER FOR DISABILITY DETERMINATIONS.
OFFICE OF PERSONNEL	ASSOCIATE COMMISSIONER.
	DEPUTY ASSOCIATE COMMISSIONER FOR PERSONNEL.
OFFICE OF CIVIL RIGHTS AND EQUAL OPPORTUNITY	ASSOCIATE COMMISSIONER FOR CIVIL RIGHTS AND EQUAL OPPORTUNITY.
OFFICE OF LABOR-MANAGEMENT AND EMPLOYEE RELATIONS.	ASSOCIATE COMMISSIONER FOR LABOR-MANAGEMENT AND EMPLOYEE RELATIONS.
	DEPUTY ASSOCIATE COMMISSIONER FOR LABOR-MANAGEMENT AND EMPLOYEE RELATIONS.
OFFICE OF BUDGET, FINANCE AND MANAGEMENT	ASSISTANT DEPUTY COMMISSIONER FOR FINANCE, ASSESSMENT AND MANAGEMENT.
OFFICE OF FINANCIAL POLICY AND OPERATIONS	ASSOCIATE COMMISSIONER, OFFICE OF FINANCE POLICY AND OPERATIONS.
	DEPUTY ASSOCIATE COMMISSIONER FINANCIAL POLICY AND OPERATIONS.
OFFICE OF QUALITY ASSURANCE AND PERFORMANCE ASSESSMENT.	DEPUTY ASSOCIATE COMMISSIONER FOR QUALITY ASSURANCE AND PERFORMANCE ASSESSMENT.
OFFICE OF BUDGET	ASSOCIATE COMMISSIONER FOR BUDGET.
	DEPUTY ASSOCIATE COMMISSIONER FOR BUDGET.
OFFICE OF ACQUISITION AND GRANTS	ASSOCIATE COMMISSIONER FOR ACQUISITION AND GRANTS.
OFFICE OF TELECOMMUNICATIONS AND SYSTEMS OPERATIONS.	ASSOCIATE COMMISSIONER FOR TELECOMMUNICATIONS AND SYSTEMS OPERATIONS.
	DEPUTY ASSOCIATE COMMISSIONER FOR TELECOMMUNICATIONS AND SYSTEMS OPERATIONS (SYSTEMS OPERATIONS).
	DEPUTY ASSOCIATE COMMISSIONER FOR TELECOMMUNICATIONS AND SYSTEMS OPERATIONS (TELECOMMUNICATIONS).

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE OF GENERAL LAW	ASSOCIATE GENERAL COUNSEL FOR GENERAL LAW.
OFFICE OF PUBLIC DISCLOSURE	EXECUTIVE DIRECTOR FOR PUBLIC DISCLOSURE.
DEPARTMENT OF STATE:	
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	COUNSEL TO THE INSPECTOR GENERAL.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INSPECTIONS.
	DEPUTY INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR SECURITY OVERSIGHT.
	SENIOR INSPECTOR—THEMATIC REVIEW.
	ASSISTANT INSPECTOR GENERAL FOR AUDITS.
BUREAU OF INTELLIGENCE AND RESEARCH	EXECUTIVE DIRECTOR.
BUREAU OF ADMINISTRATION	DIRECTOR, OFFICE OF ACQUISITIONS.
BUREAU OF HUMAN RESOURCES	HUMAN RESOURCES OFFICER.
	PRINCIPAL DEPUTY ASSISTANT SECRETARY.
BUREAU OF INTERNATIONAL SECURITY AND NON-PROLIFERATION.	OFFICE DIRECTOR.
	OFFICE DIRECTOR.
	DEPUTY ASSISTANT SECRETARY.
	DIRECTOR, OFFICE OF STRATEGIC NEGOTIATIONS AND IMPLEMENTAITON.
TRADE AND DEVELOPMENT AGENCY:	
OFFICE OF THE DIRECTOR	ASSISTANT DIRECTOR FOR POLICY AND PROGRAMS.
DEPARTMENT OF TRANSPORTATION:	
OFFICE OF INTELLIGENCE, SECURITY AND EMERGENCY RESPONSE.	Did not find title for this position.
OFFICE OF ENVIRONMENT, ENERGY AND SAFETY	DIRECTOR.
ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS	DEPUTY CHIEF FINANCIAL OFFICER.
ASSISTANT SECRETARY FOR ADMINISTRATION	ASSISTANT SECRETARY FOR ADMINISTRATION.
OFFICE OF THE SENIOR PROCUREMENT EXECUTIVE	SENIOR PROCUREMENT EXECUTIVE.
OFFICE OF INSPECTOR GENERAL	DEPUTY INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR LEGAL, LEGISLATIVE AND EXTERNAL AFFAIRS.
	SENIOR ECONOMIST.
PRINCIPAL ASSISTANT INSPECTOR GENERAL FOR AUDITING AND EVALUATION.	PRINCIPAL ASSISTANT INSPECTOR GENERAL FOR AUDITING AND EVALUATION.
ASSISTANT INSPECTOR GENERAL FOR FINANCIAL AND INFORMATION TECHNOLOGY AUDITS.	ASSISTANT INSPECTOR GENERAL FOR FINANCIAL AND INFORMATION TECHNOLOGY AUDITS.
	DIRECTOR FOR INFORMATION TECHNOLOGY AND COMPUTER SECURITY.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR FINANCIAL MANAGEMENT AUDITS.
ASSISTANT INSPECTOR GENERAL FOR AVIATION, DEPARTMENT-WIDE AND SPECIAL PROGRAM AUDITS.	ASSISTANT INSPECTOR GENERAL FOR AVIATION, DEPARTMENT-WIDE AND SPECIAL PROGRAM AUDITS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AVIATION, DEPARTMENT-WIDE AND SPECIAL PROGRAM AUDITS.
ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
ASSISTANT INSPECTOR GENERAL FOR SURFACE AND MARITIME PROGRAMS.	DEPUTY ASSISTANT INSPECTOR GENERAL FOR SURFACE AND MARITIME PROGRAMS.
	ASSISTANT INSPECTOR GENERAL FOR TRANSIT, RAIL SAFETY AND MARITIME PROGRAMS.
ASSISTANT INSPECTOR GENERAL FOR COMPETITION AND ECONOMIC ANALYSIS.	ASSISTANT INSPECTOR GENERAL FOR COMPETITION AND ECONOMIC ANALYSIS.
ASSOCIATE ADMINISTRATOR FOR ADMINISTRATION AND FINANCE.	DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT/DEPUTY CHIEF FINANCIAL OFFICER.
ASSOCIATE ADMINISTRATOR FOR SAFETY	ASSOCIATE ADMINISTRATOR FOR SAFETY.
OFFICE OF SAFETY ASSURANCE AND COMPLIANCE	DIRECTOR, OFFICE OF SAFETY ASSURANCE AND COMPLIANCE.
ASSOCIATE ADMINISTRATOR FOR SHIP ANALYSIS AND CARGO PREFERENCE.	ASSOCIATE ADMINISTRATOR FOR SHIP ANALYSIS AND CARGO PREFERENCE.
ASSOCIATE ADMINISTRATOR FOR SHIPBUILDING	DIRECTOR, OFFICE OF SHIPBUILDING AND MARINE TECHNOLOGY.
ADMINISTRATOR	EXECUTIVE DIRECTOR.
OFFICE OF REAL ESTATE SERVICES	DIRECTOR, OFFICE OF REAL ESTATE SERVICES.
SAFETY	ASSOCIATE ADMINISTRATOR FOR SAFETY.
OFFICE OF BUDGET AND FINANCE	DIRECTOR, OFFICE OF BUDGET AND FINANCE.
	DEPUTY CHIEF FINANCIAL OFFICER AND CHIEF BUDGET OFFICER.
OFFICE OF ACQUISITION MANAGEMENT	DIRECTOR, OFFICE OF ACQUISITION MANAGEMENT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
OFFICE OF SAFETY RESEARCH AND DEVELOPMENT	DIRECTOR, OFFICE OF SAFETY RESEARCH, DEVELOPMENT AND TECHNOLOGY.
ADMINISTRATOR	ASSISTANT ADMINISTRATOR/CHIEF SAFETY OFFICER.
OFFICE OF BUS AND TRUCK STANDARDS AND OPERATIONS	DIRECTOR, OFFICE OF BUS AND TRUCK STANDARDS AND OPERATIONS.
OFFICE OF ENFORCEMENT AND COMPLIANCE	DIRECTOR, OFFICE OF ENFORCEMENT AND COMPLIANCE.
ASSOCIATE ADMINISTRATOR FOR ENFORCEMENT	ASSOCIATE ADMINISTRATOR FOR ENFORCEMENT.
	DIRECTOR, OFFICE OF DEFECTS INVESTIGATION.
	DIRECTOR, OFFICE OF VEHICLE SAFETY COMPLIANCE.
PROCEEDINGS	DEPUTY DIRECTOR—LEGAL ANALYSIS.
ECONOMIC ENVIRONMENTAL ANALYSIS AND ADMINISTRATION.	DIRECTOR OF ECONOMIC, ENVIRONMENTAL ANALYSIS AND ADMINISTRATION.
OFFICE OF CHIEF SAFETY OFFICER	ASSISTANT ADMINISTRATOR AND CHIEF SAFETY OFFICER.
OFFICE OF PIPELINE SAFETY	ASSOCIATE ADMINISTRATOR FOR PIPELINE SAFETY.
DEPARTMENT OF THE TREASURY:	
FISCAL ASSISTANT SECRETARY	FISCAL ASSISTANT SECRETARY.
	DEPUTY ASSISTANT SECRETARY FOR FISCAL OPERATIONS AND POLICY.
	DEPUTY ASSISTANT SECRETARY (ACCOUNTING POLICY).
FINANCIAL MANAGEMENT SERVICE	DIRECTOR, REGIONAL FINANCIAL CENTER (SAN FRANCISCO).
	DIRECTOR, REGIONAL FINANCIAL CENTER (AUSTIN).
	DIRECTOR, PLATFORM SERVICES DIRECTORATE.
	ASSISTANT COMMISSIONER, GOVERNMENTWIDE ACCOUNTING.
	DIRECTOR, REGIONAL FINANCIAL CENTER (KANSAS CITY).
	COMMISSIONER, FINANCIAL MANAGEMENT SERVICE.
	ASSISTANT COMMISSIONER, INFORMATION RESOURCES.
	ASSISTANT COMMISSIONER, FEDERAL FINANCE.
	DEPUTY COMMISSIONER, FINANCIAL MANAGEMENT SERVICE.
	DIRECTOR, REVENUE COLLECTION GROUP.
	DIRECTOR, BIRMINGHAM DEBT MANAGEMENT OPERATIONS CENTER.
	DIRECTOR, INFORMATION SERVICES DIRECTORATE.
	ASSISTANT COMMISSIONER, REGIONAL OPERATIONS.
	ASSISTANT COMMISSIONER, MANAGEMENT (CHIEF FINANCIAL OFFICER).
	DIRECTOR, SYSTEMS MANAGEMENT DIRECTORATE.
	ASSISTANT COMMISSIONER (AGENCY SERVICES).
	DIRECTOR, CASH MANAGEMENT ENTERPRISE ARCHITECTURE.
	ASSISTANT COMMISSIONER, FINANCIAL OPERATIONS.
	DEPUTY ASSISTANT COMMISSIONER, GOVERNMENTWIDE ACCOUNTING.
	ASSISTANT COMMISSIONER, GOVERNMENTWIDE ACCOUNTING OPERATIONS.
	DEPUTY CHIEF INFORMATION OFFICER.
	ASSISTANT COMMISSIONER, DEBT MANAGEMENT SERVICES.
BUREAU OF THE PUBLIC DEBT	COMMISSIONER OF THE PUBLIC DEBT.
	DEPUTY COMMISSIONER OF THE PUBLIC DEBT.
	ASSISTANT COMMISSIONER (FINANCING).
	EXECUTIVE DIRECTOR (ADMINISTRATIVE RESOURCE CENTER).
	EXECUTIVE DIRECTOR, GOVERNMENT SECURITIES REGULATIONS.
	ASSISTANT COMMISSIONER, OFFICE OF SECURITIES OPERATIONS.
	ASSISTANT COMMISSIONER, OFFICE OF INVESTOR SERVICES.
	ASSISTANT COMMISSIONER (OFFICE OF INFORMATION TECHNOLOGY).
	DEPUTY EXECUTIVE DIRECTOR (ADMINISTRATIVE RESOURCE CENTER).
	SENIOR ADVISOR TO THE COMMISSIONER AND DEPUTY COMMISSIONER.
	ASSISTANT COMMISSIONER (OFFICE OF MANAGEMENT SERVICES).
	EXECUTIVE DIRECTOR (INVESTOR EDUCATION AND COMMUNICATION STAFF).
	ASSISTANT COMMISSIONER (PUBLIC DEBT ACCOUNTING).
	DEPUTY ASSISTANT COMMISSIONER (FINANCING).
ASSISTANT SECRETARY (TERRORIST FINANCING)	DIRECTOR, EXECUTIVE OFFICE FOR ASSET FORFEITURE.
FINANCIAL CRIMES ENFORCEMENT NETWORK	DIRECTOR, FINANCIAL CRIMES ENFORCEMENT NETWORK.
	ASSOCIATE DIRECTOR, REGULATORY POLICY AND PROGRAMS DIVISION.
	CHIEF COUNSEL, FINANCIAL CRIMES ENFORCEMENT NETWORK.
	DEPUTY DIRECTOR, ADMINISTRATION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSOCIATE DIRECTOR, CLIENT LIAISON AND SERVICES.
	ASSOCIATE DIRECTOR, ANALYSIS AND LIAISON DIVISION.
	EXECUTIVE ADVISOR FOR EXTERNAL PROGRAM INTEGRATION.
	ASSOCIATE DIRECTOR, INFORMATION AND TECHNOLOGY.
	DIVISION/CHIEF INFORMATION OFFICER.
ASSISTANT SECRETARY (INTELLIGENCE AND ANALYSIS)	DEPUTY ASSISTANT SECRETARY FOR SECURITY.
OFFICE OF THE INSPECTOR GENERAL	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT (FINANCIAL MANAGEMENT).
	COUNSEL TO THE INSPECTOR GENERAL.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT SERVICES.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT (PROGRAM AUDITS).
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
INSPECTOR GENERAL FOR TAX ADMINISTRATION	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT SERVICES.
	DEPUTY INSPECTOR GENERAL FOR INVESTIGATIONS.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT (HEADQUARTERS OPERATIONS).
	COUNSEL TO THE TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION.
	ASSISTANT INSPECTOR GENERAL FOR AUDIT (WAGE AND INVESTMENT).
	ASSISTANT INSPECTOR GENERAL FOR AUDIT (SMALL BUSINESS AND CORPORATE ENTITIES).
	ASSISTANT INSPECTOR GENERAL FOR AUDIT (INFORMATION SYSTEMS PROGRAMS).
	DEPUTY INSPECTOR GENERAL FOR AUDIT.
	ASSISTANT INSPECTOR GENERAL FOR INFORMATION TECHNOLOGY.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATION (INVESTIGATIVE SUPPORT).
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS (FIELD OPERATIONS).
ASSISTANT SECRETARY (TAX POLICY)	DIRECTOR, ECONOMIC MODELING AND COMPUTER APPLICATIONS.
ALCOHOL AND TOBACCO TAX AND TRADE BUREAU	DEPUTY ADMINISTRATOR, ALCOHOL AND TOBACCO TAX AND TRADE BUREAU.
	ASSISTANT ADMINISTRATOR, HEADQUARTER OPERATIONS.
	ASSISTANT ADMINISTRATOR, MANAGEMENT/CHIEF FINANCIAL OFFICER.
ASSISTANT SECRETARY (MANAGEMENT)	DEPUTY ASSISTANT SECRETARY FOR HEADQUARTERS.
	OPERATIONS AND SENIOR PROCUREMENT EXECUTIVE.
	DEPUTY CHIEF FINANCIAL OFFICER.
	DIRECTOR, OFFICE OF PROCUREMENT.
INTERNAL REVENUE SERVICE	CHIEF, EQUAL EMPLOYMENT OPPORTUNITY AND DIVERSITY.
	DIRECTOR, TECHNICAL CONTRACT MANAGEMENT DIVISION.
	ASSISTANT TO THE COMMISSIONER.
	DIRECTOR OF RESEARCH.
	DIRECTOR, COMPLIANCE.
	DIRECTOR OF COMPLIANCE, ATLANTA—WAGE AND INVESTMENT.
	DEPUTY DIRECTOR, GENERAL APPEALS.
	AREA DIRECTOR, STAKEHOLDER, PARTNERSHIP, EDUCATION AND COMMUNICATION.
	COMPLIANCE SERVICES FIELD DIRECTOR.
	DIRECTOR, LEADERSHIP AND ORGANIZATIONAL DEVELOPMENT—NATIONAL HEADQUARTERS.
	DEPUTY CHIEF FINANCIAL OFFICER (FINANCE).
	SPECIAL AGENT IN CHARGE, NEW YORK.
	SPECIAL AGENT IN CHARGE, CHICAGO.
	DEPUTY DIRECTOR, PERSONNEL SERVICES.
	DIRECTOR, CENTRALIZED WORKLOAD SELECTION AND DELIVERY—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, COMPLIANCE LOS ANGELES AREA OFFICE—SMALL BUSINESS AND SELF-EMPLOYED.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, COMPLIANCE NEW YORK AREA OFFICE—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, HUMAN RESOURCES—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, FILING AND PAYMENT COMPLIANCE—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, BUSINESS SYSTEMS PLANNING.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR, ATLANTA, WAGE AND INVESTMENT.
	AREA DIRECTOR, FIELD ASSISTANCE (SAN FRANCISCO)—WAGE AND INVESTMENT.
	TRANSITION EXECUTIVE FOR STRATEGY, CRIMINAL INVESTIGATION.
	PROJECT DIRECTOR.
	DIRECTOR, COMPETITIVE SOURCING.
	DIRECTOR, COMMUNICATIONS—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, ORGANIZATIONAL PERFORMANCE.
	DIRECTOR, INFORMATION TECHNOLOGY SECURITY.
	COMMISSIONER, TAX EXEMPT AND GOVERNMENT ENTITIES DIVISION.
	DIRECTOR, EXEMPT ORGANIZATIONS EXAMINATIONS.
	DIRECTOR, FACILITIES OPERATIONS—AGENCYWIDE SHARED SERVICES.
	DIRECTOR, CUSTOMER SUPPORT—AGENCYWIDE SHARED SERVICES.
	DIRECTOR, COMPLIANCE AREA, LAGUNA NIGUEL—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, RETAILERS, FOOD, PHARMACEUTICALS, AND HEALTH CARE.
	DIRECTOR, TAXPAYER EDUCATION AREA, BROOKLYN—SMALL.
	BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, COMPLIANCE AREA.
	DIRECTOR, LEGISLATIVE AFFAIRS DIVISION.
	DIRECTOR, ELECTRONIC TAX ADMINISTRATION—WAGE AND INVESTMENT.
	SUBMISSION PROCESSING FIELD DIRECTOR, MEMPHIS.
	DIRECTOR, GOVERNMENT ENTITIES.
	DIRECTOR, FIELD ASSISTANCE AREA (GREENSBORO) WAGE AND INVESTMENT.
	DIRECTOR, TAXPAYER EDUCATION AREA, NASHVILLE—SMALL BUSINESS AND SELF-EMPLOYED.
	COMPLIANCE SERVICE FIELD DIRECTOR, AUSTIN—WAGE AND INVESTMENT.
	DIVISION INFORMATION OFFICER—SMALL BUSINESS AND SELF-EMPLOYED.
	SPECIAL AGENT IN CHARGE, LOS ANGELES.
	DIRECTOR, FIELD ASSISTANCE AREA (PHOENIX)—WAGE AND INVESTMENT.
	DEPUTY DIRECTOR, STRATEGIC HUMAN RESOURCES.
	DEPUTY DIRECTOR, INTERNATIONAL.
	PRIVACY ADVOCATE.
	NATIONAL DIRECTOR OF APPEALS.
	DIRECTOR, APPEALS—LARGE AND MID-SIZE BUSINESS.
	AREA DIRECTOR, WESTERN.
	DIRECTOR OF INVESTIGATIONS, CENTRAL AREA OF OPERATIONS.
	PROJECT MANAGER.
	DEPUTY CHIEF FINANCIAL OFFICER.
	CHIEF COMMUNICATIONS AND LIAISON.
	DIRECTOR OF FIELD OPERATIONS.
	DIRECTOR, TECHNICAL SERVICES, APPEALS.
	DIRECTOR, TAX ADMINISTRATION MODERNIZATION.
	DIRECTOR, COMPLIANCE CAMPUS OPERATIONS.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR, FRESNO—WAGE AND INVESTMENT.
	PROJECT DIRECTOR (EXECUTIVE INSTRUCTOR).
	PROJECT DIRECTOR, WAGE AND INVESTMENT.
	CHIEF FINANCIAL OFFICER, INTERNAL REVENUE SERVICE.
	DIRECTOR, STRATEGIC PLANNING—WAGE AND INVESTMENT.
	SPECIAL AGENT IN CHARGE.
	SPECIAL AGENT IN CHARGE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, WORKFORCE RELATIONS. DIRECTOR, REPORTING COMPLIANCE. DIRECTOR OF FINANCE—SMALL BUSINESS AND SELF-EMPLOYED. ASSISTANT DEPUTY DIRECTOR COMPLIANCE FIELD OPERATIONS. DIRECTOR, STRATEGY, RESEARCH, AND PROGRAM PLANNING—LARGE AND MID-SIZE BUSINESS. PROJECT DIRECTOR. DIRECTOR, EXAMINATION AREA. DIRECTOR, FILING AND PAYMENT COMPLIANCE. DIRECTOR, COLLECTION POLICY. DEPUTY ASSOCIATE COMMISSIONER (BUSINESS INTEGRATION). PRIVACY ADVOCATE. DIRECTOR, CUSTOMER APPLICATIONS DEVELOPMENT. MANAGEMENT DIVISION. DIRECTOR, COMMUNICATIONS, LIAISON AND DISCLOSURE. DIRECTOR, CAPITAL PLANNING AND INVESTMENT. DIRECTOR, PROGRAM CONTROL AND PROCESS MANAGEMENT. DIRECTOR, COMPLIANCE AREA, BALTIMORE—SMALL BUSINESS AND SELF-EMPLOYED. DIRECTOR, STAKEHOLDER, PARTNERSHIP, EDUCATION AND COMMUNICATION—WAGE AND INVESTMENT. DIRECTOR, EMPLOYEE PLANS. DIRECTOR, EMPLOYEE SUPPORT SERVICES. ASSOCIATE CHIEF FINANCIAL OFFICER FOR REVENUE AND FINANCIAL MANAGEMENT. DEPUTY DIRECTOR, PROCUREMENT. DIRECTOR, ELECTRONIC CRIMES PROGRAM OFFICE. PROJECT DIRECTOR, TECHNOLOGY OPERATIONS AND INVESTIGATIVE SERVICES. DIRECTOR, EXAMINATION OPERATIONS SUPPORT. DEPUTY NATIONAL TAXPAYER ADVOCATE. DIRECTOR, LEARNING AND EDUCATION. CHIEF, CRIMINAL INVESTIGATION. DIRECTOR, SYSTEMS ENGINEERING AND INTEGRATION. DEPUTY COMMISSIONER, OPERATIONS SUPPORT. DIRECTOR, STATISTICS. AREA DIRECTOR, STAKEHOLDER, PARTNERSHIP, EDUCATION, AND COMMUNICATION, HARTFORD—WAGE AND INVESTMENT. DEPUTY CHIEF, INFORMATION TECHNOLOGY SERVICES. DIRECTOR, NETWORK ENTERPRISE ARCHITECTURE AND ENGINEERING. DIRECTOR, FIELD ASSISTANCE—WAGE AND INVESTMENT. DIRECTOR, SUBMISSION PROCESSING (CINCINNATI)—WAGE AND INVESTMENT. AREA DIRECTOR, STAKEHOLDER, PARTNERSHIP, EDUCATION AND COMMUNICATION—WAGE AND INVESTMENT. ACCOUNTS MANAGEMENT FIELD DIRECTOR, CINCINNATI. ACCOUNTS MANAGEMENT FIEDL DIRECTOR—ODGEN. ACCOUNTS MANAGEMENT FIELD DIRECTOR, AUSTIN—WAGE AND INVESTMENT. COMMISSIONER, LARGE AND MID-SIZED BUSINESS DIVISION. PROJECT DIRECTOR. AREA DIRECTOR, STAKEHOLDER PARTNERSHIP EDUCATION AND COMMUNICATION. DIRECTOR, CUSTOMER RELATIONSHIP AND INTEGRATION. COMPLIANCE SERVICES FIELD DIRECTOR. DIRECTOR, JOINT OPERATIONS CENTER. COMPLIANCE SERVICE FIELD DIRECTOR. DIRECTOR, FIELD OPERATIONS. DIRECTOR, COMPLIANCE AREA, CHICAGO—SMALL BUSINESS AND SELF-EMPLOYED. DIRECTOR, MEDIA AND PUBLICATIONS PUBLISHING DIVISION. DEPUTY CHIEF, CRIMINAL INVESTIGATION. DEPUTY DIRECTOR, FIELD SPECIALISTS—LARGE AND MID-SIZE BUSINESS. SUBMISSION PROCESSING FIELD DIRECTOR—FRESNO, CALIFORNIA. DEPUTY DIRECTOR, ACCOUNTS MANAGEMENT. DIRECTOR, COMPLIANCE AREA, OAKLAND—SMALL BUSINESS AND SELF-EMPLOYED.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, FIELD OPERATIONS WEST, APPEALS.
	DEPUTY DIRECTOR, END USER EQUIPMENT AND SERVICES.
	DIRECTOR, OPERATIONS POLICY AND SUPPORT—CRIMINAL INVESTIGATIONS.
	DIRECTOR, TENNESSEE COMPUTING CENTER.
	DIRECTOR OF FIELD OPERATIONS (PACIFIC AREA)—CRIMINAL INVESTIGATIONS.
	DIRECTOR, REFUND CRIMES.
	ASSOCIATE DIRECTOR, FACILITIES OPERATIONS.
	DIRECTOR, NATURAL RESOURCES INDUSTRY GROUP.
	DIRECTOR, COMPLIANCE AREA, PHILADELPHIA—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, FIELD OPERATIONS, COMMUNICATIONS, TECHNOLOGY AND MEDIA—LARGE AND MID-SIZE BUSINESS.
	DEPUTY DIRECTOR, COMPLIANCE SERVICES—SMALL BUSINESS.
	DIRECTOR, FIELD OPERATIONS (NATURAL RESOURCES), HOUSTON.
	DIRECTOR OF FIELD OPERATIONS (MIDSTATES AREA)—CRIMINAL INVESTIGATION.
	DIRECTOR, COMMISSIONER'S OFFICE OF EMPLOYEE ISSUES AND PROFESSIONAL CONDUCT.
	PROJECT DIRECTOR.
	DIRECTOR, PROGRAM ANALYSIS CUSTOMER ACCOUNT SERVICES—WAGE AND INVESTMENT.
	DEPUTY ASSOCIATE CHIEF INFORMATION OFFICER FOR PROGRAM MANAGEMENT.
	DIRECTOR, OFFICE OF PROGRAM EVALUATION AND RISK ANALYSIS.
	DIRECTOR, STAKEHOLDER, PARTNERSHIP, EDUCATION AND COMMUNICATIONS (SPECIALIST).
	DEPUTY ASSOCIATE CHIEF INFORMATION OFFICER, MANAGEMENT PROCESSES.
	DIRECTOR, OFFICE OF PRIVACY.
	DIRECTOR, FRAUD/BANK SECRECY ACT.
	PROJECT DIRECTOR.
	DEPUTY CHIEF HUMAN CAPITAL OFFICER.
	DIRECTOR, SPECIALTY PROGRAMS.
	DIRECTOR, COLLECTION.
	DIRECTOR, EXAMINATION POLICY.
	DIRECTOR, WORKFORCE RELATIONS.
	DIRECTOR, FIELD ASSISTANCE AREA.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	PROJECT DIRECTOR.
	PROJECT DIRECTOR.
	PROJECT DIRECTOR, NATIONAL RESEARCH STUDY PROJECT.
	DEPUTY COMMISSIONER, SERVICES AND ENFORCEMENT.
	DIRECTOR, COMMUNICATIONS.
	DEPUTY DIRECTOR, PREFILING AND TECHNICAL GUIDANCE.
	DIRECTOR, REFUND CRIMES.
	DIRECTOR, TAXPAYER EDUCATION AREA, DENVER—SMALL.
	BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, LEADERSHIP AND EDUCATION.
	CHIEF, CRIMINAL INVESTIGATION.
	ASSOCIATE CHIEF FINANCIAL OFFICER FOR CORPORATE PLANNING AND INTERNAL CONTROL.
	DIRECTOR, NATIONAL PUBLIC LIAISON.
	ASSOCIATE CHIEF INFORMATION OFFICER FOR MANAGEMENT AND FINANCE.
	DIRECTOR, DATA MANAGEMENT MODERNIZATION.
	PROJECT DIRECTOR.
	DIRECTOR, FIELD OPERATIONS, SPECIAL—WAGE AND INVESTMENT.
	DIRECTOR CUSTOMER ACCOUNT SERVICES—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR OF FIELD OPERATIONS—CRIMINAL INVESTIGATION, NORTH ATLANTIC.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	SUBMISSION PROCESSING FIELD DIRECTOR.
	DIRECTOR, INFRASTRUCTURE MODERNIZATION PROJECT OFFICE.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, FILING AND CAMPUS COMPLIANCE.
	DIRECTOR OF FIELD OPERATIONS.
	DIRECTOR, ADVISORY, INSOLVENCY AND QUALITY.
	DIRECTOR, FIELD ASSISTANCE AREA, SAINT LOUIS—WAGES AND INVESTMENTS.
	DIRECTOR, FIELD OPERATIONS.
	DIRECTOR, CASE MANAGEMENT—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, COLLECTION AREA.
	DIRECTOR, REPORTING COMPLIANCE.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR—ANDOVER.
	PROJECT DIRECTOR, BUSINESS REQUIREMENTS.
	DIRECTOR, STRATEGY, RESEARCH AND PROGRAM PLANNING.
	DIRECTOR, NEW CUSTOMER DEVELOPMENT.
	SUBMISSION PROCESSING FIELD DIRECTOR.
	DIRECTOR, EMPLOYEE PLANS EXAMINATION.
	CHIEF, AGENCY-WIDE SHARED SERVICES.
	SUBMISSION PROCESSING FIELD DIRECTOR—PHILADELPHIA.
	DIRECTOR, COMPETITIVE SOURCING.
	PROJECT DIRECTOR.
	DIRECTOR, FIELD OPERATIONS—RETAILERS, FOOD.
	PHARMACEUTICALS, HEALTHCARE.
	DIRECTOR, CRIMINAL INVESTIGATION TECHNOLOGY.
	OPERATIONS AND INVESTIGATIVE SERVICES.
	DIRECTOR, FIELD OPERATIONS.
	DIRECTOR, BUSINESS SYSTEMS PLANNING—LARGE AND MID-SIZE BUSINESS.
	CHIEF, AGENCYWIDE SHARED SERVICES.
	PROJECT DIRECTOR.
	DIRECTOR, COMMUNICATION, ASSISTANCE, RESEARCH AND EDUCATION.
	DIRECTOR, COMPLIANCE AREA, NASHVILLE—SMALL BUSINESS AND SELF-EMPLOYED.
	SUBMISSION PROCESSING FIELD DIRECTOR—BROOKHAVEN.
	DIRECTOR, OPERATIONS POLICY AND SUPPORT.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR, KANSAS CITY—WAGE AND INVESTMENT.
	DIRECTOR, TAX EXEMPT BONDS.
	DIRECTOR, EXAMINATION AREA.
	DIRECTOR, HUMAN RESOURCES—WAGE AND INVESTMENT.
	DIRECTOR, STRATEGY AND FINANCE—WAGE AND INVESTMENT.
	DIRECTOR, COLLECTION AREA.
	DEPUTY DIVISION COMMISSIONER, TAX EXEMPT AND GOVERNMENT ENTITIES.
	DIRECTOR, EXEMPT ORGANIZATIONS.
	DEPUTY DIRECTOR, SUBMISSION PROCESSING.
	AREA DIRECTOR, FIELD ASSISTANCE.
	DIRECTOR OF FIELD OPERATIONS.
	ASSOCIATE CHIEF INFORMATION OFFICER, BUSINESS SYSTEMS DEVELOPMENT.
	DIRECTOR, INTERNAL MANAGEMENT MODERNIZATION.
	PROJECT DIRECTOR.
	DEPUTY DIRECTOR, COMPLIANCE—SMALL BUSINESS AND SELF-EMPLOYED.
	DEPUTY CHIEF, APPEALS.
	DIRECTOR, CENTERS OF EXCELLENCE.
	PROJECT DIRECTOR, CUSTOMER ACCOUNT DATA ENGINE PROJECT.
	DEPUTY COMMISSIONER, LARGE AND MID-SIZE BUSINESS, INTERNATIONAL.
	DIRECTOR, OPERATIONAL READINESS.
	DIRECTOR, TECHNICAL SERVICES.
	PROJECT DIRECTOR, COLLECTION.
	PROJECT DIRECTOR, COLLECTION.
	DIRECTOR, CLIENT SERVICES DIVISION.
	DIRECTOR, STRATEGY AND FINANCE.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	DIRECTOR, OFFICE OF PROFESSIONAL RESPONSIBILITY.
	CHIEF, COMMUNICATIONS AND LIAISON.
	DIRECTOR, RESEARCH, ANALYSIS AND STATISTICS OF INCOME.
	DIRECTOR, OFFICE OF TAX ADMINISTRATION.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	SUBMISSION PROCESSING FIELD DIRECTOR, OGDEN—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, ENTERPRISE COMPUTING CENTERS.
	DIRECTOR, CAMPUS COLLECTION COMPLIANCE.
	CHIEF, SECURITY SERVICES.
	AREA DIRECTOR OF INFORMATION TECHNOLOGY.
	DIRECTOR, ACCOUNTS MANAGEMENT, WAGE AND INVESTMENT.
	DIRECTOR, FILING SYSTEMS DIVISION.
	DIRECTOR, FIELD OPERATIONS—RETAILS, FOOD.
	PHARMACEUTICALS AND HEALTHCARE.
	DEPUTY DIRECTOR, COMPLIANCE POLICY.
	DIRECTOR, COLLECTION BUSINESS REENGINEERING.
	DIRECTOR, COLLECTION AREA.
	DIRECTOR, FIELD OPERATIONS—HEAVY MANUFACTURING AND TRANSPORTATION.
	PROJECT DIRECTOR—SMALL BUSINESS AND SELF-EMPLOYED.
	COMPLIANCE SERVICE FIELD DIRECTOR—PHILADELPHIA.
	DIRECTOR, COMPLIANCE AREA, BALTIMORE—SMALL BUSINESS AND SELF-EMPLOYED.
	CHIEF OF STAFF, INTERNAL REVENUE SERVICE.
	DEPUTY DIRECTOR, OFFICE OF PROFESSIONAL RESPONSIBILITY.
	DIRECTOR, MANAGEMENT AND SUPPORT.
	SUBMISSION PROCESSING FIELD DIRECTOR.
	DIRECTOR, PRODUCT ASSURANCE.
	DIRECTOR, CAMPUS REPORTING COMPLIANCE.
	DIRECTOR, FIELD ASSISTANCE AREA.
	DIRECTOR, FIELD OPERATIONS, EAST, APPEALS.
	DIRECTOR, FILING AND PAYMENT COMPLIANCE.
	SUBMISSION PROCESSING FIELD DIRECTOR—ATLANTA.
	MODERNIZATION EXECUTIVE.
	SUBMISSION PROCESSING FIELD DIRECTOR—AUSTIN.
	DIRECTOR, MISSION ASSURANCE.
	DIRECTOR, CHANGE MANAGEMENT AND RELEASE MANAGEMENT.
	PROJECT DIRECTOR (BUSINESS REQUIREMENTS).
	DIRECTOR, HEAVY MANUFACTURING, TRANSPORTATION AND CONSTRUCTION INDUSTRY.
	DIRECTOR, OPERATIONAL READINESS.
	DIRECTOR, FILING SYSTEMS.
	DIRECTOR, STRATEGIC PLANNING AND PROGRAM MANAGEMENT.
	DEPUTY ASSOCIATE COMMISSIONER, SYSTEMS INTEGRATION.
	PROJECT DIRECTOR.
	DIRECTOR, COMPLIANCE AREA.
	PROJECT MANAGER.
	AREA DIRECTOR, STAKEHOLDER, PARTNERSHIP, EDUCATION, AND COMMUNICATION, DALLAS—WAGE AND INVESTMENT.
	ACCOUNTS MANAGEMENT FIELDD DIRECTOR.
	DEPUTY COMMISSIONER, SMALL BUSINESS/SELF-EMPLOYED.
	PROJECT DIRECTOR, EMPLOYEE TAX COMPLIANCE.
	DIRECTOR, PRODUCT ASSURANCE.
	CHIEF, MANAGEMENT AND FINANCE—LARGE AND MID-SIZE BUSINESS.
	CHIEF HUMAN CAPITAL OFFICER, INTERNAL REVENUE SERVICE.
	DIRECTOR, SAFETY AND SECURITY.
	COMPLIANCE SERVICE FIELD DIRECTOR.
	COMPLIANCE SERVICE FIELD DIRECTOR.
	DEPUTY DIRECTOR, BUSINESS SYSTEMS DEVELOPMENT DIVISION.
	DIRECTOR, PERSONNEL POLICY.
	DIRECTOR, FIELD SPECIALISTS—LARGE AND MID SIZE BUSINESS.
	DIRECTOR, CUSTOMER ACCOUNT MANAGER.
	DIRECTOR, REAL ESTATE AND FACILITIES MANAGEMENT.
	DIRECTOR, FIELD OPERATIONS (FINANCIAL SERVICES), LAGUNA NIGUEL.
	DEPUTY DIRECTOR, ENTERPRISE OPERATIONS SERVICES.
	DIRECTOR OF FIELD OPERATIONS, NEW YORK—LARGE AND MID SIZE BUSINESS.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, EXEMPT ORGANIZATIONS, RULINGS AND AGREEMENTS.
	COMMISSIONER, SMALL BUSINESS AND SELF-EMPLOYED.
	PROJECT DIRECTOR—APPEALS.
	DIRECTOR, PROCUREMENT.
	CHIEF, INFORMATION TECHNOLOGY SERVICES.
	DIRECTOR, PROFESSIONAL RESPONSIBILITY.
	PROJECT DIRECTOR.
	COMPLIANCE SERVICE FIELD DIRECTOR.
	DIRECTOR, SECURITY POLICY, SUPPORT AND OVERSIGHT.
	ASSOCIATE CHIEF FINANCIAL OFFICER FOR INTERNAL.
	FINANCIAL MANAGEMENT—NATIONAL HEADQUARTERS.
	DIRECTOR, TAXPAYER EDUCATION AND COMMUNICATION AREA, ST LOUIS—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, CUSTOMER APPLICATIONS DEVELOPMENT.
	PROJECT DIRECTOR.
	DIRECTOR, RESEARCH.
	DIRECTOR, EARNED INCOME AND HEALTH COVERAGE TAX CREDITS.
	DIRECTOR, COMPLIANCE AREA—DENVER, SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, EXAMINATION AREA.
	DIRECTOR, COMPLIANCE AREA, DALLAS—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, PERSONNEL SERVICES.
	DIRECTOR, PRE-FILING AND TECHNICAL GUIDANCE.
	COMPLIANCE SERVICE, FIELD DIRECTOR—ATLANTA.
	DIRECTOR, PROJECT SERVICES.
	DIRECTOR, INFORMATION TECHNOLOGY, SECURITY PROGRAM.
	PROJECT DIRECTOR.
	COMMISSIONER, WAGE AND INVESTMENT.
	DIRECTOR, STRATEGIC SERVICES.
	PROJECT DIRECTOR.
	SENIOR COUNSELOR TO THE COMMISSIONER (TAX ADMINSTRATION, PRACTICE AND PROFESSIONAL RESPONSIBILITY).
	ASSISTANT DEPUTY COMMISSIONER FOR SERVICES AND ENFORCEMENT.
	DIRECTOR, BUSINESS SYSTEMS MODERNIZATION ACQUISITION.
	DIRECTOR, COMPLIANCE AREA.
	DIRECTOR, COMMUNICATIONS, TECHNOLOGY AND MEDIA INDUSTRY—LARGE AND MID SIZE BUSINESS.
	CHIEF, MISSION ASSURANCE AND SECURITY SERVICES.
	EXECUTIVE DIRECTOR, SYSTEMIC ADVOCACY—NATIONAL TAXPAYER ADVOCATE.
	DIVISION INFORMATION OFFICER—LARGE AND MID SIZE BUSINESS.
	DEPUTY DIRECTOR, ENTERPRISE OPERATIONS SERVICES.
	DIRECTOR, FIELD OPERATIONS.
	DIRECTOR, FIELD OPERATIONS—NATURAL RESOURCES AND CONSTRUCTION.
	COMPLIANCE SERVICE FIELD DIRECTOR, ANDOVER—WAGE AND INVESTMENT.
	DIRECTOR, DETROIT COMPUTING CENTER.
	SUBMISSION PROCESSING FIELD DIRECTOR.
	DIRECTOR, SPECIAL PROGRAMS AND OVERSIGHT.
	DIRECTOR, COMPLIANCE CAMPUS OPERATIONS.
	DIRECTOR, COLLECTION AREA.
	DEPUTY DIRECTOR, OPERATION STANDARDS.
	AREA DIRECTOR, FIELD ASSISTANCE.
	DIRECTOR, MEDIA AND PUBLICATIONS.
	DIRECTOR, TEST ASSURANCE AND DOCUMENTATION.
	DEPUTY DIRECTOR, FIELD ASSISTANCE.
	DIRECTOR, STRATEGY, PROGRAM MANAGEMENT AND PERSONNEL SECURITY.
	DIRECTOR, PLANNING AND ANALYSIS.
	DIRECTOR, OPERATIONAL READINESS.
	DIRECTOR, MEDIA AND PUBLICATIONS DISTRIBUTION DIVISION.
	DIRECTOR, INTERNAL MANAGEMENT.
	DEPUTY DIVISION COMMISSIONER.
	DIRECTOR, CUSTOMER ACCOUNT SERVICES—WAGE AND INVESTMENT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DIRECTOR, ABUSIVE TRANSACTIONS.
	DIRECTOR, COLLECTION AREA.
	COMPLIANCE SERVICE FIELD DIRECTOR—KANSAS CITY.
	DIRECTOR, TECHNICAL SERVICES.
	DIRECTOR, FIELD OPERATIONS.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	DIRECTOR, FIELD OPERATIONS.
	DEPUTY ASSOCIATE CHIEF INFORMATION OFFICER, BUSINESS.
	SYSTEMS DEVELOPMENT.
	DIRECTOR, TECHNICAL SYSTEMS SOFTWARE.
	DEPUTY DIRECTOR, SUBMISSION PROCESSING, CINCINNATI—.
	SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, COMPLIANCE CAMPUS OPERATIONS.
	PROJECT DIRECTOR.
	DIRECTOR, COMPLIANCE CAMPUS OPERATIONS.
	CHIEF INFORMATION OFFICER.
	DIRECTOR, PORTFOLIO MANAGEMENT.
	DIRECTOR, EMPLOYEE PLAN DETERMINATION LETTER REDESIGN.
	DEPUTY CHIEF, AGENCYWIDE SHARED SERVICES.
	DEPUTY DIRECTOR, PROCUREMENT.
	DIRECTOR, WORKFORCE RETENTION AND TRANSITION.
	PROJECT DIRECTOR.
	DIRECTOR, TAXPAYER EDUCATION AREA—LOS ANGELES.
	DIRECTOR, ENTERPRISE OPERATIONS SERVICES.
	DEPUTY DIRECTOR, FIELD SPECIALISTS.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	DIRECTOR, STRATEGY, CRIMINAL INVESTIGATIONS.
	ASSOCIATE CHIEF INFORMATION OFFICER FOR INFORMATION TECHNOLOGY SERVICES.
	DIRECTOR, FIELD OPERATIONS—FINANCIAL SERVICES.
	DIRECTOR, COMPLIANCE, DETROIT—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, COMPLIANCE AREA.
	AREA DIRECTOR, STAKEHOLDER, PARTNERSHIP, EDUCATION AND COMMUNICATIONS—NEW ORLEANS.
	DIRECTOR, REGULATORY COMPLIANCE.
	DIRECTOR, TAXPAYER EDUCATION AREA, CHICAGO—SMALL BUSINESS AND SELF-EMPLOYED.
	PROJECT DIRECTOR (SMALL BUSINESS AND SELF-EMPLOYED).
	TRANSITION EXECUTIVE).
	DIRECTOR, CONTACT CENTER SUPPORT DIVISION.
	DIRECTOR, EXAMINATION AREA.
	AREA DIRECTOR, INFORMATION TECHNOLOGY.
	DIRECTOR, EXAMINATION AREA.
	DIRECTOR, PERSONNEL FIELD SERVICES.
	DIRECTOR, INDIVIDUAL MASTER FILE.
	DIRECTOR, EQUAL EMPLOYMENT OPPORTUNITY AND DIVERSITY.
	DEPUTY DIRECTOR, ELECTRONIC TAX ADMINISTRATION.
	DIRECTOR, COMPLIANCE SYSTEMS DIVISION.
	PROJECT DIRECTOR.
	ASSISTANT DEPUTY COMMISSIONER FOR OPERATIONS SUPPORT.
	INFORMATION TECHNOLOGY MANAGER, POLICY AND PLANNING.
	DIRECTOR, INTERNET DEVELOPMENT SERVICES.
	DIRECTOR, EXAMINATION AREA.
	DIRECTOR, INTERNAL MANAGEMENT SYSTEMS DEVELOPMENT DIVISION.
	DIRECTOR, CORPORATE DATA AND SYSTEMS MANAGEMENT DIVISION.
	DEPUTY DIRECTOR, SUBMISSION PROCESSING.
	DIRECTOR, TAXPAYER EDUCATION AND COMMUNICATION—SMALL BUSINESS AND SELF-EMPLOYED.
	DIRECTOR, CORRESPONDENCE PRODUCTION SERVICES.
	SUBMISSION PROCESSING FIELD DIRECTOR—ANDOVER.
	DIRECTOR, BURDEN REDUCTION AND COMPLIANCE STRATEGIES.
	DIRECTOR, OPERATIONAL ASSURANCE.
	DIRECTOR, COMPLIANCE AREA.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	FIELD DIRECTOR, ACCOUNTS MANAGEMENT, WAGE AND INVESTMENT.
	DEPUTY DIRECTOR, ACCOUNTS MANAGEMENT.
	DEPUTY ASSOCIATE CHIEF INFORMATION OFFICER,.
	APPLICATIONS DEVELOPMENT.
	DIRECTOR, EXAMINATION PLANNING AND DELIVERY.
	DIRECTOR, JOINT OPERATIONS CENTER.
	DIRECTOR, DEVELOPMENT SERVICES.
	PROJECT DIRECTOR.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR, FRESNO.
	DIRECTOR, EMPLOYEE PLANS, RULINGS, AND AGREEMENTS.
	DIRECTOR, FINANCIAL MANAGEMENT SERVICES.
	DIRECTOR, INTERNET DEVELOPMENT SERVICES.
	PROJECT DIRECTOR.
	DIRECTOR, PERFORMANCE, QUALITY AND INNOVATION—LARGE AND MID-SIZE BUSINESS.
	PROJECT DIRECTOR.
	DIRECTOR, STRATEGY AND FINANCE, APPEALS.
	DIRECTOR, COLLECTION AREA.
	DIRECTOR, EXAMINATION AREA.
	SENIOR ADVISOR, INFORMATION SYSTEMS CURRENT PROCESSING ENVIRONMENT SECURITY.
	AREA DIRECTOR, SOUTHEAST.
	DIRECTOR, TAXPAYER EDUCATION AND COMMUNICATION FIELD OPERATIONS.
	PROJECT DIRECTOR.
	DEPUTY CHIEF, MISSION ASSURANCE AND SECURITY SERVICES.
	ASSISTANT TO DIRECTOR, REAL ESTATE AND FACILITIES MANAGEMENT.
	PROJECT DIRECTOR, OFFICE OF PROFESSIONAL RESPONSIBILITY.
	DIRECTOR, BUSINESS SYSTEMS PLANNING.
	DIRECTOR, SUBMISSION PROCESSING.
	DIRECTOR, CORPORATE DATA.
	DIRECTOR OF FIELD OPERATIONS (SOUTHEAST AREA)—CRIMINAL INVESTIGATION.
	DIRECTOR, MANAGEMENT SERVICES.
	PROJECT DIRECTOR.
	PROJECT DIRECTOR.
	INDUSTRY DIRECTOR—FINANCIAL SERVICES—LARGE AND MID-SIZE BUSINESS.
	DIRECTOR, E-FILE SYSTEMS.
	BUSINESS MODERNIZATION EXECUTIVE.
	DIRECTOR, FIELD OPERATIONS.
	DIRECTOR, COLLECTION AREA.
	DIRECTOR, EMERGENCY MANAGEMENT PROGRAMS.
	DIRECTOR, FINANCIAL MANAGEMENT SERVICES.
	DIRECTOR, ENTERPRISE OPERATIONS SERVICES.
	DEPUTY DIRECTOR, TAXPAYER EDUCATION AND COMMUNICATION.
	ASSOCIATE CHIEF FINANCIAL OFFICER FOR CORPORATE STRATEGY.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	DIRECTOR, STAKEHOLDER LIAISON FIELD.
	SUBMISSION PROCESSING FIELD DIRECTOR.
	PROJECT DIRECTOR.
	DEPUTY DIRECTOR, OFFICE OF PROFESSIONAL RESPONSIBILITY.
	SPECIAL AGENT IN CHARGE.
	DIRECTOR, EMERGENCY MANAGEMENT AND PHYSICAL SECURITY.
	DIRECTOR, TAX FORMS AND PUBLICATIONS.
	DIRECTOR, COMPLIANCE SERVICES CAMPUS OPERATIONS.
	DIRECTOR, RESEARCH.
	ACCOUNTS MANAGEMENT FIELD DIRECTOR.
	SUBMISSION PROCESSING FIELD DIRECTOR.
	DIRECTOR, STRATEGY, RESEARCH AND PERFORMANCE MANAGEMENT.
	DIRECTOR, COMPLIANCE CAMPUS OPERATIONS.
	DIRECTOR, BUSINESS SYSTEMS PLANNING.
	DIRECTOR, STRATEGY AND RESOURCE MANAGEMENT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
INTERNAL REVENUE SERVICE CHIEF COUNSEL	ACCOUNTS MANAGEMENT FIELD DIRECTOR. ASSOCIATE CHIEF FINANCIAL OFFICER FOR CORPORATE PERFORMANCE BUDGETING. ASSISTANT CHIEF COUNSEL (INTERNATIONAL) (LITIGATION) ASSISTANT CHIEF COUNSEL (COLLECTION, BANKRUPTCY AND SUMMONSES) DIVISION COUNSEL (WAGE AND INVESTMENT) DEPUTY DIVISION COUNSEL/DEPUTY ASSISTANT CHIEF COUNSEL (CRIMINAL TAX). DEPUTY ASSOCIATE CHIEF COUNSEL (GENERAL LEGAL SERVICES). ASSISTANT CHIEF COUNSEL (DISCLOSURE AND PRIVACY LAW). AREA COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED) (AREA 7). AREA COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED)—LOS ANGELES. DEPUTY ASSOCIATE CHIEF COUNSEL (GENERAL LEGAL SERVICES) (LABOR AND PERSONNEL LAW). AREA COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED)—PHILADELPHIA. SPECIAL COUNSEL TO THE CHIEF COUNSEL. AREA COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED)—CHICAGO. AREA COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED)—NEW YORK. DEPUTY DIVISION COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED). DIVISION COUNSEL (LARGE AND MID-SIZE BUSINESS). DIVISION COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED). DEPUTY ASSOCIATE CHIEF COUNSEL (CORPORATE). ASSISTANT CHIEF COUNSEL (FINANCIAL INSTITUTIONS AND PRODUCTS). AREA COUNSEL (LARGE AND MID-SIZE BUSINESS) (AREA 1) (FINANCIAL SERVICES AND HEALTH CARE). DEPUTY ASSOCIATE CHIEF COUNSEL #2 (PASSTHROUGHS AND SPECIAL INDUSTRIES). DIRECTOR, EMPLOYEE PLANS EXAMINATIONS. ASSOCIATE CHIEF COUNSEL (PROCEDURE AND ADMINISTRATION). ASSOCIATE CHIEF COUNSEL (PASSTHROUGHS AND SPECIAL INDUSTRIES). ASSOCIATE CHIEF COUNSEL (CORPORATE). DEPUTY DIVISION COUNSEL #2 (SMALL BUSINESS AND SELF-EMPLOYED). DEPUTY ASSOCIATE CHIEF COUNSEL (FINANCE AND MANAGEMENT). DEPUTY ASSOCIATE CHIEF COUNSEL #1 (INCOME TAX AND ACCOUNTING). AREA COUNSEL (LARGE AND MID-SIZE BUSINESS) (AREA 2) (HEAVY MANUFACTURING, CONSTRUCTION AND TRANSPORTATION). SPECIAL COUNSEL TO THE NATIONAL TAXPAYER ADVOCATE. DEPUTY ASSOCIATE CHIEF COUNSEL (INTERNATIONAL TECHNICAL). ASSOCIATE CHIEF COUNSEL (GENERAL LEGAL SERVICES). AREA COUNSEL (LARGE AND MID-SIZE BUSINESS) (AREA 5) (COMMUNICATIONS, TECHNOLOGY, AND MEDIA). ASSISTANT CHIEF COUNSEL (ADMINISTRATIVE PROVISIONS AND JUDICIAL PRACTICE). AREA COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED)—JACKSONVILLE. ASSISTANT CHIEF COUNSEL (EMPLOYEE BENEFITS). DEPUTY ASSOCIATE CHIEF COUNSEL (PROCEDURE AND ADMINISTRATION). DEPUTY ASSOCIATE CHIEF COUNSEL (STRATEGIC INTERNATIONAL PROGRAMS). DEPUTY DIVISION COUNSEL (LARGE AND MID-SIZE BUSINESS). DEPUTY CHIEF COUNSEL (TECHNICAL). AREA COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED)—DALLAS. DEPUTY ASSOCIATE CHIEF COUNSEL #2 (INCOME TAX AND ACCOUNTING).

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	DEPUTY DIVISION COUNSEL AND DEPUTY ASSOCIATE CHIEF COUNSEL (TAX EXEMPT AND GOVERNMENT ENTITIES).
	AREA COUNSEL, LARGE AND MID-SIZE BUSINESS (AREA 3) (FOOD, MASS RETAILERS, AND PHARMACEUTICALS).
	ASSOCIATE CHIEF COUNSEL (INTERNATIONAL).
	ASSOCIATE CHIEF COUNSEL (FINANCE AND MANAGEMENT).
	SENIOR COUNSEL TO THE CHIEF COUNSEL (LEGISLATION).
	DEPUTY ASSOCIATE CHIEF COUNSEL (FINANCIAL INSTITUTIONS AND PRODUCTS).
	ASSOCIATE CHIEF COUNSEL/OPERATING DIVISION COUNSEL (TAX EXEMPT AND GOVERNMENT ENTITIES).
	DEPUTY CHIEF COUNSEL (OPERATIONS).
	ASSISTANT CHIEF COUNSEL (EXEMPT ORGANIZATIONS, EMPLOYMENT TAX, AND GOVERNMENT ENTITIES).
	ASSOCIATE CHIEF COUNSEL (INCOME TAX AND ACCOUNTING).
	AREA COUNSEL (LARGE AND MID-SIZE BUSINESS) (AREA 4) (NATURAL RESOURCES).
	AREA COUNSEL (SMALL BUSINESS AND SELF-EMPLOYED)—DENVER.
	DEPUTY ASSOCIATE CHIEF COUNSEL #1 (PASSTHROUGHS AND SPECIAL INDUSTRIES).
	DIVISION COUNSEL/ASSOCIATE CHIEF COUNSEL (CRIMINAL TAX).
UNITED STATES MINT	ASSOCIATE DIRECTOR, INFORMATION RESOURCES/CHIEF INFORMATION OFFICER.
	ASSOCIATE DIRECTOR FOR CIRCULATING.
	SENIOR ADVISOR.
	ASSOCIATE DIRECTOR FOR SALES AND MARKETING.
	SENIOR ADVISOR.
	ASSOCIATE DIRECTOR FOR POLICY AND MANAGEMENT/CHIEF FINANCIAL OFFICER.
UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT:	
OFFICE OF THE ADMINISTRATOR	COUNSELOR TO THE AGENCY.
OFFICE OF THE GENERAL COUNSEL	DEPUTY GENERAL COUNSEL.
	ASSISTANT GENERAL COUNSEL FOR ETHICS AND ADMINSTRATIONS.
OFFICE OF THE INSPECTOR GENERAL	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDIT.
	COUNSEL TO THE INSPECTOR GENERAL.
	DEPUTY INSPECTOR GENERAL.
OFFICE OF SECURITY	DIRECTOR, OFFICE OF SECURITY.
OFFICE OF EQUAL OPPORTUNITY PROGRAMS	DIRECTOR OFFICE OF EQUAL OPPORTUNITY PROGRAMS.
BUREAU FOR GLOBAL HEALTH	ASSOCIATE ASSISTANT ADMINISTRATOR CENTER FOR ECONOMIC GROWTH.
	SENIOR DEPUTY ASSISTANT ADMINISTRATOR.
	DEPUTY ASSISTANT ADMINISTRATOR, CENTER FOR POPULATION, HEALTH, AND NUTRITION.
	ASSOCIATE ASSISTANT ADMINISTRATOR.
BUREAU FOR EUROPE AND EURASIA	DEPUTY ASSISTANT ADMINISTRATOR.
BUREAU FOR MANAGEMENT	DEPUTY CONTROLLER.
	DIRECTOR OFFICE OF INFORMATION RESOURCE MANAGEMENT.
	DEPUTY DIRECTOR OFFICE OF PROCUREMENT.
	DEPUTY DIRECTOR, OFFICE OF HUMAN RESOURCES.
	DIRECTOR OFC MANAGEMENT OPERATIONS.
	DEPUTY DIRECTOR, OFFICE OF PROCUREMENT.
	DEPUTY ASSISTANT ADMINISTRATOR BUREAU FOR MANAGEMENT.
	DEPUTY DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT.
	FINANCIAL OFFICER FOR CREDIT POLICY.
	FINANCIAL OFFICER FOR CREDIT POLICY.
UNITED STATES INTERNATIONAL TRADE COMMISSION:	
OFFICE OF EXTERNAL RELATIONS	DIRECTOR, OFFICE OF EXTERNAL RELATIONS.
OFFICE OF INDUSTRIES	DIRECTOR OFFICE OF INDUSTRIES.
OFFICE OF INVESTIGATIONS	DIRECTOR, OFFICE OF INVESTIGATIONS.
DEPARTMENT OF VETERANS AFFAIRS:	
OFFICE OF THE SECRETARY AND DEPUTY	DIRECTOR, OFFICE OF EMPLOYMENT DISCRIMINATION COMPLAINT ADJUDICATION.
OFFICE OF THE INSPECTOR GENERAL	DEPUTY INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR AUDITING.
	ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	DEPUTY INSPECTOR GENERAL.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
	ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT AND ADMINISTRATION.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS.
	COUNSELOR TO THE INSPECTOR GENERAL.
	ASSISTANT INSPECTOR GENERAL FOR HEALTHCARE INSPECTIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR AUDITING.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR HEALTHCARE INSPECTIONS.
	DEPUTY ASSISTANT INSPECTOR GENERAL FOR MANAGEMENT AND ADMINISTRATION.
	DIRECTOR OF MEDICAL CONSULTATION AND REVIEW.
	ASSOCIATE DIRECTOR OF MEDICAL CONSULTATION AND REVIEW.
BOARD OF VETERANS APPEALS	VICE CHAIRMAN.
OFFICE OF THE GENERAL COUNSEL	REGIONAL COUNSEL.
	REGIONAL COUNSEL.
	REGIONAL COUNSEL.
	REGIONAL COUNSEL.
	REGIONAL COUNSEL.
	REGIONAL COUNSEL.
	REGIONAL COUNSEL.
OFFICE ASSISTANT SECRETARY FOR MANAGEMENT	PRINCIPAL DEPUTY ASSISTANT SECRETARY FOR MANAGEMENT.
	PROGRAM MANAGER (FINANCIAL SYSTEMS).
	DIRECTOR, OFFICE OF BUSINESS OVERSIGHT.
OFFICE OF FINANCE	ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR FINANCIAL SYSTEMS AND OPERATIONS.
	DIRECTOR, FINANCIAL SERVICES CENTER.
OFFICE OF ACQUISITION AND MATERIEL MANAGEMENT	DEPUTY ASSISTANT SECRETARY FOR ACQUISITION AND MATERIEL MANAGEMENT.
	ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR ACQUISITIONS.
	ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR PROGRAM MANAGEMENT AND OPERATIONS.
	EXECUTIVE DIRECTOR/CHIEF OPERATING OFFICER.
OFFICE OF ASSET ENTERPRISE MANAGEMENT	DEPUTY DIRECTOR, ASSET ENTERPRISE MANAGEMENT.
OFFICE ASSISTANT SECRETARY FOR POLICY, PLANNING AND PREPAREDNESS.	DEPUTY ASSISTANT SECRETARY FOR EMERGENCY MANAGEMENT.
OFFICE OF SECURITY AND LAW ENFORCEMENT	DEPUTY ASSISTANT SECRETARY FOR SECURITY AND LAW ENFORCEMENT.
OFFICE OF HUMAN RESOURCES MANAGEMENT AND LABOR RELATIONS.	ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR HUMAN RESOURCES MANAGEMENT.
OFFICE ASST SECRETARY FOR INFORMATION AND TECHNOLOGY.	DIRECTOR, VETERANS AFFAIRS AUTOMATION CENTER, AUSTIN, TEXAS.
	ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR POLICY, PORTFOLIO OVERSIGHT AND EXECUTION.
	ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR CYBER AND INFORMATION SECURITY.
	PROGRAM MANAGEMENT EXECUTIVE.
	ASSOCIATE DEPUTY ASSISTANT SECRETARY ELECTRONIC GOVERNMENT AND RECORDS MANAGEMENT.
	ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR FINANCE INFORMATION TECHNOLOGY.
	EXECUTIVE DIRECTOR (BUSINESS OPERATIONS).
	ASSOCIATE DEPUTY ASSISTANT SECRETARY FOR INFORMATION TECHNOLOGY OPERATIONS.
NATIONAL CEMETERY ADMINISTRATION	DIRECTOR, OFFICE OF FINANCE AND PLANNING.
	DIRECTOR, OFFICE OF CONSTRUCTION MANAGEMENT.
VETERANS BENEFITS ADMINISTRATION	DEPUTY DIRECTOR FOR POLICY AND PROCEDURES.
	CHIEF FINANCIAL OFFICER.
	DEPUTY DIRECTOR FOR OPERATIONS.
VETERANS HEALTH ADMINISTRATION	CHIEF FINANCIAL OFFICER.
	DIRECTOR, OFFICE OF COMPLIANCE AND BUSINESS INTEGRITY.
	DEPUTY CHIEF FINANCIAL OFFICER.
	ASSOCIATE CHIEF FACILITIES MANAGEMENT OFFICER FOR STRATEGIC MANAGEMENT.
	ASSOCIATE CHIEF FACILITIES MANAGEMENT OFFICER FOR SERVICE DELIVERY.
	ASSOCIATE CHIEF FACILITIES MANAGEMENT OFFICER FOR RESOURCE MANAGEMENT.

POSITIONS THAT WERE CAREER RESERVED DURING CALENDAR YEAR 2006—Continued

Agency/organization	Career reserved position
VETERANS INTEGRATED SERVICE NETWORK DIRECTORS	CHIEF OPERATING OFFICER. FINANCIAL MANAGER. CHIEF PROSTHETICS AND CLINICAL LOGISTICS OFFICER. ASSOCIATE CHIEF INFORMATION OFFICER IMPLEMENTATION AND TRAINING SERVICES. ASSOCIATE CHIEF FINANCIAL OFFICER FOR COREFINANCIAL AND LOGISTICS SYSTEM AND DECISION SUPPORT SYSTEMS. DIRECTOR CANTEEN SERVICE.

[FR Doc. E7–5534 Filed 4–2–07; 8:45 am]
BILLING CODE 6325–43–P

Federal Register

Tuesday,
April 3, 2007

Part IV

The President

Proclamation 8119—Cancer Control Month, 2007

Federal Register
Vol. 72, No. 63
Tuesday, April 3, 2007

Presidential Documents

Title 3—

The President

Proclamation 8119 of March 29, 2007

Cancer Control Month, 2007

By the President of the United States of America

A Proclamation

Cancer Control Month is an opportunity to educate all Americans about cancer, to raise awareness about treatments, and to renew our commitment to fighting this deadly disease.

Through developments in medical science, we continue to make advances in the prevention and treatment of cancer. Yet millions of our citizens continue to live with some form of this disease, and it remains the second leading cause of death in the United States. Individuals can reduce their risk of developing cancer by practicing healthy eating habits, exercising, limiting sun exposure, avoiding tobacco, knowing their family history, and getting regular screenings from the doctor.

My Administration remains committed to the fight against cancer. In 2005, the National Cancer Institute and the National Human Genome Research Institute launched the Cancer Genome Atlas, a revolutionary research project to help scientists understand the genetic sources of cancer. The discoveries from this project have the potential to bring about rapid advances in cancer research. And last year the National Institutes of Health invested more than $5 billion in cancer research.

We are making progress. Cancer related deaths have declined for 2 consecutive years. Thirty years ago, there were only 3 million cancer survivors, and today there are more than 10 million.

During Cancer Control Month, we remember those who have lost their lives to cancer. And we commend the determination, courage, and strength of cancer survivors. Our Nation is grateful for medical professionals, researchers, family members, and friends who support cancer patients. Their dedication to these individuals is a reflection of the true spirit of America. Our country will continue the fight against cancer until it is won.

In 1938, the Congress of the United States passed a joint resolution (52 Stat. 148; 36 U.S.C. 103) as amended, requesting the President to issue an annual proclamation declaring April as ''Cancer Control Month.''

NOW, THEREFORE, I, GEORGE W. BUSH, President of the United States of America, by virtue of the authority vested in me by the Constitution and laws of the United States, do hereby proclaim April 2007 as Cancer Control Month. I encourage citizens, government agencies, private businesses, nonprofit organizations, and other interested groups to join in activities that will increase awareness about the steps Americans can take to prevent and control cancer.

IN WITNESS WHEREOF, I have hereunto set my hand this twenty-ninth day of March, in the year of our Lord two thousand seven, and of the Independence of the United States of America the two hundred and thirty-first.

[FR Doc. 07–1668
Filed 4–2–07; 9:23 am]
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Federal Register

Tuesday,
April 3, 2007

Part V

The President

Notice of April 3, 2007—Notice of Intention To Enter Into a Free Trade Agreement With Korea

Federal Register
Vol. 72, No. 63
Tuesday, April 3, 2007

Presidential Documents

Title 3—

The President

Notice of April 1, 2007

Notice of Intention To Enter Into a Free Trade Agreement With Korea

Consistent with section 2105(a)(1)(A) of the Trade Act of 2002, I have notified the Congress of my intention to enter into a free trade agreement with the Republic of Korea.

Consistent with section 2105(a)(1)(A) of that Act, this notice shall be published in the **Federal Register**.

THE WHITE HOUSE,
April 1, 2007.

[FR Doc. 07–1677
Filed 4–2–07; 11:57 am]
Billing code 3195–01–P

Reader Aids

Federal Register

Vol. 72, No. 63

Tuesday, April 3, 2007

CUSTOMER SERVICE AND INFORMATION

Federal Register/Code of Federal Regulations	
General Information, indexes and other finding aids	**202–741–6000**
Laws	**741–6000**
Presidential Documents	
Executive orders and proclamations	**741–6000**
The United States Government Manual	**741–6000**
Other Services	
Electronic and on-line services (voice)	**741–6020**
Privacy Act Compilation	**741–6064**
Public Laws Update Service (numbers, dates, etc.)	**741–6043**
TTY for the deaf-and-hard-of-hearing	**741–6086**

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FEDERAL REGISTER PAGES AND DATE, APRIL

15597–15804 2
15805–16260 3

CFR PARTS AFFECTED DURING APRIL

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.

3 CFR

Proclamations:
8119 16255
Administrative Orders:
Notices:
Notice of March 30, 2007 15803
Notice of April 1, 2007 16259

7 CFR

301 15597
319 15805

10 CFR

300 15598

12 CFR

652 15812
655 15812
915 15600
Proposed Rules:
915 15627

14 CFR

39 ..... 15603, 15812, 15814, 15816, 15818, 15820, 15822
71 ..... 15824, 15825
97 15825
Proposed Rules:
39 ..... 15633, 15635, 15850

17 CFR

Proposed Rules:
1 15637
3 15637
4 15637
15 15637
166 15637

21 CFR

866 15828

22 CFR

126 15830

31 CFR

538 15831
560 15831

33 CFR

100 15832
165 ..... 15834, 15837
Proposed Rules:
117 15852

36 CFR

Proposed Rules:
261 15641

40 CFR

52 15839
Proposed Rules:
92 15938
94 15938
1033 15938
1039 15938
1042 15938
1065 15938
1068 15938

41 CFR

Proposed Rules:
102-38 15854

46 CFR

501 15613

49 CFR

23 15614
26 15614

50 CFR

622 15617
679 15848
Proposed Rules:
17 15857

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 APRIL 3, 2007

ENVIRONMENTAL PROTECTION AGENCY

Air quality implementation plans; approval and promulgation; various States:

Delaware; published 4-3-07

HOMELAND SECURITY DEPARTMENT

Coast Guard

Drawbridge operations:

New York; published 3-23-07

TRANSPORTATION DEPARTMENT

Federal Aviation Administration

Airworthiness directives:

Airbus; published 2-27-07

Alpha Aviation Design Ltd.; published 2-27-07

Bombardier; published 2-27-07

Empresa Brasileira de Aeronautics S.A. (EMBRAER); published 2-27-07

Fokker; published 2-27-07

Class E airspace; correction; published 4-3-07

Standard instrument approach procedures; published 4-3-07

TREASURY DEPARTMENT

Foreign Assets Control Office

Sudanese sanctions regulations and Iranian transactions regulations:

Goods or technology exportation or reexportation via diplomatic pouch; published 4-3-07

COMMENTS DUE NEXT WEEK

AGRICULTURE DEPARTMENT

Agricultural Marketing Service

Nectarines and peaches grown in California; comments due by 4-13-07; published 3-29-07 [FR E7-05789]

Tomatoes grown in Florida; comments due by 4-9-07; published 2-6-07 [FR 07-00502]

AGRICULTURE DEPARTMENT

Animal and Plant Health Inspection Service

Exportation and importation of animals and animal products:

Czech Republic et al.; live swine, swine semen, pork, and pork products; comments due by 4-13-07; published 2-12-07 [FR E7-02327]

Plant-related quarantine, domestic:

Pine shoot beetle; comments due by 4-13-07; published 2-12-07 [FR E7-02325]

BROADCASTING BOARD OF GOVERNORS

Legal proceedings; testimony by employees, production of official records, and disclosure of official information; comments due by 4-11-07; published 3-12-07 [FR E7-04329]

COMMERCE DEPARTMENT

National Oceanic and Atmospheric Administration

Fishery conservation and management:

Caribbean, Gulf, and South Atlantic fisheries—

South Atlantic Fishery Management Council; hearings; comments due by 4-10-07; published 3-2-07 [FR E7-03703]

Northeastern United States fisheries—

Georges Bank cod, haddock, and yellowtail flounder; comments due by 4-11-07; published 3-12-07 [FR E7-04442]

DEFENSE DEPARTMENT

Defense Acquisition Regulations System

Acquisition regulations:

Online Representations and Certifications Application; comments due by 4-13-07; published 2-12-07 [FR E7-02205]

ENVIRONMENTAL PROTECTION AGENCY

Air pollution; standards of performance for new stationary sources:

Hospital, medical, and infectious waste incinerators; comments due by 4-9-07; published 2-6-07 [FR E7-01617]

Air programs; approval and promulgation; State plans for designated facilities and pollutants:

Missouri; comments due by 4-9-07; published 3-9-07 [FR E7-04297]

Air quality implementation plans:

Preparation, adoption, and submittal—

Plan submission methods and public hearing requirements; revisions and administrative changes; comments due by 4-12-07; published 3-13-07 [FR E7-04563]

Air quality implementation plans; approval and promulgation; various States:

Iowa; comments due by 4-9-07; published 3-8-07 [FR E7-04179]

Kansas; comments due by 4-9-07; published 3-9-07 [FR E7-04304]

Missouri; comments due by 4-9-07; published 3-9-07 [FR E7-04176]

Air quality implementation plans; approval and promulgation; various States; air quality planning purposes; designation of areas:

Missouri; comments due by 4-9-07; published 3-9-07 [FR E7-04300]

Air quality implementation plans; approval and promulgation; various States:

Nevada; comments due by 4-11-07; published 3-12-07 [FR E7-04428]

New Jersey; comments due by 4-13-07; published 3-14-07 [FR E7-04665]

Pesticides; tolerances in food, animal feeds, and raw agricultural commodities:

Tris (2-ethylhexyl) phosphate; comments due by 4-9-07; published 2-7-07 [FR 07-00460]

Superfund program:

National oil and hazardous substances contingency plan priorities list; comments due by 4-12-07; published 3-13-07 [FR E7-04449]

HEALTH AND HUMAN SERVICES DEPARTMENT

Food and Drug Administration

Human drugs:

Labeling of drug products (OTC)—

Standardized format and content requirements; convenience-size drug packets; alternative labeling requirements; comments due by 4-11-07; published 12-12-06 [FR E6-21019]

HOMELAND SECURITY DEPARTMENT

Coast Guard

Anchorage regulations:

New York; comments due by 4-9-07; published 2-6-07 [FR E7-01882]

Virginia; comments due by 4-9-07; published 3-8-07 [FR E7-04111]

Ports and waterways safety; regulated navigation areas, safety zones, security zones, etc.:

Severn River and College Creek, Annapolis, MD; comments due by 4-13-07; published 2-12-07 [FR E7-02334]

INTERIOR DEPARTMENT

Fish and Wildlife Service

Endangered and threatened species:

Critical habitat designations—

Flatwoods salamander; comments due by 4-9-07; published 2-7-07 [FR 07-00470]

Nevin's barberry; comments due by 4-9-07; published 2-6-07 [FR 07-00472]

Findings on petitions, etc.—

Polar bear; comments due by 4-9-07; published 1-9-07 [FR 06-09962]

Polar bear; comments due by 4-9-07; published 2-15-07 [FR 07-00723]

Gray wolf; comments due by 4-9-07; published 2-8-07 [FR 07-00487]

INTERIOR DEPARTMENT

Surface Mining Reclamation and Enforcement Office

Permanent program and abandoned mine land reclamation plan submissions:

Maryland; comments due by 4-9-07; published 3-8-07 [FR E7-04147]

JUSTICE DEPARTMENT

Grants and agreements:

Nonprocurement debarment and suspension; OMB guidance; implementation; comments due by 4-12-07; published 3-13-07 [FR E7-04362]

LABOR DEPARTMENT

Employee Benefits Security Administration

Employee Retirement Income Security Act:

Cross-trading of securities; statutory exemption; comments due by 4-13-07; published 2-12-07 [FR E7-02290]

TRANSPORTATION DEPARTMENT

Federal Aviation Administration

Airworthiness directives:

Air Tractor, Inc.; comments due by 4-9-07; published 2-6-07 [FR E7-01874]

Airbus; comments due by 4-12-07; published 3-13-07 [FR E7-04534]

British Aerospace; comments due by 4-12-07; published 3-13-07 [FR E7-04518]

Empresa Braileira de Aeronautica S.A. (EMBRAER); comments due by 4-9-07; published 3-8-07 [FR E7-04128]

Empresa Brasileira de Aeronautica S.A. (EMBRAER); comments due by 4-11-07; published 3-12-07 [FR E7-04373]

Fokker; comments due by 4-11-07; published 3-12-07 [FR E7-04379]

McDonnell Douglas; comments due by 4-9-07; published 2-22-07 [FR E7-02975]

REIMS AVIATION S.A.; comments due by 4-9-07; published 3-8-07 [FR E7-04131]

Vulcanair S.p.A.; comments due by 4-9-07; published 3-9-07 [FR E7-04242]

Class B airspace; comments due by 4-13-07; published 2-12-07 [FR 07-00599]

Class E airspace; comments due by 4-9-07; published 2-23-07 [FR E7-03050]

TRANSPORTATION DEPARTMENT

National Highway Traffic Safety Administration

Motor vehicle safety standards:

Child restraint systems—

Lower anchors and tethers for children; system designs, child side impact safety, and public education; public meeting; comments due by 4-9-07; published 1-24-07 [FR E7-01021]

TREASURY DEPARTMENT

Internal Revenue Service

Income taxes:

Qualified film and television production costs deduction; cross-reference; comments due by 4-10-07; published 2-9-07 [FR E7-02153]

Procedure and administration:

Lien or discharge of property release; comments due by 4-11-07; published 1-11-07 [FR E7-00219]

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 ''P L U S'' (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.

H.R. 1129/P.L. 110–16

To provide for the construction, operation, and maintenance of an arterial road in St. Louis County, Missouri. (Mar. 28, 2007; 121 Stat. 71)

Last List March 27, 2007

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