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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.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 73

RIN: 3150–AH90

Secure Transfer of Nuclear Materials

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations to implement requirements for secure transfer of nuclear materials as required by Section 656 of the Energy Policy Act of 2005 (EPAct), signed into law on August 8, 2005. The final rule implements Section 656 by specifically excepting certain licensees from provisions of Section 170I of the Atomic Energy Act (AEA) of 1954, as amended.

DATES: *Effective Date:* The final rule is effective on February 23, 2007.

ADDRESSES: Publicly available documents related to this rulemaking may be viewed electronically on the public computers located at the NRC's Public Document Room (PDR), Room O1F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The PDR reproduction contractor will copy documents for a fee. Selected documents can be viewed and downloaded electronically via the NRC's rulemaking Web site at *http://ruleforum.llnl.gov*.

Publicly available documents created or received at the NRC are available electronically at the NRC's Electronic Reading Room at *http://www.nrc.gov/NRC/reading-rm/adams.html*. From this site, the public can gain entry into the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at (800) 397–4209, (301) 415–4737, or by e-mail to *pdr@nrc.gov*.

FOR FURTHER INFORMATION CONTACT: Frank Cardile, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone (301) 415–6185, e-mail: *fpc@nrc.gov*.

SUPPLEMENTARY INFORMATION:

I. Background

The Energy Policy Act of 2005

On August 8, 2005, the President signed into law the EPAct of 2005 Pub. L. No. 109–58,119 Stat. 594 (2005). Section 656 of the EPAct added Section 170I to the AEA, as amended, 42 U.S.C. 2210i, and requires that: (a) A system be established by the Commission to ensure that materials transferred or received in the United States, by any party, pursuant to an import or export license issued by NRC, are accompanied by a manifest describing the type and amount of materials; (b) each individual receiving or accompanying the transfer of materials shall be subject to a security background check conducted by appropriate Federal entities; and (c) the Commission issue regulations, within one year after enactment of the EPAct, identifying radioactive materials or classes of individuals that, consistent with the protection of the public health and safety and the common defense and security, are appropriate exceptions to the requirements in Section 170I of the AEA.

Rulemaking Considerations Related to Proposed Rule To Implement Section 656 of the EPAct

In preparing the proposed rule to implement Section 656 (71 FR 51534; August 30, 2006), the NRC determined that, based on existing requirements for shipping papers for radioactive materials already in place in Department of Transportation regulations and incorporated by reference in NRC regulations in 10 CFR part 71, an appropriate system is already established to ensure that shipments of radioactive materials, that would be affected by Section 656, are accompanied by papers (*i.e.*, a manifest) appropriately describing the materials being shipped. Thus, NRC did not include any additional requirements for manifesting of radioactive material shipments in the proposed rule.

In addition, the NRC determined that the most appropriate and comprehensive approach for establishing requirements for security background checks is as part of the broader considerations of NRC's rulemaking to implement Section 652 of the EPAct. Section 652 mandates the Commission to require fingerprinting and criminal history record checks for any individual who is permitted unescorted access to risk-significant radioactive material. The individuals referred to under Section 656 are a subgroup (*i.e.*, those transferring radioactive material pursuant to an export or import license) of the larger group of individuals at a licensed facility, with unescorted access to radioactive material, and will be covered by the comprehensive Section 652 rulemaking. The Section 652 proposed rule is currently in preparation and its schedule calls for issuance of a proposed rule in the Fall of 2007 and a final rule in the Fall of 2008.

While the Section 652 rulemaking is being conducted, NRC has a regulatory framework for security background checks through an extensive system of Orders issued during 2002–2006 that includes requirements for background checks, including fingerprinting for criminal history checks, for unescorted access to radioactive material for certain facilities which it licenses. NRC has also issued Orders to licensees for shipment of radioactive material in quantities of concern (RAMQC). The purpose of these Orders has been to impose certain security measures to supplement existing regulations at 10 CFR part 20, and equivalent Agreement State regulations, for securing licensed materials from unauthorized access, with the intent of providing the NRC with reasonable assurance that the common defense and security is protected. The Orders note that conditions for unescorted access to risk-significant sources of radioactive material are governed by an appropriate need-to-know and by background checks as input to a determination concerning the trustworthiness and reliability of individuals who have access to the material. Most recently, in October 2006, NRC issued Orders to pool-type irradiator licensees,

manufacturing and distribution (M&D) licensees, and licensees making shipments of RAMQC, to specifically require fingerprinting and criminal history checks for unescorted access to the risk-significant sources of radioactive material at their facilities.

Issuance of Proposed Rule

Consistent with Section 656(b) of the EPAct, the Commission proposed to amend NRC's regulations to except from the security background check requirements of Section 170I of the AEA, as amended, licensees who have *not* received NRC Orders containing requirements for background checks for trustworthiness and reliability, that include fingerprinting and criminal history record checks, as a prerequisite for unescorted access to risk-significant radioactive materials. As noted above, Orders restricting access based on fingerprinting and criminal history record checks have been issued for pool-type irradiator licensees, M&D licensees, and licensees who make shipments of RAMQC. These licensees can use the provisions of their existing Orders (or new or amended Orders) to comply with Section 170I. Also, if additional Orders for fingerprinting and criminal history checks for unescorted access to radioactive material are issued to licensees other than those noted here, licensees who receive any such new Orders would no longer be excepted from the security background check requirements of Section 170I.

The rationale for the exceptions is that it is consistent with the system of Orders, issued to certain licensees, that the NRC has instituted for protection of the common defense and security. The materials possessed and transferred by the licensees who have received Orders have been deemed, during the process of issuance of the Orders, to be appropriate for immediately requiring certain security measures for unescorted access based on potential higher risk resulting from malevolent use of those materials.

The proposed rule was published in the **Federal Register** on August 30, 2006 (71 FR 51534) as a proposed new § 73.28 in 10 CFR part 73.

II. Discussion

Summary of Public Comments on the Proposed Rule

The public comment period closed on September 29, 2006. In response to the request for comments, NRC received two comment responses, one from the Organization of Agreement States (OAS) and one from the Nuclear Energy Institute (NEI).

The comment response from the OAS summarized the content of the NRC's proposed rulemaking and its effect on Agreement States, including that the proposed Agreement State Compatibility Category of the proposed rule would be ''NRC.'' The comment response from the OAS concluded by stating that the NRC approach in the rulemaking seemed reasonable to the OAS Executive Board.

The comment response letter from NEI stated that NEI supports the proposed rule as drafted. However, NEI also stated that there were two areas of confusion regarding the applicability of the rulemaking. In particular, NEI noted that there are a number of power reactor licensees that were not issued additional orders, but that have personnel who come in contact with radioactive materials in transit and who are not covered by existing rules in 10 CFR 73.57. Particularly noted were personnel in shipping and receiving operations located outside of the protected area who are considered outside of the nuclear power facility and do not require access to Safeguards Information. The second area of confusion related to a NEI concern as to where this Section 656 rulemaking will end and where the referenced Section 652 rulemaking, due for issuance in late 2007, will start.

With regard to the first point raised by NEI, the Supplementary Information in the **Federal Register** Notice, issuing the proposed rule, stated that this Section 656 rulemaking is relying upon the framework of the existing system of NRC Orders, either in place or to be put into place, as the basis for codifying exceptions. This allows for a consistent approach for radioactive materials which NRC considers appropriate, at this time, for exception from the requirements of Section 170I of the AEA as amended by the EPAct. The materials possessed and transferred by licensees who have received Orders have been deemed, during the process of issuance of the Orders, to be appropriate for immediately requiring certain security measures for unescorted access based on potential higher risk resulting from malevolent use of those materials. Orders for fingerprinting and criminal history checks for persons at licensed facilities shipping RAMQC were issued in October 2006. As noted previously, the Section 652 rulemaking will take a more comprehensive approach in establishing requirements for security background checks for licensees, and for licensee employees, for unescorted access to radioactive material. To the extent that personnel at a nuclear power plant handle risk-significant material and are not currently covered by regulation and/or order with regard to background checks and fingerprinting, consideration can be given to including such licensee personnel in NRC's framework of orders. If such additional Orders are issued, those licensees who have not previously received any such Orders would no longer be excepted from the security background check requirements of Section 170I, under the provisions of this final rule.

With regard to the second point raised by NEI, the Supplementary Information in the proposed rule notes that the NRC intends to address background checks and fingerprinting for criminal history record checks for licensees in a more comprehensive manner under the rulemaking to implement Section 652 of the EPAct. One of the elements of that rulemaking, as mandated by Section 652(B)(i)(ll), will be determining requirements for access to quantities of radioactive material, subject to regulation by the Commission, that the Commission determines to be of such significance to the public health and safety or to the common defense and security as to warrant fingerprinting and background checks. The requirements for exceptions in this Section 656 rulemaking were issued as part of a mandate of Section 656 of the EPAct for a limited subset of licensee employees. If necessary, the requirements now codified at 10 CFR 73.28 will be revisited, and may be amended and/or superseded by the more comprehensive Section 652 rulemaking.

Summary of Revisions to Proposed Rule

After review of the public comments, the NRC has decided to make final the approach in the August 30, 2006, proposed rule (i.e., to amend NRC's regulations to except from the security background check requirements of Section 170I those licensees that have *not* received NRC Orders restricting unescorted access to radioactive materials to individuals who have undergone background checks, for trustworthiness and reliability, that include fingerprinting and criminal history record checks). As of October 2006, Orders for fingerprinting and criminal history checks for unescorted access to radioactive materials have been issued to pool-type irradiator licensees, M&D licensees, and licensees who make shipments of RAMQC. Under the provisions of the final rule, if additional Orders for fingerprinting and criminal history checks for unescorted access to radioactive material are issued to licensees other than those noted above, licensees who receive any such new Orders would no longer be

excepted from the security background check requirements of Section 170I of the AEA.

III. Section by Section Analysis of Final Rule

New § 73.28 has not been revised from the wording in the proposed rule and continues to except licensees from the security background check provisions of Section 170I of the AEA if they have not received Orders from the NRC containing requirements for background checks for trustworthiness and reliability that include fingerprinting and criminal history checks as a prerequisite for unescorted access to radioactive materials. Licensees subject to Orders are not excepted from the security background check provisions, and would use the requirements in their existing Orders to comply with Section 170I of the AEA.

IV. Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995 (Pub. L. 104–113) requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. In this final rule, NRC is indicating specific exceptions to the requirements of Section 656 of the EPAct. This action does not constitute the establishment of a standard that establishes generally applicable requirements.

V. Agreement State Compatibility

Under the ''Policy Statement on Adequacy and Compatibility of Agreement State Programs,'' which became effective on September 3, 1997 (62 FR 46517), NRC program elements (including regulations) are placed into four compatibility categories (Compatibility Category A through D). In addition, NRC program elements also can be identified as having particular health and safety significance or as being reserved solely to NRC.

The amendment to 10 CFR part 73 is a program element designated ''NRC'' based on implementation of the procedure in NRC's Management Directive 5.9, ''Adequacy and Compatibility of Agreement States.'' The requirements in this amendment are limited to providing exceptions to requirements in Section 170I of the AEA and are based on a system of Orders that were developed under NRC's authority to protect the common defense and security which are areas of exclusive NRC regulatory authority and cannot be relinquished to the Agreement States. Therefore, the requirements of this amendment should not be adopted by the Agreement States.

VI. Environmental Impact: Categorical Exclusion

NRC has determined that this final rule is the type of action described in 10 CFR 51.22(c)(3)(ii) as a categorical exclusion. Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this final rule.

VII. Paperwork Reduction Act Statement

This final rule does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

Existing requirements were approved by the Office of Management and Budget, approval number 3150–0002.

VIII. Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

IX. Regulatory Analysis

A regulatory analysis has not been prepared for this regulation because it relieves restrictions and does not impose any additional burdens on licensees.

X. Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that this rule will not have a significant economic impact on a substantial number of small entities. The amendment does not impose any additional burdens on licensees.

XI. Backfit Analysis

NRC has determined that the backfit rule (§§ 50.109, 70.76, 72.62, or 76.76) does not apply to this final rule because this amendment does not involve any provisions that would impose backfits as defined in the backfit rule. Therefore, a backfit analysis is not required.

XII. Congressional Review Act

In accordance with the Congressional Review Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.

List of Subjects in 10 CFR Part 73

Criminal penalties, Export, Hazardous materials transportation, Import, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements, Security measures.

■ For the reasons set out in the preamble and under the authority of the AEA, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553; NRC is adopting the following amendment to 10 CFR part 73.

PART 73—PHYSICAL PROTECTION OF PLANTS AND MATERIALS

■ 1. The authority citation for part 73 continues to read as follows:

Authority: Secs. 53, 161, 68 Stat. 930, 948, as amended, sec. 147, 94 Stat. 780 (42 U.S.C. 2073, 2167, 2201); sec. 201, as amended, 204, 88 Stat. 1242, as amended, 1245, sec. 1701, 106 Stat. 2951, 2952, 2953 (42 U.S.C. 5841, 5844, 2297f); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note).

Section 73.1 also issued under secs. 135, 141, Pub. L. 97–425, 96 Stat. 2232, 2241 (42 U.S.C, 10155, 10161). Section 73.37(f) also issued under sec. 301, Pub. L. 96–295, 94 Stat. 789 (42 U.S.C. 5841 note). Section 73.57 is issued under sec. 606, Pub. L. 99–399, 100 Stat. 876 (42 U.S.C. 2169).

■ 2. Section 73.28 is added to read as follows:

§ 73.28 Security background checks for secure transfer of nuclear materials.

Licensees are excepted from the security background check provisions in Section 170I of the AEA if they have not received Orders from the Nuclear Regulatory Commission containing requirements for background checks for trustworthiness and reliability that include fingerprinting and criminal history record checks as a prerequisite for unescorted access to radioactive materials.

Dated at Rockville, Maryland, this 18th day of January 2007.

Annette L. Vietti-Cook,

Secretary of the Commission.

[FR Doc. E7–971 Filed 1–23–07; 8:45 am]

BILLING CODE 7590–01–P

FEDERAL HOUSING FINANCE BOARD

12 CFR Part 915

[No. 2007–01]

RIN 3069–AB–33

Federal Home Loan Bank Appointive Directors

AGENCY: Federal Housing Finance Board.

ACTION: Interim final rule with request for comments.

SUMMARY: The Federal Housing Finance Board (Finance Board) is adopting procedures for the selection of Federal Home Loan Bank (Bank) appointive directors. The procedures require the boards of directors of the Banks to submit to the Finance Board a list of individuals that includes information regarding each individual's eligibility and qualifications to serve as a Bank director. The Finance Board will use the lists provided by each Bank to select well-qualified individuals to serve on the Bank's board of directors.

DATES: This interim final rule is effective on January 24, 2007. The Finance Board will accept written comments on the interim final rule on or before February 23, 2007.

Comments: Submit comments to the Finance Board using any one of the following methods:

E-mail: *comments@fhfb.gov.*

Fax: 202–408–2580.

Mail/Hand Delivery: Federal Housing Finance Board, 1625 Eye Street NW., Washington, DC 20006, ATTENTION: Public Comments.

Federal eRulemaking Portal: *http://www.regulations.gov*. Follow the instructions for submitting comments. If you submit your comment to the Federal eRulemaking Portal, please also send it by e-mail to the Finance Board at *comments@fhfb.gov* to ensure timely receipt by the agency. Include the following information in the subject line of your submission: Federal Housing Finance Board. Interim Final Rule: Federal Home Loan Bank Appointive Directors. RIN Number 3069–AB–33. Docket Number 2007–01.

We will post all public comments we receive without change, including any personal information you provide, such as your name and address, on the Finance Board Web site at *http://www.fhfb.gov/Default.aspx?Page=93&Top=93.*

FOR FURTHER INFORMATION CONTACT: Neil R. Crowley, Deputy General Counsel, 202–408–2990, *crowleyn@fhfb.gov;* or Thomas P. Jennings, Senior Attorney Advisor, Office of General Counsel, 202–408–2553, *jenningst@fhfb.gov.* You can send regular mail to the Federal Housing Finance Board, 1625 Eye Street NW., Washington, DC 20006.

SUPPLEMENTARY INFORMATION:

I. Background

Section 7(a) of the Federal Home Loan Bank Act (Bank Act) (12 U.S.C. 1427(a)), authorizes the Finance Board to appoint directors to the board of each Bank. Section 7(f)(2) (12 U.S.C. 1427(f)(2)) authorizes the Finance Board to fill any vacancy in an appointive directorship for the remainder of the unexpired term. The current rule implementing this statutory authority provides only for the selection of appointive directors in the sole discretion of the Finance Board, but lacks any procedures for accomplishing this. *See* 12 CFR 915.10(a). The Finance Board has determined that adopting procedures for the selection of appointive directors will enhance its ability to identify and appoint well-qualified individuals to serve as Bank directors. Accordingly, the Finance Board is amending § 915.10 to adopt procedures under which the board of directors of each Bank will submit to the Finance Board a list of individuals that includes information regarding each individual's eligibility and qualifications to serve as a Bank director. The Finance Board will use the lists provided by each Bank to select well-qualified individuals to serve on the Bank's board of directors.

II. Analysis of the Interim Final Rule

A. Bank Responsibilities

An effective board of directors is an important element in maintaining the safety and soundness of a Bank and ensuring that it serves its housing and community finance mission. The Banks and other interested parties with knowledge of the district likely will be familiar with individuals who have the background and skills necessary to serve on the board of a large financial institution such as a Bank. The Finance Board believes that the appointment process will be enhanced by allowing those most familiar with the resources in a Bank's district to play a greater role in identifying a pool of well-qualified individuals from which the Finance Board can appoint Bank directors. Accordingly, the rule seeks to utilize the local and regional knowledge of the Bank, as well as of any other interested parties, in seeking out or otherwise identifying individuals who have the background and skills necessary to serve as an effective Bank director.

Under the rule, the Banks are responsible at the initial stages of the selection process for identifying potential appointive directors, assessing their eligibility and qualifications, and nominating them to the Finance Board. In doing so, the Finance Board expects each Bank to assess the appropriate experience and abilities its board must possess in order to operate effectively. When the Bank's board identifies potential appointive directors, it will perform a preliminary assessment of their qualifications prior to sending a list of nominations to the Finance Board. The board's preliminary assessment should include, but is not limited to, a review of the individuals' executed eligibility form and their community reputation. In the case of an individual seeking to be designated as a community interest director, the Finance Board expects that each Bank will assess the individual's prior experience in serving the consumer and community interests specified in the Bank Act. As noted below, in order to allow for a well-diversified applicant pool, the rule permits any interested party to submit to the Banks the names of prospective directors, which the Banks will evaluate based on each individual's qualifications.

Section 915.10(a)(1) requires the board of directors of each Bank annually, on or before October 1st, to submit to the Finance Board a list of nominees who meet the statutory eligibility requirements and are otherwise well-qualified for the appointive directorships that will become vacant at the end of that calendar year. Determining who to include on the list is left to the boards of directors of the Banks, which may exercise discretion in determining how to identify and present individuals to the Finance Board. The board should consider each individual in light of his or her background and experience as it relates to being a director of a Bank, and should select nominees based on the totality of their qualifications. Section 915.10(a)(3) of the rule further requires that the list of individuals a Bank submits include 2 times the number of appointive directorships that are to be filled that year. Under § 915.15(b), the Finance Board has the discretion to require a Bank to provide information about additional eligible and well-qualified individuals.

Along with the list of eligible and qualified individuals, the Bank must provide the original executed appointive director application form on which each individual describes in detail the business, financial, housing, community and economic development, or other leadership experiences that qualify him or her to serve on the board

of the Bank. A copy of the form is attached as an exhibit.

Section 915.10(a)(2) extends this procedure to filling vacancies that arise before the completion of a full term, by requiring the board of directors of the Bank to submit a list of 2 individuals for any appointive directorship that becomes vacant prior to the end of its term. The rule requires a Bank to act promptly to provide the list to fill the remaining term of a vacant appointive directorship.

B. Finance Board Selection

Section 915.10(b) provides that the Finance Board has sole discretion to appoint individuals to the boards of the Banks. In exercising this discretion, the Finance Board intends to look principally to the qualifications of the nominees, and will appoint only those individuals who have demonstrated that they possess the experience necessary to serve effectively on the board of a large and sophisticated financial institution with an important housing finance and economic development mission, such as a Bank. By relying on the demonstrated qualifications of the nominees, the Finance Board expects that any individuals it appoints will possess the experience and skills necessary to serve as the independent voices on the board of directors, a role that can best be played by the appointive directors of the Banks.

The rule also makes clear that the Finance Board may decline, in its sole discretion, to appoint any of the individuals on the initial list submitted by the Bank. If this occurs, the Finance Board can direct a Bank to submit the names of additional eligible and well-qualified individuals for the Finance Board's consideration.

C. Prospective Appointive Directors

To ensure a diverse pool of prospective directors, § 915.10(c) allows any individual who is interested in being appointed to the board of a Bank to submit to the Bank an executed appointive director application form. The rule also allows any interested party to make recommendations to a Bank regarding individuals who are well-qualified to serve on the board of the Bank, but requires any such individual to submit to the Bank the same application form before the Bank may consider that person for inclusion in the list it submits to the Finance Board. The rule does not provide for any individuals to submit applications directly to the Finance Board. The board of the Bank has discretion to determine which individuals it submits to the Finance Board for consideration, although the Finance Board expects that the Bank's board will give due consideration to all persons seeking to be nominated to the board.

D. Term of Office

Section 915.10(d) is substantially similar to § 915.10(b) of the current rule. It has been revised to delete outdated language that addressed how the Finance Board would stagger the terms of appointive directors with terms commencing in 2001 and 2002, to achieve a one-third staggering of the boards of directors, as required by section 7(d) of the Bank Act (12 U.S.C. 1427(d)). Because the Finance Board has adjusted the terms of office for those directorships and has established 3 approximately equal classes of directors at each of the Banks that language is no longer necessary and is deleted.

E. Appointive Directorship Vacancies Existing on January 1, 2007

Section 915.10(e) is a temporary provision for filling appointive directorships that are vacant on January 1, 2007. The rule requires the boards of directors of the Banks to submit the list of eligible and qualified individuals to the Finance Board on or before March 31, 2007, instead of October 1, 2007. In all other respects, the changes made by the interim final rule will apply. For these directorships the Finance Board intends to consider nominations as they are received, and the rule thus does not require a Bank to submit nominations for all vacancies at one time.

III. Notice and Public Participation

The notice and comment procedure required by the Administrative Procedure Act is inapplicable to this interim final rule because it is a rule of agency procedure. *See* 5 U.S.C. 553(b)(3)(A). In addition, it is in the public interest to fill appointive directorships at the Banks with well qualified individuals as soon as it is practicable to do so. *See* 5 U.S.C. 553(b)(3)(B). However, because the Finance Board believes that public comments are valuable, it encourages comments on this interim final rule, and will consider all comments received on or before February 23, 2007 in promulgating a final rule.

IV. Effective Date

For the reasons stated in part III above, the Finance Board for good cause finds that the interim final rule should become effective on January 24, 2007. *See* 5 U.S.C. 553(d)(3).

V. Paperwork Reduction Act

The appointive director application form is part of the information collection entitled ''Federal Home Loan Bank Directors.'' Under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Office of Management and Budget (OMB) has assigned control number 3069–0002, which is due to expire on November 30, 2007. The Finance Board and the Banks use the information contained in the application form to determine whether prospective appointive Bank directors satisfy the statutory and regulatory eligibility requirements and are well qualified to serve as a Bank director. Only individuals meeting these requirements may serve as Bank directors. *See* 12 U.S.C. 1427. The interim final rule does not make substantive or material modifications to the ''Federal Home Loan Bank Directors'' information collection. Consequently, the Finance Board has not submitted any information to OMB for review.

VI. Regulatory Flexibility Act

The Finance Board is adopting this procedural amendment in the form of an interim final rule and not as a proposed rule. Therefore, the provisions of the Regulatory Flexibility Act do not apply. *See* 5 U.S.C. 601(2) and 603(a).

List of Subjects in 12 CFR Part 915

Conflicts of interest, Elections, Federal home loan banks, Reporting and recordkeeping requirements.

■ For the reasons stated in the preamble, the Finance Board amends 12 CFR part 915 as follows:

PART 915—BANK DIRECTOR ELIGIBILITY, APPOINTMENT, AND ELECTIONS

■ 1. The authority citation for part 915 continues to read as follows:

Authority: 12 U.S.C. 1422a(a)(3), 1422b(a), 1426, 1427, and 1432.

■ 2. Revise § 915.10 to read as follows:

§ 915.10 Selection of appointive directors.

(a) *Bank responsibilities.* (1) On or before October 1st of each year, the board of directors of each Bank shall submit to the Finance Board a list of eligible nominees who are well-qualified to fill the appointive directorships that will expire on December 31st of that year, along with the original Finance Board-prescribed appointive director application form executed by each individual on the list.

(2) If an appointive directorship becomes vacant prior to the expiration

of its term, the board of directors of the Bank shall submit to the Finance Board a list of eligible nominees who are well-qualified to fill that directorship, along with each individual's executed appointive director application form, promptly after the vacancy arises.

(3) The number of nominees on any list submitted by a Bank's board of directors pursuant to paragraphs (a)(1) or (2) of this section shall equal 2 times the number of appointive directorships to be filled.

(b) *Finance Board selection.* As provided by the Act, the Finance Board has the sole responsibility for appointing individuals to the boards of directors of the Banks. In exercising that responsibility, the Finance Board shall select from among the nominees on the list submitted by the Bank pursuant to paragraph (a) of this section, provided, however, that if the Finance Board does not fill all of the appointive directorships from the list initially submitted by the Bank, it may require the Bank to submit a supplemental list of nominees for its consideration.

(c) *Prospective applicants.* Any individual who seeks to be appointed to the board of directors of a Bank may submit to the Bank an executed appointive director application form that demonstrates that the individual both is eligible and has business, financial, housing, community and economic development, and/or leadership experience. Any other interested party may recommend to the Bank that it consider a particular individual as a nominee for an appointive directorship, but the Bank may not do so until the individual has provided the Bank with an executed appointive director application form. The board of directors of the Bank may consider any individual for inclusion on the list it submits to the Finance Board provided it has determined that the individual is eligible and well-qualified for an appointive directorship at the Bank.

(d) *Term of office.* The term of office of each appointive directorship is 3 years, except as adjusted pursuant to section 7(d) of the Act (12 U.S.C. 1427(d)) to achieve a staggered board, and shall commence on January 1st. In the case of a discretionary appointive directorship that is terminated pursuant to § 915.3(b)(5), the term of office of the directorship shall end after the close of business on December 31st of that year.

(e) *Appointive directorship vacancies existing on January 1, 2007.* For appointive directorships that are vacant on January 1, 2007, the board of directors of each Bank shall submit the information required by paragraph (a) of this section on or before March 31, 2007.

Dated: January 18, 2007.

By the Board of Directors of the Federal Housing Finance Board.

Ronald A. Rosenfeld,

Chairman.

Editorial Note: The following forms will not appear in the Code of Federal Regulations.

BILLING CODE 6725–01–P

FEDERAL HOME LOAN BANK APPOINTIVE DIRECTOR APPLICATION FORM

PERSONAL INFORMATION

Full name: _____

Address: _____

_____

_____

_____

Current employment:

_____ _____
Name of organization **Your title or position**

_____ _____ _____
Telephone number **Fax number** **E-mail address**

_____ _____ _____ _____
Street **City** **State** **Zip code**

_____ _____ _____ _____
Mailing address (if different) **City** **State** **Zip code**

Expires 11/30/2007
OMB No. 3069-0002

STATUTORY ELIGIBLITY REQUIREMENTS

An individual must satisfy certain statutory requirements in order to be eligible for appointment to the board of a Federal Home Loan Bank (Bank). Those requirements relate to citizenship, residency, and, for prospective community interest directors, experience in that field. The statute also prohibits an appointive director from having any financial interest in an institution that is a member of the Bank on whose board the director serves. The questions below address these statutory requirements.

1. ***Citizenship.*** Are you a citizen of the United States? **Yes ___ No ___**

2. ***Residency.*** In order to be an appointed director you must be a bona fide resident of a state that is within the geographic district of the Bank on whose board you wish to serve. You will satisfy this requirement if your principal residence is located within that geographic district, or if you own or lease a second residence within the district *and* are employed within the district. Please indicate which basis you are using to demonstrate bona fide residence.

Is your principal residence located within the Bank's geographic district? **Yes ___ No ___**

If you answered **No**, do you own or lease a second residence within the Bank's district *and* are you employed within the district? **Yes ___ No ___**

If so, please provide the address of the second home and the name and address of your employer.

_____

_____

_____

_____

3. ***Community Interest Directors.*** If you are seeking appointment as a community interest director, you also must be able to demonstrate that you are a director, officer, employee, or member of an organization that has represented consumer or community interests on banking services, credit needs, housing, or financial consumer protections for at least two years.

If you meet this requirement, provide the name and address of the organization, specify your association with the organization, and describe how the organization represents consumer or community interests.

Name of organization	**Your title or position**

Street	**City**	**State**	**Zip code**

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Describe how the organization represents consumer or community interests:

_____

_____

_____

_____

4. ***Conflicts of interest.*** The statute prohibits an appointive director from serving as an officer or director of any member of the Bank on whose board the director serves, and from owning any shares or other financial interest in any member of the Bank on whose board the directors serves. If you have any such financial interests, you will have to divest them before you can become a director of the Bank.

For purposes of this conflict of interest provision, the term "member" includes the member institution itself, as well as any subsidiary, holding company, and affiliate. Thus, you may not own bank holding company stock or bonds if a subsidiary of the holding company is a member of your Bank.

The term "financial interest" is broadly defined, and includes any "direct or indirect financial interest in any activity, transaction, property, or relationship that involves receiving or providing something of monetary value," and "any right, contractual or otherwise, to the payment of money." Finance Board regulations exclude from this prohibition financial interests that arise in the normal course of business with a member and are on terms generally available to the public, such as having money on deposit with, or obtaining a loan from, a financial institution that is a member of your Bank. Other types of business relationships with a Bank member – such as engaging in a joint venture or providing goods or services – may constitute a prohibited "financial interest" for these purposes.

A "direct" financial interest includes any interests that you hold in your own name, either as a sole or joint owner. An "indirect" financial interest includes other situations where you have a beneficial interest or the interest is held by a member of your immediate family. Thus, the financial interests of your spouse or minor child generally will be attributed to you, as will interests held through a trust or similar arrangement. Because indirect interests often present complex factual situations, you may wish to consult with Bank or Finance Board staff to determine whether particular interests must be disclosed and/or divested. Ownership of shares of a registered investment company (mutual fund) that owns debt or equity instruments issued by a member is not barred by this prohibition.

A. If you own any equity or debt securities issued by a member of the Bank on whose board you would serve, or have any other financial interest in a member of that Bank, please list those interests below.

_____

_____

_____

_____

_____

_____

_____

B. Do you agree to divest such interests before becoming an appointive director of that Bank? **Yes** ___ **No** ___

SELECTION CRITERIA

The Banks are multi-billion dollar financial institutions, the principal business of which is to borrow funds in the capital markets and then provide secured loans to their members. The size and nature of the Banks' business requires that each Bank have a board of directors that possesses expertise in areas such as capital markets transactions, asset/liability management, the use of derivatives, accounting and financial modeling, mortgage markets, affordable housing, community investment, and legal/regulatory compliance. In making appointments to the boards of the Banks, the Finance Board seeks persons who have broad business leadership experience, are financially literate, and have a commitment to serving on the board, as well as experience in one or more of the above areas.

1. ***Leadership Experience.*** Bank directors should have experience in senior management or policy-making in one or more fields of business, government, education, or community/civic affairs, and should have a record of achievement in their chosen profession or field of business. This experience should provide directors with the ability to understand the business of the Bank, to act independently, and to ask Bank management appropriate questions about how they are conducting Bank business.

A. If you have ever served as the CEO, CFO, COO, or in a similar capacity for a business enterprise, or as a dean or senior faculty member at a prominent college or university, or as a senior official for a federal or state government or prominent nonprofit organization, please provide the details for those positions, including the dates of service and the positions held.

B. If you have other experience dealing with issues such as developing or implementing business strategies, overseeing regulatory compliance, corporate governance, or board operations, or have previously served on the board of a large business enterprise, please describe those experiences.

C. If you have other significant business or professional achievements that demonstrate your ability to lead an organization please describe them.

2. ***Business Knowledge.*** Bank directors must be financially literate, meaning that they must be familiar with how financial statements and various financial ratios are used in managing a business enterprise, how basic accounting conventions apply to the Bank, and how internal controls are used to manage risk. They also must have some knowledge about one or more of the areas of the Bank's business, such as mortgage finance, capital markets transactions, accounting/modeling practices, affordable housing, community and economic development, and legal and regulatory compliance.

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A. Do you know how to read and understand a financial statement, and do you understand how financial ratios and other indices are used for evaluating the performance of a business enterprise? **Yes** ___ **No** ___

If you answered **Yes**, please describe the setting in which you gained that knowledge.

_____

_____

_____

_____

B. Do you have a working familiarity with basic finance and accounting practices, including internal controls and risk management? **Yes** ___ **No** ___

If you answered **Yes**, please describe the setting in which you acquired that knowledge.

_____

_____

_____

_____

C. Do you have experience with financial accounting and corporate finance, particularly with a publicly traded company? **Yes** ___ **No** ___

If you answered **Yes**, please describe that experience.

_____

_____

_____

_____

D. Do you have experience in capital market transactions? **Yes** ___ **No** ___

If you answered **Yes**, please describe that experience.

E. Do you have experience in an organization providing financing for residential mortgages, housing for low or moderate income individuals and families, or real estate development? **Yes** ___ **No** ___

If you answered **Yes**, please describe that experience.

F. Have you served in any position that required an understanding of the legal and other fiduciary obligations associated with being an independent director? **Yes** ___ **No** ___

If you answered **Yes**, please describe that experience.

G. The mission of the Banks is to support the housing finance activities of their members, which includes residential mortgage finance and community and economic development lending activities. Please describe any prior experience that is related to the mission of the Banks.

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3. ***Commitment to Service.*** In order to serve effectively on the board of a Bank, a director must be able to attend the meetings of the board of directors and subcommittees on which the director serves, and to devote the time necessary to prepare for those meetings.

A. Do you have any other business or professional commitments that would hinder your ability to prepare for and attend board of director and committee meetings? **Yes** ___ **No** ___ If so, please describe the constraints on your ability to serve.

_____

_____

_____

_____

_____

B. If you serve on any other corporate boards, please provide the name and location of the organization, your role (*e.g.*, chair and committee assignments), and the term of service.

Name of organization	**Your role**	**Term**
Name of organization	**Your role**	**Term**
Name of organization	**Your role**	**Term**

4. ***Personal Integrity.*** Character is an important consideration in evaluating any prospective Bank director. All directors must have high ethical standards and integrity in both their personal and professional dealings. Please indicate whether you ever have been convicted of a felony, been found to have violated any federal or state civil laws relating to the securities, banking, housing or real estate industries, or have had a professional license suspended or revoked. **Yes** ___ **No** ___ If you answered **Yes**, please explain.

_____

_____

_____

_____

_____

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5. ***Independence.*** It is essential that an appointive director be able act independently of management in overseeing the policy and operations of a Bank, and not have any relationships that may create actual or apparent conflicts of interest. Please disclose whether you have any familial or business relationships with any members of Bank management or the board of directors of the Bank, and any other relationship(s) that might lead a reasonable person to question your independence. **Yes** ___ **No** ___

If you answered **Yes**, please explain below.

_____

_____

_____

_____

6. ***Other Experience and Education.*** Please provide a copy of your resume that describes other business, professional, or educational achievements that are not described in the responses to the questions above.

BY EXECUTING AND SUBMITTING THIS APPLICATION FORM, YOU ARE CERTIFYING THAT THE INFORMATION YOU PROVIDED IS TRUE, CORRECT, AND COMPLETE TO THE BEST OF YOUR KNOWLEDGE AND THAT YOU AGREE TO SERVE AS A DIRECTOR IF APPOINTED.

_____ _____

Signature Date

Expires 11/30/2007
OMB No. 3069-0002

[FR Doc. 07–271 Filed 1–23–07; 8:45 am]
BILLING CODE 6725–01–C

SMALL BUSINESS ADMINISTRATION

13 CFR Part 125

RIN: 3245–AE66

Small Business Size Regulation; Government Contracting Programs; HUBZone Program; Correction

AGENCY: U.S. Small Business Administration.

ACTION: Correcting amendment.

SUMMARY: This document contains a correction to the final regulations which were published in the **Federal Register** of May 24, 2004. The regulations amended several definitions and made procedural and technical amendments to cover the U.S. Small Business Administration's (SBA) HUBZone, size and government contracting programs. This rule also inadvertently included two provisions that except for one word are substantively similar. SBA is removing one of these two provisions to eliminate the confusion.

DATES: Effective January 24, 2007.

FOR FURTHER INFORMATION CONTACT: Dean Koppel, Assistant Administrator, Office of Policy, Planning and Liaison, (202) 205–7322, or *dean.koppel@sba.gov*.

SUPPLEMENTARY INFORMATION: On May 5, 2004, the SBA published an interim final rule that created the Service Disabled Veteran Owned (SDVO) Small Business program, 69 FR 25262. In that rule, the SBA added paragraph (b) to § 125.6, to address subcontracting limitations for SDVO small businesses. As a result of this new paragraph (b), the SBA redesignated then-current paragraphs (b), (c), (d), (e), (f), and (g) as paragraphs (c), (d), (e), (f), (g), and (h), respectively.

On May 21, 2004, the SBA published a final rule amending its size regulations, as well as the regulations addressing SBA's government contracting programs (69 FR 29192). In its final rule, the SBA amended § 125.6(g) to state that:

> Where an offeror is exempt from affiliation under § 121.103(h)(3) of this chapter and qualifies as a small business concern, the performance of work requirements set forth in this section apply to the cooperative effort of the joint venture, not its individual members.

69 FR 29208. The rule removed the term ''team'' from § 125.6(g). However, as a result of the SDVO interim final rule, former paragraph (g)—addressing the use of cooperative efforts to meet the subcontracting limitations—became paragraph (h). Thus, the final rule published on May 21, 2004 should have amended paragraph (h) and not paragraph (g). Consequently, as of May 21, 2004, both paragraphs (g) and (h) addressed using cooperative efforts to meet the subcontracting limitations requirements.

A few days later, on May 24, 2004, the SBA published amendments to its size and HUBZone regulations. 69 FR 29411. In the final rule, the SBA redesignated paragraphs (c), (d), (e), (f), (g), and (h) of § 125.6 as paragraphs (e), (f), (g), (h), (i), and (j) (because the SBA had added two new paragraphs—(c) and (d)—to address changes to the HUBZone program's subcontracting limitations on construction contracts). *Id.* at 29420. Paragraphs (g) and (h) became paragraphs (i) and (j). Therefore, except for the term ''team,'' both paragraphs are now essentially identical. The regulations now state:

> (i) Where an offeror is exempt from affiliation under § 121.103(h)(3) of this chapter and qualifies as a small business concern, the performance of work requirements set forth in this section apply to the cooperative effort of the joint venture, not its individual members.
>
> (j) Where an offeror is exempt from affiliation under § 121.103(f)(3) of this chapter and qualifies as a small business concern, the performance of work requirements set forth in this section apply to the cooperative effort of the team or joint venture, not its individual members.

13 CFR 125.6. The last regulation that the SBA had promulgated concerning cooperative efforts and the subcontracting limitations requirement and the regulation that correctly reflects the amendment SBA intended is set forth at § 125.6(i). Therefore, to correct this error and to eliminate the confusion caused by the two similar, but apparently contradictory provisions, the SBA is removing current paragraph (j).

List of Subjects in 13 CFR Part 125

Administrative practice and procedure, Government procurement, Small businesses.

■ Accordingly, 13 CFR part 125 is corrected by making the following correcting amendment:

PART 125—GOVERNMENT CONTRACTING PROGRAMS

■ 1. The authority citation for part 125 continues to read as follows:

Authority: 15 U.S.C. 632(p), (q), 634(b)(6), 637, 644, and 657(f).

■ 2. Amend § 125.6 by removing paragraph (j).

Steven C. Preston,

Administrator.

[FR Doc. E7–966 Filed 1–23–07; 8:45 am]

BILLING CODE 8025–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Docket No. CE264, Special Condition 23–204–SC]

Special Conditions; Piper Aircraft, Inc., Piper PA–32R–301T, Saratoga II TC, and PA–32–301FT, Piper 6X; Protection of Electronic Flight Instrument Systems (EFIS) for High Intensity Radiated Fields (HIRF)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued to Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, Florida 32960, for a type design change for the Piper PA–32R–301T, Saratoga II TC, and PA–32–301FT, Piper 6X. These airplanes will have novel and unusual design features when compared to the state of technology envisaged in the applicable airworthiness standards. These novel and unusual design features include the installation of electronic flight instrument system (EFIS) displays, Model G–1000, manufactured by Garmin AT, Inc., for which the applicable regulations do not contain adequate or appropriate airworthiness standards for the protection of these systems from the effects of high intensity radiated fields (HIRF). These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to the airworthiness standards applicable to these airplanes.

DATES: The effective date of these special conditions is January 12, 2007. Comments must be received on or before February 23, 2007.

ADDRESSES: *Mail comments in duplicate to:* Federal Aviation Administration, Regional Counsel, ACE–7, Attention: Rules Docket Clerk, Docket No. CE264, Room 506, 901 Locust, Kansas City, Missouri 64106. *Mark all comments:* Docket No. CE264. You may inspect comments in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4 p.m.

FOR FURTHER INFORMATION CONTACT: James Brady, Aerospace Engineer, Standards Office (ACE–110), Small Airplane Directorate, Aircraft Certification Service, Federal Aviation Administration, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone (816) 329–4123.

SUPPLEMENTARY INFORMATION: The FAA has determined that notice and opportunity for prior public comment hereon are impracticable because these procedures would significantly delay issuance of the approval design and thus delivery of the affected aircraft. In addition, the substance of these special conditions has been subject to the public comment process in several prior instances with no substantive comments received. The FAA, therefore, finds that good cause exists for making these special conditions effective upon issuance.

Comments Invited

We invite interested persons to take part in this rulemaking by sending written data, views, or comments. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data. We ask that you send us two copies of the written comments. Communications should identify the regulatory docket or notice number and be submitted in duplicate to the address specified above.

We will file in the docket all comments we receive, as well as a report summarizing each substantive public contact with FAA personnel about these special conditions. You can inspect the docket before and after the closing date. If you wish to review the docket in person, go to the address in the **ADDRESSES** section of this preamble between 7:30 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

We will consider all comments we receive by the closing date for comments. We will consider comments filed late if it is possible to do so without incurring expense or delay. We may change these special conditions based on the comments we receive.

If you want us to let you know we received your comments on these special conditions, send us a pre-addressed, stamped postcard on which the docket number appears. We will stamp the date on the postcard and mail it back to you.

Background

On June 15, 2006, Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, Florida 32960, made an application to the FAA for a supplemental type certificate for a type design change for the Piper PA–32R–301T, Saratoga II TC, and PA–32–301FT, Piper 6X. The PA–32 is currently approved under TC No. A3SO. The proposed modification incorporates a novel or unusual design feature, such as digital avionics consisting of an EFIS that is vulnerable to HIRF external to the airplane.

Type Certification Basis

Under the provisions of 14 CFR 21, 21.101, Piper Aircraft, Inc. must show that the Piper PA–32 aircraft, as changed, meets the original certification basis for the airplane, as listed on Type Data Sheet A3SO; the additional certification requirements added for the G1000 system, exemptions, if any; and the special conditions adopted by this rulemaking action.

Discussion

If the Administrator finds that the applicable airworthiness standards do not contain adequate or appropriate safety standards because of novel or unusual design features of an airplane, special conditions are prescribed under the provisions of § 21.16.

Special conditions, as appropriate, as defined in § 11.19, are issued in accordance with § 11.38 after public notice and become part of the type certification basis in accordance with § 21.101.

Special conditions are initially applicable to the model for which they are issued. Should the applicant apply for a supplemental type certificate to modify any other model already included on the same type certificate to incorporate the same novel or unusual design feature, the special conditions would also apply to the other model under the provisions of § 21.101.

Novel or Unusual Design Features

Piper Aircraft, Inc. plans to incorporate certain novel and unusual design features into the Piper PA–32R–301T, Saratoga II TC, and the PA–32–301FT, Piper 6X, airplanes for which the airworthiness standards do not contain adequate or appropriate safety standards for protection from the effects of HIRF. These features include EFIS, which are susceptible to the HIRF environment, that were not envisaged by the existing regulations for this type of airplane.

Protection of Systems from High Intensity Radiated Fields (HIRF): Recent advances in technology have given rise to the application in aircraft designs of advanced electrical and electronic systems that perform functions required for continued safe flight and landing. Due to the use of sensitive solid state advanced components in analog and digital electronics circuits, these advanced systems are readily responsive to the transient effects of induced electrical current and voltage caused by the HIRF. The HIRF can degrade electronic systems performance by damaging components or upsetting system functions.

Furthermore, the HIRF environment has undergone a transformation that was not foreseen when the current requirements were developed. Higher energy levels are radiated from transmitters that are used for radar, radio, and television. Also, the number of transmitters has increased significantly. There is uncertainty concerning the effectiveness of airframe shielding for HIRF. Furthermore, coupling to cockpit-installed equipment through the cockpit window apertures is undefined.

The combined effect of the technological advances in airplane design and the changing environment has resulted in an increased level of vulnerability of electrical and electronic systems required for the continued safe flight and landing of the airplane. Effective measures against the effects of exposure to HIRF must be provided by the design and installation of these systems. The accepted maximum energy levels in which civilian airplane system installations must be capable of operating safely are based on surveys and analysis of existing radio frequency emitters. These special conditions require that the airplane be evaluated under these energy levels for the protection of the electronic system and its associated wiring harness. These external threat levels, which are lower than previous required values, are believed to represent the worst case to which an airplane would be exposed in the operating environment.

These special conditions require qualification of systems that perform critical functions, as installed in aircraft, to the defined HIRF environment in paragraph 1 or, as an option to a fixed value using laboratory tests, in paragraph 2, as follows:

(1) The applicant may demonstrate that the operation and operational capability of the installed electrical and electronic systems that perform critical functions are not adversely affected when the aircraft is exposed to the HIRF environment defined below:

Frequency	Field strength (volts per meter)	
	Peak	Average
10 kHz–100 kHz	50	50
100 kHz–500 kHz	50	50
500 kHz–2 MHz	50	50
2 MHz–30 MHz	100	100
30 MHz–70 MHz	50	50
70 MHz–100 MHz	50	50
100 MHz–200 MHz	100	100
200 MHz–400 MHz	100	100
400 MHz–700 MHz	700	50
700 MHz–1 GHz	700	100
1 GHz–2 GHz	2000	200
2 GHz–4 GHz	3000	200
4 GHz–6 GHz	3000	200
6 GHz–8 GHz	1000	200
8 GHz–12 GHz	3000	300
12 GHz–18 GHz	2000	200
18 GHz–40 GHz	600	200

The field strengths are expressed in terms of peak root-mean-square (rms) values.

or,

(2) The applicant may demonstrate by a system test and analysis that the electrical and electronic systems that perform critical functions can withstand a minimum threat of 100 volts per meter, electrical field strength, from 10 kHz to 18 GHz. When using this test to show compliance with the HIRF requirements, no credit is given for signal attenuation due to installation.

A preliminary hazard analysis must be performed by the applicant, for approval by the FAA, to identify either electrical or electronic systems that perform critical functions. The term ''critical'' means those functions whose failure would contribute to, or cause, a failure condition that would prevent the continued safe flight and landing of the airplane. The systems identified by the hazard analysis that perform critical functions are candidates for the application of HIRF requirements. A system may perform both critical and non-critical functions. Primary electronic flight display systems, and their associated components, perform critical functions such as attitude, altitude, and airspeed indication. The HIRF requirements apply only to critical functions.

Compliance with HIRF requirements may be demonstrated by tests, analysis, models, similarity with existing systems, or any combination of these. Service experience alone is not acceptable since normal flight operations may not include an exposure to the HIRF environment. Reliance on a system with similar design features for redundancy as a means of protection against the effects of external HIRF is generally insufficient since all elements of a redundant system are likely to be exposed to the fields concurrently.

Applicability

As discussed above, these special conditions are applicable to the Piper PA–32R–301T and PA–32–301FT. Should Piper Aircraft, Inc. apply at a later date for a supplemental type certificate for a type design change to modify any other model on the same type certificate to incorporate the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of § 21.101.

Conclusion

This action affects only certain novel or unusual design features on one model of airplane. It is not a rule of general applicability and affects only the applicant who applied to the FAA for approval of these features on the airplane.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance contained herein. For this reason, and because a delay would significantly affect the certification of the airplane, which is imminent, the FAA has determined that prior public notice and comment are unnecessary and impracticable, and good cause exists for adopting these special conditions upon issuance. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

List of Subjects in 14 CFR Part 23

Aircraft, Aviation safety, Signs and symbols.

Citation

■ The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113 and 44701; 14 CFR 21.16 and 21.101; and 14 CFR 11.38 and 11.19.

The Special Conditions

■ Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for the Piper PA–32R–301T, Saratoga II TC, and PA–32–301FT, Piper 6X, airplane modified by Piper Aircraft, Inc. to add a G1000 EFIS system.

1. *Protection of Electrical and Electronic Systems from High Intensity Radiated Fields (HIRF).* Each system that performs critical functions must be designed and installed to ensure that the operations, and operational capabilities of these systems to perform critical functions, are not adversely affected when the airplane is exposed to high intensity radiated electromagnetic fields external to the airplane.

2. For the purpose of these special conditions, the following definition applies: *Critical Functions:* Functions whose failure would contribute to, or cause, a failure condition that would prevent the continued safe flight and landing of the airplane.

Issued in Kansas City, Missouri, on January 12, 2007.

Kim Smith,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–1018 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 33

[Docket No. NE127; Special Conditions No. 33–006–SC]

Special Conditions: General Electric Company GEnx Model Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final special conditions.

SUMMARY: These special conditions are issued for the General Electric Company (GE) GEnx turbofan engine models GEnx–1B54, GEnx–1B58, GEnx–1B64, GEnx–1B67, GEnx–1B70, GEnx–1B70/72, GEnx–1B70/75, GEnx–1B72, and GEnx–1B75. The fan blades of these engines will have novel or unusual design features when compared to the state of technology envisioned in the part 33 airworthiness standards. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for these design features. These special conditions contain the added safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: *Effective Date:* The effective date of these special conditions is January 12, 2007.

FOR FURTHER INFORMATION CONTACT: Robert McCabe, ANE–111, Rulemaking and Policy Branch, Engine and Propeller Directorate Standards Staff, Aircraft Certification Service, 12 New England

Executive Park, Burlington, Massachusetts 01803–5299; telephone (781) 238–7138; facsimile (781) 238–7199; e-mail *robert.mccabe@faa.gov.*

SUPPLEMENTARY INFORMATION:

Background

On December 13, 2004, the General Electric Company (GE) applied to the FAA for a new type certificate for the GEnx series engine models. On May 24, 2005, GE submitted a revised application for a type certificate that added models and changed the model designation nomenclature. The turbofan engine models to be certified are GEnx–1B54, GEnx–1B58, GEnx–1B64, GEnx–1B67, GEnx–1B70, GEnx–1B70/72, GEnx–1B70/75, GEnx–1B72, and GEnx–1B75. For these GEnx engine models, GE plans to use carbon graphite composite fan blades incorporating metal leading and trailing edges that use geometry, composite structural materials, and manufacturing methods very similar to those used for previously certified GE90–series engine fan blade designs.

In lieu of direct compliance to 14 CFR section (§) 33.94(a)(1) for the GEnx fan blades, the FAA proposed that GE comply with new special conditions that retain the basic requirements of the original SC–33–ANE–08 created for the GE90–76B, –77B, –85B , –90B, –94B model certification program, and then successfully applied to the GE90–110B1, –113B, and –115B model certification program.

These GE90 series engine model fan blades are manufactured using carbon graphite composite material that also incorporates metal leading and trailing edges. These unusual and novel design features result in the fan blades having significant differences in material property characteristics when compared to conventionally designed fan blades using non-composite metallic materials. GE submitted data and analysis during the GE90–76B, –77B, –85B, –90B, –94B model certification program showing the likelihood that a composite fan blade will fail below the inner annulus flow path line is highly improbable. GE, therefore, questioned the appropriateness of the requirement contained in § 33.94(a)(1) to show blade containment after a failure of the blade at the outermost retention feature.

The FAA determined that the requirements of § 33.94(a)(1) are based on metallic blade characteristics and service history and were not appropriate for the unusual design features of the composite fan blade design planned for the GE90–76B, –77B, –85B, –90B, –94B model turbofan engines. The FAA determined that a more realistic blade retention test would be achieved with a fan blade failure at the inner annulus flow path line (the complete airfoil only) instead of the outermost blade retention feature as currently required by § 33.94(a)(1).

The FAA, therefore, issued special conditions SC–33–ANE–08 on February 1, 1995 for the GE90–76B, –77B, –85B, –90B, –94B engine models. These special conditions defined additional safety standards for the carbon graphite composite fan blades that were appropriate for the unusual design features of those fan blades, and that were determined to be necessary to establish a level of safety equivalent to that established by the intent of the airworthiness standards of § 33.94(a)(1). The FAA later determined that these special conditions continued to be appropriate for the amended type certificate applied to the GE90–110B1, –113B, and –115B engine models. The FAA has also concluded that these same special conditions, with some additional enhancements, continue to be appropriate for the GEnx model engines.

Type Certification Basis

Under the provisions of 14 CFR 21.17, GE must show that the GEnx series turbofan engine models meet the requirements of applicable provisions of part 33 in effect on the date of the application for the type certificate. The FAA has determined that the applicable airworthiness regulations in part 33 do not contain adequate or appropriate safety standards for the GEnx series turbofan engine models because of its novel and unusual fan blade design features. Therefore, these special conditions are prescribed under the provisions of 14 CFR 11.19 and 21.16, and will become part of the type certification basis for GEnx engine in accordance with § 21.17(a)(2).

As discussed above, these special conditions apply only to the GEnx series turbofan engine models GEnx–1B54, GEnx–1B58, GEnx–1B64, GEnx–1B67, GEnx–1B70, GEnx–1B70/72, GEnx–1B70/75, GEnx–1B72, and GEnx–1B75. If the type certificate for those models is amended later to include any other models that incorporate the same novel or unusual fan blade design features, these special conditions would apply to the other models under the provisions of § 21.101(a)(1).

Discussion of Novel or Unusual Design Features

The GEnx–1B54, –B58, –1B64, –1B67, –70B, –1B70/72, –1B70/75, –72B and –75B engine models will incorporate fan blades to be manufactured using carbon graphite composite material that incorporates metal leading and trailing edges. The FAA has conducted that these carbon graphite composite fan blades are novel and unusual compared to the metallic fan blade technology envisioned in the part 33 standards and thus warrant these special conditions.

The FAA has also determined that the composite fan blade design and construction presents factors other than the expected location of a blade failure that must be considered. Tests and analyses must account for the effects of in-service deterioration of, manufacturing and materials variations in, and environmental effects on, the composite material. Tests and analyses must also show that a lightning strike on a composite fan blade will not result in a hazardous condition to the aircraft and that the engine will continue to meet the requirements of § 33.75.

Therefore, due to the close similarity of the GEnx models series fan blade design to the previously certified GE90 model series fan blade design, the FAA is issuing similar special conditions as part of the type certification basis for the GEnx engine models in lieu of direct compliance to § 33.94(a)(1). These special conditions define the additional requirements that the Administrator considers necessary to establish a level of safety equivalent to that which would be established by direct compliance to the airworthiness standards of § 33.94(a)(1).

Discussion of Comments

Notice of Proposed Special Conditions, Docket No. NE127; Notice No. 33–06–01–SC, was published in the **Federal Register** on November 17, 2006 (71 FR 66888). We received no comments on the proposed special conditions. After a careful review of the applicable data, the FAA has determined that air safety and the public interest require the adoption of these special conditions as proposed.

Conclusion

This action affects only the carbon fiber composite fan blade design features on the GEnx series turbofan engine models GEnx–1B54, GEnx–1B58, GEnx–1B64, GEnx–1B67, GEnx–1B70, GEnx–1B70/72, GEnx–1B70/75, GEnx–1B72, and GEnx–1B75. It is not a rule of general applicability, and it affects only the General Electric Company which has applied to the FAA for certification of these fan blade design features.

List of Subjects in 14 CFR Part 33

Air transportation, Aircraft, Aviation safety, Safety.

The authority citation for these special conditions continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421, 1423; 49 U.S.C. 106(g); and 14 CFR 11.49 and 21.16.

The Special Conditions

Accordingly, the Federal Aviation Administration (FAA) issues the following special conditions as part of the type certification basis for the GEnx series turbofan engines.

1. In lieu of the fan blade containment test with the fan blade failing at the outermost retention groove as specified in § 33.94(a)(1), complete the following requirements:

(a) Conduct an engine fan blade containment test with the fan blade failing at the inner annulus flow path line.

(b) Substantiate by test and analysis, or other methods acceptable to the Administrator, that a minimum material properties fan disk and fan blade retention system can withstand without failure a centrifugal load equal to two times the maximum load which the retention system could experience within approved engine operating limitations. The fan blade retention system includes the portion of the fan blade from the inner annulus flow path line inward to the blade dovetail, the blade retention components, and the fan disk and fan blade attachment features.

(c) Using a procedure approved by the Administrator, establish an operating limitation that specifies the maximum allowable number of start-stop stress cycles for the fan blade retention system. The life evaluation shall include the combined effects of high cycle and low cycle fatigue. If the operating limitation is less than 100,000 cycles, that limitation must be specified in Chapter 5 of the Engine Manual Airworthiness Limitation Section.

(d) Substantiate that, during the service life of the engine, the total probability of the occurrence of a hazardous engine effect defined in § 33.75 due to an individual blade retention system failure resulting from all possible causes will be extremely improbable, with a cumulative calculated probability of failure of less than 10^{-9} per engine flight hour.

(e) Substantiate by test or analysis that not only will the engine continue to meet the requirements of § 33.75 following a lightning strike on the composite fan blade structure, but that the lightning strike will also not cause damage to the fan blades that would prevent continued safe operation of the affected engine.

(f) Account for the effects of in-service deterioration, manufacturing variations, minimum material properties, and environmental effects during the tests and analyses required by paragraphs (a), (b), (c), (d), and (e) of these special conditions.

(g) Propose fleet leader monitoring and field sampling programs for the GEnx engine fan blades that will monitor the effects of usage on fan blade and retention system integrity. The sampling program should use the experience gained on current GE90 engine model monitoring programs, and must be approved by the FAA prior to certification of the GEnx engine models.

Issued in Burlington, Massachusetts, on January 12, 2007.

Francis A. Favara,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 07–301 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001–NM–183–AD; Amendment 39–14889; AD 2007–02–02]

RIN 2120–AA64

Airworthiness Directives; McDonnell Douglas Model DC–8–55, DC–8F–54, and DC–8F–55 Airplanes; and Model DC–8–60, DC–8–70, DC–8–60F, and DC–8–70F Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain McDonnell Douglas Model DC–8 airplanes. This AD requires a one-time inspection for previous repairs of the aft fuselage skin panel at the longeron 28 skin splice; repetitive inspections for cracks of the same area; and related investigative and corrective actions. This AD also provides optional actions for extending the repetitive inspection intervals. The actions specified by this AD are intended to detect and correct cracks in the aft fuselage skin at the longeron 28 skin splice, which could lead to loss of structural integrity of the aft fuselage, resulting in rapid decompression of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective February 28, 2007.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of February 28, 2007.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1–L5A (D800–0024). This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California.

FOR FURTHER INFORMATION CONTACT: Jon Mowery, Aerospace Engineer, Airframe Branch, ANM–120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712–4137; telephone (562) 627–5322; fax (562) 627–5210.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model DC–8–55, DC–8F–54, and DC–8F–55 airplanes; and Model DC–8–60, DC–8–70, DC–8–60F, and DC–8–70F series airplanes; was published as a supplemental notice of proposed rulemaking (NPRM) in the **Federal Register** on July 25, 2006 (71 FR 42062). That action proposed to require a one-time inspection for previous repairs of the aft fuselage skin panel at the longeron 28 skin splice; repetitive inspections for cracks of the same area; related investigative and corrective actions; and reporting inspection findings to the manufacturer. That action also proposed to provide optional actions for extending the repetitive inspection intervals.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Request To Lengthen Inspection Threshold for Certain Airplanes

Air Transport Association (ATA), on behalf of one of its members, UPS, does not agree with the inspection threshold of 12 months for airplanes that have accumulated 24,000 total flight cycles or more as of the effective date of the AD, as specified in paragraph (a)(2) of the supplemental NPRM. The commenters note that all U.S.-registered McDonnell

Douglas Model DC–8 airplanes are now freighters, which typically have low cycle utilization. UPS states that, out of a fleet of 47 airplanes, it has found only two instances of cracking in the subject area. The commenter believes that, based on these facts, the 24-month threshold indicated in paragraph (a)(1) of the supplemental NPRM should apply to all airplanes. The commenter believes that changing the threshold would have no adverse effect on airplane safety.

We disagree with the request to lengthen the inspection threshold. In developing an appropriate compliance time for this action, we considered the low utilization rate as one factor. Other factors we considered were a crack finding on an airplane that had accumulated 27,072 total landings, normal scatter associated with fatigue initiation, input from the manufacturer, the difficulty of the inspection, and the urgency associated with the subject unsafe condition. However, according to the provisions of paragraph (f) of the final rule, we may approve requests to adjust the compliance time if the request includes data that prove that the new compliance time would provide an acceptable level of safety. We have not changed the AD in this regard.

Request To Change Incorporation of Certain Information

The Modification and Replacement Parts Association (MARPA) states that, typically, airworthiness directives are based on service information originating with the type certificate holder or its suppliers. MARPA adds that manufacturer service documents are privately authored instruments generally having copyright protection against duplication and distribution. MARPA notes that when a service document is incorporated by reference into a public document, such as an airworthiness directive, it loses its private, protected status and becomes a public document. MARPA adds that if a service document is used as a mandatory element of compliance, it should not simply be referenced, but should be incorporated into the regulatory document; by definition, public laws must be public, which means they cannot rely upon private writings. MARPA is concerned that the failure to incorporate essential service information could result in a court decision invalidating the AD.

MARPA adds that incorporated by reference service documents should be made available to the public by publication in the Docket Management System (DMS), keyed to the action that incorporates them. MARPA notes that the stated purpose of the incorporation by reference method is brevity, to keep from expanding the **Federal Register** needlessly by publishing documents already in the hands of the affected individuals; traditionally, ''affected individuals'' means aircraft owners and operators, who are generally provided service information by the manufacturer. MARPA adds that a new class of affected individuals has emerged, since the majority of aircraft maintenance is now performed by specialty shops instead of aircraft owners and operators. MARPA notes that this new class includes maintenance and repair organizations, component servicing and repair shops, parts purveyors and distributors, and organizations manufacturing or servicing alternatively certified parts under section 21.303 (''Parts Manufacturer Approval'') of the Federal Aviation Regulations (14 CFR part 21). MARPA adds that the concept of brevity is now nearly archaic as documents exist more frequently in electronic format than on paper. Therefore, MARPA asks that the service documents deemed essential to the accomplishment of the NPRM be incorporated by reference into the regulatory instrument, and published in DMS.

We do not agree that documents should be incorporated by reference during the NPRM phase of rulemaking. The Office of the Federal Register (OFR) requires that documents that are necessary to accomplish the requirements of the AD be incorporated by reference during the final rule phase of rulemaking. This final rule incorporates by reference the document necessary for the accomplishment of the requirements mandated by this AD. Further, we point out that while documents that are incorporated by reference do become public information, they do not lose their copyright protection. For that reason, we advise the public to contact the manufacturer to obtain copies of the referenced service information.

Additionally, we do not publish service documents in DMS. We are currently reviewing our practice of publishing proprietary service information. Once we have thoroughly examined all aspects of this issue, and have made a final determination, we will consider whether our current practice needs to be revised. However, we consider that to delay this AD action for that reason would be inappropriate, since we have determined that an unsafe condition exists and that the requirements in this AD must be accomplished to ensure continued safety. Therefore, we have not changed the AD in this regard.

Explanation of Change to Cost Impact

We have changed the cost estimate to include estimated costs for all required actions, including the repetitive inspections and the repair.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the change described previously. We have determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 508 airplanes of the affected design in the worldwide fleet. The FAA estimates that 244 airplanes of U.S. registry are affected by this AD. The average labor rate is $80 per work hour.

ESTIMATED COSTS

Action	Work hours	Cost per airplane	Fleet cost
Initial Inspection for doubler installation	2 to 4	$160 to $320	$39,040 to $78,080.
Repetitive Inspections (per inspection cycle)	2 to 8	$160 to $640	$39,040 to $156,160.
Repair	164 to 184	$13,120 to $14,720	$3,201,280 to $3,591,680.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include

incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

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 Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

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

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

■ 2. Section 39.13 is amended by adding the following new airworthiness directive:

2007–02–02 McDonnell Douglas: Amendment 39–14889. Docket 2001–NM–183–AD.

Applicability

McDonnell Douglas Model DC–8–55, DC–8F–54, DC–8F–55, DC–8–61, DC–8–62, DC–8–63, DC–8–61F, DC–8–62F, DC–8–63F, DC–8–71, DC–8–72, DC–8–73, DC–8–71F, DC–8–72F, and DC–8–73F airplanes; certificated in any category; as identified in Boeing Alert Service Bulletin DC8–53A080, dated June 22, 2004.

Compliance

Required as indicated, unless accomplished previously.

To detect and correct cracks in the aft fuselage skin at the longeron 28 skin splice, which could lead to loss of structural integrity of the aft fuselage, resulting in rapid decompression of the airplane, accomplish the following:

One-Time Inspection for Previous Repairs

(a) *For all airplanes:* At the applicable time in paragraph (a)(1) or (a)(2) of this AD, do a general visual inspection to determine if there are previous repairs of the aft fuselage skin panel at the longeron 28 skin splice; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC8–53A080, dated June 22, 2004. Then do the applicable actions specified in paragraphs (b) and (c) of this AD.

(1) *For airplanes that have accumulated fewer than 24,000 total flight cycles as of the effective date of this AD:* Within 24 months after the effective date of this AD or prior to accumulating 24,000 total flight cycles, whichever occurs later.

(2) *For airplanes that have accumulated 24,000 total flight cycles or more as of the effective date of this AD:* Within 12 months after the effective date of this AD.

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.''

Repetitive Inspections for Areas That Do Not Have a Previous Repair

(b) *For areas that do not have a previous repair:* Before further flight after the initial inspection in paragraph (a) of this AD, do general visual and high-frequency eddy current (HFEC) inspections for discrepancies of the unrepaired areas at longeron 28 between the bolted connection of the tail section to forward of the flat aft pressure bulkhead, on both the left and right sides, and do all applicable related investigative and corrective actions before further flight. Do all actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC8–53A080, dated June 22, 2004. Repeat the inspections thereafter at intervals not to exceed 2,000 flight cycles until an optional action in paragraph (d) of this AD is accomplished.

Repetitive Inspections and Repair for Areas That Have a Previous Repair

(c) For areas that have a previous repair: Within 24 months after accomplishing the initial inspection in paragraph (a) of this AD, remove the previous repair(s), and install a local repair, in accordance with Boeing DC–8 Service Rework Drawing SR08530032, dated January 13, 2004, including Boeing Parts List PL SR08530032, dated January 7, 2004, Boeing Advance Engineering Order, Advanced Drawing Change A, dated April 1, 2004, and Boeing Engineering Order, dated January 13, 2004. Do the inspections in paragraph (d) of this AD thereafter at the applicable interval specified in paragraph (d)(1) or (d)(2) of this AD.

Optional Actions, Extended Repetitive Inspection Intervals

(d) Installing a full-length preventive modification, doing a full-length repair, or doing a local repair, in accordance with Boeing DC–8 Service Rework Drawing SR08530032, dated January 13, 2004, including Boeing Parts List PL SR08530032, dated January 7, 2004, Boeing Advance Engineering Order, Advanced Drawing Change A, dated April 1, 2004, and Boeing Engineering Order, dated January 13, 2004, ends the repetitive inspection intervals in paragraph (b) of this AD; repeat the inspection thereafter at the applicable interval in paragraph (d)(1) or (d)(2) of this AD.

(1) For airplanes that have internal finger doublers: Within 30,000 flight cycles after doing the optional action, do general visual and HFEC inspections for discrepancies of the unrepaired areas at longeron 28 between the bolted connection of the tail section to forward of the flat aft pressure bulkhead, on both the left and right sides, and do all applicable related investigative and corrective actions before further flight. Do all actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC8–53A080, dated June 22, 2004. Repeat the inspections thereafter at intervals not to exceed 5,000 flight cycles.

(2) *For airplanes that do not have internal finger doublers:* Use the applicable intervals and inspections in paragraph (d)(2)(i) or (d)(2)(ii) of this AD.

(i) For repairs (full-length preventive modification, doing a full-length repair, or

doing a local repair) that are 12 inches or less along the longeron: Within 15,000 flight cycles after doing the optional action, use only the external general visual inspection method for discrepancies of the unrepaired areas at longeron 28 between the bolted connection of the tail section to forward of the flat aft pressure bulkhead, on both the left and right sides, and do all applicable related investigative and corrective actions before further flight. Do all actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC8–53A080, dated June 22, 2004. Repeat the external general visual inspection thereafter at intervals not to exceed 5,000 flight cycles.

(ii) For repairs (full-length preventive modification, doing a full-length repair, or doing a local repair) that are more than 12 inches in length along the longeron: Within 15,000 flight cycles after doing the optional action, use only the low-frequency eddy current (LFEC) inspection method for cracks of the unrepaired areas at longeron 28 between the bolted connection of the tail section to forward of the flat aft pressure bulkhead, on both the left and right sides, and do all applicable related investigative and corrective actions before further flight. Do all actions in accordance with Boeing DC–8 Service Rework Drawing SR08530032, dated January 13, 2004, including Boeing Parts List PL SR08530032, dated January 7, 2004, Boeing Advance Engineering Order, Advanced Drawing Change A, dated April 1, 2004, and Boeing Engineering Order, dated January 13, 2004. Repeat the LFEC inspection thereafter at intervals not to exceed 10,000 flight cycles, using only LFEC inspection outward along all four edges of the doubler.

Reporting of Results

(e) Submit a report of positive findings of the inspections required by paragraphs (b) and (d) of this AD to Boeing Commercial Airplanes, Manager, Structure/Payloads, Technical and Fleet Support, Service Engineering/Commercial Aviation Services, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, at the applicable time specified in paragraph (e)(1) or (e)(2) of this AD. The report must include the inspection results, a description of any discrepancies found, the airplane fuselage number, and the total number of landings and flight hours on the airplane. Information collection requirements contained in this AD have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120–0056.

(1) For airplanes on which the inspection is accomplished after the effective date of this AD: Submit the report within 30 days after performing the inspection.

(2) For airplanes on which the inspection was accomplished prior to the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

Alternative Methods of Compliance (AMOCs)

(f)(1) In accordance with 14 CFR 39.19, the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, is authorized to approve AMOCs for this AD.

(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) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Commercial Airplanes Delegation Option Authorization Organization who has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.

Incorporation by Reference

(g) Unless otherwise specified in this AD, the actions must be done in accordance with Boeing Alert Service Bulletin DC8–53A080, dated June 22, 2004; and Boeing DC–8 Service Rework Drawing SR08530032, dated January 13, 2004, including Boeing Parts List PL SR08530032, dated January 7, 2004, Boeing Advance Engineering Order, Advanced Drawing Change A, dated April 1, 2004, and Boeing Engineering Order, dated January 13, 2004; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get copies of this service information, contact Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1–L5A (D800–0024). To inspect copies of this service information, go to the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; to the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or to the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741–6030, or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

Effective Date

(h) This amendment becomes effective on February 28, 2007.

Issued in Renton, Washington, on January 5, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–710 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2006–26694; Directorate Identifier 2006–CE–91–AD; Amendment 39–14899; AD 2007–02–12]

RIN 2120–AA64

Airworthiness Directives; Reims Aviation S.A. F406 Airplanes

AGENCY: Federal Aviation Administration (FAA), 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) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

* * * several reports regarding discovery of cracks about the rudder pulley bracket part number 6015511–1. This pulley bracket is installed with the ''Camera Hole'' option.

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

DATES: This AD becomes effective February 13, 2007.

The Director of the Federal Register approved the incorporation by reference of REIMS AVIATION INDUSTRIES Service Bulletin No. F406–58, Rev. 1, dated October 27, 2006, listed in this AD as of February 13, 2007.

We must receive comments on this AD by February 23, 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 Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri, 64106; *telephone:* (816) 329–4144; *fax:* (816) 329–4090.

SUPPLEMENTARY INFORMATION:

Streamlined Issuance of AD

The FAA is implementing a new process for streamlining the issuance of ADs related to MCAI. The 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 Direction Genorale de L'Aviation Civile (DGAC), which is the aviation authority for France, has issued AD No. F–2005–080, Issue date: May 25, 2005, (referred to after this as ''the MCAI''), to correct an unsafe condition for the specified products.

The MCAI states:

* * * several reports regarding discovery of cracks about the rudder pulley bracket part number 6015511–1. This pulley bracket is installed with the ''Camera Hole'' option. This condition, if left uncorrected, could result in the loss of rudder control on the airplane.

The MCAI requires:

Prior to the next flight, perform initial inspection as specified in the REIMS AVIATION INDUSTRIES Service Bulletin No. F406–58. If no cracking is found following the initial inspection, repeat the inspection every 50 flight hours or 1 month whichever occurs first and at the latest within the next 100 flight hours or 2 months after the effective date of this AD whichever occurs first, install the modified pulley bracket as specified in the REIMS AVIATION INDUSTRIES Service Bulletin No F406–58. If any cracking is found, prior to next flight, install the modified pulley bracket as specified in the REIMS AVIATION INDUSTRIES Service Bulletin No F406–58.

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

Relevant Service Information

Reims Aviation S.A. has issued REIMS AVIATION INDUSTRIES Service Bulletin No. F406–58, Rev. 1, dated October 27, 2006. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of the 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 this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by the State of Design Authority and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Differences Between This 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 have also required different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are described in a separate paragraph of the AD. These requirements take precedence over those copied from the MCAI.

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 undetected cracks in the pulley bracket could result in rudder control failure. 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–2006–26694; Directorate Identifier 2006–CE–91–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 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.

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:

2007–02–12 Reims Aviation S.A.: Amendment 39–14899; Docket No. FAA–2006–26694; Directorate Identifier 2006–CE–91–AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective February 13, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the following model and serial number airplanes, certificated in any category.

Model	Serial Nos.
F406	0002, 0003, 0004, 0006, 0008, 0009, 0010, 0012, 0013, 0017, 0024, 0025, 0039, 0042, 0044, 0045, 0066, 0070, 0073, 0074, 0075, 0077, 0080 through 0090, and 0092.

Reason

(d) The mandatory continuing airworthiness information (MCAI) states:

* * * several reports regarding discovery of cracks about the rudder pulley bracket part number 6015511–1. This pulley bracket is installed with the ''Camera Hole'' option. This condition, if left uncorrected, could result in the loss of rudder control on the airplane.

Actions and Compliance

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

(1) Within the next 10 hours time-in-service (TIS) after February 13, 2007. (the effective of this AD), perform the initial inspection as specified in REIMS AVIATION INDUSTRIES Service Bulletin No. F406–58, Rev. 1, dated October 27, 2006.

(2) If no cracking is found following the initial inspection required in paragraph (e)(1) of this AD, repeat the inspection every 50 flight hours or 1 month, whichever occurs first, until the conditions specified in paragraph (e)(3) of this AD are met.

(3) Within the next 100 hours TIS or 2 months after February 13, 2007. (the effective of this AD), whichever occurs first, install the modified pulley bracket as specified in REIMS AVIATION INDUSTRIES Service Bulletin No F406–58, Rev. 1, dated October 27, 2006.

(4) If any cracking is found during the inspection required in paragraph (e)(1) of this AD, prior to next flight, install the modified pulley bracket as specified in REIMS AVIATION INDUSTRIES Service Bulletin No F406–58, Rev. 1, dated October 27, 2006.

(5) The modified pulley bracket specified in REIMS AVIATION INDUSTRIES Service Bulletin No F406–58, Rev. 1, dated October 27, 2006, may be installed at any time after the inspection required in paragraph (e)(1) of this AD, but must be installed prior to further flight if cracking is found.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

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

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, Standards Staff, FAA, Small Airplane Directorate, ATTN: Mike Kiesov, Aerospace Engineer, 901 Locust, Room 301, Kansas City, Missouri 64106; *telephone:* (816) 329–4144; *fax:* (816) 329–4090, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(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 (44 U.S.C. 3501 et.seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120–0056.

Related Information

(g) Refer to Direction Générale de L'Aviation Civile AD No. F–2005–080, Issue date: May 25, 2005, and REIMS AVIATION INDUSTRIES Service Bulletin No. F406–58, Rev. 1, dated October 27, 2006, for related information.

Material Incorporated by Reference

(h) You must use REIMS AVIATION INDUSTRIES Service Bulletin No. F406–58, Rev. 1, dated October 27, 2006, 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 REIMS AVIATION INDUSTRIES, Aérodrome de Reims Prunay, 51360 Prunay, France, A l'attention du Support Client; telephone 03.26.48.46.53; fax: 03.26.49.18.57.

(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 January 12, 2007.

Kim Smith,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–774 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2006–26134; Directorate Identifier 2006–CE–56–AD; Amendment 39–14898; AD 2007–02–11]

RIN 2120–AA64

Airworthiness Directives; EXTRA Flugzeugproduktions-und Vertriebs-GmbH Models EA–300, EA–300S, EA–300L, and EA–300/200 Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) to supersede AD 2002–21–11, which applies to certain EXTRA Flugzeugbau GmbH (EXTRA) Model EA–300S airplanes. AD 2002–21–11 currently requires you to inspect, using a fluorescent dye check penetrant method, the upper longeron at the horizontal stabilizer attachment for cracks, repair any cracks found, and modify the horizontal stabilizer. That AD also requires a limit on operation to the Normal category until the initial inspection and modification on airplanes with less than 200 hours time-in-service is done. Since we issued AD 2002–21–11, cracks have been found on Models EA–300L and EA–300/200 airplanes. Consequently, this AD adds airplanes to the Applicability section and requires you to inspect and modify the upper longeron at the horizontal stabilizer attachment. This AD results from mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Germany. We are issuing this AD to detect, correct, and prevent cracks in the upper longeron at the horizontal stabilizer attachment, which could result in structural failure of the aft fuselage. This failure could lead to loss of control.

DATES: This AD becomes effective on February 28, 2007.

As of February 28, 2007, the Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation.

ADDRESSES: For service information identified in this AD, contact EXTRA Flugzeugproduktions-und Vertriebs-GmbH, Schwarze Heide 21, D–46569 Huenxe, Germany; fax: (+49)-2858–9137–42.

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 20590–001 or on the Internet at *http://dms.dot.gov.* The docket number is FAA–2006–26134; Directorate Identifier 2006–CE–56–AD.

FOR FURTHER INFORMATION CONTACT: Karl Schletzbaum, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; *telephone:* (816) 329–4146; *fax:* (816) 329–4090.

SUPPLEMENTARY INFORMATION:

Discussion

On November 15, 2006, we issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain EXTRA Flugzeugproduktions-und Vertriebs-GmbH (EXTRA) Models EA–300, EA–300S, EA–300L, and EA–300/200 airplanes. This proposal was published in the **Federal Register** as a notice of proposed rulemaking (NPRM) on November 22, 2006 (71 FR 67499). The NPRM proposed to supersede AD 2002–21–11, Amendment 39–12917 (67 FR 65479, October 25, 2002), with a new AD that would require you to do the following:

- Inspect the upper longeron at the horizontal stabilizer attachment for cracks;
- Reinforce the upper longeron in the area of the horizontal stabilizer attachment; and
- Install V-tubes to reinforce fuselage frame underneath the horizontal stabilizer attachment bracket on Models EA–300S and EA–300L airplanes only.

Comments

We provided the public the opportunity to participate in developing this AD. We received no comments on the proposal 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 except for minor editorial corrections. We have determined that these minor corrections:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Differences Between the European Authority AD, the Service Bulletin, and This AD

EASA AD No. 2006–0281, dated September 14, 2006, and EXTRA Service Bulletin No. 300–2–95, Issue: F, Dated: July 10, 2006, allow 50-hour repetitive inspections of the horizontal stabilizer attachment with the option of installing the modification kits as a terminating action for the repetitive inspections for certain affected airplanes. This AD does not allow continued repetitive inspections.

The FAA has determined that long-term continued operational safety is better assured by design changes that remove the source of the problem rather than by repetitive inspections or other special procedures.

Costs of Compliance

We estimate that this AD affects 134 airplanes in the U.S. registry.

We estimate the following costs to do the inspection:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
24 work-hours × $80 per hour = $1,920	Not applicable	$1,920	$1,920 × 134 = $257,280.

We estimate the following costs to do the modifications:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
40 work-hours × $80 per hour = $3,200	$200	$3,200 + $200 = $3,400	$3,400 × 134 = $455,600.

For airplanes still covered under warranty, the manufacturer will provide warranty credit for up to 35 work-hours for the inspection and modification work, as stated on page 8 of EXTRA Service Bulletin No. 300–2–95, Issue: F, Dated: July 10, 2006.

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 AD.

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 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 summary of the costs to comply with this AD (and other information as included in the Regulatory Evaluation) and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**. Include ''Docket No. FAA–2006–26134; Directorate Identifier 2006–CE–56–AD'' in your request.

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 Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2002–21–11, Amendment 39–12917 (67 FR 65479, October 25, 2002) and adding the following new AD:

2007–02–11 EXTRA Flugzeugproduktions- und Vertriebs-GmbH: Amendment 39–14898; Docket No. FAA–2006–26134; Directorate Identifier 2006–CE–56–AD.

Effective Date

(a) This AD becomes effective on February 28, 2007.

Affected ADs

(b) This AD supersedes AD 2002–21–11, Amendment 39–12917.

Applicability

(c) This AD applies to the following airplanes that are certificated in any category:

Models	Serial Nos.
EA–300	01 through 62.
EA–300L	01 through 71, 73 through 77, 79 through 83, 85 through 89, 91, and 92.
EA–300S	01 through 29.
EA–300/200	01 through 31 and 1032 through 1039.

Unsafe Condition

(d) This AD is the result from mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Germany. The actions specified in this AD are intended to detect, correct, and prevent cracks in the upper longeron at the horizontal stabilizer attachment, which could result in structural failure of the aft fuselage. 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) Inspect, using a fluorescent dye penetrant method, the upper longeron at the horizontal stabilizer attachment for cracks, as applicable. You may take ''unless already done'' credit for the inspections if you previously used Extra Service Bulletin No. 300–2–95 (pages 2–6 at Issue: C, dated July 15, 1998; and pages 1 and 7 through 11 at Issue: D, dated January 30, 2001).	(i) For Models EA–300S airplanes: Upon accumulating 250 hours time-in-service (TIS) after December 17, 2002 (the effective date of AD 2002–21–11) or within the next 50 hours TIS after February 28, 2007 (the effective date of this AD), whichever occurs first. (ii) For Models EA–300, EA–300L, and EA–300/200 airplanes: Within the next 50 hours TIS after February 28, 2007 (the effective date of this AD). (iii) For all affected airplanes: If the modifications specified in Part II and Part III of EXTRA Service Bulletin No. 300–2–95, Issue: F, Dated: July 10, 2006, have already been incorporated, no further action is required.	Follow Part I of EXTRA Service Bulletin No. 300–2–95, Issue: F, *Dated:* July 10, 2006.

Actions	Compliance	Procedures
(2) If cracks are found during the inspection required in paragraph (e)(1) of this AD in areas A, B, and C (as shown in Figure 1 of EXTRA Service Bulletin No. 300–2–95, Issue: F, Dated: July 10, 2006), weld the crack and modify the upper longeron at the horizontal stabilizer attachment by installing the applicable modification kit (or FAA-approved equivalent parts).	For all affected airplanes: Before further flight after the inspection required in paragraph (e)(1) of this AD in which cracks are found, unless already done.	Follow Part II of EXTRA Service Bulletin No. 300–2–95, Issue: F, *Dated:* July 10, 2006.
(3) If no cracks are found during the inspection required in paragraph (e)(1) of this AD, modify the upper longeron at the horizontal stabilizer attachment by installing the applicable modification kit (or FAA-approved equivalent parts).	For all affected airplanes: Within the next 100 hours TIS after February 28, 2007 (the effective date of this AD), unless already done.	Follow Part II of EXTRA Service Bulletin No. 300–2–95, Issue: F, *Dated:* July 10, 2006.
(4) For Models EA–300S and EA–300L airplanes only: Reinforce the fuselage frame underneath the horizontal stabilizer main spar attachment bracket by installing the applicable modification kit (or FAA-approved equivalent parts).	(i) For Model EA–300S: Within the next 200 hours TIS after December 17, 2002 (the effective date of AD 2002–21–11) or within the next 100 hours TIS after February 28, 2007 (the effective date of this AD), whichever occurs first, unless already done. (ii) For Model EA–300L: Within the next 100 hours TIS after February 28, 2007 (the effective date of this AD), unless already done.	Follow Part III of EXTRA Service Bulletin No. 300–2–95, Issue: F, *Dated:* July 10, 2006.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Standards Office, Small Airplane Directorate, FAA, ATTN: Karl Schletzbaum, Aerospace Engineer, 901 Locust, Room 301, Kansas City, Missouri 64106; *telephone:* (816) 329–4146; *fax:* (816) 329–4090, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(g) AMOCs approved for AD 2002–21–11 are approved for this AD.

Related Information

(h) The European Aviation Safety Agency (EASA) AD No. 2006–0281, dated September 14, 2006, also addresses the subject of this AD.

Material Incorporated by Reference

(i) You must use EXTRA Service Bulletin No. 300–2–95, Issue: F, *Dated:* July 10, 2006 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 EXTRA Flugzeugproduktions- und Vertriebs- GmbH, Schwarze Heide 21, D–46569 Huenxe, Germany; fax: (+49)–2858–9137–42.

(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 January 12, 2007.

Kim Smith,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–775 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2006–24452; Directorate Identifier 2006–NE–11–AD; Amendment 39–14893; AD 2007–02–06]

RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney PW2000 Series Turbofan Engines

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Pratt & Whitney PW2000 series turbofan engines. This AD requires a onetime focused visual and fluorescent penetrant inspection (FPI) of 21 suspect PW2000 8th stage high pressure compressor (HPC) drum rotor disk assemblies. This AD results from a PW2037 8th stage HPC drum rotor disk assembly failure event caused by tooling damage that occurred during disk assembly manufacture. We are issuing this AD to prevent 8th stage HPC drum rotor disk assembly failure that could result in an uncontained engine failure and damage to the airplane.

DATES: This AD becomes effective February 28, 2007. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of February 28, 2007.

ADDRESSES: You can get the service information identified in this AD from Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565–8770; fax (860) 565–4503.

You may examine the AD docket on the Internet at *http://dms.dot.gov* or in Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238–7758; fax (781) 238–7199.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with a proposed AD. The proposed AD applies to Pratt & Whitney PW2000 series turbofan engines. We published the proposed AD in the **Federal Register** on August 3, 2006 (71 FR 43997). That action proposed to require a onetime focused visual and FPI of 21 suspect PW2000 8th stage HPC drum rotor disk assemblies.

Examining the AD Docket

You may examine the docket that contains the AD, any comments received, and any final disposition in person at the Docket Management Facility Docket Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647–5227) is located on the plaza level of the Department of Transportation Nassif Building at the street address stated in **ADDRESSES**. Comments will be available in the AD docket shortly after the DMS receives them.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Claim That AD Action Is Redundant

Northwest Airlines and Air Transport Association claim that the proposed AD is redundant to existing requirements in the engine manual, and would only put an additional administrative burden on the operators. They further state that existing AD 2005–18–03 (enhanced inspection of critical rotating parts) already requires a focused FPI of the drum rotor disk and includes the area of question on the 8th stage disk. The commenters point out that the visual inspection referenced in Pratt & Whitney Alert Service Bulletin (ASB) No. PW2000 A72–706, dated February 17, 2006 requires that any disk damage be within the limits in the engine manual visual inspection.

We do not agree. The intent of this AD is to require inspection of the HPC 8th stage disk when the HPC rotor assembly is exposed but with compressor blades installed. The requirements in this AD are more restrictive than the requirements of AD 2005–18–03, which only requires inspection when the HPC rotor is removed from the HPC module and disassembled to the piece-part level with compressor blades removed.

For clarification, we revised the AD compliance section to state that the 8th stage HPC drum rotor disk assembly is a rotor with compressor blades installed.

Proposed AD Not Clear if the Nondestructive Inspection Procedures (NDIPs) Are Mandatory

Northwest Airlines and Air Transport Association state that the proposed AD is not clear if the NDIPs referenced in the Pratt & Whitney ASB No. PW2000 A72–706, dated February 17, 2006, are mandatory.

We agree. We clarified the AD by splitting up the information needed in paragraph (f), into subparagraphs. We also clarified the AD by specifying to use paragraphs 3., 3.A., and 3.B., of the Accomplishment Instructions of Pratt & Whitney ASB No. PW2000 A72–706, dated February 17, 2006, to use NDIP 1096, dated January 19, 2006, and to use NDIP 1095, dated January 12, 2006.

Claim That AD Is Not Required

Northwest Airlines states that the AD is not required, since all affected parts will be scrapped at exposure. The commenter states that since most of the affected parts in the field are likely to have very few cycles remaining, the parts will be retired upon their next disassembly.

We do not agree. The estimated number of cycles on the affected 8th stage disks currently in service ranges from about 13,500 cycles to 19,000 cycles. The current life limit of the 8th stage disk is 20,000 cycles. Therefore, some of the affected 8th stage disks probably will be returned to service after a shop visit. Affected parts with very few cycles remaining and voluntarily removed from service, will not require inspection or incur any inspection cost.

Recommend Compliance Time Be Reduced

The National Transportation Safety Board (NTSB) supports the need for a onetime focused visual and FPI inspection of the HPC 8th stage disk. However, the NTSB recommends that the compliance time be reduced due to unknown factors from the disk failure investigation (failure location striation count) and the disk's demonstrated lack of damage tolerance.

We do not agree. The finite element structural analysis performed by Pratt & Whitney for the 8th stage disk failure (PW2037 engine uncontained 8th stage HPC drum rotor disk assembly failure event, March 10, 2005,) correlate well with results from the Materials & Processes Engineering Lab measurements. The Lab measurements were of the fatigue striation counts from the failed disk. Based on the failure analysis and the manufacturing records review of the 8th stage disk, a risk analysis determined that an acceptable level of safety will be maintained for the compliance described in the AD.

Service Documents Should Be Incorporated by Reference

Modification and Replacement Parts Association (MARPA) states that the Pratt & Whitney service information referenced in the proposed AD should be incorporated by reference for the AD to be considered legal.

We agree. Paragraph (i) of this AD incorporates by reference the necessary service information. The proposed AD did not contain the incorporation by reference paragraph (i), because it is only a notice of proposed rulemaking.

Service Documents Should Be Published in the Docket Management System (DMS)

MARPA states that the Pratt & Whitney service information to be incorporated by reference in the AD, should be published in the DMS, as it is part of the AD.

We partially agree. We are currently reviewing issues surrounding the posting of service information on the DMS as part of an AD Docket. Once we thoroughly examine all aspects of this issue and make a final determination, we will consider if our current practice needs revising.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

We estimate that this AD will affect 15 engines installed on airplanes of U.S. registry. We also estimate that it will take about 70 work-hours per engine to perform the actions, and that the average labor rate is $80 per work-hour. We do not expect that parts will be required. Based on these figures, we estimate the total cost of the AD to U.S. operators to be $84,000 for the inspection.

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 summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary at the address listed under **ADDRESSES**.

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 Federal Aviation Administration 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:

2007–02–06 Pratt & Whitney: Amendment 39–14893. Docket No. FAA–2006–24452; Directorate Identifier 2006–NE–11–AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective February 28, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Pratt & Whitney PW2037, PW2040, and PW2037M turbofan engines. These engines are installed on, but not limited to Boeing 757 airplanes.

Unsafe Condition

(d) This AD results from a Pratt & Whitney PW2037 8th stage high-pressure compressor (HPC) drum rotor disk assembly failure event caused by tooling damage that occurred during disk assembly manufacture. We are issuing this AD to prevent 8th stage HPC drum rotor disk assembly failure that could result in an uncontained engine failure and damage to the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed at the next shop visit, not to exceed an additional 6,000 engine cycles, after the effective date of this AD, when the 8th stage HPC drum rotor disk assembly (compressor blades installed) is exposed and removed from the HPC module, unless the actions have already been done.

Inspect the 8th Stage Drum Rotor Disk

(f) Inspect the 8th stage drum rotor disks listed by part numbers and serial numbers in Table 1 of the Accomplishment Instructions of Pratt & Whitney Alert Service Bulletin No. PW2000 A72–706, dated February 17, 2006, as follows:

(1) Do a onetime focused visual and fluorescent penetrant inspection (FPI) of suspect 8th stage HPC drum rotor disk assemblies that may have been damaged during manufacture.

(2) Use paragraphs 3., 3.A., and 3.B. of the Accomplishment Instructions of Pratt & Whitney Alert Service Bulletin No. PW2000 A72–706, dated February 17, 2006, Nondestructive Inspection Procedure (NDIP) 1096, dated January 19, 2006, and NDIP 1095, dated January 12, 2006, to do the inspections.

(3) Any 8th stage disk damage that exceeds the serviceable limits specified in Pratt & Whitney PW2000 Engine Manual, Part Number 1A6231, Chapter/Section 72–35–03, Inspection/Check–01/–04, can not be returned to service.

(g) After the effective date of this AD, do not install any uninspected 8th stage drum rotor disk assemblies listed in Table 1 of the Accomplishment Instructions of Pratt & Whitney Alert Service Bulletin No. PW2000 A72–706, dated February 17, 2006, in any engine.

Alternative Methods of Compliance

(h) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Material Incorporated by Reference

(i) You must use the Pratt & Whitney service information specified in Table 1 to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of the documents listed in Table 1 of this AD in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565–8770; fax (860) 565–4503, for a copy of this service information. You may review copies 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*.

TABLE 1.—INCORPORATION BY REFERENCE

Pratt & Whitney service information	Page	Revision	Date
Alert Service Bulletin No. PW2000 A72–706 Total Pages: 11	All	Original	February 17, 2006.
Nondestructive Inspection Procedure 1095 Total Pages: 18	All	Original	January 12, 2006.
Nondestructive Inspection Procedure 1096 Total Pages: 18	All	Original	January 19, 2006.

Relate Information

(j) Contact Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238–7758; fax (781) 238–7199, e-mail: *mark.riley@faa.gov* for more information about this AD.

Issued in Burlington, Massachusetts, on January 12, 2007.

Francis A. Favara,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. E7–686 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 30532 Amdt. No. 3202]

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 January 24, 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 January 24, 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 January 12, 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 15 March 2007*

Emmonak, AK, Emmonak, Takeoff Minimums and Textual DP, Orig
Kodiak, AK, Kodiak, ILS OR LOC/DME Y RWY 25, Amdt 1
Kodiak, AK, Kodiak, RNAV (GPS) RWY 25, Amdt 1
Kodiak, AK, Kodiak, VOR Y RWY 25, Amdt 1
Kodiak, AK, Kodiak, Takeoff Minimums and Textual DP, Amdt 2
San Jose, CA, Norman Y. Mineta/San Jose International, RNAV (GPS) RWY 12L, Amdt 1
San Jose, CA, Norman Y. Mineta/San Jose International, RNAV (GPS) RWY 30R, Amdt 1
Meriden, CT, Meriden Markham Muni, Takeoff Minimums and Textual DP, Amdt 3
Monticello, IN, White County, NDB RWY 36, Amdt 4, CANCELLED
Standish, MI, Standish Industrial, VOR OR GPS–A, Amdt 3, CANCELLED
Standish, MI, Standish Industrial, Takeoff Minimums and Textual DP, Amdt 1, CANCELLED
Brainerd, MN, Brainerd Lakes Rgnl, Takeoff Minimums and Textual DP, Amdt 5
Shelby, MT, Shelby, RNAV (GPS) RWY 23, Orig
Shelby, MT, Shelby, Takeoff Minimums and Textual DP, Orig
Shelby, MT, Shelby, NDB RWY 23, Amdt 7
Alliance, NE, Alliance Muni, RNAV (GPS) RWY 8, Orig
Alliance, NE, Alliance Muni, RNAV (GPS) RWY 26, Orig
Alliance, NE, Alliance Muni, VOR RWY 30, Amdt 3
Alliance, NE, Alliance Muni, Takeoff Minimums and Textual DP, Orig
New York, NY, John F. Kennedy Intl, RNAV (GPS) Y RWY 31L, Amdt 1
Dayton, OH, Greene County-Lewis A Jackson Regional, RNAV (GPS) RWY 7, Orig
Dayton, OH, Greene County-Lewis A Jackson Regional, RNAV (GPS) RWY 25, Orig
Dayton, OH, Greene County-Lewis A Jackson Regional, NDB RWY 25, Amdt 1
Dayton, OH, Greene County-Lewis A Jackson Regional, GPS RWY 7, Orig–A, CANCELLED
Dayton, OH, Greene County-Lewis A Jackson Regional, Takeoff Minimums and Textual DP, Amdt 1
Allentown, PA, Lehigh Valley Intl, VOR–A, Amdt 9
Bristol/Johnson/Kingsport, TN, Tri-Cities Regional TN/VA, Radar–1, Amdt 16, CANCELLED
Jasper, TN, Marion County-Brown Field, RNAV (GPS) RWY 4, Orig
Jasper, TN, Marion County-Brown Field, NDB RWY 4, Amdt 5
Sheridan, WY, Sheridan County, ILS OR LOC/DME RWY 32, Amdt 1
Sheridan, WY, Sheridan County, RNAV (GPS) RWY 14, Orig
Sheridan, WY, Sheridan County, RNAV (GPS) RWY 32, Orig
Sheridan, WY, Sheridan County, VOR RWY 14, Amdt 1
Sheridan, WY, Sheridan County, Takeoff Minimums and Textual DP, Amdt 3

[FR Doc. E7–839 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 30533; Amdt. No. 3203]

Standard Instrument Approach Procedures; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment amends Standard Instrument Approach Procedures (SIAPs) for operations at certain airports. These regulatory actions are needed 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 January 24, 2007. The compliance date for each SIAP 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 January 24, 2007.

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

For Examination—

1. FAA Rules Docket, FAA Headquarters Building, 800 Independence Ave, SW., Washington, DC 20591;

2. The FAA Regional Office of the region in which 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 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, 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, Code of Federal Regulations, Part 97 (14 CFR part 97) amends Standard Instrument Approach Procedures (SIAPs). The complete

regulatory description of each SIAP is contained in the appropriate FAA Form 8260, as modified by the the National Flight Data Center (FDC)/Permanent Notice to Airmen (P–NOTAM), which is incorporated by reference in the amendment under 5 U.S.C. 552(a), 1 CFR part 51, and § 97.20 of the Code of Federal Regulations. Materials incorporated by reference are available for examination or purchase as stated above.

The large number of SIAPs, 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, but refer to their graphic 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 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. 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 as amended in the transmittal. For safety and timeliness of change considerations, this amendment incorporates only specific changes contained for each SIAP as modified by FDC/P–NOTAMs.

The SIAPs, as modified by FDC P–NOTAM, and contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these chart changes to SIAPs, the TERPS criteria were applied to only these specific conditions existing at the affected airports. All SIAP amendments in this rule have been previously issued by the FAA in an FDC NOTAM as an emergency action of immediate flight safety relating directly to published aeronautical charts. The circumstances which created the need for all these SIAP amendments requires making them effective in less than 30 days.

Further, the SIAPs contained in this amendment are based on the criteria contained in TERPS. Because of the close and immediate relationship between these SIAPs and safety in air commerce, I find that notice and public procedure before adopting these SIAPs are impracticable and contrary to the public interest and, where applicable, that good cause exists for making these SIAPs 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 January 12, 2007.

James J. Ballough,

Director, Flight Standards Service.

Adoption of the Amendment

■ Accordingly, pursuant to the authority delegated to me, Title 14, Code of Federal Regulations, Part 97, 14 CFR part 97, is amended by amending Standard Instrument Approach Procedures, 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:

By amending: § 97.23 VOR, VOR/DME, VOR or TACAN, and VOR/DME or TACAN; § 97.25 LOC, LOC/DME, LDA, LDA/DME, LDA w/GS, SDF, SDF/DME; § 97.27 NDB, NDB/DME; § 97.29 ILS, MLS, TLS, GLS, WAAS PA, MLS/RNAV; § 97.31 RADAR SIAPs; § 97.33 RNAV SIAPs; § 97.35 COPTER SIAPs, § 97.37 Takeoff Minima and Obstacle Departure Procedures. Identified as follows:

** * * Effective Upon Publication*

FDC date	State	City	Airport	FDC No.	Subject
12/29/06	GA	Atlanta	Newnan Coweta County	6/9357	Take-Off Minimums and (Obstacle) Departure Procedure, Amdt 3.
01/10/07	AK	Pilot Point	Pilot Point	7/0592	RNAV (GPS) Rwy 7, Orig.
01/10/07	AK	Pilot Point	Pilot Point	7/0593	RNAV (GPS) Rwy 25, Orig.

[FR Doc. E7–838 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[TD 9303]

RIN 1545–BF84

Corporate Reorganizations; Distributions Under Sections 368(a)(1)(D) and 354(b)(1)(B)

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Final and temporary regulations; correction notice.

SUMMARY: This document contains corrections to temporary regulations that was published in the **Federal Register** on Tuesday, December 19, 2006 (71 FR 75879) regarding the qualification of certain transactions as reorganizations described in section 368(a)(1)(D).

DATES: These corrections are effective December 19, 2006.

FOR FURTHER INFORMATION CONTACT: Bruce A. Decker at (202) 622–7550 (not a toll-free number).

SUPPLEMENTARY INFORMATION:

Background

The temporary regulations (TD 9303) that is the subject of these corrections are under sections 368 and 354 of the Internal Revenue Code.

Need for Correction

As published, the temporary regulations (TD 9303) contains errors that may prove to be misleading and are in need of correction.

Correction of Publication

Accordingly, the temporary regulations (TD 9303) that was the subject of FR Doc. E6–21565, is corrected as follows:

1. On page 75879, column 1, in the preamble, under the caption ''SUMMARY:'', line 9, the language ''securities of the acquiring corporation is'' is corrected to read ''securities of the acquiring corporation are.''

2. On page 75880, column 1, in the preamble, under the paragraph heading ''Background'', first full paragraph of the column, line 5, the language ''its operating assets to Y for $34x dollars,'' is corrected to read ''its operating assets to Y for $34x,.''

3. On page 75880, column 1, in the preamble, under the paragraph heading ''Background'', second full paragraph of the column, line 7, the language ''requirements of section 354 and 356, is corrected to read ''requirements of sections 354 and 356,.''

4. On page 75881, column 1, in the preamble, under the paragraph heading ''Special Analyses'', line 7 from the bottom of the paragraph, the language ''published elsewhere in this **Federal**'' is corrected to read ''published elsewhere in this issue of the **Federal**.''

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

PART 1—INCOME TAXES

■ **Paragraph 1.** The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

§ 1.368–2T [Corrected]

■ **Par. 2.** Section 1.368–2T is amended by revising paragraph (l)(1) to read as follows:

§ 1.368–2T Definition of terms (temporary).

* * * * *

(l) * * *

(1) *General rule.* In order to qualify as a reorganization under section 368(a)(1)(D), a corporation (transferor corporation) must transfer all or part of its assets to another corporation (transferee corporation) and immediately after the transfer the transferor corporation, or one or more of its shareholders (including persons who were shareholders immediately before the transfer), or any combination thereof, must be in control of the transferee corporation; but only if, in pursuance of the plan, stock or securities of the transferee corporation are distributed in a transaction which qualifies under section 354, 355, or 356.

* * * * *

LaNita Van Dyke,

Chief, Publications and Regulations Branch, Legal Processing Division, Office of Associate Chief Counsel (Procedure and Administration).

[FR Doc. E7–861 Filed 1–23–07; 8:45 am]

BILLING CODE 4830–01–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[CGD08–07–001]

Drawbridge Operating Regulations; Berwick Bay (Atchafalaya River), Morgan City, LA

AGENCY: Coast Guard, DHS.

ACTION: Notice of temporary deviation from regulations.

SUMMARY: The Commander, Eighth Coast Guard District, has issued a temporary deviation from the regulation governing the operation of the BNSF Railway Company Vertical Lift Span Bridge across Berwick Bay, mile 0.4 (Atchafalaya River, mile 17.5), at Morgan City, St. Mary Parish, Louisiana. This deviation provides for the bridge to remain closed to navigation for 12 consecutive hours to conduct scheduled maintenance to the drawbridge.

DATES: This deviation is effective from 8 a.m. until 8 p.m. on Wednesday, February 7, 2007.

ADDRESSES: Materials referred to in this document are available for inspection or copying at the office of the Eighth Coast Guard District, Bridge Administration Branch, Hale Boggs Federal Building, Room 1313, 500 Poydras Street, New Orleans, Louisiana 70130–3310 between 7 a.m. and 3 p.m., Monday through Friday, except Federal holidays. The telephone number is (504) 671–2128. The Bridge Administration Branch maintains the public docket for this temporary deviation.

FOR FURTHER INFORMATION CONTACT: David Frank, Bridge Administration Branch, telephone (504) 671–2128.

SUPPLEMENTARY INFORMATION: The BNSF Railway Company has requested a temporary deviation in order to replace the railroad signal circuits of the BNSF Railway Railroad Vertical Lift Span Bridge across Berwick Bay, mile 0.4 (Atchafalaya River, mile 17.5) at Morgan City, St. Mary Parish, Louisiana. Replacement of the signal circuits is necessary to turn the lining of signals across the bridge into a fully automatic operation so that the bridge will be in full compliance with requirements of the Federal Railroad Administration. This temporary deviation will allow the bridge to remain in the closed-to-navigation position from 8 a.m. until 8 p.m. on Wednesday, February 7, 2007. The proposed work was previously scheduled for Wednesday, December 13, 2006, but had to be postponed due to parts being unavailable. The required parts have been received and BNSF is now ready to accomplish the repairs. There may be times, during the closure period, when the draw will not be able to open for emergencies.

The bridge provides 4 feet of vertical clearance in the closed-to-navigation position. Thus, most vessels will not be able to transit through the bridge site when the bridge is closed. Navigation on the waterway consists of tugs with tows, fishing vessels and recreational craft including sailboats and powerboats. Due to prior experience, as well as coordination with waterway users, it has been determined that this closure will not have a significant effect on these vessels.

In accordance with 33 CFR 117.35(e), the drawbridge must return to its regular operating schedule immediately at the end of the designated time period. This deviation from the operating regulations is authorized under 33 CFR 117.35.

Dated: January 16, 2007.

Marcus Redford,

Bridge Administrator.

[FR Doc. E7–994 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[CGD01–07–003]

Drawbridge Operation Regulations; Reynolds Channel, Lawrence, NY

AGENCY: Coast Guard, DHS.

ACTION: Notice of temporary deviation from regulations.

SUMMARY: The Commander, First Coast Guard District, has issued a temporary deviation from the regulation governing the operation of the Atlantic Beach Bridge across Reynolds Channel, mile 0.4, at Lawrence, New York. Under this temporary deviation, an advance notice shall be required for bridge openings from February 26, 2007 through March 2, 2007, from 7 a.m. to 5:30 p.m. This deviation is necessary to facilitate scheduled bridge maintenance.

DATES: This deviation is effective from February 26, 2007 through March 2, 2007.

ADDRESSES: Materials referred to in this document are available for inspection or copying at the First Coast Guard District, Bridge Branch Office, One South Street, New York, New York 10004, 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 Office maintains the public docket for this temporary deviation.

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

SUPPLEMENTARY INFORMATION: The Atlantic Beach Bridge, across Reynolds Channel at mile 0.4, at Lawrence, New York, has a vertical clearance in the closed position of 25 feet at mean high water and 30 feet at mean low water. The existing drawbridge operation regulations are listed at 33 CFR 117.5.

The owner of the bridge, Nassau County Bridge Authority, requested a temporary deviation to facilitate scheduled bridge span lock maintenance. The bridge will not be able to open while the bridge maintenance is underway. An advance notice for openings is necessary in order to have the bridge operational for vessel traffic.

Under this temporary deviation the bridge shall open on signal after at least a 1-hour advance notice is given between 7 a.m. and 5:30 p.m. from February 26, 2007 through March 2, 2007.

The contact information for providing the advance notice for bridge openings shall be via marine radio channel 13 or by calling (516) 239–1821.

In accordance with 33 CFR 117.35(c), this work will be performed with all due speed in order to return the bridge to normal operation as soon as possible.

Should the bridge maintenance authorized by this temporary deviation be completed before the end of the effective period published in this notice, the Coast Guard will rescind the remainder of this temporary deviation, and the bridge shall be returned to its normal operating schedule. Notice of the above action shall be provided to the public in the Local Notice to Mariners and the **Federal Register**, where practicable.

This deviation from the operating regulations is authorized under 33 CFR 117.35.

Dated: January 16, 2007.

Gary Kassof,

Bridge Program Manager, First Coast Guard District.

[FR Doc. E7–993 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[CGD01–07–004]

Drawbridge Operation Regulations; Mystic River, Mystic, CT

AGENCY: Coast Guard, DHS.

ACTION: Notice of temporary deviation from regulations.

SUMMARY: The Commander, First Coast Guard District, has issued a temporary deviation from the regulation governing the operation of the Amtrak railroad bridge across the Mystic River, mile 2.4, at Mystic, Connecticut. Under this temporary deviation, the bridge may remain in the closed position from February 2, 2007 through February 4, 2007. This deviation is necessary to facilitate scheduled bridge maintenance.

DATES: This deviation is effective from February 2, 2007 through February 4, 2007.

ADDRESSES: Materials referred to in this document are available for inspection or copying at the First Coast Guard District, Bridge Branch Office, One South Street, New York, New York 10004, 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 Office maintains the public docket for this temporary deviation.

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

SUPPLEMENTARY INFORMATION: The Amtrak railroad bridge, across the Mystic River, mile 0.4, at Mystic, Connecticut, has a vertical clearance in the closed position of 4 feet at mean high water and 8 feet at mean low water. The existing drawbridge operation regulations are listed at 33 CFR 117.211.

The owner of the bridge, National Railroad Passenger Corporation (Amtrak), requested a temporary deviation to facilitate scheduled bridge pinion shaft maintenance. The bridge will not be able to open while the bridge maintenance is underway.

Under this temporary deviation the Amtrak railroad bridge may remain in the closed position from February 2, 2007 through February 4, 2007.

In accordance with 33 CFR 117.35(c), this work will be performed with all due speed in order to return the bridge to normal operation as soon as possible.

Should the bridge maintenance authorized by this temporary deviation be completed before the end of the effective period published in this notice, the Coast Guard will rescind the remainder of this temporary deviation, and the bridge shall be returned to its normal operating schedule. Notice of the above action shall be provided to the public in the Local Notice to Mariners and the **Federal Register**, where practicable.

This deviation from the operating regulations is authorized under 33 CFR 117.35.

Dated: January 16, 2007.

Gary Kassof,

Bridge Program Manager, First Coast Guard District.

[FR Doc. E7–992 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[CGD01–07–005]

Drawbridge Operation Regulations; Connecticut River, East Haddam, CT

AGENCY: Coast Guard, DHS.

ACTION: Notice of temporary deviation from regulations.

SUMMARY: The Commander, First Coast Guard District, has issued a temporary deviation from the regulation governing the operation of the Route 82 Bridge across the Connecticut River, mile 16.8, at East Haddam, Connecticut. Under this temporary deviation, the bridge may remain in the closed position for two nights from 8:30 p.m. to 4:30 a.m. in January 2007. The two closure dates will be determined based upon favorable weather for two nights between January 22, 2007 and January 27, 2007. This deviation is necessary to facilitate scheduled bridge maintenance.

DATES: This deviation is effective from January 22, 2007 through January 27, 2007.

ADDRESSES: Materials referred to in this document are available for inspection or copying at the First Coast Guard District, Bridge Branch Office, One South Street, New York, New York, 10004, 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 Office maintains the public docket for this temporary deviation.

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

SUPPLEMENTARY INFORMATION: The Route 82 Bridge, across the Connecticut River, mile 16.8, at East Haddam, Connecticut, has a vertical clearance in the closed position of 22 feet at mean high water and 25 feet at mean low water. The existing drawbridge operation regulations are listed at 33 CFR 117.205(c).

The owner of the bridge, Connecticut Department of Transportation, requested a temporary deviation to facilitate scheduled bridge maintenance, drive gear repairs. The bridge will not be able to open while the bridge maintenance is underway.

Under this temporary deviation the Route 82 Bridge may remain in the closed position between 8:30 p.m. and 4:30 a.m., for two nights only, between January 22, 2007 and January 27, 2007. The two closure dates will be selected depending upon favorable weather necessary to perform the required repairs.

In accordance with 33 CFR 117.35(c), this work will be performed with all due speed in order to return the bridge to normal operation as soon as possible.

Should the bridge maintenance authorized by this temporary deviation be completed before the end of the effective period published in this notice, the Coast Guard will rescind the remainder of this temporary deviation, and the bridge shall be returned to its normal operating schedule. Notice of the above action shall be provided to the public in the Local Notice to Mariners and the **Federal Register**, where practicable.

This deviation from the operating regulations is authorized under 33 CFR 117.35.

Dated: January 16, 2007.

Gary Kassof,

Bridge Program Manager, First Coast Guard District.

[FR Doc. E7–991 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–15–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[CGD09–06–174]

RIN 1625–AA00

Safety Zones; M/V ROY A. JODREY, St. Lawrence River, Wellesley Island, NY

AGENCY: Coast Guard, DHS.

ACTION: Final rule.

SUMMARY: The Coast Guard is removing the established safety zone around the wreck of the M/V ROY A. JODREY, St. Lawrence River, Wellesley Island, NY. The safety zone was necessary for restricting recreational diving while conducting oil removal operations aboard the sunken vessel. The safety zone is no longer needed and the Coast Guard is removing the regulation.

DATES: This section becomes effective on February 23, 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 CGD9–06–174 and are available for inspection or copying at U.S. Coast Guard Sector Buffalo, 1 Fuhrmann Blvd., Buffalo, NY 14203 between 8 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: LT Tracy Wirth, U.S. Coast Guard Sector Buffalo, (716) 843–9573.

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 publishing an NPRM is unnecessary because this rule removes a safety zone that is no longer needed.

Background and Purpose

The rule established a safety zone around the sunken M/V ROY A. JODREY, St. Lawrence River, Wellesley Island, NY (67 FR 65042 (October 23, 2002).). The safety zone was necessary for restricting recreational diving while conducting oil removal operations aboard the sunken vessel. The zone covered all waters and adjacent shoreline encompassed by the arc of a circle with a 150-yard radius of the wreck M/V ROY A JODREY, with its center in 44°19.55 N, 075°56.00 W (NAD83). The safety zone is no longer needed and the Coast Guard is removing the regulation.

Regulatory Evaluation

This rule is not a ''significant regulatory action'' under section 3(f) of Executive Order 12866 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 this rule under that order. It is not significant under the regulatory policies and procedures of the Department of Homeland Security (DHS), because we are disestablishing the safety zone around wreck M/V ROY A JODREY.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have considered whether this rule would have a significant 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 this rule removes an obsolete safety zone.

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 rule so that they can better evaluate its effects 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 Sector Buffalo (see **ADDRESSES**).

Small businesses may send comments on 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 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 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

The Coast Guard has 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 concern 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. It has not been designated by the Administrator of the Office of Information and Regulatory Affairs 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 procedure; and related management system 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 M16475.1D, 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)(g), of the Instruction, from further environmental documentation.

Under figure 2–1, paragraph (34)(g), of the Instruction, an ''Environmental Analysis Check List'' and a ''Categorical Exclusion Determination'' are not required for this rule because we are disestablishing a safety zone.

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.

§ 165.917 [Removed]

■ 2. Section 165.917 is removed.

Dated: January 4, 2007.

S.J. Ferguson,

Captain, U.S. Coast Guard, Captain of the Port Buffalo, Sector Buffalo.

[FR Doc. E7–1004 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–15–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA–R09–OAR–2006–0580; FRL–8270–3]

Approval and Promulgation of Air Quality Implementation Plans; Designation of Areas for Air Quality Planning Purposes; Arizona; Miami Sulfur Dioxide State Implementation Plan and Request for Redesignation to Attainment; Correction of Boundary of Miami Sulfur Dioxide Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: EPA is taking direct final action under the Clean Air Act to approve the Miami Sulfur Dioxide Nonattainment Area State

Implementation and Maintenance Plan as a revision to the Arizona state implementation plan. The Arizona Department of Environmental Quality developed this plan to maintain the sulfur dioxide national ambient air quality standards in the Miami (Gila County) area. The maintenance plan contains various elements, including contingency provisions that will be implemented if measured ambient concentrations of sulfur dioxide are above certain trigger levels. EPA is also approving the State of Arizona's request for redesignation of the Miami area from nonattainment to attainment for the sulfur dioxide standards. Lastly, EPA is correcting the boundary of the Miami sulfur dioxide nonattainment area to exclude a noncontiguous township that was erroneously included in the description of the area and to fix a transcription error in the listing of one of the other townships.

EPA is taking these actions consistent with provisions in the Clean Air Act that obligate the Agency to approve or disapprove submittals of revisions to state implementation plans and requests for redesignation. The intended effect is to redesignate the Miami, Arizona sulfur dioxide nonattainment area to attainment, provide for maintenance of the standard for the ten-year period following redesignation, and correct long-standing errors in the codified description of the area.

DATES: This rule is effective on March 26, 2007 without further notice, unless EPA receives adverse comments by February 23, 2007. If we receive such comments, we will publish a timely withdrawal in the **Federal Register** to notify the public that this direct final rule will not take effect.

ADDRESSES: Submit comments, identified by docket number EPA–R09–OAR–2006–0580, by one of the following methods:

1. *Federal eRulemaking Portal: www.regulations.gov.* Follow the on-line instructions.

2. *E-mail: vagenas.ginger@epa.gov.*

3. *Mail or deliver:* Ginger Vagenas (Air-2), U.S. Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA 94105–3901.

Instructions: All comments will be included in the public docket without change and may be made available online at *www.regulations.gov,* including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider CBI or otherwise protected should be clearly identified as such and should not be submitted through the *www.regulations.gov* or e-mail. *www.regulations.gov* is an ''anonymous access'' system, and EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send e-mail directly to EPA, your e-mail address will be automatically captured and included as part of the public comment. 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.

Docket: The index to the docket for this action is available electronically at *www.regulations.gov* and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available in either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Ginger Vagenas, Air Planning Office, (415) 972–3964 or by e-mail at *vagenas.ginger@epa.gov.*

SUPPLEMENTARY INFORMATION: Elsewhere in this **Federal Register**, we are proposing approval and soliciting written comment on this action. Throughout this document, the words ''we,'' ''us,'' or ''our'' mean U.S. EPA.

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I. Summary of Today's Direct Final Action

On June 26, 2002, the Arizona Department of Environmental Quality (''ADEQ'' or ''State'') submitted to EPA Region IX its Miami Sulfur Dioxide State Implementation and Maintenance Plan and its request for redesignation to attainment (''Miami SO_2 Maintenance Plan'' or ''submittal''). The submittal summarizes the progress the State has made in attaining the sulfur dioxide (SO_2) national ambient air quality standards (NAAQS) in the Miami nonattainment area (Gila County, Arizona) (''Miami area'') and includes a plan to assure continued attainment of the SO_2 NAAQS for at least the next 10 years. The June 26, 2002 submittal also includes a request for redesignation of the boundary of the area and for redesignation of the status of the area, as amended, to ''attainment'' under section 107(d) of the Clean Air Act (''Act'' or CAA). On June 30, 2004, ADEQ submitted certain replacement pages correcting errors in the June 26, 2002 submittal. On June 20, 2006, ADEQ submitted a letter withdrawing the boundary redesignation request and requesting EPA to address the boundary issue as an error correction under CAA section 110(k)(6) instead.

In today's direct final action, because we find that the Miami SO_2 Maintenance Plan meets the requirements for maintenance plans under section 175A of the Act and that the Miami area qualifies for redesignation under CAA section 107(d)(3)(E), we are approving the submittal (as amended by the submittals dated June 30, 2004 and June 20, 2006) as a revision to the Arizona SIP and redesignating the Miami area from nonattainment to attainment for the SO_2 NAAQS. Also, based on a review of the relevant State and EPA materials from the late 1970's, we are correcting errors under CAA section 110(k)(6) in the listing of the townships that comprise the Miami SO_2 nonattainment area to exclude a noncontiguous township and

to fix a transcription error in one of the other townships so listed.

II. Introduction

The following section discusses the NAAQS for SO_2, CAA requirements for state implementation plans, SO_2 planning in Arizona generally and in the Miami area more specifically, and sources of emissions in the Miami area.

A. SO_2 NAAQS

The NAAQS for SO_2 consists of three standards: Two primary standards for the protection of public health and a secondary standard for protection of public welfare. The primary SO_2 standards address 24-hour average and annual average ambient SO_2 concentrations. The secondary standard addresses 3-hour average ambient SO_2 concentrations. The level of the annual SO_2 standard is 0.030 parts per million (ppm), which is equivalent to 80 micrograms per cubic meter ($\mu g/m^3$), not to be exceeded in a calendar year. The level of the 24-hour standard is 0.14 ppm (365 $\mu g/m^3$), not to be exceeded more than once per calendar year. The level of the secondary SO_2 standard is a 3-hour standard of 0.5 ppm (1,300 $\mu g/m^3$), not to be exceeded more than once per calendar year. See 40 CFR 50.2–50.5.

B. State Implementation Plan

The CAA requires states to implement, maintain, and enforce ambient air quality equal to or better than the NAAQS. A state's strategies for implementing, maintaining, and enforcing the NAAQS are submitted to EPA for approval, and, once approved, become part of the State Implementation Plan (or SIP) for that State. SIPs are compilations of regulatory and non-regulatory elements adopted, submitted, and approved at different times to address various types of changes in circumstances, such as new or revised NAAQS or amendments to the CAA. SIPs include, among other things, the following: (1) An inventory of emission sources; (2) statutes and regulations adopted by the state legislature and executive agencies; (3) air quality analyses that include demonstrations that adequate controls are in place to meet the NAAQS; and (4) contingency measures to be undertaken if an area fails to attain the standard or make reasonable progress toward attainment by the required date. The state must make proposed changes to the SIP available for public review and comment through a public hearing, and must formally adopt the changes before submitting them to EPA for approval. Upon our approval, a SIP revision becomes federally enforceable.

C. History of SO_2 Planning in Arizona

1. Development of the SO_2 SIP

In the early 1970's, soon after the Clean Air Amendments of 1970 were passed, Arizona began developing air quality regulations that applied to all Arizona primary copper smelters, including the one operating in the Miami area. These regulations focused on establishing an air quality monitoring network in the areas surrounding the smelters and determining the allowable emission rates from the smelters so that the SO_2 NAAQS could be attained and maintained. Arizona submitted various SIP revisions during the 1970s to establish approvable emission limitations for the primary copper smelters operating in the state. On September 20, 1979, the State submitted its SIP revision to EPA which contained its multi-point rollback (MPR) technique to establish operating limitations on smelters. After EPA's proposed conditional approval on November 30, 1981 (46 FR 58098), Arizona made necessary changes which corrected identified deficiencies. EPA granted full approval of the MPR-based SIP submittal on January 14, 1983 (48 FR 1717), but was not able to grant full approval to the SO_2 SIPs for six smelter areas (including Miami) because they lacked a strategy for addressing fugitive[1] sources of SO_2.

On November 1, 2004, EPA approved several revisions to the SO_2 SIP, including site-specific requirements, compliance and monitoring, and fugitive emissions standards for existing primary copper smelters. See 69 FR 63321. In that same notice, EPA promulgated a limited approval/limited disapproval of R18–2–Appendix 8, which sets out procedures for calculating sulfur emissions using a sulfur balance method. ADEQ subsequently corrected the identified deficiencies and EPA approved the new version of R18–2–Appendix 8 as a SIP revision on April 12, 2006. See 71 FR 18624. The effective date for our April 12, 2006 final approval is June 12, 2006.

2. Miami SO_2 Nonattainment Area

Originally, the air quality planning area we refer to as the Miami SO_2 nonattainment area was not separately defined but rather was included in a county-wide SO_2 nonattainment area (see 43 FR 8969, March 3, 1978). At the request of the state of Arizona, the boundaries were reduced to nine townships in and around the city of Miami (44 FR 21261, April 10, 1979). See also, 40 CFR 81.303.[2] In addition, six adjacent townships were designated as ''cannot be classified''. Section 107(d)(1)(C) of the 1990 Clean Air Act Amendments (CAAA) brought forward, by operation of law, the nonattainment designations for areas, such as the Miami SO_2 area, that continued to be designated as nonattainment at the time of enactment of the CAAA, i.e., areas that had not been redesignated to ''attainment'' prior to November 1990.

D. Sources of SO_2 Emissions in the Miami Area

The dominant source of SO_2 emissions in the Miami area is the Phelps-Dodge Miami primary copper smelter (''Miami smelter''). Combined stack and fugitive SO_2 emissions from the smelter are limited under the source-specific EPA-approved rule (i.e., R18–2–7–715) to 2,420 pounds per hour annual average, which amounts to approximately 10,368 tons per year based on 357 days of operation (set forth for the permit for this facility) or approximately 10,600 tons per year assuming 365 days per year of smelter operation. Between 1996 and 2000, the smelter's actual SO_2 emissions ranged from 5,737 tons per year to 7,819 tons per year and represented 97 to 99% of the total stationary source SO_2 emissions in the Miami nonattainment area. See tables 4.1, 4.3, and 5.2 of the Miami SO_2 Maintenance Plan. There are several other point sources of SO_2 in the Miami area, all of which are relatively minor: BHP Copper, Pinto Valley; BHP Copper, Miami East Unit; Carlota Copper Company Mine; and the Phelps-Dodge Miami Mine. Viewed collectively, these sources are permitted to emit a total of approximately 100 tons per year. Actual emissions, however, are generally less than 10 tons per year. SO_2 emissions from area and mobile sources

[1] ''Fugitive'' in this context refers to emissions that could not reasonably pass through a stack, chimney, vent for a functionally equivalent opening.

[2] The nine townships that comprise the Miami SO_2 nonattainment area are: T2N, R14E; T2N, R15E; T1N, R13E (only that portion in Gila County); T1N, R14E; T1N, R15E; T1N, R16E; T1S, R14E (only that portion in Gila County); T1S, R14¼E; and T1S, R15E. Code of Federal Regulations, title 40, part 81, section 303 (40 CFR 81.303) also identifies six other townships as areas that ''cannot be classified.'' These six townships are: T2N, R13E (only that portion in Gila County); T2N, R16E; T1S, R13E (only that portion in Gila County); T1S, R16E; T2S, R14E (only that portion in Gila County); and T2S, R15E. All of the townships discussed in this notice relate to the Gila and Salt River Base Line. In section V of this notice, we discuss our decision to amend 40 CFR 81.303 to correct the boundary of the Miami area to exclude a noncontiguous township and to fix a typographical error.

are about 150 tons per year. See sections 4.1 and 4.3 of the Miami SO_2 Maintenance Plan and table 1, below.

TABLE 1.—POINT, AREA, AND MOBILE SOURCES OF SO_2 EMISSIONS IN THE MIAMI SO_2 NONATTAINMENT AREA (TONS PER YEAR, TPY)

Source name or type	Allowable emissions	Actual emissions (1999)
Stationary Sources (not including Phelps-Dodge primary copper smelter):		
BHP Copper, Pinto Valley Unit	6[a]	<1
BHP Copper, Miami East Unit	<1	<1
Carlotta Copper Company Mine	1	0
Phelps-Dodge Miami Mine	92	7
Area and Mobile	NA	149
Phelps-Dodge Miami Smelting Operations	10,368	7,819
Total From All Sources	NA	7,975

[a] When burning diesel; lower limits exist for other fuels.
NA = not applicable.
Source: Sections 4.1 and 4.3 from the Miami SO_2 Maintenance Plan.

III. CAA Requirements for Redesignation Requests and Maintenance Plans

As stated in the summary section of this rule, Arizona has requested that we redesignate the Miami SO_2 nonattainment area to attainment. Any redesignation from nonattainment to attainment requires EPA to determine whether the requirements of Clean Air Act section 107(d)(3)(E), have been met. These criteria are: (1) At the time of the redesignation, we must find that the area has attained the relevant NAAQS; (2) the State must have a fully approved SIP for the area; (3) we must determine that the improvements in air quality are due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable federal regulations and other permanent and enforceable reductions; (4) the state must have met all the nonattainment area requirements applicable to the area; and (5) we must have fully approved a maintenance plan for the area under CAA section 175A.

To evaluate the State's redesignation request for the Miami area, we relied upon the Clean Air Act itself, particularly section 110 and part D (of title I), EPA's NAAQS and SIP regulations in 40 CFR parts 50 and 51, and guidance set forth in ''General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990'' (57 FR 13498, April 16, 1992), and in the following EPA guidance documents: ''Procedures for Processing Requests to Redesignate Areas to Attainment,'' dated September 4, 1992, from John Calcagni, (''Calcagni Memo''), ''Attainment Determination Policy for Sulfur Dioxide Nonattainment Areas,'' dated January 26, 1995, from Sally L. Shaver, (''Shaver Memo''), and ''Part D New Source Review (part D NSR) Requirements for Areas Requesting Redesignation to Attainment,'' dated October 14, 1994, from Mary D. Nichols (''Nichols Memo'').

IV. EPA's Evaluation of Redesignation Request and Maintenance Plan for the Miami, Arizona SO_2 Nonattainment Area

A. The Area Must Be Attaining the SO_2 NAAQS

Under CAA section 107(d)(3)(E)(i), in order for an area to be redesignated, we must determine that the area has attained the applicable NAAQS. The air quality data should be representative of the area of highest concentration and should be measured by monitors that remain at the same location for the duration of the monitoring period required for demonstrating attainment. The data should be collected and quality-assured in accordance with 40 CFR part 58 and recorded in EPA's Air Quality System database (AQS) to be available for public review. Under 40 CFR part 58, States certify data that is entered into AQS on an annual basis.

For the purposes of determining whether an area has attained the SO_2 NAAQS, we require no fewer than two consecutive years of ''clean'' data (i.e., no violations) as recorded in AQS. In addition, to qualify for attainment determination purposes, the annual average and second-highest 24-hour average concentrations must be based upon hourly data that are at least 75 percent complete in each calendar quarter. See 40 CFR 50.4.

The State of Arizona initiated ambient monitoring of SO_2 in the Miami area in 1970. In order to establish coverage sufficient to evaluate the ambient impact of smelter emissions, this initial effort was expanded. Eventually more than sixteen stationary monitoring sites were established, with as many as seven monitors operating concurrently. Historic ambient SO_2 monitoring site locations and periods of operation are provided in Table 3.1, and Figures 3.1 and 3.2 of the State's submittal.

Following the Miami smelter's compliance with stack emissions limits (using continuous control technology) as required under Arizona Administrative Code (AAC) R9–3–515, which was submitted and approved by EPA as a revision to the Arizona SIP in the 1980's (but since amended and re-codified as R18–2–7–715), the number of SO_2 monitors has decreased. Between 1990 and 1996, the number of monitors varied from three to four and several monitoring locations changed, but since 1997, the three presently-operating monitors have remained at their current locations: the Jones Ranch monitor along Cherry Flats Road, the Ridgeline monitor along Linden Street, and the Townsite monitor along Sullivan Street.

All three presently-operating monitors are located south of the smelter, but vary in distance and elevation relative to smelter sources. The Townsite monitor lies closest to the smelter and at the lowest elevation among the three sites while the Jones Ranch monitor lies furthest from the smelter but at the highest elevation. The Jones Ranch and Townsite monitors are operated by Phelps Dodge using Thermal Electron pulsed fluorescent (TECO) samplers, and the Ridgeline monitor is operated by ADEQ using a Thermo pulse fluorescence analyzer.

Table 2 below summarizes the SO_2 monitoring data collected at the various monitors operated by ADEQ (or, in the case of Jones Ranch, ADEQ or the smelter operator) from 1988 through 2005. ADEQ ended its monitoring at Jones Ranch in 1994, but the smelter

operator continues to monitor SO_2 at that location. Table 3 below presents estimated annual SO_2 emissions from the smelter over the same time period.

TABLE 2.—SUMMARY OF SULFUR DIOXIDE AMBIENT AIR QUALITY DATA—MIAMI, ARIZONA: 1988–2005

Year	Averaging period	Concentrations (μg/m³) at individual sites			
		Jones ranch	Cities services bldg.	Little acres	Ridgeline
1988	Max 3-hour	*655*	*413*	*153*	
	Max 24-hour	*180*	*73*	*29*	—
	Annual	*21*	*13*	*6*	—
1989	Max 3-hour	*814*	*169*	*86*	—
	Max 24-hour	*133*	*29*	*18*	—
	Annual	*17*	*4*	*3*	—
1990	Max 3-hour	*715*	—	—	—
	Max 24-hour	*136*	—	—	—
	Annual	**16*	—	—	—
1991	Max 3-hour	*767*	—	—	—
	Max 24-hour	*143*	—	—	—
	Annual	**18*	—	—	—
1992	Max 3-hour	875	—	—	—
	Max 24-hour	128	—	—	—
	Annual	*8	—	—	—
1993	Max 3-hour	721	—	—	—
	Max 24-hour	123	—	—	—
	Annual	10	—	—	—
1994	Max 3-hour	566	—	—	—
	Max 24-hour	121	—	—	—
	Annual	16	—	—	—
1995	Max 3-hour	433	—	—	244
	Max 24-hour	122	—	—	89
	Annual	8	—	—	10
1996	Max 3-hour	593	—	—	338
	Max 24-hour	146	—	—	110
	Annual	11	—	—	8
1997	Max 3-hour	820	—	—	524
	Max 24-hour	138	—	—	92
	Annual	10	—	—	5
1998	Max 3-hour	840	—	—	175
	Max 24-hour	123	—	—	40
	Annual	10	—	—	8
1999	Max 3-hour	897	—	—	*198*
	Max 24-hour	152	—	—	*65*
	Annual	8	—	—	*14*
2000	Max 3-hour	895	—	—	*307*
	Max 24-hour	133	—	—	*70*
	Annual	11	—	—	*17*
2001	Max 3-hour	577	—	—	*338*
	Max 24-hour	145	—	—	*110*
	Annual	19	—	—	*19*
2002	Max 3-hour	628	—	—	*174*
	Max 24-hour	184	—	—	*78*
	Annual	16	—	—	*18*
2003	Max 3-hour	578	—	—	*250*
	Max 24-hour	152	—	—	*70*
	Annual	21	—	—	*13*
2004	Max 3-hour	326	—	—	*291*
	Max 24-hour	99	—	—	*78*
	Annual	13	—	—	*11*
2005	Max 3-hour	—	—	—	*250*
	Max 24-hour	—	—	—	*78*
	Annual	—	—	—	*12*

Notes: The primary NAAQS for SO_2 are 365 μg/m³, 24-hour average, not to be exceeded more than once per calendar year, and 80 μg/m³, annual average. The secondary NAAQS for SO_2 is 1,300 μg/m³, 3-hour average, not to be exceeded more than once per calendar year. The * indicates that the annual average does not satisfy summary criteria. The — indicates little or no data in a given year from a given monitor. EPA's AQS database is the source of data shown in *italics*. ADEQ's Air Quality Annual Reports are the sources of the non-italicized data shown in this table.

Monitoring Sites:

• The Jones Ranch monitoring site is located along Cherry Flats Road, approximately 1.8 miles south-southeast of the smelter stack at an elevation of 4,100 feet above sea level. ADEQ operated a monitor at this site through 1994. From 1991 through 1994, the State-operated monitor at Jones Ranch was referred to as ''Nolan Ranch''. More recent data shown in this table for Jones Ranch was collected and compiled by the smelter operator.

• The Cities Services Building monitoring site was located approximately 2.2 miles east-northeast of the smelter stack. ADEQ operated a monitor at this site through 1989.

• The Little Acres monitoring site was located approximately 2 miles southeast of the smelter. ADEQ operated a monitor at this site through 1989.

• The Ridgeline monitoring site, which is the current ADEQ monitoring site for SO_2 in the Miami area, is located along Linden Street at an elevation of 3,600 feet.

TABLE 3.—MIAMI SMELTER SULFUR DIOXIDE EMISSIONS: 1988–2005

Year	Sulfur dioxide emissions tons per year
1988	3,988
1989	6,398
1990	4,141
1991	11,145
1992	4,813
1993	7,678
1994	9,260
1995	5,108
1996	5,737
1997	6,368
1998	6,097
1999	7,819
2000	6,810
2001	9,062
2002	5,667
2003	8,005
2004	8,754
2005	7,366

Sources: Miami SO_2 Maintenance Plan, page 35; e-mail correspondence from Bruce Friedl, ADEQ, dated September 29, 2006.

Review of historic data supports identification of the Jones Ranch monitor as the monitoring location where the highest concentrations are recorded among the network of monitoring locations selected to measure the impact of smelter-related emissions on ambient air quality. We note that the Jones Ranch monitoring site was determined to be the ''limiting site'' for the purposes of establishing emissions limits for the smelter. ADEQ closed its monitoring site at Jones Ranch in 1994, and while Phelps-Dodge continues to operate an SO_2 monitor at that site, the data is not recorded in AQS.[3] In 1995, ADEQ began monitoring at the Ridgeline site, and no exceedances have ever been recorded there.

Based on a review of the data from the Miami SO_2 Maintenance Plan as well as tables 2 and 3 presented above, we find that the Miami nonattainment area has attained the SO_2 NAAQS and thereby meets the first criterion for redesignation. Our conclusion is based on six basic interrelated facts:

• Ambient SO_2 concentrations in the Miami air quality planning area are determined by emissions from the Phelps-Dodge primary copper smelter[4] and local meteorological and topographic characteristics, and all other SO_2 sources have essentially no effect on ambient levels in the planning area;

• The monitor at the Jones Ranch site records SO_2 concentrations that are representative of the highest ambient levels in the nonattainment area;

• There are two consecutive and complete years of ''clean'' data from the Jones Ranch monitor, i.e., the limiting site, as recorded in AQS (1988 and 1989);

• During the 1988–1989 period, maximum concentrations were approximately 60% of the 3-hour-average secondary NAAQS and approximately 50% of the 24-hour-average primary NAAQS, and the highest of the annual-average concentrations measured in the area during this period was approximately 30% of the corresponding primary NAAQS;

• While annual emissions from the smelter have varied from year to year, they have generally been no higher than 50% above those that occurred during the 1988–1989 period; and

• No SO_2 exceedances have been measured at any of the monitoring sites over the 1988 to 2005 period.

B. The Area's Applicable Implementation Plan Must Be Fully Approved Under CAA Section 110(k)

Under CAA section 107(d)(3)(E)(ii), the SIP for the Miami area must be fully approved under CAA section 110(k) of the Act. We examined the applicable SIP for Arizona and also looked at the disapprovals listed in 40 CFR 52.125 and have determined that no disapprovals listed remain relevant to the applicable SIP. Arizona has a fully approved SIP with respect to SO_2 in the Miami area.

C. The Improvement in Air Quality Must Be Due to Permanent and Enforceable Reductions in Emissions

CAA section 107(d)(3)(E)(iii) requires that EPA determine that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and/or applicable federal measures. Figure 6.1 of the Miami SO_2 Maintenance Plan (as amended in ADEQ's submittal dated June 30, 2004) illustrates the significant decline in emissions from the Miami smelter since the 1970's in inverse proportion to the level of control over smelter emissions sources.

Control over the smelter's SO_2 emissions has been made permanent and enforceable through EPA approval of State rules limiting such emissions as a revision to the Arizona SIP (specifically, R18–2–715, R18–2–715.01, R18–2–715.02, and R18–2–Appendix 8) and through ADEQ's issuance of a title V permit for the Miami smelter. Arizona's primary copper smelter rules and ADEQ's title V permit contain enforceable emission limitations that cap emissions at a level that has been shown to be protective of the NAAQS. Any relaxation to the SIP-approved limits must be approved by EPA as a revision to the Arizona SIP, and EPA may not approve any such SIP revision without a demonstration that the relaxation in the limits would not interfere with attainment or maintenance of the NAAQS. See CAA section 110(l). Therefore, we find that the improvement in ambient SO_2 concentrations in the Miami, AZ area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP.

D. The Area Must Have Met All Applicable Requirements Under Section 110 and Part D

Under CAA section 107(d)(3)(E)(v), we must determine whether the State of Arizona has met all requirements under section 110 and under part D (of title I) of the CAA applicable to the Miami SO_2 nonattainment area.

1. Section 110 Requirements

CAA section 110 contains the general requirements for SIPs (enforceable emissions limits, ambient monitoring, permitting of new sources, adequate funding, etc.). EPA's guidance for implementing section 110 of the Act is discussed in the General Preamble to Title I (57 FR 13498, April 16, 1992). Over the years, we have approved Arizona's SIP as meeting these basic requirements. The SIP includes enforceable emission limitations; requires monitoring, compiling, and analyzing of ambient air quality data; requires preconstruction review of new

[3] ADEQ has committed to working with Phelps-Dodge to begin entering SO_2 monitoring data collected at the Jones Ranch site to AQS beginning with the first quarter of 2008. See letter from Nancy C. Wrona, Director, Air Quality Division, ADEQ, to Deborah Jordan, Air Division Director, EPA—Region IX, dated October 18, 2006.

[4] There is one significant point source located outside the Miami nonattainment area but within 50 kilometers of the Miami nonattainment area. The ASARCO Hayden Smelter is located approximately 46 kilometers south of the Miami smelter. However, because the ASARCO Hayden smelter is geographically separated from the Miami area by the 7,000 foot Pinal Mountains, its emissions do not have an impact on air quality in the Miami area.

major stationary sources and major modifications to existing ones; provides for adequate funding, staff, and associated resources necessary to implement its requirements; and requires stationary source emission monitoring and reporting.

2. Part D Requirements

Before an area can be redesignated to attainment, it must have fulfilled the applicable requirements under part D (of title I). For this area, the relevant requirements are found in subparts 1 and 5 of part D. Subpart 1 of part D specifies the basic requirements applicable to all nonattainment areas. Subpart 5 sets out additional provisions for areas designated nonattainment for SO_2. As discussed below, EPA finds that Arizona has met the requirements of subpart 1 of part D, specifically sections 172(c) and 176, and subpart 5 as applicable for the Miami SO_2 nonattainment area.

a. Section 172

CAA section 172 contains the general requirements for nonattainment SIPs. A thorough discussion of the requirements of 172(c) can be found in the General Preamble for the implementation of title I (57 FR 13498, April 16, 1992). Additional guidance can be found in the Calcagni memo.

EPA has interpreted the requirements of CAA sections 172(c)(2) (reasonable further progress—RFP), 172(c)(6) (other measures), and 172(c)(9) (contingency measures) as not relevant to a redesignation request because they only have meaning for an area that is not attaining the standard (see the General Preamble and the Calcagni Memo), and as discussed above in section IV.A. of this notice, we find that the Miami area is attaining the SO_2 standard. Furthermore, the State has not sought to exercise options that would trigger section 172(c)(4) (identification of certain emissions increases). Thus, this provision is also not relevant to this redesignation request. The other provisions under 172(c) are discussed below.

Reasonably available control measures. Under CAA section 172(c)(1), reasonably available control measures (RACM), which include requirements for reasonably available control technology (RACT), are required for existing sources in nonattainment areas. In 1983, we approved the State's submittal of Rule R9–3–315, a predecessor to the State's current smelter rules codified at Arizona Administrative Code (AAC) R18–2–715. See 48 FR 1717 (January 14, 1983). This rule limited stack emissions from primary copper smelters, including the smelter in the Miami area. We concluded, however, that the control strategy for SO_2 in Arizona's six SO_2 nonattainment areas was incomplete due to the failure to address fugitive emissions problems. See 48 FR 1717 (January 14, 1983) and 40 CFR 52.125(a)(1).

In 1998, 2003, and 2006, the State submitted amended rules (AAC R18–2–715 (sections F, G, and H), R18–2–715.01, R18–2–715.02, and R18–2–Appendix 8).[5] These rules address both fugitive and stack emissions from smelters and, in approving the rules, we found that the amended rules met the RACT requirement under CAA sections 172(c)(1) and 191(b). See 69 FR 26789 at 26788 (May 14, 2004), 69 FR 63321 (November 2, 2004), and 71 FR 18624 at 18625 (April 12, 2006). Furthermore, because the area has attained the standard, no further demonstration that RACM has been implemented need be submitted by the State.

Emissions inventory. The emissions inventory requirement of section 172(c)(3) is satisfied by the maintenance plan inventory requirements. The maintenance plan inventory is evaluated below, in section IV.E.1.

NSR permit program. Section 172(c)(5) requires new source review (NSR) permits for the construction and operation of new and modified major stationary sources located in nonattainment areas. ADEQ is the agency responsible for implementing the nonattainment area NSR permit program in the Miami area. Under ADEQ's rules, all new major sources and modifications to existing major sources are subject to the NSR requirements of these rules.

We have not yet fully approved the ADEQ NSR rules.[6] We have, however, determined that an area being redesignated from nonattainment to attainment does not need to have an approved NSR program prior to redesignation, provided that the area demonstrates maintenance of the standard without nonattainment NSR in effect. See memorandum from Mary Nichols dated October 14, 1994 (''Part D New Source Review (part D NSR) Requirements for Areas Requesting Redesignation to Attainment.'') We have determined that the maintenance demonstration for Miami does not rely on nonattainment NSR.

Prevention of significant deterioration (PSD) is the permitting program that applies in attainment areas. PSD was established to preserve air quality in areas that are meeting the NAAQS. The PSD program requires new, modified, or reconstructed stationary sources to undergo preconstruction review and to apply best available control technology. In addition, sources are required to review PSD increment consumption and undertake preconstruction modeling. ADEQ has an EPA-approved PSD permitting program (Arizona Air Pollution Rule R9–3–304) for all criteria pollutants except respirable particulate matter (PM_{10}). See 48 FR 19878 (May 3, 1983). The federal PSD program for PM_{10} was delegated to the State on March 12, 1999. ADEQ's partially approved, partially delegated PSD program will apply automatically to new major sources or major modifications to existing sources of SO_2 in the Miami area once the area is redesignated to attainment.

Compliance with section 110(a)(2). Under section 172(c)(7), plan provisions submitted to satisfy part D must meet the applicable provisions of section 110(a)(2) of the CAA. As noted in section IV.B. above, the Miami portion of the Arizona SIP meets these requirements.

Equivalent techniques. Under section 172(c)(8), EPA may allow the use of equivalent modeling, emission inventory, and planning procedures, unless EPA determines that the proposed techniques are, in the aggregate, less effective than the methods specified by EPA. The Miami SO_2 Maintenance Plan relies on an equivalent modeling technique referred to as Multipoint Rollback (MPR). MPR was used to derive emissions limits for the Miami smelter that provide for attainment and maintenance of the SO_2 NAAQS. The State's rules containing MPR-derived emission limits for the Miami smelter were approved by EPA on January 14, 1983 (48 FR 1717) and amended versions of the rules were approved by EPA on November 1, 2004 (69 FR 63321).

b. Section 176

Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and projects developed, funded or approved

[5] A more extensive summary of the regulatory history of copper smelters in Arizona is included in EPA's proposed action on these rules. See 69 FR 26786 (May 14, 2004).

[6] ADEQ's NSR rules are included in the preconstruction review and permitting provisions of Arizona Administrative Code (AAC), Title 18, Chapter 2, Articles 3 and 4. EPA approved an earlier version of ADEQ's NSR requirements (AAC R9–3–302) on May 5, 1982 (47 FR 19328) and August 10, 1988 (53 FR 30220).

under title 23 U.S.C. or the Federal Transit Laws (''transportation conformity'') as well as to all other federally supported or funded projects (''general conformity''). Because EPA does not consider SO_2 a transportation-related pollutant, only the requirements related to general conformity apply to the Miami SO_2 area. The State of Arizona adopted general conformity criteria and procedures as a revision to the Arizona SIP. EPA approved Arizona's general conformity SIP on April 23, 1999 (64 FR 19916). Thus, the requirements of CAA section 176 have been satisfied.

c. Subpart 5

Subpart 5 of part D contains additional provisions for areas designated nonattainment for SO_2. Under CAA section 191(b), States with existing nonattainment areas for the primary SO_2 NAAQS where those areas lack fully approved SIPs, including part D plans, must submit implementation plans meeting the requirements of subpart 1 of part D. As discussed in section IV.D.2.a of this notice, the State of Arizona has met the requirements of subpart 1 of part D for the Miami area. Under CAA section 192(b), such areas were required to meet the primary SO_2 NAAQS as expeditiously as possibly but no later than November 15, 1995. As discussed in section IV.A of this notice, the Miami SO_2 nonattainment area met the primary SO_2 standards well before the applicable attainment date of November 15, 1995 and has continued to attain since then.

E. The Area Must Have a Fully Approved Maintenance Plan

Section 107(d)(3)(E)(iv) of the Act makes EPA approval of a maintenance plan meeting the requirements of section 175A another prerequisite to redesignation. Under section 175A, a maintenance plan must provide for maintenance of the NAAQS for at least 10 years after redesignation, and include any additional control measures as may be necessary to ensure such maintenance. In addition, maintenance plans are to contain such contingency provisions as EPA deems necessary to assure the prompt correction of a violation of the NAAQS that occurs after redesignation. The contingency measures must include, at a minimum, a requirement that the state will implement all control measures contained in the nonattainment SIP prior to redesignation.

The Calcagni Memo contains EPA guidance on the contents of maintenance plans submitted for the purposes of meeting section 175A. Generally, such plans should address the following five topics: the attainment emissions inventory, maintenance demonstration, monitoring network, verification of continued attainment, and a contingency plan.

Lastly, under CAA section 175A(b), states are required to submit a subsequent maintenance plan eight years after redesignation providing for maintenance of the NAAQS for an additional 10-year period beyond the initial 10-year maintenance period.

1. Attainment Inventory

The Miami SO_2 Maintenance Plan includes an emissions inventory for point sources, area sources, and mobile sources for 1999 and 2000 as well as a projection of emissions to 2015. See table 4 below. As discussed in section IV.A of this notice, the Miami area has continued to attain the SO_2 NAAQS since at least 1990 and thus 1999 and 2000 are acceptable as the basis upon which to develop an ''attainment emissions inventory'' for the purposes of a maintenance plan.

ADEQ developed the area and mobile source estimates shown in table 4 based on EPA's AIRData for Gila County. Point source estimates are based on ADEQ annual emissions inventory data. See section 4.0 and appendix B of the Miami SO_2 Maintenance Plan. Sulfur dioxide emissions from the Phelps-Dodge smelter copper smelter itself are based on continuous emission monitoring systems and the assumption that stack emissions represent 25 percent of the facility's total annual (i.e., stack plus fugitive) SO_2 emissions. The actual percentage of total facility emissions emanating from the stacks varies from year to year (e.g., from 19 percent to 33 percent over the 1996 to 2000 period) but the 25 percent assumption is a reasonable average annual value based on material balance calculation methods.

TABLE 4.—SO_2 EMISSIONS INVENTORIES FOR 1999, 2000, AND PROJECTED INVENTORY FOR 2015 FOR THE MIAMI AREA (IN TPY)

Source type	1999	2000	2015
Area and Mobile	149	150	162
Point (excluding Miami smelter)	7	4	9
Miami Smelter	7,819	6,810	8,000
Total	7,975	6,964	8,171

Source: Miami SO_2 Maintenance Plan, tables 4.4 and 4.6.

Based on our review of the submitted plan, we conclude that the emissions inventory is based on reasonable methods and assumptions and is comprehensive and accurate.

2. Maintenance Demonstration

EPA allows states to demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS.[7] In the case of the Miami nonattainment area, the demonstration of maintenance relies on both a projected emissions inventory for future years of 2005, 2010, and 2015 for sources in the Miami nonattainment area as well as SO_2 emission limits for the Miami smelter that were developed using a variant of Multipoint Rollback (MPR) modeling and intended to minimize the probability of an exceedance of the SO_2 NAAQS due to smelter emissions.

The inventory from the Miami SO_2 Maintenance Plan shows that about 98% of the total SO_2 emissions in the Miami nonattainment area are generated by the smelter.[8] Projections for the Miami smelter itself anticipate a minor increase from those in 1999 [7,819 tons per year (tpy)] to 2005 and beyond (8,000 tpy). The remaining point sources in the nonattainment area have existing permits that limit their allowable emissions to less than 100 tpy. Projections for area and mobile sources

[7] See Calcagni Memo, at p. 9.

[8] See appendix B of submitted plan.

(increasing from 149 tpy [9] to 162 tpy) are based on anticipated moderate increases in population and the assumption that SO_2 emissions from such sources are proportionate to the population. Total projected actual emissions of point, area, and mobile sources are expected to remain relatively constant, with total SO_2 emissions projected to be less than 24 tons on a daily basis and approximately 8,200 tons on annual basis by 2015.[10] This represents an increase of only about 2 percent from 1999 levels. Thus, throughout the maintenance period, the Miami smelter is expected to continue to be the overwhelming source of SO_2 emissions in the area.

The emissions projections for the smelter (from 7,819 tpy) in 1999 to 8,000 tpy in 2005 and beyond are based on the expectation that, through 2015, the copper industry will not expand. While the expectation of continued low price pressures on copper may well have been reasonable in 2002 when the maintenance plan was adopted, changes in the copper market in fact have occurred over the past several years raising the price for copper thereby leading to a reasonable expectation of higher production levels at the Miami smelter than anticipated in the Miami SO_2 Maintenance Plan.

Nonetheless, the demonstration of maintenance of the SO_2 NAAQS in the Miami area does not rely solely on the emissions projections, but also on the SO_2 emission limits established under SIP rule AAC R18–2–715 (approved by EPA in 2004 and, as amended, in 2006) and incorporated into the title V operating permit for the Phelps-Dodge Miami smelter. These limits cap stack emissions at 604 pounds per hour (lbs/hr) on an annual average basis and total facility (i.e., stacks plus fugitives) emissions at 2,420 lbs/hr on an annual basis. SIP rule AAC R18–2–715 also establishes a cumulative occurrence table that caps the number of occurrences of 3-hour average emissions above various levels with, for example, only two occurrences allowed per year of stack SO_2 emissions greater than 5,900 lbs/hr, 3-hour average. The total facility emissions cap (2,420 lbs/hr) corresponds to approximately 10,600 tpy assuming round-the-clock, year-round operation (the permit however cites 10,400 tpy based on 357 work days in a given year).

As explained below, ADEQ has demonstrated that the new limits are protective of the SO_2 NAAQS. In order to increase the smelter's emissions limits the State would have to submit a SIP revision that demonstrates that, consistent with CAA section 110(l), the revision does not interfere with maintenance of the SO_2 NAAQS. Therefore, the emission limits for the smelter, supported by the emissions inventory projections that show that the smelter will remain the overwhelming source of SO_2 emissions in the area for the foreseeable future, in essence provide the demonstration necessary to show that the Miami area will continue to attain the SO_2 standard indefinitely, and thereby comply with CAA section 175A(a), which requires maintenance plans to provide for maintenance of the NAAQS for at least 10 years after redesignation.

Given the link then between the SO_2 emission limits on the Phelps-Dodge Miami smelter and the demonstration of maintenance, the Miami SO_2 Maintenance Plan provides a detailed explanation of how the limits were derived and how they minimize the probability of exceedance of the SO_2 NAAQS due to smelter operations. See chapter 5 of the submitted plan. First, it is important to note that ADEQ used a variant of the Multipoint Rollback (MPR) method to derive these emissions limits. In brief, MPR uses the ratio of monitored concentrations to the NAAQS to determine how much to scale the smelter's existing hourly distribution of emission rates so that they meet the NAAQS. Unlike simple rollback, which yields a single maximum emission rate never to be exceeded, MPR yields limitations on the number of times per year that the facility may exceed each of a series of emission rates. In the resulting cumulative occurrence table, the larger the emissions rate, the fewer number of occurrences are allowed per year. The emission rates are chosen so that the full hourly distribution results in attainment of the NAAQS on a probabilistic basis. This approach has been approved by EPA for use with smelters because of their highly variable emission rates.[11] ADEQ used a variant of MPR, as explained further below, to show that the new limits are protective of the NAAQS.

ADEQ derived the original emissions limits for the smelter in the late 1970's using MPR, and adopted the original smelter SO2 emissions rule in 1979. To derive new, enforceable limits on the smelter stacks, it was necessary to distinguish stack emissions from total emissions, which include fugitives (those emissions not vented through the stack). The new emissions limits were derived by apportioning the old facility-wide emission limits between the stack emissions and fugitive emissions. Using mass balance, the total amount of emissions can be calculated from the total mass of sulfur entering the plant in raw materials. Stack emissions are monitored, and account for about 25% of the total sulfur. The fugitive emissions were then determined by subtracting the monitored stack emissions from the calculated total emissions. Because the release height of the stack and fugitive emissions is similar, and their emissions are fairly well-mixed by the time they reach the monitor, the stack also accounts for 25% of the observed concentration at the monitor, on average. Thus, 25% of the existing facility-wide limits (2,420 lb/hr) are what the stack must be limited to (605 lb/hr; the SIP rule caps the emissions at 604 lb/hr, which is slightly more conservative) in order to meet the NAAQS.

This provides only an annual average emission rate. To derive MPR-style limits on allowed occurrences of various emission rates (i.e., a cumulative occurrence table), ADEQ used the shape of the current hourly emission distribution [12] and scaled it to match the required annual average emission rate. Since the new average limit is 1.75 times the current average actual emissions (604 lb/hr limit vs. 345 lb/hr current average), the current distribution and occurrence emission levels were scaled up by this factor. The result is new occurrence limits consistent with the new average limit of 604 lb/hr, the level needed to meet the NAAQS based upon the 1979 MPR analysis and the 25% stack fraction.

However, scaling according to the 1979 limits assumes that the 1979 relationship between emissions and ambient concentrations has not changed. There have been substantial operational and emissions changes at the smelter since the 1979 average

[9] The most recent quality assured inventory is from 1996. The 1999 SO_2 inventory for area and mobile sources is based on economic growth activity.

[10] See table 4.6 of submitted plan.

[11] See EPA Final Rule, ''Approval and Promulgation of Implementation Plans; Arizona Plan Revision: Sulfur Oxides Control Strategy and Regulations for Existing Nonferrous Smelters,'' 48 FR 1717 (January 14, 1983); and the SO_2 Guideline Document, EPA–452/R–94–008, February 1994, section 6.4.4.

[12] Emissions from each hour of 1999 were averaged with the corresponding hour in 2000, which represents a minor departure from how original MPR was carried out; i.e., using all data in a single distribution. EPA believes any resulting changes to the calculations are insignificant in the context of the Miami MPR analysis and finds this to be an acceptable approach.

emission limit and occurrence table were derived, which could have altered the shape of the emissions curve. If the current distribution shape has a broader peak than the 1979 one, then there will be relatively more instances of high ambient impacts, and so scaling of the average will not guarantee NAAQS-protective limits on short-term emissions.

In order to address this, ADEQ carried out a second step in the submittal that is more consistent with the MPR procedure, in that it incorporated the ambient effect of the current emissions distribution, rather than relying on the 1979 relationship. ADEQ used monitoring data from 1996–2000, and emissions during that same period. The new emission limits, though a decrease from the old limits, represent an increase over the current actual emissions, and so should be shown to be consistent with the NAAQS. ADEQ assumed the smelter operated at the higher emissions rate allowed in the new limits, and applied the fractional emissions increase to ambient 3-hour, 24-hour, and annual SO_2 concentrations. This uses the current relationship between emissions and ambient concentration to show that the scaled-up emissions allowed in the new limits are consistent with the NAAQS. The result of this ''rollback'' scaling is shown in figure 5.4 of the Miami SO_2 Maintenance Plan, and also in table 5 below.

TABLE 5.—PREDICTED AMBIENT SO_2 CONCENTRATIONS BASED ON EMISSIONS LIMITS

Averaging time	Predicted level $\mu g/m^3$	NAAQS $\mu g/m^3$	Percent of NAAQS
3-hour	1,180	1,300	91
24-hour	230	365	63
Annual	25	80	31

Note: The predicted 3-hour and 24-hour average concentrations represent second-high values in a given year. Predicted levels listed in this table are derived from figure 5.4 of the Miami SO_2 Maintenance Plan.

With this second verification step, ADEQ used a procedure consistent with MPR, an EPA-approved method for smelter attainment demonstrations, to show that the new limits are protective of the NAAQS. We find that the protection of the NAAQS provided by the smelter's SO_2 emissions limits, considered in the context of emissions projections that show that the smelter will remain the overwhelming source of SO_2 emissions in the area for the foreseeable future, sufficient to demonstrate maintenance through the maintenance period and beyond.

3. Monitoring Network

Currently, there are three monitoring sites in the Miami nonattainment area: the Ridgeline monitor operated by ADEQ, and the Jones Ranch and Townsite monitors operated by Phelps-Dodge. ADEQ and Phelps-Dodge Miami commit to continue monitoring ambient SO_2 concentrations at their respective sites for at least 10 years following the approval of the Miami SO_2 Maintenance Plan. Phelps-Dodge has the option of shutting down the monitors if the smelter has not operated for more than 2 years but commits to resume monitoring at the two sites three months prior to restarting of smelting operations. In addition, ADEQ commits to discussing changes to monitor locations with EPA and indicates that all ambient monitoring data will continue to be quality-assured in accordance with the requirements of 40 CFR part 58, Ambient Air Quality Surveillance. See section 7.2 of the submitted plan. We find that the Miami SO_2 Maintenance Plan adequately provides for continued monitoring of SO_2 concentrations in the Miami area.

At the present time, only the SO_2 monitoring data collected at ADEQ's Ridgeline site is certified and entered into AQS. However, because the Jones Ranch site has historically measured the highest SO_2 concentrations in the area and because the data from Jones Ranch is used in connection with the contingency plan, EPA has requested that ADEQ commit to working with Phelps-Dodge to ensure that SO_2 monitoring data from the Jones Ranch site is entered into AQS. By letter to EPA dated October 18, 2006, ADEQ has agreed that entering SO_2 monitoring data from the Jones Ranch site into AQS is appropriate and has committed to working with Phelps-Dodge to accomplish this task no later than the first quarter of 2008. This commitment provides additional assurance that a suitable monitoring network will be maintained within the Miami area through the maintenance period and provides additional support for the contingency plan discussed below in section IV.E.5 of this action.

4. Verification of Continued Attainment

ADEQ intends to track the progress of the Miami SO_2 Maintenance Plan through implementation and enforcement of the monitoring, reporting, and certification procedures to which permitted sources are subject under AAC R18–2–306 and R18–2–309. As a permitted source, the Phelps-Dodge Miami smelter is subject to these State requirements. ADEQ also notes that it has authority pursuant to Arizona Revised Statutes section 49–101 to monitor and ensure source compliance with all applicable rules and permit conditions. See section 7.3 of the submitted plan. Lastly, we note that ADEQ is required under 40 CFR part 51, subpart A, to report emissions data for large stationary sources, such as the Phelps-Dodge Miami smelter, on an annual basis. Considered together, the submitted plan and relevant EPA regulations adequately provide for verification of continued attainment of the SO_2 NAAQS in the Miami area.

5. Contingency Plan

Section 175A(d) of the CAA requires that maintenance plans include contingency provisions to promptly correct any violation of the NAAQS that occurs after redesignation of the area. The Calcagni memo provides additional guidance, noting that, although a state is not required to have fully adopted contingency measures that will take effect without further action by the state in order for the maintenance plan to be approved, the maintenance plan should ensure that the contingency measures are adopted expediently once they are triggered. Specifically, the maintenance plan should clearly identify the measures to be adopted, include a schedule and procedure for adoption and implementation of the measures, and contain a specific time limit for action by the state. In addition, the state should identify specific indicators, or triggers, that will be used to determine when the contingency measures need to be implemented.

Because the Phelps-Dodge smelter is the overwhelming source of SO_2 emissions in the Miami area, the

contingency plan contained in section 7.4 of the Miami SO_2 Maintenance Plan focuses on ambient impacts and emissions attributable to it. The contingency plan uses monitored ambient concentrations of SO_2 to trigger actions designed to ensure continued attainment of the SO_2 NAAQS. The trigger levels and associated notification procedures and associated actions are described below.

Notification Procedure: If either of the Phelps-Dodge monitors or the ADEQ-operated monitor record ambient 3-hour average SO_2 levels between 0.425 ppm and 0.5 ppm (i.e., levels greater than 85%, but less than 100%, of the secondary SO_2 NAAQS),[13] the entity that operates the monitor is required to notify the other party. A second occurrence in a calendar year of ambient concentrations between 0.425 ppm and 0.5 ppm, or an exceedance of the secondary NAAQS is defined as the protective trigger level (PTL). The response required by a triggering of the PTL is divided into two action levels.

First Action Level: If the PTL is tripped, Phelps-Dodge must undertake a series of inspections and a full calibration check of the ambient SO_2 analyzers and recording systems in order to validate the data. If the data are determined to be valid, Phelps-Dodge must perform any needed repairs or corrective actions and implement specified preventive measures. The source must also submit a report to ADEQ by the close of the second business day following an exceedance in which it describes the nature of the event, any corrective actions taken to resolve the event, and recommendations for future corrective actions to avoid recurrence of such an event.

Second Action Level: If the source is unable to correct the triggering of the PTL by implementing the actions required under the first action level, Phelps-Dodge must undertake an analysis to identify additional control measures needed to ensure maintenance of the NAAQS. Phelps-Dodge is required to submit recommendations to ADEQ within 30 business days following the triggering of the PTL. Using all available data, ADEQ will determine the cause and appropriate resolution of the event, and will require the adoption and implementation of additional control measures, as needed. ADEQ commits to initiating changes to the rules or to the permit as soon as possible.

Special Measure: A violation of the secondary NAAQS (i.e., a second exceedance in a calendar year) triggers the implementation of a special measure within 24 hours of the monitored violation that requires the source to reduce its operating rate by the same percentage as that by which the 3-hour standard was exceeded. These circumstances also require that the source comply with first action level requirements and, if necessary, second action level requirements. A second and higher concentration violation of the secondary NAAQS within the same calendar year requires that the operating rate be recalculated accordingly.

Upon review of the contingency plan in the Miami SO2 Maintenance Plan summarized above, we find that ADEQ has established a workable contingency plan, including trigger levels, notification procedures, and appropriate actions, for promptly correcting any violations of the SO2 NAAQS that occur after the redesignation of the Miami area to attainment and thereby satisfies the requirements of CAA section 175A(d).

6. Subsequent Maintenance Plan Revisions

As noted previously, CAA section 175A(b) requires states to submit a subsequent maintenance plan revision eight years after the redesignation request is approved by EPA. The subsequent maintenance plan is to provide for maintenance of the NAAQS for an additional 10 years following the first 10-year maintenance period. ADEQ has made a commitment to submit a subsequent maintenance plan to EPA eight years into the initial 10-year maintenance period (see page 53 of the submitted plan) and thereby satisfies CAA section 175A(b).

7. Conclusion

ADEQ's Miami SO_2 Maintenance Plan adequately addresses the five basic topics that such plans should address, including attainment inventory, maintenance demonstration, monitoring network, verification of continued attainment, and contingency plan, and also provides for submittal of a subsequent maintenance plan. Therefore, we approve the Miami SO_2 Maintenance Plan as a revision to the Arizona SIP and thereby satisfy the related redesignation criterion of CAA section 107(d)(3)(E)(iv).

V. Boundary Correction

A. Background

Under section 107(d) of the Clean Air Act Amendments of 1977, each State was directed to submit to EPA a list identifying the NAAQS attainment status for all areas within the State. EPA was required under section 107(d)(2) of the 1977 Amended Act to promulgate the State lists, with any necessary modifications, within 60 days of their submittal. In 1978, in the absence of recommendations from the State of Arizona, EPA promulgated the original area designations for Arizona for each of the NAAQS. See 43 FR 8962 (March 3, 1978).[14] EPA selected counties as the geographic basis for the original nonattainment area designations for SO_2 in Arizona and designated all of Gila County as a nonattainment area for the SO_2 NAAQS. See 43 FR 8962, at 8968.

On August 15, 1978, the State of Arizona submitted its area designations to EPA with the intent that EPA redesignate the original EPA-promulgated nonattainment areas to reflect the State's recommendations. The State's August 15, 1978 submittal included a background document prepared by the Arizona Department of Health Services and entitled, ''Identification of Areas within Arizona that do or do not meet National Ambient Air Quality Standards (August 1, 1978)'' (referred to herein as the ''State's designations background report''). The State's designations background report identifies townships, or identifiable portions thereof, as the smallest geographic unit defining air quality planning areas in Arizona.

With respect to SO_2 in the Miami area, the State's designations background report includes a map showing a nonattainment area comprised by a total of nine townships: two townships in which the major source of SO_2 emissions in the area (i.e., the primary copper smelter) is located (T1N, R14E and T1N, R15E) and seven adjacent townships (or portions thereof) to the east, west, north and south. The State's map also shows six additional adjacent townships with the designation of ''cannot be classified.''

In the State's designations background report, the State provided a specific list of townships defining the nonattainment and ''cannot be classified'' areas. However, the list of townships and the map illustrating the areas are not entirely consistent with

[13] See Table 5, above, which shows that the three-hour SO_2 NAAQS is ''limiting'' in the sense of being the most constraining on emissions, since this averaging time has the least room for additional emission increases. This is consistent with past findings that the three-hour average requires the most stringent reduction in emissions. See 46 FR 58098 (November 30, 1981) at page 58102.

[14] EPA has codified the designations for air quality planning areas at 40 CFR part 81. The Arizona area designations are codified at 40 CFR 81.303.

one another. The State's list of townships for the Miami SO_2 nonattainment area includes, among others, the following townships moving west to east: T1N, R13E; T1N, R14E; T1N, R15E; and T1N, R16E. The township immediately east of T1N, R15E, however, is T1N, R15½E not T1N, R16E, and thus the list inadvertently created a noncontiguous nonattainment area with a single township (T1N, R16E) isolated from the rest of the larger designated area.[15] In contrast, the map submitted as part of the designations background report shows the nonattainment area boundary as a single contiguous area including both T1N, R15½E and the western half of T1N, R16E. On April 10, 1979 (44 FR 21261), we approved the redesignation request by Arizona for the Miami SO_2 nonattainment area without modification and thereby codified the State's submitted list of townships (not the map) as the geographic definition for the Miami SO_2 nonattainment area thereby creating a noncontiguous nonattainment area (i.e., one township isolated from the rest of the townships comprising the nonattainment area). In its June 26, 2002 submittal of the Miami SO_2 Maintenance Plan and supplemental June 30, 2004 submittal, ADEQ requested that we redesignate the boundaries under CAA section 107(d)(3)(D) to create a single, contiguous planning area and to exclude tribal lands from the planning area. By letter dated June 26, 2006, however, ADEQ withdrew the boundary redesignation request as previously formulated but requested that EPA act to correct the boundary under section 110(k)(6) of the Act instead. As explained further below, we agree with ADEQ that a boundary correction is warranted, and we make the related corrections to the boundary in today's notice.

Also, while our April 10, 1979 final rule redesignating nonattainment areas in Arizona correctly listed T1S, R14½E as one of the townships comprising the Miami SO_2 nonattainment area, the 1979 version of 40 CFR part 81 included a transcription error and listed this particular township as ''T1S, R14¼E'' instead of ''T1S, R14½E.'' We are correcting the transcription error in this notice as well.

B. Authority for Correcting Errors

Section 110(k)(6) of the Clean Air Act, as amended in 1990, provides, ''Whenever the Administrator determines that the Administrator's action approving, disapproving, or promulgating any plan or plan revision (or part thereof), area designation, redesignation, classification or reclassification was in error, the Administrator may in the same manner as the approval, disapproval, or promulgation revise such action as appropriate without requiring any further submission from the State. Such determination and the basis thereof shall be provided to the State and the public.''

We interpret this provision to authorize the Agency to make corrections to a promulgated regulation when it is shown to our satisfaction that (1) we clearly erred in failing to consider or in inappropriately considering information made available to EPA at the time of the promulgation, or the information made available at the time of promulgation is subsequently demonstrated to have been clearly inadequate, and (2) other information persuasively supports a change in the regulation. See 57 FR 56762, at 56763 (November 30, 1992).

In this instance, we have found clear error in our 1979 consideration of the State of Arizona's submitted recommendations for area redesignations and believe that correction of the error to be appropriate at this time in support of the State's submittal of a redesignation request and maintenance plan for the SO_2 NAAQS within the Miami air quality planning area.

C. Evaluation and Conclusion

Based on a comparison of the map submitted by the State in its 1978 designations background report that illustrates the nonattainment area with the accompanying list of townships defining the area, we find that the State erred by assuming that the township immediately east of T1N, R15E is T1N, R16E when it is actually T1N, R15½E and by then including the former instead of the latter in the list of townships defining the nonattainment area. Whereas T1N, R15½E lies immediately adjacent to one of the townships in which the major source of SO_2 emissions is located, T1N, R16E lies mostly within the San Carlos Indian Reservation, is more distant from the major source in the area, and has no known source of SO_2 emissions. EPA then erred in failing to discover this error in our 1979 consideration and approval of the State's recommended redesignation for the Miami SO_2 nonattainment area. By virtue of the State's designations background report submitted in August 15, 1978, EPA had the relevant information necessary to discover this error at the time of our April 10, 1979 final rule but failed to do so. The State has now requested redesignation of the Miami SO_2 nonattainment area to ''attainment'' and submitted a maintenance plan, which if approved as proposed herein, will begin the next phase (''maintenance'') of air quality planning in the Miami area.

We believe that correction of the error that resulted in the creation of a noncontiguous area would help provide a solid regulatory foundation for the maintenance phase of CAA planning in the Miami area by eliminating the noncontiguous portion of the otherwise contiguous Miami air quality planning area and by removing any uncertainties as to the area designation status and applicable requirements for township T1N, R16E. Furthermore, ADEQ's redesignation request and maintenance plan for the Miami area do not rely on any control measure within T1N, R16E to demonstrate attainment and maintenance of the SO_2 standard in the Miami area. We are therefore taking direct final action under CAA section 110(k)(6) to correct the designation for T1N, R16E and thereby remove it from the list of townships comprising the Miami SO_2 nonattainment area (which we are herein taking direct final action to redesignate to attainment). Specifically, we are correcting the error by revising the designation of T1N, R16E from ''does not meet primary standards'' to ''cannot be classified'' in the listing for Miami in the Arizona SO_2 table in 40 CFR 81.303. We are changing the designation of the township to ''cannot be classified'' for the SO_2 standard consistent with the State's 1978 approach for areas that, while in the general proximity of a recommended SO_2 nonattainment area, would be unlikely to experience violations of the standard because of the distance from the source and the terrain. For example, using this rationale, the State recommended, and we approved, ''cannot be classified'' designations for townships T2N, R16E and T1S, R16E.

Rather than reclassifying township T1N, R15½E as part of this redesignation action, we have decided to retain its current air quality planning status of ''cannot be classified.'' First, establishing township T1N, R15½E as part of a future Miami maintenance area (and no longer as part of the ''rest of

[15] Township T1N, R16E straddles the boundary of the San Carlos Indian Reservation. Most of the township (roughly 31 or 32 of the 36 square miles) lies within the reservation and is characterized by rugged mountainous terrain traversed in places by jeep trails. The 4 to 5 square miles of land that lie within State jurisdiction have similar characterisics as the portion within the reservation. No population centers are found within this township. ADEQ indicates that no permits have been issued to any stationary source within the portion of the township that lies within State jurisdiction.

state'' area) could have unintended effects on SO_2 increment tracking under the State's prevention of significant deterioration permitting program. Second, no control measures in T1N, R15½E have been relied upon for attainment or maintenance of the SO_2 standard in the Miami area. Third, including township T1N, R15½E in the maintenance area would inappropriately subject projects in that township to certain CAA requirements, such as general conformity, that are intended only to apply within nonattainment areas and former nonattainment areas that have been redesignated to attainment. See CAA section 176(c)(5).

In addition to the correction described above, we are taking direct final action to correct the transcription error introduced first in the 1979 version of 40 CFR part 81 by replacing T1S, R14¼E with T1S, R14½E in the list of townships comprising the Miami SO_2 air quality planning area.

VI. Public Comment and Final Action

As authorized under section 110(k)(3) of the Act, EPA is approving the Miami Sulfur Dioxide Nonattainment Area State Implementation and Maintenance Plan, as submitted by ADEQ on June 26, 2002, corrected by the submittal dated June 30, 2004, and amended by the submittal dated June 20, 2006, as a revision to the Arizona state implementation plan. In so doing, we find that the maintenance plan meets the requirements for such plans under CAA section 175A.

EPA is also approving the State of Arizona's request for redesignation of the Miami area from nonattainment to attainment for the SO_2 NAAQS based on our conclusion that all of the redesignation criteria in CAA section 107(d)(3)(E) have been satisfied. Specifically, we find that (1) the Miami area has attained the SO_2 NAAQS; (2) Arizona has a fully approved SIP for the Miami area; (3) the improvements in air quality in the Miami area are due to permanent and enforceable reductions in emissions resulting from implementation of EPA-approved smelter rules and title V permit conditions; (4) Arizona has met all of the nonattainment area requirements applicable to the Miami area; and (5) the State's submitted maintenance plan meets all relevant CAA requirements and is being approved in this notice.

Lastly, under CAA section 110(k)(6) and for the reasons stated above in section V of this notice, EPA is correcting the boundary of the Miami SO_2 nonattainment area to exclude a noncontiguous township that was erroneously included in the original description of the nonattainment area. Specifically, we are correcting the error by revising the designation of township T1N, R16E as listed in the Arizona SO_2 table in 40 CFR 81.303 from ''does not meet primary standards'' to ''cannot be classified.'' We are also correcting the erroneous transcription of one of the townships in the Miami SO_2 planning area in 40 CFR 81.303 by replacing ''T1S, R14¼E'' with ''T1S, R14½E.''

EPA is finalizing this action without proposing it in advance because the Agency views this action as noncontroversial and anticipates no adverse comments. However, in the Proposed Rules section of this **Federal Register**, we are simultaneously proposing approval of the same maintenance plan and request for redesignation and proposing the same corrections to the list of townships comprising the Miami, AZ SO_2 area. If we receive adverse comments by February 23, 2007, we will publish a timely withdrawal in the **Federal Register** to notify the public that the direct final approval will not take effect and we will address the comments in a subsequent final action based on the proposal. If we do not receive timely adverse comments, the direct final approval will be effective without further notice on March 26, 2007. This will approve the redesignation request and maintenance plan submitted by Arizona on June 26, 2002, as amended by submittals dated June 30, 2004 and June 20, 2006, and to revise the designation of township T1N, R16E as listed in the Arizona SO_2 table in 40 CFR 81.303 from ''does not meet primary standards'' to ''cannot be classified'' and replace the township incorrectly listed as ''T1S, R14¼E'' with ''T1S, R14½E''.

Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment.

VII. Statutory and Executive Order Review

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 a state plan and redesignation request as meeting Federal requirements and corrects a long-standing error in the boundary of an air quality planning area. It 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). Nonetheless, EPA has contacted the San Carlos Apache tribe to provide an opportunity to discuss the implications of exclusion of that portion of township T1N, R16E that lies within the reservation from the Miami SO_2 nonattainment area. In letters dated November 20, 2006 and December 12, 2006, EPA transmitted a fact sheet with background information on this issue and a map illustrating the air quality planning area boundary change.

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 plan and redesignation request implementing a Federal standard and corrects a long-standing error in the boundary of an air quality planning area. It 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 is not economically significant.

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.*).

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

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 26, 2007. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Reporting and recordkeeping requirements, Sulfur oxides.

40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

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

Dated: December 22, 2006.

Sally Seymour,

Acting Regional Administrator, Region IX.

■ Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

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

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

Subpart D—Arizona

■ 2. Section 52.120 is amended by adding paragraph (c)(132) to read as follows:

§ 52.120 Identification of plan.

* * * * *

(c) * * *

(132) The following plan revision was submitted on June 26, 2002, by the Governor's designee.

(i) Incorporation by reference.

(A) Arizona Department of Environmental Quality.

(1) Final Miami Sulfur Dioxide Nonattainment Area State Implementation and Maintenance Plan (June 2002), chapter 7 (''Maintenance Plan''), adopted on June 26, 2002 by the Arizona Department of Environmental Quality.

(ii) Additional materials.

(A) Arizona Department of Environmental Quality.

(*1*) Final Miami Sulfur Dioxide Nonattainment Area State Implementation and Maintenance Plan (June 2002), excluding the cover page, and pages iii, 2, 3, 4, and 49; chapter 7 (''Maintenance Plan''); appendix A (''SIP Support Information''), sections A.1 (''Pertinent Sections of the Arizona Administrative Code'') and A.2 (''Information Regarding Revisions to AAC R18–2–715 and R18–2–715.01, 'Standards of Performance for Primary Copper Smelters: Site Specific Requirements; Compliance and Monitoring' ''); and appendix D (''SIP Public Hearing Documentation''), adopted on June 26, 2002 by the Arizona Department of Environmental Quality.

(*2*) Submittal of Corrections to the Final Miami Sulfur Dioxide Nonattainment Area State Implementation and Maintenance Plan (June 2002), letter and enclosures (replacement pages for the cover page and pages iii, 2, 3, 4 and 49), dated June 30, 2004.

(*3*) Letter from Stephen A. Owens, Director, Arizona Department of Environmental Quality, dated June 20, 2006, withdrawing a section 107(d)(3)(D) boundary redesignation request included in the Miami Sulfur Dioxide Nonattainment Area State Implementation and Maintenance Plan and requesting a section 110(k)(6) error correction.

* * * * *

■ Part 81, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 81—[AMENDED]

■ 1. The authority citation for part 81 continues to read as follows:

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

Subpart C—[Amended]

■ 2. In § 81.303, the table entitled ''Arizona—SO_2'' is amended by revising the entry for Miami to read as follows:

§ 81.303 Arizona.

* * * * *

ARIZONA—SO_2

Designated area	Does not meet primary standards	Does not meet secondary standards	Cannot be classified	Better than national standards
* * * * * * *				
Miami:				
T2N, R14E				X
T2N, R15E				X
T1N, R13E [1]				X
T1N, R14E				X
T1N, R15E				X
T1S, R14E [1]				X

ARIZONA—SO_2—Continued

Designated area	Does not meet primary standards	Does not meet secondary standards	Cannot be classified	Better than national standards
T1S, R14½E				X
T1S, R15E				X
T2N, R13E [1]			X	
T2N, R16E			X	
T1N, R16E			X	
T1S, R13E [1]			X	
T1S, R16E			X	
T2S, R14E [1]			X	
T2S, R15E			X	
* * * * * * *				

[1]Only that portion in Gila County.

* * * * *

[FR Doc. E7–996 Filed 1–23–07; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA–HQ–OPP–2006–0667; FRL–8110–3]

Spiromesifen; Pesticide Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation revises a tolerance for combined residues of spiromesifen in or on vegetables, fruiting, group 8 and establishes tolerances for inadvertent or indirect combined residues in or on oat (grain, forage, hay, straw). Interregional Research Project No. 4 (IR–4) and Bayer CropScience (respectively) requested these tolerances under the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA).

DATES: This regulation is effective January 24, 2007. Objections and requests for hearings must be received on or before March 26, 2007, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the **SUPPLEMENTARY INFORMATION**).

ADDRESSES: EPA has established a docket for this action under docket identification (ID) number EPA–HQ–OPP–2006–0667. All documents in the docket are listed in the index for the docket. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available in the electronic docket at *http://www.regulations.gov*, or, if only available in hard copy, at the OPP Regulatory Public Docket in Rm. S-4400, One Potomac Yard (South Building), 2777 S. Crystal Drive, Arlington, VA. The Docket Facility is open from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The Docket telephone number is (703) 305–5805.

FOR FURTHER INFORMATION CONTACT: Thomas C. Harris, Registration Division (7505P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460–0001; telephone number: (703) 308–9423; e-mail address: *harris.thomas@epa.gov*.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does This Action Apply to Me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. Potentially affected entities may include, but are not limited to:

- Crop production (NAICS 111), e.g., agricultural workers; greenhouse, nursery, and floriculture workers; farmers.
- Animal production (NAICS 112), e.g., cattle ranchers and farmers, dairy cattle farmers, livestock farmers.
- Food manufacturing (NAICS 311), e.g., agricultural workers; farmers; greenhouse, nursery, and floriculture workers; ranchers; pesticide applicators.
- Pesticide manufacturing (NAICS 32532), e.g., agricultural workers; commercial applicators; farmers; greenhouse, nursery, and floriculture workers; residential users.

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in this unit could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether this action might apply to certain entities. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

B. How Can I Access Electronic Copies of this Document?

In addition to accessing an electronic copy of this **Federal Register** document through the electronic docket at *http://www.regulations.gov*, you may access this **Federal Register** document electronically through the EPA Internet under the ''**Federal Register**'' listings at *http://www.epa.gov/fedrgstr*. You may also access a frequently updated electronic version of 40 CFR part 180 through the Government Printing Office's pilot e-CFR site at *http://www.gpoaccess.gov/ecfr*.

C. Can I File an Objection or Hearing Request?

Under section 408(g) of the FFDCA, as amended by the FQPA, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. The EPA procedural regulations which govern the submission of objections and requests for hearings appear in 40 CFR part 178. You must file your objection or request a hearing on this regulation in accordance with the instructions provided in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket ID number EPA–HQ–OPP–2006–0667 in the subject line on the first page of your submission. All requests must be in writing, and must be

mailed or delivered to the Hearing Clerk on or before March 26, 2007.

In addition to filing an objection or hearing request with the Hearing Clerk as described in 40 CFR part 178, please submit a copy of the filing that does not contain any CBI for inclusion in the public docket that is described in **ADDRESSES**. Information not marked confidential pursuant to 40 CFR part 2 may be disclosed publicly by EPA without prior notice. Submit your copies, identified by docket ID number EPA–HQ–OPP–2006–0667, by one of the following methods:

- *Federal eRulemaking Portal*: *http://www.regulations.gov*. Follow the on-line instructions for submitting comments.
- *Mail*: Office of Pesticide Programs (OPP) Regulatory Public Docket (7502P), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460–0001.
- *Delivery*: OPP Regulatory Public Docket (7502P), Environmental Protection Agency, Rm. S-4400, One Potomac Yard (South Building), 2777 S. Crystal Drive, Arlington, VA. Deliveries are only accepted during the Docket's normal hours of operation (8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays). Special arrangements should be made for deliveries of boxed information. The Docket telephone number is (703) 305–5805.

II. Background and Statutory Findings

In the **Federal Register** of September 13, 2006 (71 FR 54057) (FRL–8091–7), EPA issued a notice pursuant to section 408(d)(3) of FFDCA, 21 U.S.C. 346a(d)(3), announcing the filing of a pesticide petition (PP 5E6901) by Interregional Research Project No. 4 (IR-4), Rutgers, The State University of New Jersey, 500 College Road East, Suite 201, Princeton, NJ 08540. The petition requested that 40 CFR 180.607 be amended by revising a tolerance for combined residues of the insecticide/miticide spiromesifen (2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate) and its enol metabolite (4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one), calculated as the parent compound equivalents, in or on vegetable, fruiting, crop group 8 from 0.30 to 0.45 parts per million (ppm). The same notice also announced the filing of a pesticide petition (PP 6F7039) by Bayer CropScience, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709. That petition requested that 40 CFR 180.607 be amended by establishing a tolerance for inadvertent or indirect combined residues of the insecticide/miticide spiromesifen (2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate), its enol metabolite (4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one), and its metabolites containing the 4-hydroxymethyl moiety (4-hydroxy-3-[4-(hydroxymethyl)-2,6-dimethylphenyl]-1-oxaspiro[4.4]non-3-en-2-one), calculated as the parent compound equivalents, in or on oat, forage; oat, fodder; and oat, straw at 0.25 ppm and in or on the food commodity oat, grain at 0.03 ppm. The notice included summaries of the petitions prepared by Bayer CropScience, the registrant. Comments were received on the notice of filing from one private citizen. EPA's response to these comments is discussed in Unit IV.C.

Based on the EPA analysis of the residue chemistry and toxicological databases, petition PP 6F7039 was subsequently revised to express the oat tolerances as inadvertent or indirect combined residues of the insecticide/miticide spiromesifen (2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate), its enol metabolite (4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one), and its metabolites containing the 4-hydroxymethyl moiety (4-hydroxy-3-[4-(hydroxymethyl)-2,6-dimethylphenyl]-1-oxaspiro[4.4]non-3-en-2-one), calculated as the parent compound equivalents, in or on oat, forage at 0.20 ppm; oat, grain at 0.03 ppm; oat, hay at 0.25 ppm; and oat, straw at 0.25 ppm.

Section 408(b)(2)(A)(i) of FFDCA allows EPA to establish a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the tolerance is ''safe.'' Section 408(b)(2)(A)(ii) of FFDCA defines ''safe'' to mean that ''there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.'' This includes exposure through drinking water and in residential settings, but does not include occupational exposure. Section 408(b)(2)(C) of FFDCA requires EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to ''ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue * * *.''

EPA performs a number of analyses to determine the risks from aggregate exposure to pesticide residues. For further discussion of the regulatory requirements of section 408 of the FFDCA and a complete description of the risk assessment process, see *http://www.epa.gov/fedrgstr/EPA-PEST/1997/November/Day-26/p30948.htm and http://www.epa.gov/fedrgstr/EPA-PEST/2003/July/Day-30/p19357.htm*.

III. Aggregate Risk Assessment and Determination of Safety

Consistent with section 408(b)(2)(D) of FFDCA, EPA has reviewed the available scientific data and other relevant information in support of this action. EPA has sufficient data to assess the hazards of and to make a determination on aggregate exposure, consistent with section 408(b)(2) of FFDCA, for a tolerance for combined residues of the insecticide/miticide spiromesifen and its enol metabolite, in or on vegetable, fruiting, crop group 8 at 0.45 ppm and the inadvertent or indirect combined residues of the insecticide/miticide spiromesifen and its enol metabolite, in or on oat, forage at 0.20 ppm; oat, grain at 0.03 ppm; oat, hay at 0.25 ppm; and oat, straw at 0.25 ppm. EPA's assessment of exposures and risks associated with establishing the tolerance follows.

A. Toxicological Profile

EPA has evaluated the available toxicity data and considered its validity, completeness, and reliability as well as the relationship of the results of the studies to human risk. EPA has also considered available information concerning the variability of the sensitivities of major identifiable subgroups of consumers, including infants and children. Specific information on the studies received and the nature of the toxic effects caused by spiromesifen as well as the no-observed-adverse-effect-level (NOAEL) and the lowest-observed-adverse-effect-level (LOAEL) from the toxicity studies can be found in Unit III.A. of the final rule published in the **Federal Register** of April 27, 2005 (70 FR 21631) (FRL–7705–1) at *http://www.epa.gov/fedrgstr/EPAFR-CONTENTS/2005/April/Day-27/contents.htm*.

B. Toxicological Endpoints

For hazards that have a threshold below which there is no appreciable risk, the dose at which no adverse effects are observed (the NOAEL) from the toxicology study identified as appropriate for use in risk assessment is used to estimate the toxicological level of concern (LOC). However, the lowest dose at which adverse effects of concern are identified (the LOAEL) is sometimes used for risk assessment if no NOAEL was achieved in the toxicology study

selected. An uncertainty factor (UF) is applied to reflect uncertainties inherent in the extrapolation from laboratory animal data to humans and in the variations in sensitivity among members of the human population as well as other unknowns.

The linear default risk methodology (Q*) is the primary method currently used by the Agency to quantify non-threshold hazards such as cancer. The Q* approach assumes that any amount of exposure will lead to some degree of cancer risk and estimates risk in terms of the probability of occurrence of additional cancer cases. More information can be found on the general principles EPA uses in risk characterization at *http://www.epa.gov/pesticides/health/human.htm*.

A summary of the toxicological endpoints for spiromesifen used for human risk assessment is discussed in Unit III.B. of the final rule published in the **Federal Register** of April 27, 2005 (70 FR 21631) (FRL–7705–1) at *http://www.epa.gov/fedrgstr/EPAFR-CONTENTS/2005/April/Day-27/contents.htm*.

C. Exposure Assessment

1. *Dietary exposure from food and feed uses*. Tolerances have been established (40 CFR 180.607) for the combined residues of spiromesifen, in or on a variety of raw agricultural commodities. In addition, tolerances have been established for combined residues on several livestock (cattle, goat, horse, sheep) commodities which feed on these raw agricultural commodities and for inadvertent or indirect combined residues on some rotational crop (alfalfa, barley, sugar beet, wheat) commodities. Risk assessments were conducted by EPA to assess dietary exposures from spiromesifen in food as follows:

i. *Acute exposure*. Quantitative acute dietary exposure and risk assessments are performed for a food-use pesticide if a toxicological study has indicated the possibility of an effect of concern occurring as a result of a 1–day or single exposure.

No such effects were identified in the toxicological studies for spiromesifen. Therefore, a quantitative acute dietary exposure assessment is unnecessary.

ii. *Chronic exposure*. In conducting the chronic dietary exposure assessment EPA used the Dietary Exposure Evaluation Model software with the Food Commodity Intake Database (DEEM-FCID™), which incorporates food consumption data as reported by respondents in the USDA 1994–1996 and 1998 Nationwide Continuing Surveys of Food Intake by Individuals (CSFII), and accumulated exposure to the chemical for each commodity. The following assumptions were made for the chronic exposure assessments: (1) Established/recommended tolerances for all plant and livestock except the leafy-green and leafy-Brassica vegetable subgroups; (2) EPA calculated residues of concern (parent and metabolites) for the leafy-green and leafy-Brassica vegetable subgroup; (3) 100% crop treated (CT) information for all proposed and existing uses; and (4) DEEM™ Version 7.81 default processing factors for all commodities.

The metabolism studies show that the hydroxymethyl metabolite is formed along with the enol metabolite only in the leafy-green and leafy-Brassica vegetable subgroups. EPA determined that these two metabolites along with the spiromesifen should be included in the chronic dietary risk assessment for these crops. Residue data are unavailable for the 4-hydroxymethyl metabolite; to account for this metabolite in the risk assessment, the recommended tolerance levels for these crops was multiplied by a correction factor of 1.3X, where 1.3 = metabolites in risk assessment (ppm) / metabolites in tolerance expression (ppm).

iii. *Cancer*. A cancer exposure assessment was not performed because spiromesifen is classified as ''not likely to be carcinogenic to humans.''

2. *Dietary exposure from drinking water*. The Agency lacks sufficient monitoring exposure data to complete a comprehensive dietary exposure analysis and risk assessment for spiromesifen in drinking water. Because the Agency does not have comprehensive monitoring data, drinking water concentration estimates are made by reliance on simulation or modeling taking into account data on the physical characteristics of spiromesifen. Further information regarding EPA drinking water models used in pesticide exposure assessment can be found at *http://www.epa.gov/oppefed1/models/water/index.htm*.

Based on the Pesticide Root Zone Model/Exposure Analysis Modeling System (PRZM/EXAMS) and Screening Concentrations in Groundwater (SCI-GROW) models, the estimated environmental concentrations (EECs) of spiromesifen for chronic exposures are estimated to be 11 ppb for surface water and 28 ppb for ground water. Drinking water estimates were incorporated directly into the DEEM-FCID™ using the estimated drinking water concentration generated by the SCI-GROW (version 2.3) model of 28 ppb.

3. *From non-dietary exposure*. The term ''residential exposure'' is used in this document to refer to non-occupational, non-dietary exposure (e.g., for lawn and garden pest control, indoor pest control, termiticides, and flea and tick control on pets).

Spiromesifen is not registered for use on any sites that would result in residential exposure.

4. *Cumulative effects from substances with a common mechanism of toxicity*. Section 408(b)(2)(D)(v) of the FFDCA requires that, when considering whether to establish, modify, or revoke a tolerance, the Agency considers ''available information'' concerning the cumulative effects of a particular pesticide's residues and ''other substances that have a common mechanism of toxicity.''

Unlike other pesticides for which EPA has followed a cumulative risk approach based on a common mechanism of toxicity, EPA has not made a common mechanism of toxicity finding as to spiromesifen and any other substances and spiromesifen does not appear to produce a toxic metabolite produced by other substances. For the purposes of this tolerance action, therefore, EPA has not assumed that spiromesifen has a common mechanism of toxicity with other substances. For information regarding EPA's efforts to determine which chemicals have a common mechanism of toxicity and to evaluate the cumulative effects of such chemicals, see the policy statements released by EPA's Office of Pesticide Programs concerning common mechanism determinations and procedures for cumulating effects from substances found to have a common mechanism on EPA's website at *http://www.epa.gov/pesticides/cumulative*.

D. Safety Factor for Infants and Children

1. *In general*. Section 408 of FFDCA provides that EPA shall apply an additional tenfold margin of safety for infants and children in the case of threshold effects to account for prenatal and postnatal toxicity and the completeness of the database on toxicity and exposure unless EPA determines based on reliable data that a different margin of safety will be safe for infants and children. Margins of safety are incorporated into EPA risk assessments either directly through use of a Margin of Exposure (MOE) analysis or through using uncertainty (safety) factors in calculating a dose level that poses no appreciable risk to humans. In applying this provision, EPA either retains the default value of 10X when reliable data do not support the choice of a different factor, or, if reliable data are available, EPA uses a different additional safety

factor value based on the use of traditional uncertainty factors and/or special FQPA safety factors, as appropriate.

2. *Prenatal and postnatal sensitivity*. There was no evidence of increased susceptibility of rats or rabbits to *in utero* prenatal or postpostnatal exposure to spiromesifen. In a rat developmental toxicity study, no developmental toxicity was observed at doses up to 500 milligrams/kilograms/day (mg/kg/day) (the highest dose tested) in the presence of maternal toxicity. The rat maternal LOAEL was determined to be 70 mg/kg/day based on decreased body-weight gain and reduced food consumption. In the rabbit developmental toxicity study, there was no developmental toxicity observed at doses up to 250 mg/kg/day (the highest dose tested), but the maternal LOAEL was determined to be 35 mg/kg/day based on body weight loss and reduced food consumption. There is no qualitative and/or quantitative evidence of increased susceptibility to spiromesifen following pre/postnatal exposure in a 2–generation reproduction study in rats.

There is no concern for developmental neurotoxicity resulting from exposure to spiromesifen. Neurotoxic effects such as reduced motility, spastic gait, increased reactivity, tremors, clonic-tonic convulsions, reduced activity, labored breathing, vocalization, avoidance reaction, piloerection, limp, cyanosis, squatted posture, and salivation were observed in two studies (5–day inhalation and subchronic oral rat). However, these effects were considered as secondary, not neurotoxic, effects due to the high dosage. There was no evidence of neurotoxicity in the acute or subchronic neurotoxicity or any other studies.

3. *Conclusion*. For spiromesifen, EPA determined that the 10X safety factor to protect infants and children should be removed. A 1X safety factor is appropriate because:

- There is a complete toxicity database for spiromesifen.
- There was no evidence of increased susceptibility of rat or rabbit fetuses to *in utero* exposure in developmental studies, nor following prenatal or postnatal exposure by rats in the 2–generation reproduction study.
- There are no neurotoxicity concerns based on acute and subchronic neurotoxicity studies.
- The dietary food exposure assessment uses proposed tolerance levels or higher residues for most commodities and assumed 100% crop-treated information for all commodities. By using these screening-level assessments, chronic exposures and risks will not be underestimated. The ''higher residues'' are those that were calculated using a modifying factor to account for the lack of spiromesifen-4-hydroxymethyl residue data.
- The dietary drinking water assessment (Tier 2 estimates) uses values generated by model and associated modeling parameters which are designed to provide conservative, health protective, and high-end estimates of water concentrations.
- Residential exposure is not expected, spiromesifen will be registered for agricultural and greenhouse/ornamental uses only.

E. Aggregate Risks and Determination of Safety

1. *Acute risk*. As there were no toxic effects attributable to a single dose, an endpoint of concern was not identified to quantitate acute dietary risk to the general population or any subpopulation. No acute risk is expected from exposure to spiromesifen.

2. *Chronic risk*. Using the exposure assumptions described in this unit for chronic exposure, EPA has concluded that exposure to spiromesifen from food and water will utilize 31% of the chronic population adjusted dose (cPAD) for the U.S. population, 23% of the cPAD for all infants less than 1 year old, and 38% of the cPAD for children 1-2 years old, the most highly exposed population subgroups. There are no residential uses for spiromesifen that result in chronic residential exposure to spiromesifen. Therefore, EPA does not expect the aggregate exposure to exceed 100% of the cPAD.

3. *Short- and Intermediate-term risk*. Short- and intermediate-term aggregate exposure takes into account residential exposure plus chronic exposure to food and water (considered to be a background exposure level).

Spiromesifen is not registered for use on any sites that would result in residential exposure. Therefore, the aggregate risk is the sum of the risk from food and water, which do not exceed the Agency's level of concern.

4. *Aggregate cancer risk for U.S. population*. Spiromesifen is not expected to pose a cancer risk.

5. *Determination of safety*. Based on these risk assessments, EPA concludes that there is a reasonable certainty that no harm will result to the general population, and to infants and children from aggregate exposure to spiromesifen residues.

IV. Other Considerations

A. Analytical Enforcement Methodology

Adequate analytical enforcement methodologies, high-performance liquid chromatography (HPLC)/mass spectrometry (MS)/MS, exist and have been successfully validated by independent laboratories.

B. International Residue Limits

There are no international residue limits for spiromesifen listed in CODEX.

C. Response to Comments

Several comments were received from one private citizen objecting to pesticide body load, registrant profiteering, establishing tolerances, pollution by pesticides, and lack of notification when pesticides are applied to neighboring areas. The Agency has received similar comments from this commenter on numerous previous occasions. Refer to **Federal Register** 70 FR 37686 (June 30, 2005), 70 FR 1354 (January 7, 2005), and 69 FR 63096–63098 (October 29, 2004) for the Agency's response to these objections.

V. Conclusion

Therefore, the tolerance is revised for combined residues of the insecticide/miticide spiromesifen (2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate) and its enol metabolite (4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one), calculated as the parent compound equivalents, in or on vegetable, fruiting, crop group 8 to 0.45 ppm. Also, the tolerance is established for inadvertent or indirect combined residues of the insecticide/miticide spiromesifen (2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate), its enol metabolite (4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one), and its metabolites containing the 4-hydroxymethyl moiety (4-hydroxy-3-[4-(hydroxymethyl)-2,6-dimethylphenyl]-1-oxaspiro[4.4]non-3-en-2-one), calculated as the parent compound equivalents, in or on oat, forage at 0.20 ppm; oat, grain at 0.03 ppm; oat, hay at 0.25 ppm; and oat, straw at 0.25 ppm.

VI. Statutory and Executive Order Reviews

This final rule establishes a tolerance under section 408(d) of FFDCA in response to a petition submitted to the Agency. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled *Regulatory Planning and Review* (58 FR 51735,

October 4, 1993). Because this rule has been exempted from review under Executive Order 12866 due to its lack of significance, this rule is not subject to Executive Order 13211, *Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use* (66 FR 28355, May 22, 2001). This final rule does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, or impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) (Public Law 104–4). Nor does it require any special considerations under Executive Order 12898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 FR 7629, February 16, 1994); or OMB review or any Agency action under Executive Order 13045, entitled *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997). This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, section 12(d) (15 U.S.C. 272 note). Since tolerances and exemptions that are established on the basis of a petition under section 408(d) of FFDCA, such as the tolerance in this final rule, do not require the issuance of a proposed rule, the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*) do not apply. In addition, the Agency has determined that this action will not have a substantial direct effect on 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, entitled *Federalism*(64 FR 43255, August 10, 1999). Executive Order 13132 requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' This final rule directly regulates growers, food processors, food handlers and food retailers, not States. This action does not alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of section 408(n)(4) of FFDCA. For these same reasons, the Agency has determined that this rule does not have any ''tribal implications'' as described in Executive Order 13175, entitled *Consultation and Coordination with Indian Tribal Governments* (65 FR 67249, November 6, 2000). Executive Order 13175, 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.'' ''Policies that have tribal implications'' is defined in the Executive order to include regulations that have ''substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and the Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.'' This rule will not have substantial direct effects on tribal governments, 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 in Executive Order 13175. Thus, Executive Order 13175 does not apply to this rule.

VII. Congressional Review Act

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

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: January 17, 2007.

Lois Rossi,

Director, Registration Division, Office of Pesticide Programs.

■ Therefore, 40 CFR chapter I is amended as follows:

PART 180—[AMENDED]

■ 1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 321(q), 346a and 371.

■ 2. Section 180.607 is amended in the table to paragraph (a)(1) by revising the entry for ''Vegetable, fruiting group 8'' and in the table to paragraph (d) by adding alphabetically commodities to read as follows:

§180.607 Spiromesifen; tolerances for residues.

(a) *General.* (1) * * *

Commodity	Parts per million
* * * * *	
Vegetable, fruiting, group 8	0.45
* * * * *	

* * * * *

(d) * * *

Commodity	Parts per million
* * * * *	
Oat, forage	0.20
Oat, grain	0.03
Oat, hay	0.25
Oat, straw	0.25
* * * * *	

[FR Doc. E7–990 Filed 1–23–07; 8:45 am]

BILLING CODE 6560–50–S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

42 CFR Part 51a

RIN # 0906–AA70

Healthy Tomorrows Partnership for Children Program (HTPC)

AGENCY: Health Resources and Services Administration (HRSA), HHS.

ACTION: Final rule.

SUMMARY: This Final Rule sets forth the Secretary's proposal to require HTPC grant recipients to contribute non-Federal matching funds in years 2 through 5 of the project period equal to two times the amount of the Federal Grant Award or such lesser amount

determined by the Secretary for good cause shown.

DATES: This Final Rule is effective January 24, 2007.

FOR FURTHER INFORMATION CONTACT: Jose Belardo, J.D., 301–443–0757.

SUPPLEMENTARY INFORMATION:

Background

Authorized by 42 U.S.C. 701(a)(3), the HTPC is a grant program funded and administered by the Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB). Its purpose is to stimulate innovative community-based programs that employ prevention strategies to promote access to health care for children and their families nationwide by providing grant funds to implement a new or enhance an existing child health initiative. Currently, there are 58 HTPC funded projects. In fiscal year (FY) 2006, 49 projects are continuing grantees and 9 are newly funded.

Since the inception of this grant program in 1989, the HTPC has issued a programmatic requirement in its guidance that grant applicants must demonstrate the capability to meet cost participation goals by securing non-Federal matching funds and/or in-kind resources for the second through fifth years of the project. One of the key goals of this initiative is that funded programs are to be sustainable beyond the 5-year Federal funding period. In 1999, a formal evaluation of the HTPC *The Health Tomorrows Partnership for Children Program in Review: Analysis and Findings of a Descriptive Survey* was completed, and the authors concluded that the required match fosters long-term sustainability and leveraging of community resources. There was a 70 percent sustainability rate for those projects with activities that were sustained after the Federal funding period.

This Final Rule will formally introduce a cost participation component to the HTPC grant program, thus requiring its grantees to contribute non-Federal matching funds and/or in-kind resources in years 2 through 5 of the 5-year project period equal to two times the amount of the Federal Grant Award or such lesser amount determined by the Secretary for good cause shown. The non-Federal matching funds and/or in-kind resources must come from non-Federal funds, including, but not limited to, individuals, corporations, foundations in-kind resources, or State and local agencies. Documentation of matching funds would be required (i.e., specific sources, funding level, in-kind contributions). Reimbursement for services provided to an individual under a State plan under Title XIX will not be deemed ''non-Federal matching funds'' for the purposes of this provision.

Public Participation

The public was invited to respond to Notice of Proposed Rulemaking (NPRM), which was published in the **Federal Register** on December 27, 2005 (70 FR 76435–76436). The NPRM provided for a 60-day comment period. We received no comments from the public.

Economic and Regulatory Impact

Executive Order 12866—Regulatory Planning and Review

HRSA has examined the economic implications of this Final Rule as required by Executive Order 12866. Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety and other advantages; distributive impacts; and equity). Executive Order 12866 classifies a rule as significant if it meets any one of a number of specified conditions, including: having an annual effect on the economy of $100 million, adversely affecting a sector of the economy in a material way, adversely affecting competition, or adversely affecting jobs. A regulation is also considered a significant regulatory action if it raises novel legal or policy issues.

HRSA concludes that this Final Rule is a significant regulatory action under the Executive Order since it raises novel legal and policy issues under Section 3(f)(4). HRSA concludes, however, that this Final Rule does not meet the significance threshold of $100 million effect on the economy in any one year under Section 3(f)(1).

Impact of the New Rule

Inclusion of this rule will greatly enhance grant recipients' ability to achieve the HTPC goal/performance measure of program sustainability beyond the 5-year Federal funding period.

Paperwork Reduction Act of 1995

The Final Rule does not impose any new data collection requirements.

List of Subjects in 42 CFR Part 51a

Grant programs—Handicapped, Health, Health care, Health professions, Maternal and Child Health.

Dated: July 5, 2006.

Elizabeth M. Duke,

Administrator, HRSA.

Approved: October 23, 2006.

Michael O. Leavitt,

Secretary.

Editor's Note: This document was received at the Office of the Federal Register on January 19, 2007.

■ For the reasons set forth in the preamble, HRSA amends 42 CFR part 51a as follows:

PART 51a—PROJECT GRANTS FOR MATERNAL AND CHILD HEALTH

■ 1. The authority citation for part 51a continues to read as follows:

Authority: 42 U.S.C. 1302; 42 U.S.C. 702(a), 702(b)(1)(A) and 706(a)(3).

■ 2. Amend § 51a.8 to add paragraph (c) to read as follows:

§ 51a.8 What other conditions apply to these grants?

* * * * *

(c) Grant recipients of Healthy Tomorrows Partnership for Children Program, a Community Integrated Service System-funded initiative, must contribute non-Federal matching funds in years 2 through 5 of the project period equal to two times the amount of the Federal Grant Award or such lesser amount determined by the Secretary for good cause shown. Reimbursement for services provided to an individual under a State plan under Title XIX will not be deemed ''non-Federal matching funds'' for the purposes of this provision.

[FR Doc. 07–287 Filed 1–23–07; 8:45 am]

BILLING CODE 4165–15–M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 07–61; MB Docket No. 00–53; RM–10479, RM–10770]

Radio Broadcasting Services; Eldorado, Fort Stockton, Mason and Mertzon, TX

AGENCY: Federal Communications Commission.

ACTION: Final rule, denial.

SUMMARY: This document denies a Petition for Reconsideration filed by Bryan A. King, successor to BK Radio, directed to the *Report and Order* in this proceeding. With this action, the proceeding is terminated.

FOR FURTHER INFORMATION CONTACT: Robert Hayne, Media Bureau (202) 418–2177.

SUPPLEMENTARY INFORMATION: This is a synopsis of the *Memorandum Opinion and Order* in MB Docket No. 00–53, adopted January 10, 2007, and released January 12, 2007. The full text of this decision is available for inspection and copying during normal business hours in the FCC Reference Information Center at Portals II, CY–A257, 445 12th Street, SW., Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street, SW., Room CY–B402, Washington, DC 20554, telephone 1–800–378–3160 or *http://www.BCPIWEB.com.* The Commission will not send a copy of this *Memorandum Opinion and Order* pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A), because the petition for reconsideration was dismissed.

List of Subjects in 47 CFR Part 73

Radio, Radio broadcasting.

Federal Communications Commission.

John A. Karousos,

Assistant Chief, Audio Division, Media Bureau.

[FR Doc. E7–1012 Filed 1–23–07; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 97

[WT Docket No. 04–140, WT Docket No. 05–235; FCC 06–178]

Amateur Service Rules

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Commission amends its Amateur Radio Service rules to remove the requirement that an individual must pass a Morse code telegraphy examination to qualify for a General Class or an Amateur Extra Class amateur radio service operator license. The Commission also revises the frequency segment of the 80 meter amateur service High Frequency (HF) band on which amateur stations are authorized to be automatically controlled when transmitting RTTY and data emission types, and it make other conforming amendments to the amateur service rules.

DATES: Effective February 23, 2007.

FOR FURTHER INFORMATION CONTACT: William T. Cross, Wireless Telecommunications Bureau at (202) 418–0620, or TTY (202) 418–7233.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's *Report and Order and Order on Reconsideration,* in WT Docket Nos. 04–140 and 05–235; FCC 06–178, adopted December 15, 2006 and released December 19, 2006. The complete text of this document is available for inspection and copying during normal business hours in the FCC's Reference Information Center, 445 12th Street, SW., Room CY–A257, Washington, DC. Alternative formats (Braille, large print, electronic files, audio format) are available for people with disabilities by sending an e-mail to *FCC504@fcc.gov* or, calling the Consumer and Government Affairs Bureau at (202) 418–0530 (voice), (202) 418–0432 (TTY). The Order also may be downloaded from the Commission's Web site at *http://www.fcc.gov/.*

1. In this *Report and Order and Order on Reconsideration* the Commission adopts changes to its part 97 rules to revise the examination requirements for obtaining a General Class or Amateur Extra Class amateur radio operator license, revises the operating privileges for Technician Class licensees to include the operating privileges that are authorized to Novice Class licensees, and authorizes automatically controlled digital stations to operate in the 3585–3600 kHz frequency segment. The overall effect of this action is to further the public interest by encouraging individuals who are interested in communications technology, or who are able to contribute to the advancement of the radio art, to become amateur radio operators; and eliminating a requirement that is now unnecessary and may discourage amateur service licensees from advancing their skills in the communications and technical phases of amateur radio. The changes adopted in this *Report and Order and Order on Reconsideration* were proposed in the *Notice of Proposed Rulemaking* at 70 FR 51705, August 31, 2005. Over 3800 comments on the proposed rule changes were received and changes to the proposed rules based on these comments are included in this *Report and Order and Order on Reconsideration.*

2. Specifically, the Commission (1) removes the five wpm telegraphy examination from the examination requirements for the General Class and Amateur Extra Class operator licenses; (2) revises the operating privileges for Technician Class licensees to include the High Frequency operating privileges that are authorized to Novice Class and Technician Plus Class licensees; and (3) authorizes automatically controlled digital stations to transmit in the 3585–3600 kHz segment of the 80 m band. The effect of these revisions are to eliminate unnecessary requirements from the amateur service license examination system and to provide licensees with greater flexibility in the utilization of amateur service frequencies.

I. Procedural Matters

A. Paperwork Reduction Act Analysis

3. This document does not contain any new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104–13. Therefore, it does not contain any new or modified ''information collection burden for small business concerns with fewer than 25 employees,'' pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, see 44 U.S.C. 3506(c)(4).

B. Report to Congress

4. The Commission will send a copy of the *Report and Order and Order on Reconsideration,* including this Final Regulatory Flexibility Certification, in a report to be sent to Congress and the Congressional Budget Office pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the *Report and Order and Order on Reconsideration,* including the Final Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the SBA and the Final Regulatory Flexibility Certification will also be published in the **Federal Register**.

C. Final Regulatory Flexibility Certification

5. In this *Report and Order and Order on Reconsideration,* we amend the rules that specify how an individual who has qualified for an amateur service operator license can use an amateur radio station consistent with the basis and furthering the purpose of the amateur service. The amended rules apply exclusively to individuals who are licensees in the amateur radio service. Given the definition of a ''small entity,'' none of these individuals are small entities as the term is used in the RFA. Therefore, we certify that the rules reflected in this *Report and Order and Order on Reconsideration* will not have a significant economic impact on a substantial number of small entities.

D. Ordering Clauses

6. Pursuant to sections 4(i), 303(f), 303(r), and 332 of the Communications Act of 1934, as amended, 47 U.S.C. 154 (i), 303(f), 303(r) and 332, the rules *are amended* as specified below.

List of Subjects in 47 CFR Part 97

Radio.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

Rule Changes

■ For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 97 as follows:

PART 97—AMATEUR RADIO SERVICE

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

Authority: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064–1068, 1081–1105, as amended; 47 U.S.C. 151–155, 301–609, unless otherwise noted.

■ 2. Section 97.3 is amended by revising paragraph (a)(12) to read as follows:

§ 97.3 Definitions.

(a) * * *

(12) *CEPT radio amateur license.* A license issued by a country belonging to the European Conference of Postal and Telecommunications Administrations (CEPT) that has adopted Recommendation T/R 61–01 (Nice 1985, Paris 1992, Nicosia 2003).

* * * * *

■ 3. Section 97.221 is amended by revising paragraph (b) to read as follows:

§ 97.221 Automatically controlled digital station.

* * * * *

(b) A station may be automatically controlled while transmitting a RTTY or data emission on the 6 m or shorter wavelength bands, and on the 28.120–28.189 MHz, 24.925–24.930 MHz, 21.090–21.100 MHz, 18.105–18.110 MHz, 14.0950–14.0995 MHz, 14.1005–14.112 MHz, 10.140–10.150 MHz, 7.100–7.105 MHz, or 3.585–3.600 MHz segments.

* * * * *

■ 4. Section 97.301 is amended by revising the introductory text of paragraphs (a), (b) and (e) to read as follows:

§ 97.301 Authorized frequency bands.

* * * * *

(a) For a station having a control operator who has been granted a Technician, Technician Plus, General, Advanced, or Amateur Extra Class operator license, who holds a CEPT radio amateur license, or who holds any class of IARP:

* * * * *

(b) For a station having a control operator who has been granted an Amateur Extra Class operator license, who holds a CEPT radio amateur license, or who holds a Class 1 IARP license:

* * * * *

(e) For a station having a control operator who has been granted an operator license of Novice Class, Technician Class, or Technician Plus Class:

* * * * *

■ 5. Section 97.501 is amended by revising paragraph (a) and (b) to read as follows:

§ 97.501 Qualifying for an amateur operator license.

* * * * *

(a) Amateur Extra Class operator: Elements 2, 3, and 4;

(b) General Class operator: Elements 2 and 3;

* * * * *

§ 97.503 [Amended]

■ 6. Section 97.503 is amended by removing paragraph (a), redesignating paragraph (b) as an undesignated introductory paragraph, and redesignating paragraphs (b)(1) through (b)(3) as paragraphs (a) through (c).

■ 7. Section 97.505 is amended by revising paragraphs (a)(1), (2), (3), (4), and (5) to read as set forth below, and by removing paragraphs (a)(6), (7), (8), and (9).

§ 97.505 Element credit.

(a) * * *

(1) An unexpired (or expired but within the grace period for renewal) FCC-granted Advanced Class operator license grant: Elements 2 and 3.

(2) An unexpired (or expired but within the grace period for renewal) FCC-granted General Class operator license grant: Elements 2 and 3.

(3) An unexpired (or expired but within the grace period for renewal) FCC-granted Technician or Technician Plus Class operator (including a Technician Class operator license granted before February 14, 1991) license grant: Element 2.

(4) An expired FCC-issued Technician Class operator license document granted before March 21, 1987; Element 3.

(5) A CSCE: Each element the CSCE indicates the examinee passed within the previous 365 days.

* * * * *

[FR Doc. E7–729 Filed 1–23–07; 8:45 am]

BILLING CODE 6712–01–P

Proposed Rules

Federal Register
Vol. 72, No. 15
Wednesday, January 24, 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 COMMERCE

International Trade Administration

DEPARTMENT OF THE INTERIOR

15 CFR Part 303

[Docket No. 0612243019–7006–01]

RIN: 0625–AA72

Changes in the Insular Possessions Watch, Watch Movement and Jewelry Programs 2006

AGENCIES: Import Administration, International Trade Administration, Department of Commerce; Office of Insular Affairs, Department of the Interior.

ACTION: Notice of Proposed Rulemaking and Request for Comments.

SUMMARY: The Departments of Commerce and the Interior (the Departments) propose amending their regulations governing watch duty-exemption allocations and the watch and jewelry duty-refund benefits for producers in the United States insular possessions (the U.S. Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands). The proposed rule would amend certain regulations by updating the maximum total value of watch components per watch that are eligible for duty-free entry into the United States under the insular program, further clarifying the definition of creditable and non-creditable wages and fringe benefits, providing more details about the calculation of mid-year and annual duty-refund and verification process, and making minor editorial changes.

DATES: Written comments must be received on or before February 23, 2007.

ADDRESSES: Address written comments to Faye Robinson, Director, Statutory Import Programs Staff, Room 2104, U.S. Department of Commerce, 14th and Constitution Ave., NW., Washington, DC 20230.

FOR FURTHER INFORMATION CONTACT: Faye Robinson, (202) 482–3526, same address as above.

SUPPLEMENTARY INFORMATION: The insular possessions watch industry provision in Sec. 110 of Public Law 97–446 (96 Stat. 2331) (1983), as amended by Section 602 of Public Law 103–465 (108 Stat. 4991) (1994), and additional U.S. Note 5 to chapter 91 of the Harmonized Tariff Schedule of the United States (‘‘ HTSUS’’), as amended by Public Law 94–241 (90 Stat. 263) (1976) requires the Secretary of Commerce and the Secretary of the Interior (‘‘the Secretaries’’), acting jointly, to establish a limit on the quantity of watches and watch movements that may be entered free of duty during each calendar year. The law also requires the Secretaries to establish the shares of this limited quantity that may be entered from the Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands (‘‘CNMI’’). After the Departments have verified the data submitted on the annual application (Form ITA–334P), the producers' duty-exemption allocations are calculated from the territorial share in accordance with 15 CFR 303.14 and each producer is issued a duty-exemption license. The law further requires the Secretaries to issue duty-refund certificates to each territorial watch and watch movement producer based on the company's duty-free shipments and creditable wages paid during the previous calendar year.

Public Law 106–36 (113 Stat. 127) (1999) authorizes the issuance of a duty-refund certificate to each territorial jewelry producer for any article of jewelry provided for in heading 7113 of the HTSUS that is the product of any such territory. The value of the certificate is based on creditable wages paid and duty-free units shipped into the United States during the previous calendar year. Although the law specifically mentions the U.S. Virgin Islands, Guam and American Samoa, the issuance of the duty-refund certificate would also apply to the CNMI due to the Covenant to Establish a Commonwealth of the Northern Mariana Islands in Political Union with the United States of America (Pub. L. 94–241), that states that goods from the CNMI are entitled to the same tariff treatment as imports from Guam. *See also* 19 CFR 7.2(a). In order to be considered a product of such territories, the jewelry must meet the U.S. Customs Service substantial transformation requirements (the jewelry must become a new and different article of commerce as a result of production or manufacture performed in the territory). To receive duty-free treatment, the jewelry must also satisfy the requirements of General Note 3(a)(iv) of the HTSUS and applicable Customs Regulations (19 CFR 7.3). Section 1562 of Public Law 108–429 (2004), amended by Public Law 97–446, Public Law 103–465 and Public Law 106–36 and authorizes extending the duty refund benefits to include the value of usual and customary health insurance, life insurance and pension benefits; raising the ceiling on the amount of jewelry that qualifies for the duty refund benefit; allowing new insular jewelry producers to assemble jewelry and have such jewelry treated as an article of the insular possessions for up to 18 months after the jewelry company commences assembly operations; allowing duty refund certificate holders to secure a duty refund on any articles that are imported into the customs territory of the United States by the certificate holder duty paid; and providing compensation to insular watch producers if tariffs on watches and watch movements are reduced.

Comments Received in Response to the Advanced Notice of Proposed Rulemaking

The Department's regulations provide that the current total value of watch components per watch and watch movement that are eligible for duty-free entry into the U.S. are $800 per watch and $35 per watch movement. *See* 15 CFR 303.14(b)(3). On July 25, 2006, the Department received a letter from the U.S. Virgin Islands Watch & Jewelry Manufacturers Association requesting that the Department of Commerce reexamine the current value limits for watches assembled in the U.S. Virgin Islands. The Association asserted that the rising cost of gold has made it difficult to continue production of gold watches with the current ceilings in place.

In response to the Association's request, on October 20, 2006, we published an advanced notice of proposed rulemaking in the **Federal Register**. *See* Insular Possession Watch,

Watch Movement and Jewelry Programs, 71 FR 61923 (October 20, 2006). The notice requested comments on whether to change the maximum value of watch components per watch and watch movement that are eligible for benefits under the program and provide comments on four possible options. We received comments from four parties:

The first commenter favored removing any restrictions on the value of watch components as long as all other program requirements are met.

The second commenter suggested a ceiling of $2,000 for watch components per watch and $200 for watch components per watch movement.

The third commenter encouraged the Departments to significantly increase or eliminate the value limits for watches and watch movements.

The fourth commenter urged the Departments of Commerce and the Interior to eliminate the watch and watch movement value limits from the regulations.

In 1983, the passage of Pub. L. 97–446 added features to the insular possessions watch program, which included a duty refund provision for watch producers. Contained in the rulemaking, implementing Pub. L. 97–446, was the addition of the value limits on components for watches and watch movements. (See Allocation of Watch Quota for Calendar Year 1983 Among Watch Producers Located in the Virgin Islands, Guam and American Samoa, 48 FR 17579, April 25, 1983) (''1983 Final Rule'')

Since 1983, the value limitations have been raised on several occasions, most recently in 1998 and 2004. Although two commenters favored eliminating the ceiling all together, we propose raising the value limits rather than eliminating them because we believe that the original policy reasons for maintaining the ceiling still have merit in terms of domestic and international trade policy. In the notice of proposed rulemaking (*See* Allocation of Watch Quota for Calendar Year 1983 Among Watch Producers Located in the Virgin Islands, Guam and American Samoa, 48 FR 7186, February 18, 1983) for the *1983 Final Rule,* the Departments included value limits in response to language added by the Senate Finance Committee report, which required the Secretaries to ensure that work performed in the insular possessions adds ''significantly to the value of the product.'' A basic tenant of the policy was to stimulate employment in the insular possessions while not creating disproportionate gains for watch producers and maintaining the ceiling assures that a balance is maintained. Because there have been substantial increases in the price of gold and the dollar has weakened against the Euro and the Swiss France, we propose raising the maximum total value of watch components per watch and watch movement that are eligible for duty-free entry into the U.S., from $800 to $3,000 per watch and from $35 to $300 per watch movement to account for increases in the price of gold as well as provide allowances for further fluctuation. We believe that the increase would provide flexibility to producers and has the potential to attract new producers and increases in employment while maintaining a correlation between wages paid to employees and duty savings. We, therefore, propose increasing the value limits on watches and watch movements while maintaining the option to further review value limits in future years if circumstances dictate a change.

Proposed Amendments

As discussed above, we propose to amend § 303.14(b)(3) by raising the maximum total value of watch components per watch and watch movement that are eligible for duty-free entry into the U.S., from $800 to $3,000 per watch and from $35 to $300 per watch movement due to recent increases in the price of gold.

We further propose amending §§ 303.1(c) and 303.15(b) to reflect that the duty-refunds may now be obtained on any articles that entered the customs territory of the United States duty paid except for any article containing a material which is the product of a country to which column 2 rates of duty apply, pursuant to Pub. L. 108–429. The proposed rule would further amend § 303.1(c) by removing the erroneous reference to ''Headnote 6'' and adding ''additional U.S. note 5 to chapter 91 of the HTSUS'' in its place.

We also propose amending § 303.2(a)(8) to correct a minor typographical error by adding the closing parenthesis at the end of the sentence and amending § 303.2(a)(10) by changing ''watch components'' to ''watch movements'' to more accurately define the kind of component.

Further, we propose amending §§ 303.2(a)(13), 303.2(a)(13)(ii), 303.2(a)(13)(ii)(A), 303.2(a)(13)(ii)(B), 303.2(a)(14), 303.2(a)(14)(ii), 303.2(a)(14)(ii)(A), 303.2(a)(14)(ii)(B), 303.16(a)(9), 303.16(a)(9)(ii), 303.16(a)(9)(ii)(A), 303.16(a)(9)(ii)(B), 303.16(a)(10), 303.16(a)(10)(ii), 303.16(a)(10)(ii)(A) and 303.16(a)(10)(ii)(B) to further clarify which wages, health insurance, life insurance and pension benefits are creditable in the Departments' calculation of the duty-refund benefits and which are not.

The proposed rule would also amend §§ 303.16(a)(9)(i)(C) and (a)(10)(i)(D) by clarifying that two program producers may, under certain circumstances, work on the same unit of jewelry and receive creditable wages and fringe benefits proportionally if both producers demonstrate that they have met all the qualifications of the regulations and have records sufficient for the Departments' verification. However, a non-program jewelry producer may not work together with a program jewelry producer on the manufacturing of a single article of jewelry and receive creditable wages and benefits.

A further proposal would amend §§ 303.12(a)(1), 303.14(c), 303.19(a)(1) and 303.20(b) to provide further details about the calculation of the mid-year duty-refund and annual duty-refund. We modified the criteria for the calculation of the annual duty-refund to include health insurance, life insurance and pension benefits, pursuant to Public Law 108–429 and modified the criteria for the calculation of the mid-year duty refund.

We propose amending the heading to § 303.5(b) to reflect that only verified data is used in the calculation of the duty-exemptions and duty-refunds. Also, we propose amending §§ 303.5(b)(5) and 303.17(b)(6) to clarify that the payroll information that should be available for use in the verification includes time cards for each employee. We further propose amending §§ 303.5(c) and 303.17(c) to specify that all data must be available at the time of the annual verification and that the Departments will not consider further data after the verification for the particular year has been completed.

We propose amending §§ 303.13(b) and 303.21(b) by changing ''post office address'' to ''address'' because some producers might not have post office addresses and express mail carriers often will not deliver to a post office address.

Finally, the proposed rule would amend §§ 303.2(b)(5) and 303.16(b)(3) by adding ''duty paid'' so it will be clearer that the refund of duties is specifically on items that entered into the Customs territory of the United States ''duty paid''.

Administrative Law Requirements

Regulatory Flexibility Act. In accordance with the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, the Chief Counsel for Regulation at the Department of Commerce has certified to the Chief Counsel for Advocacy,

Small Business Administration, that the proposed rule, if promulgated as final, will not have a significant economic impact on a substantial number of small entities. The majority of the changes are being proposed to further clarify the definition of creditable and non-creditable wages and fringe benefits, to provide more details about the calculation of mid-year and annual duty-refund and the verification process, and to make minor editorial changes. There are currently four watch companies in the insular watch program and four jewelry companies in the insular jewelry program, all of which are small entities. This rulemaking would update the total maximum value of watch components per watch that are eligible for duty-free entry into the United States. Increases in the price of gold and a weakened dollar against the Euro and Swiss franc have driven up the price of gold watch components. Therefore, companies are faced with a difficult situation because if the value limit is exceeded, the watch becomes ineligible for the duty-free benefit or the duty refund benefit under the program due to the fact that the insular possessions are outside the Customs territory of the United States and the watches will not have met the regulatory requirements of the program. Adoption of this rule would increase the maximum value of watch components per watch that would be eligible for duty-free treatment into the United States. This would allow producers to increase higher-priced components in their watches. As a result, producers would realize an economic benefit in that they would increase flexibility in the types of watches they could produce, which may lead to increased sales and employment to help the insular economy. There would be no adverse economic impact from this proposed change.

This proposed rule also would not change reporting or recordkeeping requirements. The changes in the regulations will also not duplicate, overlap or conflict with other laws or regulations. Consequently, the changes are not expected to meet the RFA criteria of having a ''significant'' economic effect on a ''substantial number'' of small entities, as stated in 5 U.S.C. 603 *et seq.* Therefore, a regulatory flexibility analysis was not prepared.

Paperwork Reduction Act. This proposed rulemaking does not contain revised collection of information requirements subject to review and approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995. Collection activities are currently approved by the Office of Management and Budget under control numbers 0625–0040 and 0625–0134.

Not withstanding 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.

E.O. 12866. It has been determined that the proposed rulemaking is not significant for purposes of Executive Order 12866.

List of Subjects in 15 CFR Part 303

Administrative practice and procedure, American Samoa, Customs duties and inspection, Guam, Imports, Marketing quotas, Northern Mariana Islands, Reporting and recordkeeping requirements, Virgin Islands, Watches and jewelry.

For reasons set forth above, the Departments propose to amend 15 CFR part 303 as follows:

PART 303—WATCHES, WATCH MOVEMENTS AND JEWELRY PROGRAMS

1. The authority citation for 15 CFR part 303 continues to read as follows:

Authority: Pub. L. 97–446, 96 Stat. 2331 (19 U.S.C. 1202, note); Pub. L. 103–465, 108 Stat. 4991; Pub. L. 94–241, 90 Stat. 263 (48 U.S.C. 1681, note); Pub. L. 106–36, 113 Stat. 167; Pub. L. 108–429, 118 Stat. 2582.

§ 303.1 [Amended]

2. Section 303.1 is amended as follows:

A. Remove ''on watches and watch movements and parts (except discrete watch cases) imported into the customs territory of the United States.'' from the first sentence of paragraph (c) and add ''on any article imported into the customs territory of the United States duty paid except for any article containing a material which is the product of a country to which column 2 rates of duty apply.'' in its place.

B. Remove ''Headnote 6'' from the last sentence in paragraph (c) and add ''additional U.S. note 5 to chapter 91 of the HTSUS'' in its place.

3. Section 303.2 is amended as follows:

A. Remove ''American Samoa) and the Northern Mariana Islands.'' from the only sentence in paragraph (a)(8) and add ''American Samoa and the Northern Mariana Islands).'' in its place.

B. Remove ''watch components'' from the only sentence in paragraph (a)(10) and add ''watch movements'' in its place.

C. Amend paragraph (a)(13) introductory text by removing ''wages'' and adding ''wages and associated'' in its place.

D. Add one new sentence at the end of paragraph (a)(13)(ii) introductory text as set forth below.

E. Add one new sentence at the end of paragraph (a)(13)(ii)(A) as set forth below.

F. Add one new sentence at the end of paragraph (a)(13)(ii)(B) as set forth below.

G. Revise paragraph (a)(14) introductory text as set forth below.

H. Add one new sentence at the end of paragraph (a)(14)(ii) introductory text as set forth below.

I. Add one new sentence at the end of paragraph (a)(14)(ii)(A) as set forth below.

J. Add one new sentence at the beginning of paragraph (a)(14)(ii)(B) as set forth below.

K. Remove ''United States during'' from the second sentence of paragraph (b)(5) and add ''United States duty paid during'' in its place.

§ 303.2 Definitions and forms.

(a) * * *

(13) * * *

(ii) * * * Only during the time employees are earning creditable wages are they entitled to health and life insurance duty refund benefits under the program.

(A) * * * Only during the time employees are earning creditable wages are they entitled to health and life insurance duty refund benefits under the program.

(B) * * * Only during the time employees are earning creditable wages are they entitled to pension duty refund benefits under the program.

* * * * *

(14) Non-creditable wages and associated non-creditable fringe benefits ineligible for the duty refund benefit include, but are not limited to, the following:

* * * * *

(ii) * * * Any health and life insurance costs during the time an employee is not earning creditable wages.

(A) * * * Any health and life insurance costs during the time an employee is not earning creditable wages.

(B) Any pension benefits that were not based on associated creditable wages. * * *

* * * * *

4. Section 303.5 is amended as follows:

A. Revise the section heading to read as set forth below.

B. Remove ''allocation shall'' from the first sentence of paragraph (b) introductory text and add ''allocation or duty-refund certificate shall'' in its place.

C. Remove ''payroll, production records'' from paragraph (b)(5) and add ''payroll, including time cards, production records'' in its place.

D. Remove the last sentence of paragraph (c) and add two sentences in its place as set forth below.

§ 303.5 Application for annual allocations of duty-exemptions and duty-refunds.

* * * * *

(c) * * * It is the responsibility of each program producer to make the appropriate data available to the Departments' officials for the calendar year for which the annual verification is being performed and no further data, from the calendar year for which the audit is being completed, will be considered for benefits at any time after the audit has been completed. In the event of discrepancies between the application and substantiating data before the audit is complete, the Secretaries shall determine which data will be used in the calculation of the duty refund and allocations.

* * * * *

§ 303.12 [Amended]

5. Section 303.12 is amended as follows:

A. Remove ''creditable wages paid during'' from the second sentence in paragraph (a)(1) and add ''creditable wages, determined from the wages as reported on the employer's first two quarterly federal tax returns (941–SS), paid during'' in its place.

B. Remove ''duty refund will remain the same.'' from the fifth sentence in paragraph (a)(1) and add ''duty refund will be based on verified creditable wages, duty-free shipments into the customs territory of the United States, creditable health insurance, life insurance and pension benefits and the duty differential, if watch tariffs have been reduced during the calendar year.'' in its place.

§ 303.13 [Amended]

6. Section 303.13 is amended by removing ''post office address'' from the first sentence of paragraph (b) and adding ''address'' in its place.

7. Section 303.14 is amended as follows:

A. Revise the section heading to read as set forth below.

B. In paragraph (b)(3), remove ''35'' and add ''300'' in its place; and remove ''800'' and add ''3,000'' in its place.

C. Revise paragraph (c) to read as follows.

§ 303.14 Allocation factors, duty refund calculations and miscellaneous provisions.

* * * * *

(c) *Calculation of the value of the mid-year production incentive certificates.* (1) The value of each producer's certificate shall equal the producer's average creditable wage per unit shipped during the first six months of the calendar year multiplied by the sum of:

(i) The number of units shipped up to 300,000 units times a factor of 90%; plus

(ii) Incremental units shipped up to 450,000 units times a factor of 85%; plus

(iii) Incremental units shipped up to 600,000 units times a factor of 80%; plus

(iv) Incremental units shipped up to 750,000 units times a factor of 75%.

(2) *Calculation of the value of the annual production incentive certificates.* The value of each producer's certificate shall equal the producer's average creditable benefit per unit based on creditable wages, health insurance, life insurance and pension benefits plus any duty differential, if applicable, averaged from the amount of duty free units shipped during the calendar year multiplied by the sum of the following to obtain the total verified amount of the annual duty-refund per company. This amount would then be adjusted by deducting the amount of the mid-year duty-refund already issued.

(i) The number of units shipped up to 300,000 units times a factor of 90%; plus

(ii) Incremental units shipped up to 450,000 units times a factor of 85%; plus

(iii) Incremental units shipped up to 600,000 units times a factor of 80%; plus

(iv) Incremental units shipped up to 750,000 units times a factor of 75%.

(3) The Departments may make adjustments for these data in the manner set forth in § 303.5(c).

* * * * *

§ 303.15 [Amended]

8. Section 303.15 is amended by removing ''on watches and watch movements and parts (except discrete watch cases) imported into the customs territory of the United States.'' From the first sentence of paragraph (b) and adding ''on any article imported into the customs territory of the United States duty paid except for any article containing a material which is the product of a country to which column 2 rates of duty apply.'' in its place.

9. Section 303.16 is amended as follows:

A. Amend paragraph (a)(9) introductory text by removing ''wages and creditable fringe benefits'' and adding ''wages and associated creditable fringe benefits and creditable duty differentials' in its place.

B. Remove ''two producers'' from the first sentence of paragraph (a)(9)(i)(C) and add ''two program producers'' in its place.

C. Add one new sentence at the end of paragraph (a)(9)(ii) introductory text as set forth below.

D. Add one new sentence at the end of paragraph (a)(9)(ii)(A) as set forth below.

E. Add one new sentence at the end of paragraph (a)(9)(ii)(B) as set forth below.

F. Revise paragraph (a)(10) introductory text as set forth below.

G. Add one new sentence at the end of paragraph (a)(10)(ii) introductory text as set forth below.

H. Add one new sentence at the end of paragraph (a)(10)(ii)(A) as set forth below.

I. Add one new sentence at the beginning of paragraph (a)(10)(ii)(B) as set forth below.

J. Remove ''working on the premises of the company office and'' from the first sentence of paragraph (a)(10)(i)(D) and add ''working on the premises of the company office; wages paid to employees working with a non-program producer to create a single piece of HTSUS heading 7113 jewelry whether or not it entered the United States free of duty; and'' in its place.

K. Remove ''United States during'' from the second sentence of paragraph (b)(3) and add ''United States duty paid during'' in its place.

§ 303.16 Definitions and forms.

(a) * * *

(9) * * *

(ii) * * * Only during the time employees are earning creditable wages are they entitled to health and life insurance duty refund benefits under the program.

(A) * * * Only during the time employees are earning creditable wages are they entitled to health and life insurance duty refund benefits under the program.

(B) * * * Only during the time employees are earning creditable wages are they entitled to pension duty refund benefits under the program.

* * * * *

(10) Non-creditable wages and associated non-creditable fringe benefits ineligible for the duty refund benefit include, but are not limited to, the following:

* * * * *

(ii) * * * Any health and life insurance costs during the time an employee is not earning creditable wages.

(A) * * * Any health and life insurance costs during the time an employee is not earning creditable wages.

(B) Any pension benefits that were not based on associated creditable wages. * * *

* * * * *

10. Section 303.17 is amended as follows:

A. Revise the section heading to read as set forth below.

B. Remove ''payroll, production records'' from paragraph (b)(6) and add ''payroll, including time cards, production records'' in its place.

C. Remove the last sentence of paragraph (c) and add two sentences in its place as set forth below.

§ 303.17 Application for annual duty-refunds.

* * * * *

(c) * * * It is the responsibility of each program producer to make the appropriate data available to the Departments' officials for the calendar year for which the annual verification is being performed and no further data, from the calendar year for which the audit is being completed, will be considered for benefits at any time after the audit has been completed. In the event of discrepancies between the application and substantiating data before the audit is complete, the Secretaries shall determine which data will be used in the calculation of the duty refund and allocations.

* * * * *

§ 303.19 [Amended]

11. Section 303.19 is amended as follows:

A. Remove ''creditable wages paid during'' from the second sentence in paragraph (a)(1) and add ''creditable wages, determined from the wages as reported on the employer's first two quarterly federal tax returns (941–SS), paid during'' in its place.

B. Remove ''duty refund will remain the same.'' from the fifth sentence in paragraph (a)(1) and add ''duty refund will be based on verified creditable wages, duty-free shipments into the customs territory of the United States, creditable health insurance, life insurance and pension benefits and the duty differential, if watch tariffs have been reduced during the calendar year.'' in its place.

12. Section 303.20 is amended as follows:

A. Revise the section heading to read as set forth below.

B. Revise paragraph (b) to read as follows.

§ 303.20 Duty refund calculations and miscellaneous provisions.

* * * * *

(b) *Calculation of the value of the mid-year production incentive certificates.* (1) The value of each producer's certificate shall equal the producer's average creditable wage per unit shipped during the first six months of the calendar year multiplied by the sum of:

(i) The number of units shipped up to 300,000 units times a factor of 90%; plus

(ii) Incremental units shipped up to 450,000 units times a factor of 85%; plus

(iii) Incremental units shipped up to 600,000 units times a factor of 80%; plus

(iv) Incremental units shipped up to 750,000 units times a factor of 75%.

(2) *Calculation of the value of the annual production incentive certificates.* The value of each producer's certificate shall equal the producer's average creditable benefit per unit based on creditable wages, health insurance, life insurance and pension benefits plus any duty differential, if applicable, averaged from the amount of duty free units shipped during the calendar year multiplied by the sum of the following to obtain the total verified amount of the annual duty-refund per company. This amount would then be adjusted by deducting the amount of the mid-year duty-refund already issued.

(i) The number of units shipped up to 300,000 units times a factor of 90%; plus

(ii) Incremental units shipped up to 450,000 units times a factor of 85%; plus

(iii) Incremental units shipped up to 600,000 units times a factor of 80%; plus

(iv) Incremental units shipped up to 750,000 units times a factor of 75%.

(3) The Departments may make adjustments for these data in the manner set forth in § 303.17(c).

* * * * *

§ 303.21 [Amended]

13. Section 303.21 is amended by removing ''post office address'' from the first sentence of paragraph (b) and adding ''address'' in its place.

Dated: January 18, 2007.

David Spooner,

Assistant Secretary for Import Administration, Department of Commerce.

Dated: January 9, 2007.

Nikolao Pula,

Director for Insular Affairs, Department of the Interior.

[FR Doc. 07–294 Filed 1–23–07; 8:45 am]

BILLING CODE 3510–DS–P, 4310–93–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[REG–125632–06]

RIN 1545–BF83

Corporate Reorganizations; Distributions Under Sections 368(a)(1)(D) and 354(b)(1)(B); Correction Notice

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking by cross-reference to temporary regulations; correction notice.

SUMMARY: This document contains corrections to notice of proposed rulemaking by cross-reference to temporary regulations that was published in the **Federal Register** on Tuesday, December 19, 2006 (71 FR 75898) providing guidance regarding the qualification of certain transactions as reorganizations described in section 368(a)(1)(D) where no stock and/or securities of the acquiring corporation are issued and distributed in the transaction.

FOR FURTHER INFORMATION CONTACT: Bruce A. Decker at (202) 622–7550 (not a toll-free number).

SUPPLEMENTARY INFORMATION:

Background

The notice of proposed rulemaking by cross-reference to temporary regulations (REG–125632–06) that is the subject of these corrections are under sections 368 and 354 of the Internal Revenue Code.

Need for Correction

As published, notice of proposed rulemaking by cross-reference to temporary regulations (REG–125632–06) contains errors that may prove to be misleading and are in need of clarification.

Correction of Publication

Accordingly, the notice of proposed rulemaking by cross-reference to

temporary regulations (REG–125632–06) that was the subject of FR Doc. E6–21572, is corrected as follows:

On page 75898, column 3, in the preamble, under the caption, line 9, the language ''acquiring corporation is issued and'' is corrected to read ''acquiring corporation are issued and.''

LaNita Van Dyke,

Chief, Publications and Regulations Branch, Legal Processing Division, Office of Associate Chief Counsel (Procedure and Administration).

[FR Doc. E7–860 Filed 1–23–07; 8:45 am]

BILLING CODE 4830–01–P

DEPARTMENT OF THE TREASURY

Alcohol and Tobacco Tax and Trade Bureau

27 CFR Part 9

[Notice No. 71]

RIN 1513–AB27

Proposed Establishment of the Paso Robles Westside Viticultural Area (2006R–087P)

AGENCY: Alcohol and Tobacco Tax and Trade Bureau, Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Alcohol and Tobacco Tax and Trade Bureau proposes to establish the 179,622-acre ''Paso Robles Westside'' viticultural area in San Luis Obispo County, California. The proposed viticultural area is totally within the existing Paso Robles and Central Coast viticultural areas. We designate viticultural areas to allow vintners to better describe the origin of their wines and to allow consumers to better identify wines they may purchase. We invite comments on this proposed addition to our regulations.

DATES: We must receive written comments on or before March 26, 2007.

ADDRESSES: You may send comments to any of the following addresses:

- Director, Regulations and Rulings Division, Alcohol and Tobacco Tax and Trade Bureau, Attn: Notice No. 71, P.O. Box 14412, Washington, DC 20044–4412.
- 202–927–8525 (facsimile).
- *nprm@ttb.gov* (e-mail).
- *http://www.ttb.gov/wine/wine_rulemaking.shtml.* An online comment form is posted with this notice on our Web site.
- *http://www.regulations.gov* (Federal e-rulemaking portal; follow instructions for submitting comments).

You may view copies of this notice, the petition, the appropriate maps, and any comments we receive about this proposal by appointment at the TTB Information Resource Center, 1310 G Street, NW., Washington, DC 20220. To make an appointment, call 202–927–2400. You may also access copies of the notice and comments online at *http://www.ttb.gov/wine/wine_rulemaking.shtml.*

See the Public Participation section of this notice for specific instructions and requirements for submitting comments, and for information on how to request a public hearing.

FOR FURTHER INFORMATION CONTACT: N. A. Sutton, Regulations and Rulings Division, Alcohol and Tobacco Tax and Trade Bureau, 925 Lakeville St., No. 158, Petaluma, CA 94952; telephone 415–271–1254.

SUPPLEMENTARY INFORMATION:

Background on Viticultural Areas

TTB Authority

Section 105(e) of the Federal Alcohol Administration Act (the FAA Act, 27 U.S.C. 201 *et seq.*) requires that alcohol beverage labels provide consumers with adequate information regarding product identity and prohibits the use of misleading information on those labels. The FAA Act also authorizes the Secretary of the Treasury to issue regulations to carry out its provisions. The Alcohol and Tobacco Tax and Trade Bureau (TTB) administers these regulations.

Part 4 of the TTB regulations (27 CFR part 4) allows the establishment of definitive viticultural areas and the use of their names as appellations of origin on wine labels and in wine advertisements. Part 9 of the TTB regulations (27 CFR part 9) contains the list of approved viticultural areas.

Definition

Section 4.25(e)(1)(i) of the TTB regulations (27 CFR 4.25(e)(1)(i)) defines a viticultural area for American wine as a delimited grape-growing region distinguishable by geographical features, the boundaries of which have been recognized and defined in part 9 of the regulations. These designations allow vintners and consumers to attribute a given quality, reputation, or other characteristic of a wine made from grapes grown in an area to its geographic origin. The establishment of viticultural areas allows vintners to describe more accurately the origin of their wines to consumers and helps consumers to identify wines they may purchase. Establishment of a viticultural area is neither an approval nor an endorsement by TTB of the wine produced in that area.

Requirements

Section 4.25(e)(2) of the TTB regulations outlines the procedure for proposing an American viticultural area and provides that any interested party may petition TTB to establish a grape-growing region as a viticultural area. Section 9.3(b) of the TTB regulations requires the petition to include—

- Evidence that the proposed viticultural area is locally and/or nationally known by the name specified in the petition;
- Historical or current evidence that supports setting the boundary of the proposed viticultural area as the petition specifies;
- Evidence relating to the geographic features, such as climate, soils, elevation, and physical features, that distinguish the proposed viticultural area from surrounding areas;
- A description of the specific boundary of the proposed viticultural area, based on features found on United States Geological Survey (USGS) maps; and
- A copy of the appropriate USGS map(s) with the proposed viticultural area's boundary prominently marked.

Paso Robles Westside Petition

TTB has received a petition from Holland & Knight LLP, San Francisco, California, proposing the establishment of the ''Paso Robles Westside'' American viticultural area in northern San Luis Obispo County, California. The petition was filed on behalf of 21 vintners and grape growers with interests in the proposed viticultural area, which is located approximately 20 miles east of the Pacific Ocean and 180 miles south of San Francisco. There are, according to the petitioner, approximately 2,425 acres within the proposed viticultural area currently dedicated to commercial vineyards.

Relationship to Existing Viticultural Areas

The proposed 179,622-acre Paso Robles Westside viticultural area is entirely within the existing 609,564-acre Paso Robles viticultural area (27 CFR 9.84), which in turn is entirely within the existing, multi-county Central Coast viticultural area (27 CFR 9.75). The Bureau of Alcohol, Tobacco and Firearms (ATF), TTB's predecessor agency, established the Paso Robles viticultural area in 1983 (see T.D. ATF–148, 48 FR 45239, October 4, 1983). In 1996, ATF expanded the Paso Robles viticultural area along its western boundary, increasing the viticultural area's size from approximately 557,000 acres to 609,564 acres (see T.D. ATF–377, 61 FR 29952, June 13, 1996).

As currently defined, the existing Paso Robles viticultural area lies in northern San Luis Obispo County, California, along the east and west sides of the Salinas River. The area forms a rough rectangle that runs from the Monterey County line in the north to just beyond the town of Santa Margarita in the south. The existing area generally extends from the Kern County line in the east to the inland side of the Santa Lucia Mountains in the west.

The proposed Paso Robles Westside viticultural area consists of the portion of the existing Paso Robles viticultural area that is west of the Salinas River. Therefore, the existing Paso Robles viticultural area boundaries located west of the Salinas River are concurrent with the northern, western, and southern boundaries of the proposed Paso Robles Westside viticultural area. The Salinas River serves as the eastern boundary of the proposed Paso Robles Westside viticultural area. If TTB establishes the proposed Paso Robles Westside viticultural area, that action would not affect the existing Paso Robles viticultural area, which would continue as an American viticultural area in its own right within its current boundary.

A portion of the western boundary of the existing Paso Robles viticultural area abuts the 6,350-acre York Mountain viticultural area (27 CFR 9.80), which is also located within the Central Coast viticultural area. If established, a portion of the western boundary of the Paso Robles Westside viticultural area would, therefore, also abut the York Mountain viticultural area. If TTB establishes the proposed Paso Robles Westside viticultural area, that action would not affect the York Mountain viticultural area; it would continue unchanged within its current boundary.

We summarize below the supporting evidence presented with the petition.

Name Evidence

The ''Paso Robles'' name evidence discussed in T.D. ATF–148 justifies the use of ''Paso Robles'' as a geographic place name for the Paso Robles viticultural area. According to that evidence, the full Spanish name, ''El Paso de Robles,'' translates to ''the Pass of the Oaks.'' People traveling between the missions at San Miguel and San Luis Obispo originally named the region, T.D. ATF–148 explains.

T.D. ATF–377, which expanded the western boundary of the original Paso Robles viticultural area, included evidence substantiating the use of the ''Paso Robles'' name for that expansion area. The current petition states that the proposed Paso Robles Westside viticultural area, which includes the 1996 expansion of the Paso Robles viticultural area, is locally and nationally known as the distinctive western portion of the Paso Robles viticultural area.

The petitioner explains that the Salinas River divides the Paso Robles region into east and west sides. Local residents and the media refer to ''east'' or ''west'' when describing locations within the Paso Robles region, according to the petition. In 2002, the City of Paso Robles Web site explained that water and sewer billing cycles were based on a property's location east or west of the Salinas River.

Real estate articles and advertisements, provided by the petitioner, identify some vacation rentals and residential property as being located in the Paso Robles west side region. Chanticleer Vineyard Bed and Breakfast in Paso Robles describes its location ''in Paso Robles Westside among vineyards * * *.'' Windward Vineyard and Tablas Creek Winery informational materials also note that their vineyards are within the Paso Robles west side area.

The October 2005 Wine Enthusiast magazine published an article by Steve Heimoff entitled ''The West Side Story'' that describes the growth of viticulture on the west side of the Paso Robles viticultural area. The article includes a section, ''Nine Westerners to Watch,'' that names and describes some wine industry members whose operations are located in the western portion of the Paso Robles viticultural area.

A March 21, 2001, article headlined ''Bothersome Bottleneck'' in the San Luis Obispo Tribune newspaper stated that expansion of the Niblock Bridge over the Salinas River, connecting the west and east sides of Paso Robles, was creating traffic delays and detours. An April 11, 2001, Tribune article, ''Weather Worries Paso Growers'' described the weather-related damage from recent cold nights to vineyards on the west side of Paso Robles. The petition also included a May 25, 1994, San Francisco Chronicle food section article, ''From Plonk to Premium, Paso Robles Offers It All,'' by Gerald Asher, which discussed zinfandel grapes from Paso Robles west side growers.

Boundary Evidence

The history of Paso Robles grape growing, as noted in T.D. ATF–148, started with the inception of the California mission system. Mission San Miguel, founded in 1797 and located north of the town of Paso Robles, produced wines from grapes harvested nearby. The Rotta Winery, located on the west side of Paso Robles and now known as Tablas Creek Winery, started producing wine about 1890, according to T.D. ATF–148. Also, according to T.D. ATF–148, San Luis Obispo County maintains historical records of grape plantings in the County as early as 1873.

As noted above, the proposed Paso Robles Westside viticultural area encompasses that portion of the existing Paso Robles viticultural area west of the Salinas River. The petitioner notes that the proposed Paso Robles Westside viticultural area boundary coincides with changes in topography within the larger Paso Robles viticultural area. The portion of the Paso Robles viticultural area east of the Salinas River has flatter terrain and warmer temperatures, with the Cholame Hills creating a natural eastern boundary for the existing area. In contrast, the petitioner notes that the proposed Paso Robles Westside viticultural area is nestled in the hillier terrain located between the Salinas River and the Santa Lucia Range, which forms the existing and proposed areas' western boundaries.

Distinguishing Features

The distinguishing features of the proposed Paso Robles Westside viticultural area, according to the petition, include its topography, climate, and soils. Using the Salinas River as the dividing line, the petition compares and contrasts the viticultural differences between the east and west sides of the existing Paso Robles viticultural area.

Topography

According to the provided USGS maps, elevations within the proposed Paso Robles Westside viticultural area range from a low of 591 feet at its northeast corner along the Salinas River to a high of 2,300 feet on along its western boundary line, west-southwest of the city of Paso Robles. While similar elevations are found in the portion of the Paso Robles viticultural area east of the Salinas River, the petitioner contends that the proposed Paso Robles Westside viticultural area is more rugged than regions east of the river.

A report included with the petition prepared by Dr. Thomas J. Rice, a certified soil scientist, supports the petitioner's position that the topography of the proposed Paso Robles Westside viticultural area is more rugged than the portion of the existing Paso Robles viticultural area east of the Salinas River. The report concludes that while the great majority of the terrain found in the proposed Paso Robles Westside viticultural area is made up of hills and mountains, the portion of the existing

Paso Robles viticultural area east of the Salinas River is less hilly, with nearly 30 percent of its land consisting of flatter terraces and plains. Even when compared to the existing Paso Robles viticultural area as a whole, the report notes that the proposed Paso Robles Westside area has more hills and mountains and fewer terraces and plains. The report summarized these topographical differences in the table shown below.

PERCENTAGE OF TERRAIN TYPES

Terrain type	Paso Robles viticultural area	Proposed Paso Robles Westside viticultural area	Paso Robles area east of Salinas River
Hills & Mountains	64.8	85.0	56.2
Terraces	16.3	9.6	19.2
Alluvial plains and fans, and flood plains	7.4	5.3	8.3
Unidentified	11.5	0.1	16.3
Totals	100.0	100.0	100.0

In addition, the October 2005 Wine Enthusiast magazine article, ''The West Side Story,'' depicts the geography of the Paso Robles viticultural area west of the Salinas River as a region of remote hills, valleys, and benchlands that contrasts with the ''flat as a billiard table'' terrain found east of the river. Neil Collins of Tablas Creek Winery also describes the western Paso Robles viticultural area as a region of rugged topography and meager soils that supports low vineyard yields, which contrasts with the higher-yield vineyards located on the flatter terrain of the Paso Robles viticultural area's eastern region.

Climate

The petitioner states that the Salinas River marks a distinctive climatic dividing line within the established Paso Robles viticultural area, separating the area's west side from its east side. Primary influences on the weather in California, according to the petitioner, include the Pacific Ocean and the State's mountain ranges. The west side of the existing Paso Robles viticultural area, which is concurrent with the proposed Paso Robles Westside viticultural area, lies on the eastern side of the Santa Lucia Mountains, which slope downward to the Salinas River. The Pacific Ocean's marine influence permeates the Santa Lucia Mountains, bringing more moisture to the west side of the Paso Robles viticultural area, according to the petition. In contrast, the petition states, the region east of the Salinas River, with its generally lower elevation and flatter terrain, receives much less marine influence and is drier than the region west of the river.

As evidence of this climatic difference, the petitioner provided comparative rainfall data from the Western Regional Climate Center (WRCC) for both the proposed Paso Robles Westside viticultural area and the east side of the Paso Robles viticultural area. The town of Templeton served as the Westside data collection point, while the Paso Robles Airport served as the east side data collection point. The table below summarizes the rainfall data.

	Total rainfall inches 1970–1997
Proposed Paso Robles Westside viticultural area	746.67
East side of Paso Robles	406.78
Variance between Westside and east side	339.89
Percentage difference	46

The petition also included a June 30, 1994, Chicago Tribune article, entitled ''California's Paso Robles Has the Climate and the Potential to Produce Fine Red Wines,'' which stated that the Paso Robles wine region west of the Salinas River enjoys a moderately warm growing zone with 25 to 35 inches of annual rainfall. The article also noted that the Paso Robles wine region east of the river is hotter and drier, with as little as 10 inches of rain a year, necessitating irrigation. Informational material from the Cinnabar Vineyards and Winery included with the petition takes note of the Templeton Gap, a pass in the Coast Range that draws the cooling Pacific marine layer inland, lowering afternoon temperatures in the western region of the Paso Robles area.

Soils

In his report on the proposed Paso Robles Westside viticultural area, Dr. Rice describes and compares the soils within the existing Paso Robles viticultural area to the east and to the west of the Salinas River. Soils within the Paso Robles viticultural area vary regionally and within short distances, according to Dr. Rice. Soil differences reflect varying geology (parent material), macroclimatic conditions (slope aspect and elevation), landform position (slope steepness and shape), cropping history, and past natural vegetation.

Vineyard soils within the proposed Paso Robles Westside viticultural area, according to Dr. Rice, developed primarily from sedimentary rock parent materials of the Miocene-age Monterey Formation, rich in carbonate and silica. The carbonate-rich rocks display high calcium levels, relatively low potassium and magnesium levels, and subsoil alkaline pH levels between 7.5 and 8.2. The silica-rich rocks display medium calcium levels, relatively low potassium and magnesium levels, and subsoil acid to neutral pH levels between 6.0 and 7.0. Most native soils, Dr. Rice continues, include low levels of nitrogen and phosphorus. Also, loam, clay loam, silty clay loam, and clay soil textures predominate with varying amounts of coarse rock fragments.

Soils on the east side of the Paso Robles viticultural area vary in parent materials, according to Dr. Rice. Adjacent to the major creek and river systems, Dr. Rice continues, the soils are mainly derived from weathered alluvial sediments of the Pleistocene-age Paso Robles Formation, along with more recent alluvial deposits. Also, the soils include highly variable textures with depth, consisting of stratified layers of clay, gravel, and sand. Soils from the Paso Robles Formation, Dr. Rice explains, have medium to low levels of calcium, low potassium and magnesium levels, and acid to neutral pH levels of 6.0 to 7.0 in subsoils.

Dr. Rice concludes that more than 75 percent of the acreage within the proposed Paso Robles Westside viticultural area has comparable soil physiology, while the land east of the Salinas River has more diverse soils

with no single dominant soil physiology.

Boundary Description

See the narrative boundary description of the petitioned-for viticultural area in the proposed regulatory text published at the end of this notice.

Maps

The petitioner provided the required maps, and we list them below in the proposed regulatory text.

Impact on Current Wine Labels

Part 4 of the TTB regulations prohibits any label reference on a wine that indicates or implies an origin other than the wine's true place of origin. If we establish this proposed viticultural area, its name, ''Paso Robles Westside,'' will be recognized under 27 CFR 4.39(i)(3) as a name of viticultural significance. The text of the proposed regulation would clarify this point. Consequently, wine bottlers using ''Paso Robles Westside'' in a brand name, including a trademark, or in another label reference as to the origin of the wine, must ensure that the product is eligible to use the viticultural area's name as an appellation of origin.

The name ''Paso Robles'' standing alone will continue as a term of viticultural significance for the entire, existing Paso Robles viticultural area. If the proposed Paso Robles Westside viticultural area is established, that action will have no effect on approved ''Paso Robles'' wine labels. TTB also notes that since the proposed Paso Robles Westside viticultural area is entirely within the existing Paso Robles viticultural area, any wine eligible to use ''Paso Robles Westside'' as an appellation of origin is also eligible to use the ''Paso Robles'' name standing alone.

For a wine to be labeled with a viticultural area name or with a brand name that includes a viticultural area name or other term identified as viticulturally significant in part 9 of the TTB regulations, at least 85 percent of the wine must be derived from grapes grown within the area represented by that name or other term, and the wine must meet the other conditions listed in 27 CFR 4.25(e)(3). If the wine is not eligible for labeling with the viticultural area name or other viticulturally significant term and that name or other term appears in the brand name, then the label is not in compliance and the bottler must change the brand name and obtain approval of a new label. Similarly, if the viticultural area name or other viticulturally significant term appears in another reference on the label in a misleading manner, the bottler would have to obtain approval of a new label. Accordingly, if a new label or a previously approved label uses the name ''Paso Robles Westside'' for a wine that does not meet the 85 percent standard, the new label will not be approved, and the previously approved label will be subject to revocation, upon the effective date of the approval of the Paso Robles Westside viticultural area.

Different rules apply if a wine has a brand name containing a viticultural area name or other viticulturally significant term that was used as a brand name on a label approved before July 7, 1986. See 27 CFR 4.39(i)(2) for details.

Conforming Amendment to 27 CFR 9.84, Paso Robles

As a legal matter, TTB has recognized ''Paso Robles'' as a term of viticultural significance since the establishment of the Paso Robles viticultural area in 1983. However, the regulatory text in 27 CFR 9.84 does not explicitly state that Paso Robles is a term of viticultural significance. Since we are proposing to identify ''Paso Robles Westside'' as a term of viticultural significance in paragraph (a) of the proposed regulatory text, we believe for purposes of clarity that it would be advisable to add a sentence to paragraph (a) of § 9.84 to state that ''Paso Robles'' is a term of viticultural significance in terms of that section. We also propose to include a cross reference to the viticultural significance of ''Paso Robles'' as set forth in § 9.84(a) in the ''Paso Robles Westside'' regulatory text.

Public Participation

Comments Invited

We invite comments from interested members of the public on whether we should establish the proposed Paso Robles Westside viticultural area. We are also interested in receiving comments on the sufficiency and accuracy of the name, boundary, climatic, and other required information submitted in support of the petition. Please provide any available specific information in support of your comments. We are especially interested in comments about the establishment of one viticultural area totally within another viticultural area, when both have ''Paso Robles'' in the name.

Submitting Comments

Please submit your comments by the closing date shown above in this notice. Your comments must include this notice number and your name and mailing address. Your comments must be legible and written in language acceptable for public disclosure. We do not acknowledge receipt of comments, and we consider all comments as originals. You may submit comments in one of five ways:

- *Mail:* You may send written comments to TTB at the address listed in the **ADDRESSES** section.
- *Facsimile:* You may submit comments by facsimile transmission to 202–927–8525. Faxed comments must—

(1) Be on 8.5- by 11-inch paper;

(2) Contain a legible, written signature; and

(3) Be no more than five pages long. This limitation assures electronic access to our equipment. We will not accept faxed comments that exceed five pages.

- *E-mail:* You may e-mail comments to *nprm@ttb.gov.* Comments transmitted by electronic mail must—

(1) Contain your e-mail address;

(2) Reference this notice number on the subject line; and

(3) Be legible when printed on 8.5- by 11-inch paper.

- *Online form:* We provide a comment form with the online copy of this notice on our Web site at *http://www.ttb.gov/wine/wine_rulemaking.shtml.* Select the ''Send comments via e-mail'' link under this notice number.
- *Federal e-rulemaking portal:* To submit comments to us via the Federal e-rulemaking portal, visit *http://www.regulations.gov* and follow the instructions for submitting comments.

You may also write to the Administrator before the comment closing date to ask for a public hearing. The Administrator reserves the right to determine whether to hold a public hearing.

Confidentiality

All submitted material is part of the public record and subject to disclosure. Do not enclose any material in your comments that you consider confidential or inappropriate for public disclosure.

Public Disclosure

You may view copies of this notice, the petition, the appropriate maps, and any comments we receive by appointment at the TTB Information Resource Center at 1310 G Street, NW., Washington, DC 20220. You may also obtain copies at 20 cents per 8.5- by 11-inch page. Contact our information specialist at the above address or by telephone at 202–927–2400 to schedule an appointment or to request copies of comments.

We will post this notice and any comments we receive on this proposal

on the TTB Web site. All name and address information submitted with comments will be posted, including e-mail addresses. We may omit voluminous attachments or material that we consider unsuitable for posting. In all cases, the full comment will be available in the TTB Information Resource Center. To access the online copy of this notice and the submitted comments, visit at *http://www.ttb.gov/wine/wine_rulemaking.shtml.* Select the ''View Comments'' link under this notice number to view the posted comments.

Regulatory Flexibility Act

We certify that this proposed regulation, if adopted, would not have a significant economic impact on a substantial number of small entities. The proposed regulation imposes no new reporting, recordkeeping, or other administrative requirement. Any benefit derived from the use of a viticultural area name would be the result of a proprietor's efforts and consumer acceptance of wines from that area. Therefore, no regulatory flexibility analysis is required.

Executive Order 12866

This proposed rule is not a significant regulatory action as defined by Executive Order 12866, 58 FR 51735. Therefore, it requires no regulatory assessment.

Drafting Information

N.A. Sutton of the Regulations and Rulings Division drafted this notice.

List of Subjects in 27 CFR Part 9

Wine.

Proposed Regulatory Amendment

For the reasons discussed in the preamble, we propose to amend 27 CFR, chapter 1, part 9, as follows:

PART 9—AMERICAN VITICULTURAL AREAS

1. The authority citation for part 9 continues to read as follows:

Authority: 27 U.S.C. 205.

Subpart C—Approved American Viticultural Areas

§ 9.84 [Amended]

2. Section 9.84 is amended by adding a sentence at the end of paragraph (a) to read as follows:

(a) *Name.* * * * For purposes of part 4 of this chapter, ''Paso Robles'' is a term of viticultural significance.

* * * * *

3. Subpart C is amended by adding a new § 9.__ to read as follows:

§ 9.__ Paso Robles Westside.

(a) *Name.* The name of the viticultural area described in this section is ''Paso Robles Westside''. For purposes of part 4 of this chapter, ''Paso Robles Westside'' is a term of viticultural significance. ''Paso Robles'' is also a term of viticultural significance under § 9.84(a).

(b) *Approved maps.* The 12 United Stages Geological Survey (USGS) 1:24,000 scale topographic maps used to determine the boundary of the Paso Robles Westside viticultural area are titled:

(1) San Miguel, Calif., 1948, photorevised 1979;

(2) Paso Robles, Calif., 1948, photorevised 1979;

(3) Templeton, Calif., 1948, photorevised 1979;

(4) Atascadero, Calif., 1965;

(5) Santa Margarita, Calif., 1965, revised 1993;

(6) Lopez Mountain, Calif., 1965, revised 1995;

(7) San Luis Obispo, Calif., 1965, photorevised 1979;

(8) York Mountain, Calif., 1948, photorevised 1979;

(9) Cypress Mountain, Calif., 1948, photorevised 1979;

(10) Lime Mountain, Calif., 1948, photorevised 1979;

(11) Tierra Redonda Mountain, Calif., 1948, photorevised 1979; and

(12) Bradley, Calif., 1949, photorevised 1979.

(c) *Boundary.* The Paso Robles Westside viticultural area is located in San Luis Obispo County, California. The boundary of the Paso Robles Westside viticultural area is as described below:

(1) The beginning point is on the San Miguel map at the intersection of the Monterey-San Luis Obispo County line and the Salinas River, along the northern boundary of section 6, T25S/R12E;

(2) From the beginning point, proceed southerly (upstream) along the western-most bank of the meandering Salinas River, crossing in succession onto the Paso Robles, Templeton, Atascadero, Santa Margarita, and the Lopez Mountain maps, to river's intersection with the R13E/R14E range line, along the eastern boundary of section 36, T29S/R13E; then

(3) Proceed south 0.67 mile along the R13E/R14E range line to its intersection with the T29S/T30S township line at the southeast corner of section 36, T29S/R13E, on the Lopez Mountain map; then

(4) Proceed west 6 miles along the T29S/T30S township line, crossing onto the San Luis Obispo map, to the line's intersection with the R12E/R13E range line at the southwest corner of section 31, T29S/R13E; then

(5) Proceed north-northwest in a straight line approximately 13 miles, crossing onto the Atascadero and then the Templeton map, to the line's intersection with the southern-most corner of the (Rancho) Paso de Robles boundary line, located near the intersection of an unnamed intermittent stream and the 1,200-foot contour line, T27S/R11E, approximately 2.1 miles southwest of the intersection of Paso Robles Creek and U.S. 101; then

(6) Proceed west-northwest for approximately 4.8 miles along the southwestern boundary line of the (Rancho) Paso de Robles, crossing onto the York Mountain map, to the boundary line's intersection with the southeast corner of section 32, T27S/R11E; then

(7) Proceed northerly along the eastern boundary lines of sections 32, 29, 20, and 18, T27S/R11E, to the northeast corner of section 18, T27S/R11E, York Mountain map; then

(8) Proceed west along the northern boundary of section 18, T27S/R11E, for approximately 0.8 mile to the boundary line's intersection with Dover Canyon Road, York Mountain map; then

(9) Proceed westerly along Dover Canyon Road to its intersection with a jeep trail and an unnamed intermittent stream at the mouth of Dover Canyon, section 14, T27S/R10E, York Mountain map; then

(10) Proceed west-northwest in a straight line for approximately 5.5 miles, crossing onto the Cypress Mountain map, to the line's intersection with the junction of the T26/27S and R9E/R10E township and range lines (also the southwest corner of section 31, T26S/R10E); then

(11) Proceed north for approximately 12 miles along the R9E/R10E line, crossing over Las Tablas Creek and the Nacimiento Reservoir on the Lime Mountain map, and continue along onto the R9E/R10E line on the Tierra Redonda Mountain map to the line's intersection with the Monterey-San Luis Obispo County line at the northwest corner of section 6; T24S/T25S; then

(12) Proceed east for approximately 12.3 miles along the Monterey-San Luis Obispo County line, crossing over the Bradley map, and return to the beginning point on the San Miguel map.

Dated: December 5, 2006.

John J. Manfreda,

Administrator.

[FR Doc. E7–983 Filed 1–23–07; 8:45 am]

BILLING CODE 4810–31–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA–R09–OAR–2006–0580; FRL–8270–4]

Approval and Promulgation of Air Quality Implementation Plans; Designation of Areas for Air Quality Planning Purposes; Arizona; Miami Sulfur Dioxide State Implementation Plan and Request for Redesignation to Attainment; Correction of Boundary of Miami Sulfur Dioxide Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve the maintenance plan for the Miami Area in Gila County, Arizona, as a revision to the Arizona state implementation plan; to grant the request submitted by the State to redesignate this area from nonattainment to attainment of the national ambient air quality standards for sulfur dioxide (SO_2); and to correct the boundary for the Miami SO_2 nonattainment area. EPA is proposing this action in accordance with the Clean Air Act.

DATES: Any comments on this proposal must arrive by February 23, 2007.

ADDRESSES: Submit comments, identified by docket number EPA–R09–OAR–2006–0580, by one of the following methods:

1. *Federal eRulemaking Portal: www.regulations.gov*. Follow the online instructions.

2. *E-mail: vagenas.ginger@epa.gov*.

3. *Mail or deliver:* Ginger Vagenas (Air–2), U.S. Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA 94105–3901.

Instructions: All comments will be included in the public docket without change and may be made available online at *www.regulations.gov*, including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider CBI or otherwise protected should be clearly identified as such and should not be submitted through *www.regulations.gov* or e-mail. *www.regulations.gov* is an ''anonymous access'' system, and EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send e-mail directly to EPA, your e-mail address will be automatically captured and included as part of the public comment. 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.

Docket: The index to the docket for this action is available electronically at *www.regulations.gov* and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available in either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Ginger Vagenas, EPA Region IX, (415) 972–3964, *vagenas.ginger@epa.gov*.

SUPPLEMENTARY INFORMATION: In the Rules and Regulations section of this **Federal Register**, we are taking direct final action to approve the maintenance plan for the Miami SO_2 nonattainment area and to approve the State of Arizona's request to redesignate the Miami area from nonattainment to attainment. We are also taking direct final action to correct the boundary of the Miami SO_2 nonattainment area. We are taking these actions without prior proposal because we believe these SIP revisions are not controversial. If we receive adverse comments, however, we will publish a timely withdrawal of the direct final rule and address the comments in subsequent action based on this proposed rule.

We do not plan to open a second comment period, so anyone interested in commenting should do so at this time. If we do not receive adverse comments, no further activity is planned. For further information, please see the direct final rule in this **Federal Register**.

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

Dated: December 22, 2006.

Sally Seymour,

Acting Regional Administrator, Region IX.

[FR Doc. E7–995 Filed 1–23–07; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

45 CFR Parts 301, 302, 303 and 304

RIN 0970–AC24

Child Support Enforcement Program

AGENCY: Office of Child Support Enforcement (OCSE), Administration for Children and Families (ACF), Department of Health and Human Services.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: These proposed regulations implement provisions of title IV–D of the Social Security Act (the Act) as amended by the Deficit Reduction Act of 2005, Pub. L. 109–171 (DRA of 2005). The proposed regulations address use of the tax refund intercept program to collect past-due child support on behalf of children who are not minors, mandatory review and adjustment of child support orders for families receiving Temporary Assistance to Needy Families (TANF), reduction of Federal matching rate for laboratory costs incurred in determining paternity, States' option to pay more child support collections to former assistance families, and the mandatory annual $25 fee in certain child support (IV–D) cases in which the State has collected and disbursed at least $500 of support. The regulations also make other conforming changes necessary to implement changes to the distribution and disbursement requirements.

DATES: Consideration will be given to comments received by March 26, 2007.

ADDRESSES: Send comments to: Office of Child Support Enforcement, Administration for Children and Families, 370 L'Enfant Promenade, SW., 4th Floor, Washington, DC 20447. *Attention:* Director, Policy Division, *Mail Stop:* OCSE/DP. Comments will be available for public inspection Monday through Friday from 8:30 a.m. to 5 p.m. on the 4th floor of the Department's offices at the above address. You may also transmit written comments electronically via the Internet at: *http://www.regulations.acf.hhs.gov*. To download an electronic version of the rule, you may access *http://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Paige Hausburg, Policy Specialist, OCSE, 202–401–5635, *e-mail: phausburg@acf.hhs.gov*. Deaf and hearing-impaired individuals may call

the Federal Dual Party Relay Service at 1–800–877–8339 between 8 a.m. and 7 p.m. eastern time.

SUPPLEMENTARY INFORMATION:

I. Statutory Authority

This notice of proposed rulemaking is published under the authority granted to the Secretary of the U.S. Department of Health and Human Services (the Secretary) by section 1102 of the Act, 42 U.S.C. 1302. Section 1102 authorizes the Secretary to publish regulations that may be necessary for the efficient administration of the functions for which he is responsible under the Act. The Deficit Reduction Act of 2005 (DRA of 2005), Title VII, Subtitle C—Child Support, sections 7301–7311 amends title IV–D of the Act. The specific sections of the DRA of 2005 included in the proposed regulation are discussed in detail under Provisions of the Regulation.

II. Provisions of the Regulations

Part 301—State Plan Approval and Grant Procedures

Section 301.1—General Definitions

Section 7301(f) of the DRA of 2005, effective October 1, 2007, amends the definition of ''past-due support'' at section 464(c) of the Act for purposes of the Federal income tax refund offset program. Currently, the term ''past-due support'' limits access to the Federal income tax refund offset process to past-due support owed to or on behalf of a qualified child (a child who was a minor or who, while a minor was determined to be disabled under subchapter II or XVI of the Act and for whom an order of support is in force). Prior to enactment of the DRA of 2005, only past-due support due to a qualified child or adult child who was disabled could be submitted for offset. That limitation is removed by section 7301(f) of the DRA of 2005, effective October 1, 2007. This amendment will allow collection of past-due child support from the Federal income tax refund offset program on behalf of individuals who were owed child support as children but then aged out of the system without having collected the full support amount owed to them.

Under § 301.1, we propose changes to two definitions. First, we propose to amend the definition of ''past-due support'' by inserting language to place a time limit on the definition. The revised language would read: ''Through September 30, 2007, for purposes of referral for Federal income tax refund offset of support due an individual who is receiving services under § 302.33 of this chapter, past-due support means support owed to or on behalf of a qualified child, or a qualified child and the parent with whom the child is living if the same support order includes support for the child and the parent.'' Therefore, effective October 1, 2007, past-due support owed in non-TANF cases will be treated the same as past-due support owed in TANF cases and may be submitted for Federal income tax refund offset until the debt is satisfied.

Similarly, in § 301.1, we propose to limit the applicability of the definition of ''Qualified child'' through September 30, 2007, because there is no longer any reference to a ''qualified child'' in section 464 of the Act effective October 1, 2007. Therefore, on or after October 1, 2007, past-due support owed on behalf of adults in non-TANF cases would qualify for Federal income tax refund offset, regardless of whether they are disabled.

Part 302—State Plan Approval Requirements

Section 302.32—Collection and Disbursement of Support Payments by the IV–D Agency

The proposed regulations make conforming changes to certain language in § 302.32, Collection and Disbursement of Support Payments by the IV–D Agency, for consistency with certain changes made to sections 454 and 457 of the Act. (The term ''distribution'' refers to how a support collection is allocated between families and the State and Federal government in accordance with Federal requirements. The term ''disbursement'' refers to the act of paying, by check or electronic transfer, support collections to families.)

Under the new section 454(34) of the Act, effective October 1, 2009, or up to a year earlier at State option, States have a choice to distribute collections first to satisfy support owed to families in IV–D cases. These proposed regulations make technical changes in §§ 302.32(b)(2)(iv) and (3)(ii) to delete reference to a specific statutory requirement for payments to families to simplify the regulatory language. Technical changes to § 302.51 are addressed later in this preamble.

Section 302.33—Services to Individuals Not Receiving Title IV–A Assistance

We propose to add a new § 302.33(e) to address the statutory requirement in section 454(6)(B)(ii) of the Act to impose an annual $25 fee in certain cases. We are also revising the title of the section to more appropriately reflect the scope of the revised section.

Section 7310(a) of the DRA of 2005 added section 454(6)(B)(ii) of the Act to require States, in the case of an individual who has never received assistance under a State program funded under title IV–A of the Act (hereinafter referred to as ''title IV–A program'') and for whom the State has collected at least $500 of support in any given Federal fiscal year, to impose an annual fee of $25 for each case in which services are furnished. The statutory effective date is October 1, 2006, or if State legislation is necessary to impose the mandatory $25 fee, the effective date is three months after the first day of the first calendar quarter beginning after the close of the first regular session of the State legislature that begins after the date of the enactment of the DRA of 2005. However, final regulations governing the requirement may not be published until after the mandatory effective date for the annual $25 fee in a State. In such a case, the State should implement the fee in accordance with the statutory requirements until such time as the final regulations are effective.

Section 454(6)(B)(ii) of the Act only refers to State programs funded under title IV–A of the Act. However, we believe it is authorized and consistent with the purpose and the scope of the statutory exemption from the $25 fee for current and former TANF cases and the intent of the Congress to not impose the fee in IV–D cases involving individuals who are receiving or have received assistance from a Tribal title IV–A Temporary Assistance to Needy Families (TANF) program as well. Tribal TANF recipients are a narrow, additional category of individuals receiving assistance under the same basic title IV–A statutory authority as State TANF recipients, just not under a State TANF program. The two programs are linked. Funds to operate Tribal IV–A programs in a State are deducted from the State's title IV–A block grant. The Federal statute at section 454 of the Act does not provide for any additional categories of exempt individuals besides these who may be receiving, or who may have received in the past, other types of Federal, State or Tribal assistance.

The proposed regulations at § 302.33(e)(1) would read: ''Annual $25 fee. (1) In the case of an individual who has never received assistance under a State or Tribal title IV–A program, and for whom the State has disbursed to the family at least $500 of support in the Federal fiscal year, the State must impose in, and report for, that year an annual fee of $25 for each case in which services are provided.''

A State would be required to impose the $25 fee in any case that meets the conditions for imposition of the fee under § 302.33(e), including both existing and new IV–D cases.

For purposes of § 302.33(e)(1), an individual would be considered to have received assistance under a State or Tribal title IV–A program if he or she had received a cash assistance payment or some other type of TANF assistance as defined in Federal regulations governing the State title IV–A program at 45 CFR 260.31, or under a Tribal title IV–A program at 45 CFR 286.10. A State title IV–A program would include both assistance under a State TANF program as well as assistance under the TANF program's predecessor, Aid to Families with Dependent Children (AFDC), as defined in Federal regulations governing the AFDC program.

Definition of ''Annual''

We propose that States impose the annual $25 fee within a Federal fiscal year period and report the fees for that Federal fiscal year. This proposal would ensure consistency among State programs in assessing the fee and reporting fees as program income as part of a State's mandated Federal reporting procedures. However, we encourage comments on, and a rationale for, an alternative 12-month period, for example, a calendar year, for providing more State flexibility.

When the $500 of Support Threshold Is Reached

Under section 454(6)(B)(ii) of the Act, the annual fee must be imposed after the collection of at least $500 in a Federal fiscal year. Paragraph (e)(1) would require that support payments that make up this $500 also must have been disbursed to the family within the Federal fiscal year.

We are proposing to require that the $500 support collection must have actually been disbursed to the family in a title IV–D case before imposing the $25 fee because to allow otherwise would result in imposition of a $25 fee in cases in which support is collected but is neither distributed nor disbursed to the family, e.g., a Federal income tax refund offset that is being held by the State because the obligated parent has requested a review under § 303.72, or a collection that has not yet been disbursed because the State has lost contact with, and is attempting to locate, the family. We believe this would be inconsistent with the statute's concept that a case subject to the $25 fee would have benefited from receipt of $500 in support during the year before an annual $25 fee is imposed. Therefore, at least $500 in support collections must have been disbursed to the family in a year before an annual $25 fee is imposed for that year. If $500 in support is collected in one year but not disbursed until the next year, the fee would be imposed in the year in which the collection was actually disbursed to the family.

Imposing a time period within which the $500 must be collected and disbursed is consistent with the purpose of the fee provision which requires States to impose an ''annual fee.'' Setting a specific time period for reaching the $500 threshold (i.e. within a Federal fiscal year) will also contribute to the efficient administration of HHS' oversight responsibility with respect to the title IV–D program.

One $25 Fee for Each Qualifying Case

Section 454(6)(B)(ii) of the Act, in part, requires a $25 fee to be imposed for each case in which services are provided. A title IV–D case is defined in instructions to the Federal reporting form 157 as a noncustodial parent (or putative father), custodial parent and child(ren) in common. Therefore, only one $25 fee would be imposed in a title IV–D case that otherwise met the requirements for imposition of the fee. If a custodial parent has multiple children by different noncustodial parents, there would be a separate title IV–D case for each noncustodial parent, and the State must impose the annual $25 fee for each of these title IV–D cases in which the State disburses at least $500 in the Federal fiscal year. And, if a noncustodial parent has multiple children in separate title IV–D cases, the State must impose the $25 fee in each qualifying case in which the $500 threshold and other conditions for imposing the fee under § 302.33(e) are met.

Who Imposes the Fee in Interstate, International and Intergovernmental Tribal Title IV–D Cases?

Section 454(6)(B)(ii) of the Act does not directly address imposition of the annual $25 fee in interstate cases, cases involving tribal members or the Tribal title IV–D programs, or international cases receiving services under section 454(32) of the Act. States have asked for clarification in this regulation about which State imposes a $25 fee when the conditions under section 454(6)(B)(ii) are met in these kinds of cases. We address each type separately, starting with interstate cases that involve more than one State. Many States take direct action against noncustodial parents or putative fathers in different States to establish paternity and a support order using long-arm statutes or to enforce an order through direct income withholding, for example. The requirements of proposed § 302.33(e) would apply to these interstate cases in which one State uses long-arm jurisdiction to establish or enforce support orders in another State where the noncustodial parent is living, without involving the IV–D agency in the other State. Therefore, for purposes of this discussion, we are only referring to title IV–D cases in which one State has requested assistance from another State in a child support case as interstate cases. The proposed regulation, under § 303.7(e), requires the annual $25 fee to be imposed and reported by the initiating State in an interstate case. We have taken this position because the initiating State is the only State that has sufficient information to determine whether all the requirements for imposition of the fee have been met. That change is discussed further later in this preamble.

With respect to international cases in which parents live in different countries, we believe such cases are covered by the fee provisions. However, section 454(32)(C) of the Act provides that ''no applications will be required from, and no costs will be assessed for such services against, the foreign reciprocating country or foreign obligee (but costs may at State option be assessed against the obligor).'' Section 459A of the Act addresses the Federal-level declaration of a foreign country to be a foreign reciprocating country and refers, under section 459A(d), to State-level reciprocal arrangements with foreign countries that are not the subject of a Federal-level declaration. (See PIQ–04–01, Processing Cases with Foreign Reciprocating Countries.) Therefore, while the $25 fee must be imposed when appropriate in international cases (when $500 has been collected in a Federal fiscal year and the family has never received State or Tribal TANF), it may not be taken out of the collection sent to, or charged to, a custodial parent in another country. The State could charge the noncustodial parent the fee or pay the fee itself in such cases.

The proposed regulations at § 302.33(e)(2) would require the State that receives the request from a foreign reciprocating country or a foreign country covered by a State level reciprocal agreement to impose the annual $25 fee in international cases receiving services under section 454(32) of the Act in which the criteria for imposition of the annual $25 fee under § 302.33(e)(1) are met. Proposed § 302.33(e)(3), discussed later in the

preamble, will address how the fee will actually be recovered or paid in these international cases, taking into account the prohibition in section 454(32)(C) of the Act that no costs will be assessed against the foreign reciprocating country or foreign obligee.

We also considered the impact of the annual $25 fee on Tribal members and Tribal title IV–D programs. Section 454(6)(B)(ii) is a State plan requirement and as such is not applicable to Tribal IV–D programs. However, if a Tribe is under cooperative agreement with a State title IV–D program under section 454(33) of the Act and § 302.34 to assist the State in delivering title IV–D services, the Tribe would be required to impose the annual $25 fee in appropriate cases, if doing so is addressed under the cooperative agreement with the State. If it is not addressed in the cooperative agreement, the State IV–D agency would be responsible for collecting the fee in any case where it is the jurisdiction receiving the application for services or receiving a referral from the State TANF, foster care or title XIX programs. As described above, under § 302.33(e)(1), a State would only impose the $25 fee in appropriate cases involving Tribal members who are receiving services from a State IV–D program and who have never received State or Tribal title IV–A assistance. A State may not impose a fee in a Tribal IV–D case that is referred to the State IV–D program for assistance in securing child support from a Tribal IV–D program because section 454(6)(B)(ii) of the Act does not apply to Tribal title IV–D programs under section 455(f) of the Act and 45 CFR Part 309. A case where a State IV-D program receives a request from another State IV–D program for assistance involving a tribal member would be treated as an interstate case and the fee would be imposed by the initiating State.

Collection of the Annual Fee: State Options To Retain, Charge, Recover or Pay the Annual Fee

Under section 454(6)(B)(ii) of the Act, as added by section 7310(a)(1) of the DRA of 2005, there are four options for the collection of the fee. The annual $25 fee may be retained by the State from support collected on behalf of the individual (but not from the first $500 so collected in a Federal fiscal year), or, it may be paid by the individual applying for services, recovered from the absent parent, or paid by the State out of its own funds. To implement this provision, the proposed regulation adds § 302.33(e)(3) under which after the first $500 of support collected in a Federal fiscal year is disbursed to the family, the annual fee must be collected by one or more of the following methods: (i) retained by the State from support collected in cases subject to the fee under § 302.33(e)(1) and (2), except in international cases receiving services under section 454(32) of the Act; (ii) paid by the individual applying for title IV–D services under section 454(4)(A)(ii) of the Act and implementing regulations at § 302.33; (iii) recovered from the noncustodial parent; or (iv) paid by the State out of its own funds.

In accordance with section 454(6)(B)(ii), the proposed § 302.33(e)(3) provides States with flexibility to choose the appropriate method or methods in a case to collect the fee, once imposed. The method or methods selected may affect the cost of administration of the title IV–D program. For example, a State may decide to first attempt to recover the fee by billing the noncustodial parent, and if the noncustodial parent does not pay the fee in a specified period of time (e.g., 60 days), may then choose to withhold the fee from a subsequent collection. Alternatively, a State could choose to require the noncustodial parent to pay the fee as part of the support order, and, should the noncustodial parent designate a portion of a subsequent payment as the $25 fee, or an employer remit to the State IV–D agency withheld wages sufficient to cover both the fee and the support obligation included in the support order, the State may retain that amount from that payment.

Section 454(6)(B)(ii) of the Act also authorizes a State to retain the fee from support collected in excess of the first $500 collected in a Federal fiscal year. Section 7310 of the DRA of 2005 also made a conforming amendment to section 457(a)(3) of the Act under which, in the case of a family that has never received assistance under title IV–A or title IV–E of the Act, the State shall distribute to the family the portion of the amount of support collected that remains after withholding any fee imposed pursuant to section 454(b)(B)(ii) of the Act. (A change to § 302.51 to reflect this authority is discussed later in this preamble.) Therefore, under the option to retain the fee from collections, a State does not need the custodial parent or caretaker relative's permission to withhold the annual $25 fee from a collection on his or her behalf. Alternatively, a State could charge the custodial parent or caretaker relative the fee (assuming they were the individuals who applied for services) and require payment within a specified period of time or indicate that if the fee is not paid, the State will use the option to retain the fee from support and the fee will be deducted from the first collection following the deadline for payment of the fee by the custodial parent or caretaker relative.

Retaining the annual fee from support collected on behalf of the family may be the least administratively burdensome method when collections in excess of the first $500 are disbursed to the family. However, while a State may charge the $25 fee to a custodial parent in an international case in which the custodial parent is in the U.S. and the noncustodial parent is in a foreign country, a State may not impose the fee on an individual residing in a foreign country in an international case. As discussed previously, section 454(32) of the Act prohibits States from charging application fees or assessing costs against the foreign country or foreign obligee. In such cases, the annual $25 fee imposed in international cases must be recovered from the parent or guardian living in the U.S. or be paid by the State. For purposes of international cases receiving services under section 454(32) of the Act, the $500 in support may be considered disbursed to the family when it is transmitted to the foreign reciprocating country or directly to the family.

Requirement That the Fee Be Collected by the End of the Fiscal Year

Under proposed § 302.33(e)(4), using the Secretary's rulemaking authority in section 1102 of the Act, the proposed regulations provide that the State must report, in accordance with reporting requirements under 45 CFR 302.15, and instructions issued to States by the Secretary, the total amount of annual $25 fees imposed for each Federal fiscal year as program income, regardless of which method or methods are used under paragraph (e)(3). States are required to report program income on the 4th quarter expenditure report. Requiring States to report the total amount of fees imposed in that year will contribute to the efficient administration of the Secretary's functions under title IV–D of the Act by ensuring that States actually reduce title IV–D administrative costs for the fiscal year by the amount of fees that are due, as intended by the statute. Although section 7310 of the DRA of 2005 does not include any specific sanction for a State's failure to collect the fee, section 454(6)(B)(ii) of the Act conveys a clear expectation that the $25 fee will actually be imposed and retained, collected, or paid in all eligible cases in which at least $500 of support was

collected in a Federal fiscal year. Therefore, each State is responsible for imposing, retaining, collecting or paying, and reporting the total of amount of annual $25 fees imposed in all cases in which it is required to be imposed during the fiscal year. If the $500 threshold is reached toward the end of a Federal fiscal year, the methods available to the State to collect or pay the fee may be limited to retaining the fee from a subsequent collection, if there is one made and disbursed before the end of the year, or paying the fee out of State funds. If a State does not make any collections above the $500 threshold or collects less than $25 in excess of the first $500 disbursed to the family in the year, the State must collect the fee using one of the other methods, and, if all else fails, pay the fee itself by the end of the fiscal year. We are specifically soliciting comments on ways to effectively ensure timely collection of the annual fee.

Section 7310(b) of the DRA of 2005 makes a conforming amendment to section 457(a)(3) of the Act, which requires that in the case of families that never received assistance, the State must distribute to the family the portion of the amount so collected that remains after withholding any fee pursuant to section 454(6)(B)(ii) of the Act. Therefore, if a State opts to retain the fee from a collection, the State may retain the annual $25 fee imposed under § 302.33(e)(1) and (2) from a collection in excess of the first $500 disbursed to the family in a never-assistance case, regardless of whether or not the collection is considered, under section 457 of the Act and implementing regulations at § 302.51, a payment on current support or arrearages.

For purposes of distribution under section 457 of the Act, assistance is defined in section 457(c)(1) as assistance under a State title IV–A TANF program or the program that TANF replaced, AFDC or title IV-E foster care program. If the State withholds the annual $25 fee from the collection on behalf of a never assistance case (*i.e.*, opts to retain the fee from a collection in such a case), and chooses to assess the fee against the custodial parent the State must give the noncustodial parent credit in the payment record for the entire amount of the payment. However, the State may deduct the annual $25 fee from a payment if the State has chosen to recover the fee from the noncustodial parent and the noncustodial parent has designated a portion of the payment as the annual $25 fee. In such a case, the noncustodial parent must get credit for paying the fee, and for paying support in the amount that is paid in excess of the fee.

Annual $25 Fee as Program Income

The intent of the annual $25 fee is to recoup in part the costs of the title IV–D program to the Federal and State governments by decreasing program expenditures. Under § 304.50, Treatment of Program Income, fees, recovered costs, and interest are considered program income that must be used to reduce title IV–D expenditures before seeking Federal financial participation in the title IV–D program's expenditures. Program income is reported in accordance with 45 CFR 302.15 and instructions issued by the Secretary. This reported program income must include the total amount of annual $25 fees imposed, regardless of whether the fees are retained from collections, paid by the custodial parent, recovered from the noncustodial parent or paid by the State. In addition, State-paid annual $25 fees are not an allowable title IV–D expenditure eligible for Federal matching under section 455 of the Act or 45 CFR part 304. Section 454(6)(B)(ii) of the Act requires that State funds used to pay the annual $25 fee may not be considered as an administrative cost of the State title IV–D program and must be counted as program income.

Therefore, proposed § 302.33(e)(5) requires that State funds used to pay the annual $25 fee shall not be considered administrative costs of the State for operation of the title IV–D plan, and that all annual $25 fees imposed during a Federal fiscal year must be considered income to the program, in accordance with § 304.50. States will be required to report the total amount of annual $25 fees imposed on Line 2a, Fees and Costs Recovered, on Form OCSE–396A, Child Support Enforcement Program Financial Report, in addition to any other fees, costs recovered and interest.

Section 302.51—Distribution of Support Collections

Section 7301(b) of the DRA revises section 457(a)(3) of the Act to require a State to pay, to a family that has never received assistance under a title IV–A or IV–E program, the portion of an amount collected that remains after withholding any annual $25 fee that may be imposed under section 454(6)(B)(ii) of the Act. This statutory requirement is being addressed in these proposed regulations by an amendment to § 302.51(a)(1) to include an additional exception in accordance with proposed paragraph (a)(5). Therefore, the revised paragraph (a)(1) would read as follows: ''(a)(1)For purposes of distribution in a IV–D case, amounts collected, except as provided under paragraphs (a)(3) and (5) of this section, shall be treated first as payment on the required support obligation for the month in which the support was collected and if any amounts are collected which are in excess of such amount, these excess amounts shall be treated as amounts which represent payment on the required support obligation for previous months.'' Paragraph (a)(5) would read as follows: ''(a)(5) The State must pay to a family that has never received assistance under a State program funded or approved under title IV–A of the Act or foster care under title IV–E of the Act the portion of the amount collected that remains after withholding any annual $25 fee that the State imposes under § 302.33(e) of this part.''

Certain changes made by section 7301(b) of the DRA which allow States to increase child support payments to families and simplify child support distribution rules were explained earlier under the discussion of § 302.32, Collection and Disbursement of Support Payments by the IV–D agency, including a new State plan requirement at section 454(34) of the Act under which a State must certify which option for distribution of collections in former assistance cases it will use. This statutory requirement is being addressed in these proposed regulations at § 302.51(a)(3) for consistency with State options for distribution of collections in former assistance cases authorized under the section 7301(b) of the DRA of 2005.

Current § 302.51(a)(3) requires that amounts collected through Federal income tax refund offset must be distributed as arrearages in accordance with implementing regulations for the Federal income tax refund offset process in § 303.72(h), and section 457(a)(2)(B)(iv) of the Act, under which Federal income tax refund offsets are first retained to satisfy any past-due support assigned to the State. We are making a conforming change to § 302.51(a)(3) to include the States' option, effective October 1, 2009, or up to a year earlier at State option, under section 454(34) of the Act, to use Federal income tax refund offset collections to satisfy current support, if not already paid for the month and to first pay collections, including Federal income tax refund offsets, to a former assistance family, before satisfying any support assigned to the State.

Section 302.70—Required State Laws

Section 7302 of the DRA of 2005 amended section 466(a)(10) of the Act to require States to enact laws requiring

the use of procedures to review, and if appropriate, adjust at least once every three years, child support orders for families receiving TANF in which there is an assignment of support under title IV–A of the Act. Under section 466(a)(10) of the Act and § 303.8, States may review orders using State child support guidelines and adjust them if appropriate, apply a cost-of-living adjustment to the orders, or use automated methods to identify orders eligible for review, conduct the reviews and adjust the orders, if appropriate. Section 7302 of the DRA of 2005 reinstates the pre-1996 requirement for States to review and, if appropriate, adjust orders in TANF cases on a three-year cycle. This change only affects those cases in which the families are currently receiving TANF. It does not apply to arrearage-only IV–D cases in which a State is only collecting arrearages assigned to the State because of title IV–A assistance provided in years past.

For consistency with section 466(a)(10) of the Act, the proposed regulations revise § 302.70(a)(10), under which the State must have in effect laws providing for the review and adjustment of child support orders. The requirements in current §§ 302.70(a)(10)(i) and (ii) are obsolete and would be replaced with reference to requirements for review and adjustment of child support orders in accordance with § 303.8. Specific changes to the content of § 303.8(b)(1), which address the requirements that are in effect until September 30, 2007 and those that become effective on October 1, 2007, are discussed later in this preamble.

Part 303—Standards for Program Operations

Section 303.7—Provision of Services in Interstate Title IV–D Cases

In § 302.33(c)(2), in an interstate case, the application fee is charged by the State in which the individual applies for services. Under responding State responsibilities in interstate cases in § 303.7(c)(7)(iv), the responding State must forward collections to the location specified by the initiating State title IV–D agency for distribution and disbursement. Because the application fee is paid in the initiating State and that State is responsible for distribution and disbursement of collections in interstate cases in accordance with Question and Answer 12 of OCSE–AT–98–24 (*http://www.acf.hhs.gov/programs/cse/pol/AT/1998/at-9824.htm*, only the initiating State has all the information necessary to know whether the annual $25 fee should be imposed in a particular case. Accordingly, we believe it is appropriate for the initiating State to impose the annual $25 fee in eligible cases after the $500 threshold is met, and to report the amount of fees imposed as required under § 302.33(e)(3).

Section 7310 of the DRA does not specifically address which State is to impose and collect the annual $25 fee. Using the Secretary's rulemaking authority in section 1102 of the Act, we are proposing to amend § 303.7(e) to require that the title IV–D agency in the initiating State impose the annual $25 fee in accordance with proposed changes to § 302.33(e) discussed earlier in this preamble. This change is necessary to ensure consistency in the collection of the mandatory annual $25 fee in interstate cases.

Section 303.8—Review and Adjustment of Child Support Orders

As discussed earlier, section 7302 of the DRA of 2005 revised section 466(a)(10) of the Act, effective October 1, 2007, to require States to review and, if appropriate, adjust orders in State title IV–A cases at least once every three years. Now that title IV–A assistance is time limited under TANF, it is especially important that States ensure, prior to the family ceasing to receive TANF, that the support order, which is essential to the family's continued financial independence, is set at the appropriate level based on the responsible parent's or parents' income and ability to pay.

Under current § 303.8(b)(1), a State must conduct a review every three years only if requested by either the parent or the title IV–D agency. Proposed § 303.8(b)(1) would require, effective October 1, 2007, a State to have procedures under which, every three years (or such shorter cycle as the State may determine), if there is an assignment under part A or upon the request of either parent, the State shall, with respect to a support order being enforced under this part, take into account the best interests of the child involved and (i) review and, if appropriate, adjust orders in accordance with the State's guidelines; (ii) apply a cost-of-living adjustment to the order; or (iii) use automated methods to identify orders eligible for review, conduct the review, identify orders eligible for adjustment, and apply the appropriate adjustment to the orders eligible for adjustment under any threshold that may be established by the State.

Section 303.72—Requests for Collection of Past-Due Support by Federal Tax Refund Offset

As discussed earlier in the preamble, section 7301(f) of the DRA of 2005 changes the definition of ''past-due support'' at section 464(c) of the Act to allow, effective October 1, 2007, arrearages owed to grown children to be submitted for Federal income tax refund offset process. Therefore, the proposed regulations revise § 303.72(a)(3)(i), with respect to past-due support owed in cases in which the IV–D agency is providing services under § 302.33, to allow support owed to or on behalf of a child, or a child and the parent with whom the child is living if the same support order includes support for the child and the parent, to be submitted for Federal income tax refund offset, effective October 1, 2007.

As discussed earlier with respect to distribution options for States under section 454(34) of the Act, as added by section 7301(b)(2)(C) of the DRA of 2005, effective October 1, 2009, or up to a year earlier at State option, a State may choose either to apply amounts collected, including amounts offset from Federal income tax refunds, to satisfy any support owed to the family first or to continue to distribute Federal tax offset amounts, as under current 457(a)(2)(B)(iv), to satisfy any past-due support assigned to the State first. Section 303.72(h)(1) would be revised to eliminate reference to distributing amounts offset as past-due support and to refer simply to distribution in accordance with section 457 of the Act, and effective October 1, 2009, or up to a year earlier at State option, in accordance with section 454(34) of the Act, pursuant to which States elect which distribution priority in former assistance cases to use under their IV–D programs. In addition, § 303.72(h)(3) would be revised to include the requirement that a IV–D agency, effective October 1, 2009, or up to a year earlier at State option, must inform individuals receiving services under § 302.33 in advance, when the State has opted, under section 454(34) of the Act, to continue to apply amounts offset first to satisfy any past-due support which has been assigned to the State and submitted for Federal income tax refund offset.

Part 304—Federal Financial Participation

Section 304.20—Availability and Rate of Federal Financial Participation

Section 7303 of the DRA of 2005 reduces the previously enhanced Federal matching rate for laboratory

costs to determine paternity, effective October 1, 2006. The enhanced matching rate was originally implemented in 1988 because of the high costs of genetic testing for the determination of paternity. However, the cost of genetic testing is much more reasonable than it was in 1988. The Federal matching rate of 66 percent applies to laboratory costs for determining paternity beginning October 1, 2006.

Currently, § 304.20(d) allows Federal financial participation at the 90 percent rate for laboratory costs incurred in determining paternity on or after October 1, 1988. The proposed regulation revises § 304.20(d) by eliminating the availability of enhanced funding for genetic testing costs after September 30, 2006.

III. Impact Analysis

Paperwork Reduction Act of 1995

This rule contains information collection requirements that have been submitted to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (PRA). Under this Act, no persons are required to respond to a collection of information unless it displays a valid OMB control number. These requirements will not become effective until approved by OMB.

There is a new reporting requirement for a State's IV–D plan in section 454(34) of the Act, to indicate which distribution option the State will choose to implement. A new State plan preprint page has been developed as part of this Paperwork Reduction Act (PRA) request. In addition, a new State plan preprint page has been developed for the State to indicate that a State will impose a fee and how it will be collected. States will also be required to keep track of the total amount of $25 fees that must be included as program income reported on the OCSE–396A. A State plan preprint page is not necessary. However, the tracking burden is indicated below.

All States already have the capability of automating the new and revised information collection requirements imposed by the DRA of 2005 and these implementing regulations. Therefore, as provided below, the paperwork impact on States under the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) will be minimal.

The additional incremental estimated burdens for these data collections (i.e. not including existing burden) are:

Requirement	Number of respondents	Yearly submittals	Average burden hours per response	Total burden hours
State Plan (OCSE–100)	.....	.....	.....	.....
Preprint page 2.4 Collection/Distribution of Support Payments	54	1	.25	13.5
State Plan Transmittal Page (Distribution)	54	1	.25	13.5
Preprint page 2.5–4 Services to Individuals (Fee)	54	1	.25	13.5
State Plan Transmittal Page (Fee)	54	1	.25	13.5
Financial Form 396A (Tracking the $25 fee)	54	4	1	216

The total estimated burden for the entire State Plan and Financial Report Forms are:

Requirement	Number of respondents	Yearly submittals	Total burden hours *
State Plan (OCSE–100)	54	6	189
State Plan Transmittal (OCSE–21–U4)	54	6	108
Total	.....	.....	.....
Financial Report Form (396A)	54	4	1944

* Includes incremental burden noted in previous chart.

In accordance with the Paperwork Reduction Act of 1995, this notice invites the general public and other public agencies to comment on the information collection requirements contained in this proposed rule. The Administration for Children and Families (ACF) will consider comments by the public on this proposed collection of information in the following areas:

(1) Evaluating whether the proposed collection is necessary for the proper performance of the functions of ACF, including whether the information will have practical utility;

(2) Evaluating the accuracy of ACF's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(3) Enhancing the quality, usefulness and clarity of the information to be collected; and

(4) Minimizing the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technology, e.g., permitting electronic submission of responses.

OMB is required to make a decision concerning the collection of information contained in these proposed regulations between 30 and 60 days after publication of this document in the **Federal Register**. Therefore, a comment is best assured of having its full effect if OMB receives it within 30 days of publication. This does not affect the deadline for the public to comment to the Department on the proposed regulations.

To make sure that your comments and related material do not reach OMB more than once, please submit them by only one of the following means:

1. By fax to OMB at (202) 395–6974. To ensure your comments are received in time, mark the fax to the attention of the Desk Officer for the Administration for Children and Families.

2. By e-mail to *kmatsuoka@omb.eop.gov*.

Copies of the proposed collection may be obtained by writing to the Administration for Children and

Families, Office of Administration, Office of Information Services, 370 L'Enfant Promenade, SW., Washington, DC 20447, Attn: ACF Reports Clearance Officer. All requests should be identified by the title of the information collection (i.e., State Plan OCSE–100 and State Plan Transmittal OCSE–21–U4). E-mail address: *rsargis@acf.hhs.gov*

Regulatory Flexibility Analysis

The Secretary certifies that, under 5 U.S.C. 605(b), as enacted by the Regulatory Flexibility Act (Pub. L. 96–354), this rule will not result in a significant impact on a substantial number of small entities. The primary impact is on State governments. State governments are not considered small entities under the Act.

Regulatory Impact Analysis

Executive Order 12866 requires that regulations be reviewed to ensure that they are consistent with the priorities and principles set forth in the Executive Order. The Department has determined that these proposed rules are consistent with these priorities and principles and is an economically significant rule as defined by the Executive Order because it will have an estimated $500 million impact on the economy over a 5 year period and, potentially, a $100 million impact on the economy in any given year. Specifically, we estimate that the requirement for review and adjustment of child support orders in TANF cases every three years will cost the Federal government approximately $15 million in FY 2008 but result in approximately $40 million in savings over four years. Similarly, this provision will cost State governments approximately $10 million in FY 2008 but save States almost $40 million over four years with a net government impact of approximately $25 million in costs in FY 2008 and approximately $80 million in savings by FY 2011. These costs reflect the upfront increased administrative costs involved in reviewing these cases and as appropriate updating the orders every three years and the savings that will result overtime in the way of increased revenues (Federal and State shares of the larger collections amounts). This provision also is beneficial to families in terms of ensuring that support order remain fair and equitable over time and reflect the noncustodial parent's current ability to pay support.

The provision on imposition of a $25 annual collection fee for never-TANF cases with at least $500 in collections will save the Federal government a little less than $50 million in FY 2007 (when the provision is effective) and result in approximately $270 in Federal savings over five years. The provision will save State governments approximately $25 million in FY 2007 and approximately $140 million over five years. These fees will partially offset the government's costs of providing services and are representative of Federal and State cost sharing in the program (66 and 34 percent respectively).

Finally, the provision eliminating enhanced Federal funding for the cost of paternity testing will save the Federal government almost $8 million in FY 2007 and approximately $40 million over five years and will result in a dollar for dollar increase in State costs. In other words, for each dollar saved by the Federal government because of the decrease in federal financial participation will result in a dollar in State costs. Enhanced federal funding for paternity testing is no longer necessary because the cost of these tests has decreased significantly over time.

All together these provisions save the Federal and State governments approximately $66 million in FY 2007 and approximately $495 million over five years. As each of these provisions was mandated under the Deficit Reduction Act of 2005, alternatives to this rulemaking are limited. We could have chosen not to update program regulations to reflect these statutory changes but that would be confusing to the public and would ultimately have no budgetary impact since these provisions are effective without regard to the issuance of regulations.

In the end, the proposed rule remains consistent with the statute and the underlying budget implications.

Unfunded Mandates Reform Act of 1995

Section 202 of the Unfunded Mandates Reform Act of 1995 requires that a covered agency prepare a budgetary impact statement before promulgating a 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 $120 million or more in any one year.

If a covered agency must prepare a budgetary impact statement, section 205 further requires that it select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with the statutory requirements. In addition, section 203 requires a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

The Department has determined that this proposed rule, in implementing the new statutory requirements of the Deficit Reduction Act, would not impose a mandate that will result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector, of more than $100 million in any one year. Rather, we estimate that combined the proposed provisions will result in savings to States. Over five years, the Federal government will save approximately $315 million as a result of the review and adjustment and collection fee provisions of the regulation and States will save almost $180 million. States will receive approximately $40 million less in federal reimbursement for laboratory costs associated with paternity establishment over five years. Thus, the net impact of the regulation on States is a savings of almost $140 million over five years.

Congressional Review

This notice of proposed rule making is not a major rule as defined in 5 U.S.C. chapter 8.

Assessment of Federal Regulations and Policies on Families

Section 654 of the Treasury and General Government Appropriations Act of 1999 requires Federal agencies to determine whether a proposed policy or regulation may negatively affect family well-being. If the agency's determination is affirmative, then the agency must prepare an impact assessment addressing seven criteria specified in the law. The required review of the regulations and policies to determine their effect on family well-being has been completed and these regulations will have a positive impact on family well-being as defined in the legislation because expanded access to the Federal income tax refund offset, mandatory three-year reviews of support orders in TANF cases, and State options to pay more collections to families will ensure more child support is paid to families.

Executive Order 13132

Executive Order 13132 prohibits an agency from publishing any rule that has federalism implications if the rule either imposes substantial direct compliance costs on State and local governments or is not required by statute, or the rule preempts State law, unless the agency meets the consultation and funding requirements of section 6 of the Executive Order. We do not believe the regulation has federalism impact as defined in the Executive order. However, consistent with Executive Order 13132, the Department specifically solicits comments from State and local

government officials on this proposed rule.

List of Subjects

45 CFR Part 301

Child support, Grants programs/social programs.

45 CFR Part 302

Child support, Grants programs/social programs.

45 CFR Part 303

Child support, Grant programs/social programs.

45 CFR Part 304

Child support, Grants programs/social programs.

(Catalog of Federal Domestic Assistance Programs No. 93.563, Child Support Enforcement Program.)

Wade F. Horn,

Assistant Secretary for Children and Families.

Approved: October 23, 2006.

Michael O. Leavitt,

Secretary of Health and Human Services.

For the reasons discussed above, we propose to amend title 45 chapter III of the Code of Federal Regulations as follows:

PART 301—STATE PLAN APPROVAL AND GRANT PROCEDURES

1. The authority citation for part 301 continues to read as follows:

Authority: 42 U.S.C. 651 through 658, 660, 664, 666, 667, 1301, and 1302.

2. In § 301.1, revise the definitions of ''Past-due support'' and ''Qualified child'' to read as follows:

§ 301.1 General definitions.

* * * * *

Past due support means the amount of support determined under a court order or an order of an administrative process established under State law for support and maintenance of a child, or of a child and the parent with whom the child is living, which has not been paid. Through September 30, 2007, for purposes of referral for Federal income tax refund offset of support due an individual who is receiving services under § 302.33 of this chapter, past-due support means support owed to or on behalf of a qualified child, or a qualified child and the parent with whom the child is living if the same support order includes support for the child and the parent.

* * * * *

Qualified child, through September 30, 2007, means a child who is a minor or who, while a minor, was determined to be disabled under title II or XVI of the Act, and for whom a support order is in effect.

* * * * *

PART 302—STATE PLAN APPROVAL REQUIREMENTS

1. The authority citation for part 302 continues to read as follows:

Authority: 42 U.S.C. 651 through 658, 660, 664, 666, 667, 1302, 1396a(a)(25), 1396b(d)(2), 1396b(o), 1396b(p), and 1396k.

2. In § 302.32, revise paragraphs (b) introductory text, (b)(2) introductory text, (b)(2)(iv), and (b)(3)(ii) to read as follows:

§ 302.32 Collection and disbursement of support payments by the title IV–D Agency.

* * * * *

(b) Timeframes for disbursement of support payments by the State disbursement unit (SDU) under section 454B of the Act.

(1) * * *

(2) Amounts collected by the title IV–D agency on behalf of recipients of aid under the State's title IV–A or title IV–E plan for whom an assignment under section 408(a)(3) or 471(a)(17) of the Act is effective shall be disbursed by the SDU within the following timeframes:

(i) * * *

(ii) * * *

(iii) * * *

(iv) Collections as a result of Federal income tax refund offset paid to the family or distributed in title IV–E foster care cases under § 302.52(b)(4) of this part, must be sent to the title IV–A family or title IV–E agency, as appropriate, within 30 calendar days of the date of initial receipt by the title IV–D agency, unless State law requires a post-offset appeal process and an appeal is filed timely, in which case the SDU must send any payment to the title IV–A family or title IV–E agency within 15 calendar days of the date the appeal is resolved.

(3)(i) * * *

(ii) Collections due the family as a result of Federal income tax refund offset must be sent to the family within 30 calendar days of the date of initial receipt in the title IV–D agency, except:

(A) If State law requires a post-offset appeal process and an appeal is timely filed, in which case the SDU must send any payment to the family within 15 calendar days of the date the appeal is resolved; or

(B) As provided in § 303.72(h)(5) of this chapter.

3. In § 302.33, revise the section heading and add new paragraph (e) to read as follows:

§ 302.33 Services to individuals not receiving title IV–A assistance.

* * * * *

(e) *Annual $25 fee.* (1) In the case of an individual who has never received assistance under a State or Tribal title IV–A program, and for whom the State has disbursed to the family at least $500 of support in the Federal fiscal year, the State must impose in, and report for, that year an annual fee of $25 for each case in which services are provided.

(2) The State must impose the annual $25 fee in international cases under section 454(32) of the Act in which the criteria for imposition of the annual $25 fee under paragraph (e)(1) of this section are met.

(3) For each Federal fiscal year, after the first $500 of support is disbursed to the family, the fee must be collected by one or more of the following methods:

(i) Retained by the State from support collected in cases subject to the fee except in international cases receiving services under section 454(32) of the Act;

(ii) Paid by the individual applying for services under section 454(4)(A)(ii) of the Act and implementing regulations in this section;

(iii) Recovered from the noncustodial parent; or

(iv) Paid by the State out of its own funds.

(4) The State must report, in accordance with § 302.15 of this part and instructions issued by the Secretary, the total amount of annual $25 fees imposed under this section for each Federal fiscal year as program income, regardless of which method or methods are used under paragraph (e)(3) of this section.

(5) State funds used to pay the annual $25 fee shall not be considered administrative costs of the State for the operation of the title IV–D plan, and all annual $25 fees imposed during a Federal fiscal year must be considered income to the program, in accordance with § 304.50 of this chapter.

4. In § 302.51, revise paragraphs (a)(1) and (a)(3) and add paragraph (a)(5) to read as follows:

§ 302.51 Distribution of support collections.

* * * * *

(a)(1) For purposes of distribution in a IV–D case, amounts collected, except as provided under paragraphs (a)(3) and (5) of this section, shall be treated first as payment on the required support obligation for the month in which the support was collected and if any amounts are collected which are in excess of such amount, these excess amounts shall be treated as amounts

which represent payment on the required support obligation for previous months.

(2) * * *

(3)(i) Except as provided in subparagraph (ii) of this paragraph, amounts collected through Federal income tax refund offset must be distributed as arrearages in accordance with § 303.72 of this chapter, and section 457 of the Act;

(ii) Effective October 1, 2009, or up to a year earlier at State option, amounts collected through Federal income tax refund offset shall be distributed in accordance with § 303.72 of this chapter and the option selected under section 454(34) of the Act.

(4) * * *

(5) The State must pay to a family that has never received assistance under a state program funded or approved under title IV–A or foster care under title IV–E of the Act the portion of the amount collected that remains after withholding any annual $25 fee that the State imposes under § 302.33(e) of this part.

* * * * *

5. In § 302.70, revise paragraph (a)(10) in its entirety to read as follows:

§ 302.70 Required State laws.

(a) * * *

(10) Procedures for the review and adjustment of child support orders in accordance with § 303.8(b) of this chapter.

* * * * *

PART 303—STANDARDS FOR PROGRAM OPERATIONS

1. The authority citation for part 303 is revised to read as follows:

Authority: 42 U.S.C. 651 through 658, 659, 659A, 660, 663, 664, 666, 667, 1302, 1396a(a)(25), 1396b(d)(2), 1396b(o), 1396b(p), and 1396k.

2. In § 303.7, add new paragraph (e) to read as follows:

§ 303.7 Provision of services in interstate cases.

* * * * *

(e) Imposition and reporting of annual *$25 fee in interstate cases.* The title IV–D agency in the initiating State must impose and report the annual $25 fee in accordance with § 302.33(e) of this chapter.

* * * * *

3. In § 303.8, revise paragraphs (b) introductory text and (b)(1) introductory text to read as follows:

§ 303.8 Review and adjustment of child support orders.

(a) * * *

(b) Required procedures. Pursuant to section 466(a)(10) of the Act, effective October 1, 2007, when providing services under this chapter:

(1) The State must have procedures under which, every three years (or such shorter cycle as the State may determine), if there is an assignment under part A, or upon the request of either parent, the State shall, with respect to a support order being enforced under this part, taking into account the best interests of the child involved:

* * * * *

4. In § 303.72 revise paragraphs (a)(3) introductory text, (a)(3)(i), and (h)(1) and (h)(3) to read as follows:

§ 303.72 Requests for collection of past-due support by Federal tax refund offset.

(a) * * *

(1) * * *

(2) * * *

(3) For support owed in cases where the title IV–D agency is providing title IV–D services under § 302.33 of this chapter:

(i) The support is owed to or on behalf of a child, or a child and the parent with whom the child is living if the same support order includes support for the child and the parent.

* * * * *

(h) *Distribution of collections.*

(1) Collections received by the IV–D agency as a result of refund offset to satisfy title IV–A or non-IV–A past-due support shall be distributed as required in accordance with section 457 and, effective October 1, 2009, or up to a year earlier at State option, in accordance with the option selected under section 454(34) of the Act.

* * * * *

(3)(i) Through September 30, 2009, or up to a year earlier at State option, the IV–D agency must inform individuals receiving services under § 302.33 of this chapter in advance that amounts offset will be applied to satisfy any past-due support which has been assigned to the State and submitted for Federal tax refund offset.

(ii) Effective October 1, 2009, or up to a year earlier at State option, the IV–D agency must inform individuals receiving services under § 302.33 of this chapter in advance when the State has opted, under section 454(34) of the Act, to continue to apply amounts offset first to satisfy any past-due support which has been assigned to the State and submitted for Federal tax refund offset.

* * * * *

PART 304—FEDERAL FINANCIAL PARTICIPATION

1. The authority citation for part 304 continues to read as follows:

Authority: 42 U.S.C. 651 through 655, 657, 1302, 1396a(a)(25), 1396b(d)(2), 1396b(o), 1396b(p), and 1396k.

§ 304.20 [Amended]

2. In § 304.20, revise paragraph (d) to read as follows:

§ 304.20 Availability and rate of Federal financial participation.

* * * * *

(d) Federal financial participation at the 90 percent rate is available for laboratory costs incurred in determining paternity on or after October 1, 1988, and until September 30, 2006, including the costs of obtaining and transporting blood and other samples of genetic material, repeated testing when necessary, analysis of test results, and the costs for expert witnesses in a paternity determination proceeding, but only if the expert witness costs are included as part of the genetic testing contract.

[FR Doc. E7–953 Filed 1–23–07; 8:45 am]

BILLING CODE 4184–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 25

[IB Docket 06–160; DA 07–25]

Processing Applications in the Direct Broadcast Satellite Service; Feasibility of Reduced Orbital Spacing for Provision of Direct Broadcast Satellite Service in the United States

AGENCY: Federal Communications Commission.

ACTION: Proposed rule; extension of reply comment period.

SUMMARY: On August 18, 2006, the Commission released a Notice of Proposed Rulemaking (71 FR 56923, September 28, 2006) (NPRM) in the proceeding captioned above. The NPRM seeks comment from the public on proposed licensing procedures and service rules for satellites providing Direct Broadcast Satellite (DBS) service. The NPRM also seeks comment on licensing non-nine-degree-spaced DBS applications.

On December 22, 2006, SES Americom, Inc. filed a Motion for Extension of Time, requesting the Commission to extend the reply comment filing deadline in this proceeding. SES Americom, Inc. stated that an extension would enable the parties to the proceeding to provide a more complete record for review, considering the important policy and

technical issues raised in the proceeding.

The Commission concurred that the issues raised in the proceeding are complex, technical, and of great importance to the DBS service and to direct-to-home satellite consumers throughout the United States. Thus, the Commission granted SES Americom, Inc.'s request, and extended the reply comment pleading deadline to January 25, 2007. The Commission stated that the public interest will be served by the extension to enable the filing of a more complete record in this proceeding.

Accordingly, pursuant to section 1.46 of the Commission's rules, 47 CFR 1.46, the request of SES Americom, Inc. is granted.

The deadline for filing reply comments in this proceeding is extended to January 25, 2007.

This action is taken under delegated authority pursuant to sections 0.51 and 0.261 of the Commission's rules, 47 CFR 0.51, 0.261.

Federal Communications Commission.

Robert G. Nelson,

Chief, Satellite Division, International Bureau.

[FR Doc. 07–213 Filed 1–23–07; 8:45 am]

BILLING CODE 6712–01–M

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA–07–26833]

Federal Motor Vehicle Safety Standards; Child Restraint Systems Child Restraint Anchorage Systems

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Notice of public meeting, request for comments.

SUMMARY: NHTSA is having a public meeting to bring together a roundtable of child restraint and vehicle manufacturers, retailers, technicians, researchers and consumer groups to discuss ways to improve child safety through improving the design and increasing the use of child restraint systems. Through a combination of presentations by invited speakers and group discussions among roundtable attendees, the group will focus on the following topics at this meeting: improving *L*ower *A*nchors and *T*ethers for *Ch*ildren (LATCH) system designs, improving child side impact safety, and educating the public about LATCH. This notice announces the date, time and location of the meeting.

DATES: *Public Meeting:* The public meeting will be held on February 8, 2007, from 8:30 a.m. to 4:30 p.m. at the L'Enfant Plaza Hotel, 480 L'Enfant Plaza, SW., Washington, DC.

Comments: Written comments may be submitted to the agency and must be received no later than April 9, 2007.

FOR FURTHER INFORMATION CONTACT: Ms. Debbie Ascone, Office of Vehicle Safety, NHTSA, telephone 202–366–4383, e-mail *Debbie.Ascone@dot.gov*, or Ms. Deirdre Fujita, Chief Counsel's Office, NHTSA, telephone 202–366–2992, e-mail *Dee.Fujita@dot.gov.* Both officials may also be reached at 400 Seventh Street, SW., Washington, DC 20590.

ADDRESSES: *Public meeting:* The public meeting will be held at the L'Enfant Plaza Hotel, 480 L'Enfant Plaza, SW., Washington, DC 20024, telephone 202–484–1000.

Written comments: Written comments must refer to the docket number of this notice and be submitted by any of the following methods:

- *Web site: http://dms.dot.gov.* Follow the instructions for submitting comments on the DOT electronic docket site.
- *Fax:* 1–202–493–2251.
- *Mail:* Docket Management Facility; U.S. DOT, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–001.
- *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 online instructions for submitting comments.

You may call Docket Management at 202–366–9324 and visit the Docket from 10 a.m. to 5 p.m., Monday through Friday.

Note that all comments received will be posted without change to *http://dms.dot.gov,* including any personal information provided. Please see the Privacy Act discussion under the heading ''How do I prepare and submit comments?'' at the end of this notice. Please see also the discussion there of confidential business information.

SUPPLEMENTARY INFORMATION:

Background

In March 1999, NHTSA issued a final rule that established Federal Motor Vehicle Safety Standard No. 225, ''Child restraint anchorage systems,'' which requires motor vehicle manufacturers to provide motorists with a new means of installing child restraints (64 FR 10786; March 5, 1999) in nearly all new passenger vehicles. The new means, named the ''LATCH'' [1] system by industry, is a standardized child restraint anchorage system designed to be used exclusively for securing child restraints. Each vehicle LATCH system consists of an upper anchor point (top tether anchor) and two lower anchor points. Each lower anchor point includes a six millimeter (mm) diameter straight rod, or ''bar,'' that is located near the intersection of the seat cushion and seat back (''seat bight'') in a recessed position where they will not be felt by seated adult occupants.

Each vehicle with at least two seating positions behind the front seat must have full LATCH systems (consisting of the two rigid lower bars and the top tether anchor) in at least two rear seating positions. If the vehicle has a third rear seating position, the vehicle must also have a top tether anchor at a third rear seating position.

The rule also required child restraint systems manufactured on or after September 1, 2002 to have components capable of attaching to the LATCH system. In addition, the rule required child restraints manufactured after that date to continue to be capable of being attached to a vehicle by way of the vehicle's belt system.

The LATCH system was phased into new vehicles from 1999 to 2002, beginning with the tether anchor in passenger cars in 1999 and ending with full implementation of the LATCH system for passenger cars, multipurpose passenger vehicles (including sport utility vehicles (SUVs) and vans), and light trucks and buses in September 2002.[2] *Id.*

Implementing LATCH

The agency recognized early on that educating consumers about the new LATCH system would be crucial to the success of the system. After issuing the LATCH final rule, NHTSA met regularly with vehicle and child restraint manufacturers, retailers, and consumer groups on developing public information and marketing strategies to educate consumers about the new LATCH products becoming available on the market, including the correct use of the products. The groups last met in

[1] *L*ower *A*nchors and *T*ethers for *Ch*ildren (LATCH) system.

[2] NHTSA estimated the benefits of the rule to be 36 to 50 lives saved per year, and 1,231 to 2,929 injuries prevented. Based on an estimated average total annual cost of $152 million, the cost per equivalent life saved was estimated to be from $2.1 to $3.7 million.

June and July 2002, in the months leading up to September 1 date on which the LATCH regulation became fully effective.

LATCH Use Survey and Report

To assess the progress made since 2002 and identify the possible needs for additional steps, NHTSA conducted a survey from April to October 2005 on the types of restraint systems that were being used to keep children safe while riding in passenger vehicles. The results of that survey were discussed in a report on the use and misuse of LATCH (''Child Restraint Use Survey—LATCH Use and Misuse,'' Docket 26735) published in December 2006. NHTSA was interested in whether drivers of LATCH-equipped vehicles were using LATCH to secure their child restraints to the vehicle, and if so, whether they were properly installing the restraints. In the survey, the make/model and the type of restraint installed in each seating position were recorded for each vehicle, and the demographic characteristics and the type of child restraint system were collected for each occupant. In addition, information was gathered about the drivers' knowledge of booster seats and LATCH, along with their opinions on how easy it was for them to use LATCH.

A key finding of the survey was that of the child restraints located in a seating position equipped with an upper tether anchor, 55 percent were attached to the vehicle using the upper tether. Other findings included:

(a) In 13 percent of the LATCH equipped vehicles in which there was a child restraint, the restraint was placed in a seat position not equipped with lower anchors—instead, the vehicle seat belt was used to secure the restraint to the vehicle.

(b) Among the 87 percent who placed the child safety seat at a position equipped with lower anchors, 60 percent used the lower attachments to secure the restraint to the vehicle.

(c) Of those drivers with experience using both lower attachments and seat belts, (1) 81 percent of upper tether users and 74 percent of lower attachment users said upper tether and/or lower attachments were easy to use, and (2) 75 percent preferred the lower attachments over seat belts.

(d) Sixty-one (61) percent of upper tether nonusers and 55 percent of lower attachment nonusers cited their lack of knowledge—not knowing what the anchorages were, that they were available in the vehicle, the importance of using them, or how to use them properly—as the reason for not using them.

The LATCH report found that consumers who have experience with LATCH like it, and that LATCH is helping to reduce the insecure installation of child restraints. However, the report also indicated that proper use of LATCH is not inherently evident to parents. Many parents do not use LATCH because they do not know about it or understand its importance. Some use both the LATCH system and the seat belt system to install their child restraints. There is also some confusion about where LATCH anchors can be found. In addition, there were differing degrees of difficulty using the anchors depending on location and configuration of the child seat hardware.

Public Meeting

In light of the LATCH report, NHTSA is having a public meeting to bring together a roundtable of child restraint and vehicle manufacturers, retailers, technicians, researchers and consumer groups to discuss ways to make LATCH easier to use and better known. Through a combination of presentations by invited speakers and group discussions among roundtable participants, the group will focus on the following topics at this meeting: LATCH design improvements, child side impact safety improvements, and initiatives to educate the public about LATCH and seat belt use.

The meeting will be open to the public, but participation in the roundtable will be limited and by invitation only in order to ensure that all of the topics can be addressed in the time available. However, the floor will be open to the audience attending the meeting during the final part of the meeting. Anyone wishing to supplement their oral comments may do so by submitting written comments.

Roundtable participants should focus on the issues and questions listed below.

Regarding LATCH Design

The requirements for the top tether anchor were harmonized with Canadian and Australian requirements, particularly with respect to the zones within which the anchor may be located. The lower LATCH anchor bars must be located not so far forward on the vehicle seat so as to injure an adult occupant sitting on the seat, but not so rearward as to be too difficult to access. The presence of lower bars that are not visible without compressing the seat cushion or seat back must be indicated by a permanent mark on the vehicle seat back at each bar's location to help parents locate and use the bars.

NHTSA allows vehicle manufacturers to decide which rear seating positions are equipped with the two full LATCH systems. It does not require a full LATCH system to be in a center rear seating position. This flexibility was provided because, if two full LATCH systems are provided in the rear seat of a sedan-type vehicle, it may not be feasible to fit the lower anchor bars of the two LATCH systems side-by-side in two adjacent seating positions, or practical to fit two child restraints adjacent to each other in the rear seat of small vehicles. NHTSA does require the top tether anchor at the third rear seating position to be at the center position, to provide parents an improved means of attaching child restraints in a center rear seat.

Invited speakers are asked to speak to the following questions:

Tether Anchors

- What are the design considerations/constraints for locating tether anchors in various types of vehicles? Why do some SUVs, vans and trucks have tether anchors under the seat, etc., which consumers have found difficult to access when installing their child restraints?
- What can be done to make access to the upper and lower anchors easier or make the anchors more visible?
- What would be the feasibility and/or implications of further restricting where tether anchors may be placed by amending Standard 225?

Lower Anchors

- What feedback are you obtaining from consumers? Are you getting complaints?
- NHTSA has not had any complaints that the lower anchors are causing occupant discomfort. Would it be feasible and desirable to amend the seat bight depth requirement to require that anchors be located more forward in the seat bight? Would this make the installation and/or removal of child restraint systems easier?
- Are there any technical or other reasons why consumers who wish to place their child restraint in a rear center seat location using the inboard lower anchors from the outboard seating locations should not do so? If the child restraint can be snugly secured with this installation to ''create'' a middle LATCH seating position, is there any reason that doing this should be considered misuse?
- Will you be increasing over time the proportion of your fleet that is equipped with lower anchors in the center-rear position?

Child Seat Designs

• Are there child restraint hook designs that consumers find easier to install/remove?

• What would be the feasibility and/or implications of incorporating the most consumer friendly hooks in all child restraints?

Regarding LATCH Ease-of-Use

NHTSA is interested in improving information in its ease-of-use ratings for child restraints and could include information about features of LATCH hardware. We are also considering exploring the addition of information to the annual NHTSA publication, ''Buying a Safer Car for Child Passengers,'' on the number of seating positions with LATCH and on other matters related to LATCH, such as the degree of accessibility of the anchors.

Invited speakers are asked to speak to the following questions:

• What are the considerations in developing more consumer-friendly child restraint hooks or other features (e.g., what are the trade-offs in child restraint cost, ease-of-use ratings, and retail sales)?

• NHTSA is considering providing consumer information on LATCH anchor locations and the numbers of lower anchor-equipped seating positions in each vehicle make/model. What are your comments on this initiative?

• Should NHTSA provide consumer information on including use of inboard lower anchors to ''create'' a middle LATCH seating position?

• In the past, the agency has determined that given the number of child restraints and vehicle make/models, it was not feasible for the agency to test and provide vehicle child restraint ease-of-use ratings. Are there other approaches the agency should consider? Are there voluntary initiatives underway or being jointly considered by the child restraint and vehicle manufacturers that would provide useful consumer information regarding child restraint and vehicle ease-of-use compatibility?

Regarding Child Side Impact Protection

In 2002, NHTSA published an advance notice of proposed rulemaking (ANPRM) on work in developing a child restraint side impact protection standard (67 FR 21836; May 1, 2002; Docket 12151). The rulemaking was withdrawn because considerably more work was needed to support a Federal motor vehicle standard on child side impact, including data analyses as to how children are being injured or killed in side impacts, potential countermeasures that would be available to reduce side impact intrusion, and the appropriate child test dummy and associated injury criteria for side impact testing (68 FR 37620, 37624). NHTSA's research into side impact protection has continued as an ongoing agency program.

NHTSA will present the status of its current research effort, and other panelists that have knowledge of the side impact issue will be invited to participate on the panel.

Regarding LATCH Education

NHTSA would like to develop educational messages to improve consumers' awareness of the benefits of the top tether and the convenience of the LATCH lower anchors. We also seek cooperation and coordination of efforts between NHTSA, child restraint and vehicle manufacturers, retailers, and educators, to develop and promote communications strategies that will reach parents and caregivers of young children.

Invited speakers are asked to speak to the following questions:

• What questions have users asked your organization with regard to—
  Tether use;
  Lower anchor use;
  Center rear seat use?

• What public information and marketing strategies are being conducted to inform consumers of proper or optimal use of child restraints?

• What could organizations do to reach consumers more broadly and provide more useful information to consumers about child restraint installation?

• What information should we provide consumers regarding the effectiveness of seat belts versus LATCH in securing child restraints?

Other Procedural Matters

The meeting will be open to the public with advanced registration for seating on a space-available basis. Individuals wishing to register to assure a seat in the public seating area should provide their name, affiliation, phone number and e-mail address to Ms. Ascone using the contact information at the beginning of this notice. Should it be necessary to cancel the meeting due to inclement weather or other emergency, NHTSA will take all available measures to notify registered participants by e-mail or telephone.

The meeting will be held at a site accessible to individuals with disabilities. Individuals who require accommodations such as sign language interpreters should contact Ms. Ascone by January 31, 2007.

A transcript of the meeting and other information received by NHTSA at the meeting will be placed in the docket for this notice at a later date.

Draft Agenda

8:30–9 Welcome and Opening Remarks.
9–9:10 *Panel I. LATCH systems* (overview)—NHTSA.
9:10–10:15 Invited speakers on LATCH systems.
10:15–10:30 Break.
10:30–10:40 *Panel II. Ease-of-use issues/initiatives*—NHTSA.
10:40–11:30 Invited speakers on LATCH ease-of-use (EOU).
11:30–12 Roundtable discussion and questions from floor.
12–1 Lunch on your own.
1–1:10 *Panel III. Child side impact safety* (overview)—NHTSA.
1:10–1:50 Invited speakers on side impact.
1:50–2:05 Break.
2:10–2:20 *Panel IV. Educational needs* (overview)—NHTSA.
2:20–3:20 Invited speakers on LATCH education.
3:20–3:50 Roundtable discussion and open floor.
3:50–4:15 Next steps; wrap-up.

How can I submit comments on this subject?

It is not necessary to attend or to speak at the public meeting to be able to comment on the issues. NHTSA invites readers to submit written comments which the agency will consider in its deliberations on LATCH.

How do I prepare and submit comments?

Your comments must be written and in English. To ensure that your comments are correctly filed in the Docket, please include the docket number of this document in your comments.

Your primary comments must not be more than 15 pages long (49 CFR 553.21). However, you may attach additional documents to your primary comments. There is no limit on the length of the attachments.

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** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78) or you may visit *http://dms.dot.gov.*

How can I be sure that my comments were received?

If you wish Docket Management to notify you upon its receipt of your comments, enclose a self-addressed, stamped postcard in the envelope containing your comments. Upon receiving your comments, Docket Management will return the postcard by mail.

How do I submit confidential business information?

If you wish to submit any information under a claim of confidentiality, send three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, National Highway Traffic Safety Administration, Room 5219, 400 Seventh Street, SW., Washington, DC 20590. Include a cover letter supplying the information specified in our confidential business information regulation (49 CFR part 512).

In addition, send two copies from which you have deleted the claimed confidential business information to Docket Management, Room PL–401, 400 Seventh Street, SW., Washington, DC 20590, or submit them electronically, in the manner described at the beginning of this notice.

Will the agency consider late comments?

We will consider all comments that Docket Management receives before the close of business on the comment closing date indicated above under **DATES**. To the extent possible, we will also consider comments that Docket Management receives after that date.

Please note that even after the comment closing date, we will continue to file relevant information in the docket as it becomes available. Further, some people may submit late comments. Accordingly, we recommend that you periodically check the docket for new material.

How can I read the comments submitted by other people?

You may read the comments by visiting Docket Management in person at Room PL–401, 400 Seventh Street, SW., Washington, DC from 10 a.m. to 5 p.m., Monday through Friday.

You may also see the comments on the Internet by taking the following steps:

Go to the Docket Management System (DMS) Web page of the Department of Transportation (*http://dms.dot.gov*).

On that page, click on ''Simple Search.''

On the next page (*http://dms.dot.gov/search/searchFormSimple.cfm/*) type in the five-digit docket number shown at the beginning of this notice. Click on ''Search.''

On the next page, which contains docket summary information for the docket you selected, click on the desired comments. You may also download the comments.

Authority: 49 U.S.C. 30111, 30168; delegation of authority at 49 CFR 1.50 and 501.8.

Issued on January 19, 2007.

Nicole R. Nason,

Administrator.

[FR Doc. E7–1021 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–59–P

Notices

Federal Register
Vol. 72, No. 15
Wednesday, January 24, 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.

COMMISSION ON CIVIL RIGHTS

Agenda and Notice of Public Meeting of the Florida Advisory Committee

Notice is hereby given, pursuant to the provisions of the rules and regulations of the U.S. Commission on Civil Rights, that a conference call of the Florida Advisory Committee will convene at 2 p.m. EST and adjourn at 4 p.m. EST on Tuesday, February 13, 2007. The purpose of the conference call is to discuss plans for the Committee's upcoming briefing to be held in April 2007 on religious freedom for prisoners and the restoration of their voting rights.

This conference call is available to the public through the following call-in number: 866–393–1381. Any interested member of the public may call this number and listen to the meeting. Callers can expect to incur charges for calls not initiated using the supplied call-in number or over wireless lines and the Commission will not refund any incurred charges. Callers will incur no charge for calls using the call-in number over land-line connections. Persons with hearing impairments may also follow the proceedings by first calling the Federal Relay Service at 1–800–977–8339 and providing the Service with the conference call number.

To ensure that the Commission secures an appropriate number of lines for the public, persons are asked to register by contacting Peter Minarik, Southern Regional Office, at 404–562–7000, by Tuesday, February 6, 2007.

The meeting will be conducted pursuant to the provisions of the rules and regulations of the Commission.

Dated at Washington, DC, January 19, 2007.

Ivy L. Davis,

Acting Chief, Regional Programs Coordination Unit

[FR Doc. E7–979 Filed 1–23–07; 8:45 am]

BILLING CODE 6335–01–P

COMMISSION ON CIVIL RIGHTS

Agenda and Notice of Public Meeting of the North Carolina Advisory Committee

Notice is hereby given, pursuant to the provisions of the rules and regulations of the U.S. Commission on Civil Rights, that a conference call of the North Carolina Advisory Committee will convene at 1 p.m. EST and adjourn at 3 p.m. EST on Monday, February 26, 2007. The purpose of the conference call is to discuss plans for the Committee's upcoming briefing to be held in April 2007 on religious freedom for prisoners and the restoration of their voting rights.

This conference call is available to the public through the following call-in number: 866–743–9936. Any interested member of the public may call this number and listen to the meeting. Callers can expect to incur charges for calls not initiated using the supplied call-in number or over wireless lines and the Commission will not refund any incurred charges. Callers will incur no charge for calls using the call-in number over land-line connections. Persons with hearing impairments may also follow the proceedings by first calling the Federal Relay Service at 1–800–977–8339 and providing the Service with the conference call number.

To ensure that the Commission secures an appropriate number of lines for the public, persons are asked to register by contacting Peter Minarik, Southern Regional Office, at 404–562–7000, by Monday, February 19, 2007.

The meeting will be conducted pursuant to the provisions of the rules and regulations of the Commission.

Dated at Washington, DC, January 19, 2007.

Ivy L. Davis,

Acting Chief, Regional Programs Coordination Unit.

[FR Doc. E7–980 Filed 1–23–07; 8:45 am]

BILLING CODE 6335–01–P

DEPARTMENT OF COMMERCE

International Trade Administration

Countervailing Duty Changed Circumstances Reviews; Request for Comment on Agency Practice

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Request for comment on agency practice

EFFECTIVE DATE: January 24, 2007.

SUMMARY: When conducting a countervailing duty changed circumstances review for purposes of determining the appropriate cash deposit rate in light of a change in a company's name, structure, or ownership, the Department's general approach has been to apply the ''successor in interest'' analysis that it uses for considering similar types of changes in antidumping duty changed circumstances reviews. The Department has conducted relatively few changed circumstances reviews involving the successorship of companies in the context of countervailing duty measures. However, based on recent experience, the Department is now considering whether its practice regarding such reviews should be revised or clarified.

This notice highlights various considerations relevant to this issue, and provides an opportunity for public comment on whether any changes to the Department's current practice regarding countervailing duty changed circumstances reviews would be warranted and, specifically, what those changes should entail.

DATES: Comments should be submitted within 30 days of the publication date of this request for comment.

ADDRESSES: An original and six copies of all written comments should be sent to Gregory W. Campbell, Office of Policy, Import Administration, U.S. Department of Commerce, Central Records Unit, Room 1870, Pennsylvania Avenue and 14th Street NW, Washington, DC 20230.

FOR FURTHER INFORMATION CONTACT: Gregory W. Campbell, Office of Policy, Import Administration, U.S. Department of Commerce, Room 3712, Pennsylvania Avenue and 14th Street, NW, Washington, DC 20230, (202) 482–2239.

SUPPLEMENTARY INFORMATION:

Background

In accordance with section 751(b) of the Tariff Act of 1930, as amended (the Act), and 19 CFR 351.216 and 19 CFR 351.221, the Department of Commerce (Department) may conduct a review of an antidumping (AD) or countervailing duty (CVD) measure where, *inter alia*, an interested party requests such a

review and there are changed circumstances sufficient to warrant a review. In the context of an AD ''changed circumstances review'' involving a change in a company's name, structure or ownership, the Department relies on its successor–in-interest criteria to determine whether the newly named or structured company (''successor company'') remains essentially the same as the predecessor company. *See*, *e.g.*, *Industrial Phosphoric Acid from Israel; Final Results of Antidumping Duty Changed Circumstances Review*, 59 FR 6944, 6945 (February 14, 1994) (''*Industrial Phosphoric Acid*''); *Notice of Final Results of Antidumping and Countervailing Duty Changed Circumstances Reviews; Certain Pasta from Italy*, 68 FR 41553, 41553 (July 14, 2003).

Under this analysis, where the evidence demonstrates that the successor company operates as the ''same business entity'' as its predecessor with respect to the production and sale of the subject merchandise, the Department will assign to the successor company the existing cash deposit rate of its predecessor. *Brass Sheet and Strip from Canada; Preliminary Results of Antidumping Duty Administrative Review*, 57 FR 5128, 5129 (February 12, 1992).

The Department generally bases its successorship/business entity determination in AD changed circumstances reviews on an analysis of the following factors: (1) management, (2) production facilities, (3) supplier relationships, and (4) customer base. *Brass Sheet and Strip from Canada; Final Results of Antidumping Duty Administrative Review*, 57 FR 20460 (May 13, 1992). While none of these factors is dispositive of the issue, the Department generally considers the new company to be the successor company to the predecessor company if its resulting operation is not materially dissimilar to that of the predecessor. *Industrial Phosphoric Acid*, 59 FR 6944, 6945.

However, to the extent that this AD analysis is concerned with the pricing behavior of the successor company it might not be entirely relevant in the CVD context where price discrimination is not the analytical focus. Other factors or considerations (*e.g.*, factors that focus on whether subsidies to the predecessor are attributable to the successor, or on increased participation in or eligibility for new subsidy programs as a result of the changed circumstance) might be more relevant.

In addition, there is also a broader question of whether a successorship/business entity analysis generally is too narrowly focused when reviewing the changed circumstances of a subsidized company. An examination that focuses largely or solely on changes in the legal or managerial structure or the productive capacity of a company may overlook other important considerations that also may be relevant in the context of subsidies and countervailing duties. For instance, whether the change (*e.g.*, name change or merger) was accompanied or preceded by new subsidies, or had an impact on any existing subsidies to the companies involved, also might be a relevant consideration.

One hypothetical example in which a strict successorship/business entity analysis might fall short of accurately determining the appropriate deposit rate (or level of subsidization) is where a producer of subject merchandise, who has been excluded from the order, purchases or merges with an unrelated, subsidized producer who has a company–specific rate under the order. Even if the combined entity (*i.e.*, the successor company) in this hypothetical example operated as the same business entity as its predecessor, the changed circumstance itself might have resulted in a fundamental change in the nature and extent of the subsidization of the successor company. Under this scenario, one option might be to assign the rate of the one subsidized producer to the successor company. Another option would be to continue to exclude the entries of the successor company. This second approach, however, might foreclose any possibility of a future administrative review of the successor company whose (expanded) operations have already been determined to be subsidized, at least in part. In circumstances such as these, it might be appropriate for the Department to take into account other factors that go beyond a strict business entity analysis to determine the appropriate cash deposit rate for the successor company in a CVD proceeding.

A related question is whether, if the subsidy levels have been affected by the changed circumstances, the Department should calculate a new cash deposit rate in the changed circumstances review that reflects the new level of subsidization or, alternatively, whether the Department should self–initiate an administrative review. Another approach would be for the Department to simply select a rate from among existing cash deposit rates (*e.g.*, the predecessor's rate, the all others rate, some combination of the existing rates).

In commenting on these issues, we invite commenters to identify and discuss the criteria that they consider most appropriate for a successorship/business entity analysis in the CVD context, whether they may be the same as the AD criteria, some mix of those criteria and others, or an entirely different set of criteria. We further invite commenters to address whether and how the Department's analysis might extend beyond the successorship/business entity analysis to consider more directly any changes in the company's level of subsidization occasioned by the changed circumstance. Such comments should also address the feasibility of identifying or even quantifying changes in subsidy levels given the shorter deadlines of changed circumstances reviews and the potentially significant increase in required information (*e.g.*, detailed sales and subsidy data), participatory burden (*e.g.*, of the respondent company and government), and administrative burden such an analysis might entail.

Suggested practical solutions for addressing possible feasibility concerns are encouraged. For example, one possible approach to mitigating the burden might be to conduct a staged analysis where, if the initial data indicate that the only change has been to the name of a company (*i.e.*, the change was not accompanied or prompted by a substantial change to the company's ownership or operations), no further analysis of changes in the subsidy levels would be necessary and the successor company would receive the predecessor's cash deposit rate. However, if the changed circumstances entail more than a simple name change, and the evidence indicates that the changes could have a significant impact on the level of subsidy benefits to the successor company, then the successor company could be assigned the all others rate until the subsidy levels could be fully analyzed in the course of an administrative review.

Comments

Persons wishing to comment should file a signed original and six copies of each set of comments by 5:00 p.m. on the above–referenced deadline date. The Department will consider all comments received before the close of the comment period. Comments received after the end of the comment period will be considered, if possible, but their consideration cannot be assured. The Department requires that comments be submitted in written form. All comments responding to this notice will be a matter of public record and will be available for public inspection and

copying at Import Administration's Central Records Unit, Room B–099, between the hours of 8:30 a.m. and 5 p.m. on business days. The Department will not accept comments accompanied by a request that a part or all of the material be treated confidentially because of its business proprietary nature or for any other reason. The Department will return such comments and materials to the persons submitting the comments and will not consider them in development of any changes to its practice.

The Department also recommends submission of comments in electronic form to accompany the required paper copies. Comments filed in electronic form should be submitted either by e–mail to the webmaster below, or on CD–ROM, as comments submitted on diskettes are likely to be damaged by postal radiation treatment. Comments received in electronic form will be made available to the public in Portable Document Format (PDF) on the Internet at the Import Administration Web site at the following address: *http://ia.ita.doc.gov/*. Any questions concerning file formatting, document conversion, access on the Internet, or other electronic filing issues should be addressed to Andrew Lee Beller, Import Administration Webmaster, at (202) 482–0866, e–mail address: webmaster–support@ita.doc.gov.

All written comments should be sent to Gregory W. Campbell, Office of Policy, Import Administration, U.S. Department of Commerce, Central Records Unit, Room 1870, Pennsylvania Avenue and 14th Street NW., Washington, DC 20230, Subject: Countervailing Duty Changed Circumstances Reviews; Request for Comment on Agency Practice.

Dated: January 17, 2007.

David M. Spooner,

Assistant Secretaryfor Import Administration.

[FR Doc. E7–1015 Filed 1–23–07; 8:45 am]

BILLING CODE 3510–DS–S

DEPARTMENT OF COMMERCE

International Trade Administration

Restoring America's Travel Brand: A National Strategy To Compete for International Visitors; Request for Information

GENERAL INFORMATION

Document Type	Special Notice.
Solicitation Number	Reference-Number.
Posted Date	December 27, 2006.
Original Response Date	January 24, 2007.

GENERAL INFORMATION—Continued

Current Response Date	February 9, 2007.
Original Archive Date:	
Current Archive Date:	
Classification Code:	
NAICS Code:	

Requesting Office Address

Department of Commerce, International Trade Administration, Office of Travel and Tourism Industries (OTTI), 14th & Constitution Avenue, NW., Room 1003, Washington, DC 20230.

Description/Background

In support of competitive goals established by the President of the United States, and in response to the white paper entitled Restoring America's Brand, A National Strategy to Compete for International Visitors, that was recently submitted to the Secretary of Commerce by the U.S. Travel and Tourism Advisory Board (TTAB), the U.S. Department of Commerce (DOC), International Trade Administration (ITA), Office of Travel & Tourism Industries (OTTI), is issuing this Request for Information (RFI) for assistance by interested government agencies, organizations, and industry businesses. The information requested may include:

- An assessment of, or comment on, the white paper presented by the Travel and Tourism Advisory Board, which can be found at: *http://tinet.ita.doc.gov/TTAB/docs/2006_FINALTTAB_National_Tourism_Strategy.pdf*.
- Respondents are highly encouraged to provide specific comments on the recommendations that are covered in the white paper, organized by the sections:
  - Making it easier for people to visit by balancing hospitality with security,
  - Asking people to visit the United States through a nationally coordinated marketing program, and
  - Demonstrating the value of travel and tourism to the nation's economy.
- In addition, respondents are encouraged to provide comments/observations related to other areas of concern or issues that are not addressed in the white paper, such as:
  - Sustainable tourism development,
  - Medical tourism,
  - Cultural heritage tourism development,
  - Technical training/tours for business-to-business development,
  - Education exchanges or attendance,
  - Public-private partnerships, or
  - Infrastructure challenges, to name a few.

Comments will serve in the development of policies and programs to be implemented by the federal government concerning the tourism sector.

The Government encourages both rigorous and creative solutions in response to this RFI.

How To Respond

The Department of Commerce is asking respondents to provide written input concerning any and all recommendations contained within the white paper submitted by the Travel and Tourism Advisory Board and other aspects of travel and tourism that may not be addressed in the white paper.

All responses should be *e-mailed* to either of the following members of the Office of Travel and Tourism Industries: *julie.heizer@mail.doc.gov* or *Cynthia.warshaw@mail.doc.gov*.

Please use reference: 2006 RFI Restoring America's Travel Brand, A National Strategy to Compete for International Visitors in the subject line of all correspondence. Please submit responses by January 19, 2007.

Input provided through this RFI may be representative of the collective opinion from a membership-wide survey of a travel and tourism industry trade association, or it can be submitted as the opinion of a single person. Any opinions or information received that are not specific to travel and tourism related issues will not be considered.

This RFI is issued solely for information and planning purposes and does not constitute a solicitation. All information received in response to this RFI that is marked ''Proprietary'' will be handled accordingly. Responses to the RFI will not be returned. In accordance with FAR 15.201(e), responses to this notice will not be considered an offer and cannot be accepted by the Government to form a binding contract. Interested parties are solely responsible for all expenses associated with responding to this RFI.

Additional information on the Travel and Tourism Advisory Board and the white paper submission may also be found at the Office of Travel & Tourism Industries Web site at: *http://www.tinet.ita.doc.gov*.

Points of Contact

Julie Heizer, Deputy Director, Industry Relations, Phone 202.482.4904, Fax 202.482.2887, E-mail *julie.heizer@mail.doc.gov*. Cynthia Warshaw, International Trade Specialist, Phone 202.482.4601, Fax 202.482.2887, E-mail *Cynthia.warshaw@mail.doc.gov*.

PLACE OF PERFORMANCE

Address	Washington, DC.
Postal Code	20230.
Country	United States.
You will find the RFI on the OTTI Web site at.	*http://www.tinet.ita.doc.gov/*

Dated: January 16, 2007.

Helen N. Marano,

Director, Office of Travel & Tourism Industries.

[FR Doc. E7–948 Filed 1–23–07; 8:45 am]

BILLING CODE 3510–DR–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[Docket No. 050412107–7004–03]

Ernest F. Hollings Undergraduate Scholarship Program

AGENCY: Office of Education (OEd), Office of the Undersecretary of Commerce for Oceans and Atmosphere (USEC), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of scholarship opportunity.

SUMMARY: NOAA announces the Ernest F. Hollings Scholarship Program for FY 2007, and sets forth eligibility criteria and selection guidelines for the program. The Ernest F. Hollings Scholarship Program was established through the Consolidated Appropriations Act, 2005 (Public Law 108–447). This Scholarship Program will provide approximately 100 undergraduate applicants selected for the program with scholarships to participate in oceanic and atmospheric science, research, technology, and education. There is no guarantee that funds will be available to make awards to all qualified applicants.

DATES: Completed applications must be received by February 22, 2007, at 5 p.m. eastern standard time.

ADDRESSES: Applications for the Ernest F. Hollings Scholarship Program will be available through NOAA at *http://www.oesd.noaa.gov/Hollings_info.html*. If an applicant does not have Internet access, hardcopy applications may be requested by contacting NOAA Office of Education, Hollings Scholarship Program, 1315 East-West Highway, Room 10703, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT: NOAA Hollings Scholarship at *StudentScholarshipPrograms@noaa.gov* or call 301–713–9437 x125.

SUPPLEMENTARY INFORMATION:

Background

The Ernest F. Hollings Scholarship Program was established through the Consolidated Appropriations Act, 2005 (Public Law 108–447). The purposes of the program include: (1) To increase undergraduate training in oceanic and atmospheric science, research, technology, and education and to foster multidisciplinary training opportunities; (2) to increase public understanding and support for stewardship of the ocean and atmosphere and to improve environmental literacy; (3) to recruit and prepare students for public service careers with the National Oceanic and Atmospheric Administration and other natural resource and science agencies at the Federal, State and local and tribal levels of government; and, (4) to recruit and prepare students for careers as teachers and educators in oceanic and atmospheric science and to improve scientific and environmental education in the United States.

The Hollings Scholarship Program will provide successful undergraduate applicants with awards that include academic assistance (up to a maximum of $8,000 per year) for full-time study during the 9-month academic year; a 10-week, full-time internship position ($650/week) during the summer at a NOAA facility; and, if reappointed, academic assistance (up to a maximum of $8,000) for full-time study during a second 9-month academic year. The internship between the first and second years of the award provides the Scholars with ''hands-on'' practical educational training experience in NOAA-related scientific, research, technology, policy, management, and education activities. Awards will also include travel expenses to attend a mandatory Hollings Scholarship Program orientation, approved conferences where students present a paper or poster, and a housing subsidy for scholars who do not reside at home during the summer internship.

Authority

The Ernest F. Hollings Undergraduate Scholarship Program is established by the Administrator of the National Oceanic and Atmospheric Administration under authority of the Consolidated Appropriations Act, 2005 (Public Law 108–447).

Funding Availability

Approximately $3.5 million may be available for the award of a maximum of 100 two-year scholarships, dependent on the availability of appropriations. There is no guarantee that funds will be available to provide scholarships for all qualified students.

Eligibility

Any undergraduate student who is a U.S. citizen; enrolled as a full-time student in the Fall 2007 as a junior, at an accredited college or university within the United States or U.S. Territories; possesses at least a 3.0 grade point average per semester/quarter and cumulative on a 4.0 scale (or equivalent on other identified scale) in all completed undergraduate courses and in their major field of study; and has declared a major in a NOAA-related discipline, including, but not limited to, oceanic, environmental, and atmospheric sciences, mathematics, engineering, remote sensing technology, marine policy, physical and social sciences including, geography, physics, hydrology, meteorology, oceanography or teacher education that support NOAA's programs and mission may apply to this notification.

The Hollings Scholarship Program will consider applications from all students that meet the above eligibility requirements.

Evaluation Criteria

Application will be evaluated based on the following criteria:

1. Relevant coursework (30%).
2. Education plan and statement of career interest (40%).
3. Recommendations and/or endorsements (reference forms) (20%).
4. Additional relevant experience related to diversity of education; extracurricular activities; honors and awards; non-academic and volunteer work; written and oral communications skills (10%).

Selection Process

An initial administrative review of applications is conducted to determine compliance with requirements and completeness of applications. Only complete applications in compliance with the requirements will be considered for review. Applications identified as incomplete or not in compliance with the requirements will be destroyed. All applications that meet the requirements and are complete will be evaluated and scored individually in accordance with the assigned weights of the evaluation criteria by an independent peer review panel, comprised of Federal and nonfederal employees. No consensus advice or recommendations will be given. A numerical ranking will be assigned to each application based on the average of the panelist's ratings. The Program Officer will conduct a review of the rank

order and make recommendations to the Selecting Official based on the panel ratings and the selection factors listed below. The Selecting Official, the Director of NOAA Education, will consider merit reviews and recommendations and award in rank order unless the application is justified to be selected out of rank order based on one or more of the following selection factors:

Selection Factors

In determining final awards, the selecting official reserves the right to consider the following selection factors:

1. Availability of funds.
2. Balance/distribution of funds:
a. Geographically.
b. By type of institutions.
c. Across academic disciplines.
3. Program-specific objectives.
4. Degree in scientific area and type of degree sought.

Repayment Requirement

A Hollings Scholarship recipient shall be required to repay the full amount of the scholarship to the National Oceanic and Atmospheric Administration if it is determined that the individual, in obtaining or using the scholarship, engaged in fraudulent conduct or failed to comply with any term or condition of the scholarship.

Cost Sharing Requirements

There are no cost-sharing requirements.

Intergovernmental Review

Applications under this program are not subject to Executive Order 12372, ''Intergovernmental Review of Federal programs.''

Limitation of Liability

In no event will NOAA or the Department of Commerce be responsible for proposal preparation costs if this program is cancelled because of other agency priorities. Publication of this notice does not oblige NOAA to award any specific project or to obligate any available funds. Applicants are hereby given notice that funding for the Fiscal Year 2007 program is contingent upon the availability of Fiscal Year 2007 appropriations.

National Environmental Policy Act (NEPA)

As defined in sections 5.05 and Administrative or Programmatic Functions of NAO 216–6, 6.03.c.3, this is an undergraduate scholarship and internship program for which there are no cumulative effects. Thus, it has been categorically excluded from the need to prepare an Environmental Assessment.

Paperwork Reduction Act

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 subject to the requirements of the Paperwork Reduction Act (PRA), unless that collection displays a currently valid Office of Management and Budget (OMB) control number. The Hollings Undergraduate Scholarship application form has been approved under OMB Control No. 1910–5125.

Executive Order 12866

This notice has been determined to be not significant for purposes of Executive Order 12866.

Executive Order 13132 (Federalism)

It has been determined that this notice does not contain policies with Federalism implications as that term is defined in Executive Order 13132.

Administrative Procedure Act/ Regulatory Flexibility Act

Prior notice and an opportunity for public comment are not required by the Administrative Procedure Act or any other law for rules concerning public property, loans, grants, benefits, and contracts (5 U.S.C. 553(a)(2)). Because notice and opportunity for comment are not required pursuant to 5 U.S.C. 553 or any other law, the analytical requirements for the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) are inapplicable. Therefore, a regulatory flexibility analysis has not been prepared.

Dated: January 17, 2007.

John J. Kelly, Jr.,

Deputy Undersecretary for Oceans and Atmosphere, U.S. Department of Commerce.

[FR Doc. E7–1010 Filed 1–23–07; 8:45 am]

BILLING CODE 3510–12–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 011807B]

Draft (2007) Strategic Plan for Fisheries Research

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

ACTION: Notice of availability; request for comments.

SUMMARY: NMFS announces the availability of and seeks public comment on the draft (2007) Strategic Plan for Fisheries Research. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires the Secretary of Commerce to develop, triennially, a strategic plan for fisheries research for the subsequent years. Any written comments on the draft plan will be considered by NMFS in the development of the final 2007 Strategic Plan for Fisheries Research.

DATES: Comments on the plan must be received on or before February 23, 2007.

ADDRESSES: Comments on and requests for the draft NMFS Strategic Plan for Fisheries Research (2007) should be directed to Mark Chandler, Office of Science and Technology, NMFS, NOAA, 1315 East-West Highway, Silver Spring, MD 20910. phone: (301) 713–2367 ext. 152, fax: (301) 713–1875, e-mail: *NSPFR.comments@noaa.gov*.

Electronic Access: The draft NMFS Strategic Plan for Fisheries Research (2007) may be reviewed in its entirety online at *http://www.st.nmfs.gov/*.

FOR FURTHER INFORMATION CONTACT: Mark Chandler at 301–713–2367 ext. 152, e-mail: *NSPFR.comments@noaa.gov*.

SUPPLEMENTARY INFORMATION: Section 404 of the Magnuson-Stevens Act requires the Secretary of Commerce to publish triennially in the **Federal Register** a five-year strategic plan for fisheries research. The Magnuson-Stevens Act also requires that the plan address four major areas of research: (1) research to support fishery conservation and management; (2) conservation engineering research; (3) research on the fisheries; and (4) information management research.

The 2007 draft Strategic Plan for Fisheries Research is based upon and entirely consistent with NMFS' ''New Priorities for the 21st Century: National Marine Fisheries Service Strategic Plan Updated for FY 2005–FY 2010'' located on the internet at *http://www.nmfs.noaa.gov/mb/strategic/*.

The 2007 draft document is a component of the all-encompassing NMFS Strategic Plan, focusing on science research activities. The objectives found under the ''Major Fishery Research Goals and Objectives'' section of the Strategic Plan for Fisheries Research can be matched with those in the NMFS Strategic Plan. In addition, the strategies, goals and objectives of the draft Strategic Plan for Fisheries Research are consistent with NOAA's ''New Priorities for the 21st Century: NOAA's Strategic Plan–Updated for FY 2006–2011'' available online at *http://www.spo.noaa.gov/*.

The scope of the 2007 draft document is solely fisheries research to support the Magnuson-Stevens Act. It does not include the regulatory and enforcement components of NMFS' mission. NMFS currently conducts a comprehensive program of fisheries research and involves industry and others interested in planning and implementing its fisheries objectives.

NMFS intends that the final version of the Strategic Plan for Fisheries Research will take advantage of information and recommendations from all interested parties. Therefore, comments and suggestions on this draft NMFS Strategic Plan for Fisheries Research are hereby solicited from the public, other concerned government agencies, the scientific community, industry, and any other interested parties.

Dated: January 18, 2007.

Steven A. Murawski,

Director of Scientific Programs and Chief Science Advisor, National Marine Fisheries Service.

[FR Doc. E7–1017 Filed 1–23–07; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 011107G]

Endangered Species; File No. 1596

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

ACTION: Notice; issuance of permit.

SUMMARY: Notice is hereby given that NMFS Southwest Fisheries Science Center, 8604 La Jolla Shores Drive, La Jolla, CA 92037–1508 has been issued a permit to take leatherback (*Dermochelys coriacea*) sea turtles for purposes of scientific research.

ADDRESSES: The permit and related documents are available for review upon written request or by appointment in the following office(s):

Permits, Conservation and Education Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; phone (301) 713–2289; fax (301) 427–2521;

Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802–4213; phone (562) 980–4001; fax (562) 980–4018.

FOR FURTHER INFORMATION CONTACT: Patrick Opay or Amy Hapeman, (301) 713–2289.

SUPPLEMENTARY INFORMATION: On October 20, 2006, notice was published in the **Federal Register** (71 FR 61960) that a request for a scientific research permit to take leatherback sea turtles had been submitted by the above-named organization. The requested permit has been issued under the authority of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*) and the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR parts 222–226).

The researchers will continue long-term monitoring of the status of leatherback sea turtles off the coasts of California, Oregon, and Washington to determine their abundance, distribution, size ranges, sex ratio, health status, diving behavior, local movements, habitat use, and migration routes. Up to 38 animals will be captured using a breakaway hoop net and be measured, weighed, blood and tissue sampled, photographed, and flipper and passive integrated transponder (PIT) tagged. A subset of animals are to have biotelemetry devices (e.g., transmitters) attached to them. An additional 40 animals will be approached (but not captured) and have a VHF/TDR/sonic tag unit attached to them by suction cup using a long pole or these animals would be tissue sampled with a biopsy pole. The primary goal is to address priorities outlined in the U.S. Pacific leatherback Recovery Plan and identify critical forage habitats, genetic stock structure, migratory corridors, and potential fishery impacts on this species in the Pacific. This information is necessary to make informed management decisions concerning these turtles and their habitat. The permit is issued for 5 years.

Issuance of this permit, as required by the ESA, was based on a finding that such permit (1) was applied for in good faith, (2) will not operate to the disadvantage of any endangered or threatened species, and (3) is consistent with the purposes and policies set forth in section 2 of the ESA.

Dated: January 18, 2007.

P. Michael Payne,

Chief, Permits, Conservation and Education Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. E7–1014 Filed 1–23–07; 8:45 am]

BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

Patent and Trademark Office

[Docket No. PTO–P–2006–0050]

Grant of Interim Extension of the Term of U.S. Patent No. 4,650,787; Sanvar®

AGENCY: United States Patent and Trademark Office, Commerce.

ACTION: Notice of Interim Patent Term Extension.

SUMMARY: The United States Patent and Trademark Office has issued a certificate under 35 U.S.C. 156(d)(5) for a second one-year interim extension of the term of U.S. Patent No. 4,650,787.

FOR FURTHER INFORMATION CONTACT: Mary C. Till by telephone at (571) 272–7755; by mail marked to her attention and addressed to the Commissioner for Patents, Mail Stop Hatch-Waxman PTE., P.O. Box 1450, Alexandria, VA 22313–1450; by fax marked to her attention at (571) 273–7755, or by e-mail to *Mary.Till@uspto.gov.*

SUPPLEMENTARY INFORMATION: Section 156 of Title 35, United States Code, generally provides that the term of a patent may be extended for a period of up to five years if the patent claims a product, or a method of making or using a product, that has been subject to certain defined regulatory review, and that the patent may be extended for interim periods of up to a year if the regulatory review is anticipated to extend beyond the expiration date of the patent.

On March 23, 2006, Debiovision Inc., the exclusive agent of Debiopharm S.A. and Debio Recherche Pharmaceutique S.A., who is the exclusive licensee of the Administrators of the Tulane Educational Fund of New Orleans, Louisiana, the patent owner, timely filed an application under 35 U.S.C. 156(d)(5) for a second interim extension of the term of U.S. Patent No. 4,650,787. The patent claims the human drug product Sanvar® (vapreotide acetate). The application indicates that a New Drug Application for the human drug product Sanvar® (vapreotide acetate) has been filed and is currently undergoing regulatory review before the Food and Drug Administration for permission to market or use the product commercially.

Review of the application indicates that except for permission to market or use the product commercially, the subject patent would be eligible for an extension of the patent term under 35 U.S.C. 156, and that the patent should be extended for one year as required by 35 U.S.C. 156(d)(5)(B). Because it is

apparent that the regulatory review period has and will continue beyond the extended expiration date of the patent (April 25, 2006), a second interim extension of the patent term under 35 U.S.C. 156(d)(5) is appropriate.

A second interim extension under 35 U.S.C. 156(d)(5) of the term of U.S. Patent No. 4,650,787 is granted for a period of one year from the extended expiration date of the patent, i.e., until April 25, 2007.

Dated: January 17, 2007.

Jon W. Dudas,

Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office.

[FR Doc. E7–1008 Filed 1–23–07; 8:45 am]

BILLING CODE 3510–16–P

CONSUMER PRODUCT SAFETY COMMISSION

[CPSC Docket No. 07–C0003]

Hoover Company, Inc., a Corporation, Provisional Acceptance of a Settlement Agreement and Order

AGENCY: Consumer Product Safety Commission.

ACTION: Notice.

SUMMARY: It is the policy of the Commission to publish settlements which it provisionally accepts under the Consumer Product Safety Act in the **Federal Register** in accordance with the terms of 16 CFR 1118.20(e). Published below is a provisionally-accepted Settlement Agreement with Hoover Company, Inc., a corporation, containing a civil penalty of $750,000.

DATES: Any interested person may ask the Commission not to accept this agreement or otherwise comment on its contents by filing a written request with the Office of the Secretary by February 8, 2007.

ADDRESSES: Persons wishing to comment on this Settlement Agreement should send written comments to the Comment 07–C0003, Office of the Secretary, Consumer Product Safety Commission, 4330 East West Highway, Bethesda, Maryland 20814–4408.

FOR FURTHER INFORMATION CONTACT: Michelle F. Gillice, Trial Attorney, Office of Compliance and Field Operations, Consumer Product Safety Commission, 4330 East West Highway, Bethesda, Maryland 20814–4408; telephone (301) 504–7667.

SUPPLEMENTARY INFORMATION: The text of the Agreement and Order appears below.

Dated: January 18, 2007.

Todd A. Stevenson,

Secretary.

United States of America Consumer Product Safety Commission

[CPSC Docket No. 07–C0003]

In the Matter of Hoover Company, Inc. a Corporation; Settlement Agreement and Order

1. This Settlement Agreement is made by and between the staff (the ''staff'') of the U.S. Consumer Product Safety Commission (the ''Commission'') and Hoover Company, Inc. (''Hoover''), a corporation, in accordance with 16 CFR 1118.20 of the Commission's Procedures for Investigations, Inspections and Inquiries under the Consumer Product Safety Act (''CPSA''). This Settlement Agreement and the incorporated attached Order resolve the staff's allegations set forth below.

The Parties

2. The Commission is an independent federal regulatory agency responsible for the enforcement of the CPSA, 15 U.S.C. 2051–2084.

3. Hoover is a corporation organized and existing under the laws of the State of Delaware, with its principal corporate office located in North Canton, Ohio. At all times relevant herein, Hoover designed and manufactured vacuum cleaners subject to the Settlement Agreement and Order.

Staff Allegations

4. Between may 1998 and November 1999, Hoover manufactured approximately 636,000 Self-Propelled Wind Tunnel Upright vacuum cleaners under the following model numbers: U6423–900; U6445–900; U6425–900; U6445–960; U6451–900; U6425–950; U6449–900; and U6455–900, (hereinafter ''vacuum cleaners'').

5. The vacuum cleaners are ''consumer product(s)'' and, at the times relevant herein, Hoover was a ''manufacturer'' of ''consumer product(s)'' which were ''distributed in commerce'' as those terms are defined in 3(a)(1), (4), (11), and (12) of the CPSA, 15 U.S.C. 2052(a)(1), (4), (11) and (12).

6. The vacuum cleaners are defective because of a poor crimp connection at the wire termination which could cause overheating, melting and ultimately, fire in the switch/handle area. The vacuum cleaners could catch fire while in use and switched to the ''ON'' position and while switched to ''Off'' if plugged in to an outlet.

7. On or about April 14, 1999, Hoover first learned of a vacuum cleaner switch overheating and melting.

8. Between October and November 1999, after receiving notice of at least four incidents, Hoover made several design changes to eliminate overheating in the switch area. Hoover also directed that all vacuum cleaners in inventory and any brought in by customers for repair for any reason be reworked in order to eliminate the switch overheating problem.

9. On February 26, 2001, Hoover's Safety Committee met and reviewed the vacuum cleaner incidents. At this time, Hoover had received notice of at least 46 incidents with the vacuum cleaners, 23 of which were allegations that the switch/handle area caught on fire. At least two reports indicated that the vacuum cleaner ignited while switched to the ''OFF'' position and consumers believed the vacuum cleaners to be off. The Safety Committee, however, decided that no report should be made to the Commission.

10. On June 11, 2002, the Safety Committee met again to review 80 new incidents involving the switch defect. By this time, Hoover had received notice of at least 127 incidents. In 73 of these incidents, consumers reported that the vacuum cleaners caught on fire.

11. On or about September 24, 2002, Hoover hired an outside consulting firm to examine and test the vacuum cleaners to determine the cause of the switch failures.

12. On March 12, 2003, the consulting firm issued a report confirming that a poor crimp connection caused the switch to melt and malfunction. By this time, Hoover had received notice of 171 incidents pertaining to switch overheating and/or melting. In 96 of these incidents, consumers reported that their vacuum cleaners caught on fire.

13. On June 7, 2004, after receiving notice of several vacuum cleaner incidents, Commission staff sent Hoover a letter requesting submission of a full report pursuant to section 15(b) of the CPSA.

14. On July 9, 2004, Hoover submitted a report in response to the staff's request. At this time of its report, Hoover had received notice of at least 260 consumer incidents, of which 141 involved reports of fire. Other than one report of minor burns to hands, there were no report consumer injuries.

15. Although Hoover had obtained sufficient information which could reasonably support the conclusion that the vacuum cleaners contained a defect which could create a substantial product hazard, or created an unreasonable risk of serious injury or

death, it failed to immediately inform the Commission of such defect or risk as required by sections 15(b)(2) and (3) of the CPSA, 15 U.S.C. 2064(b)(2) and (3). In failing to do so, Hoover ''knowingly'' violated section 19(a)(4) of the CPSA, 15 U.S.C. 2068(a)(4), as the term ''knowingly'' is defined in section 20(d) of the CPSA, 15 U.S.C. 2069(d).

16. Pursuant to section 20 of the CPSA, 15 U.S.C. 2069, Hoover is subject to civil penalties for its failure to make a timely report under section 15(b) of the CPSA, 15 U.S.C. 2064(b).

Response of Hoover

17. Hoover denies that the vacuum cleaners contain a defect which could create a substantial product hazard, or create a substantial risk of serious injury or death, and denies that it violated the reporting requirements of section 15(b) of the CPSA, 15 U.S.C. 2064(b).

Agreement of the Parties

18. The Commission has jurisdiction over this matter and over Hoover under the CPSA, 15 U.S.C. 2051–2084.

19. In settlement of the staff's allegations, Hoover agrees to pay a civil penalty of seven hundred fifty thousand dollars ($750,000.00) within twenty (20) calendar days of service of the Final Order of the Commission accepting this Settlement Agreement. This payment shall be made by check payable to the order of the United States Treasury.

20. The parties enter this Settlement Agreement for settlement purposes only. The Settlement Agreement does not constitute an admission by Hoover or a determination by the Commission that Hoover violated the CPSA's reporting requirements.

21. Upon provisional acceptance of this Settlement Agreement and Order by the Commission, the Commission shall place this Agreement and Order on the public record and shall publish it in the **Federal Register** in accordance with the procedure set forth in 16 CFR 1118.20(e). If the Commission does not receive any written requests not to accept the Settlement Agreement and Order within 15 calendar days, the Settlement Agreement and Order shall be deemed finally accepted on the 16th calendar day after the date it is published in the **Federal Register**, in accordance with 16 CFR 1118.20(f).

22. Upon final acceptance of the Settlement Agreement by the Commission and issuance of the Final Order, Hoover knowingly, voluntarily and completely waives any rights it may have in this matter to the following :(i) An administrative or judicial hearing; (ii) judicial review or other challenge or contest of the Commission's actions; (iii) a determination by the Commission as to whether Hoover failed to comply with the CPSA and the underlying regulations; (iv) a statement of findings of fact and conclusions of law; and (v) any claims under the Equal Access to Justice Act.

23. The Commission may publicize the terms of the Settlement Agreement and Order.

24. The Settlement Agreement shall apply to, and be binding upon Hoover and each of its successors and assigns, its parent entity, its parent's subsidiaries, and each of their respective successors and assigns.

25. The Commission's Order in this matter is issued under the provisions of the CPSA, 15 U.S.C. 2051–2084, and a violation of the Order may subject those referenced in paragraph 24 above to appropriate legal action.

26. This Settlement Agreement may be used in interpreting the Order. Agreements, understandings, representations, or interpretations made outside of this Settlement Agreement and Order may not be used to vary or to contradict its terms.

27. This Settlement Agreement and Order shall not be waived, changed, amended, modified, or otherwise altered, without written agreement thereto executed by the party against whom such amendment, modification, alteration, or waiver is sought to be enforced, and approval by the Commission.

28. If, after the effective date hereof, any provision of this Settlement Agreement and Order is held to be illegal, invalid, or unenforceable under present or future laws effective during the terms of the Settlement Agreement and Order, such provision shall be fully severable. The rest of the Settlement Agreement and Order shall remain in full effect, unless the Commission and Hoover determine that severing the provision materially changes the purpose of the Settlement Agreement and Order.

Dated: January 2, 2007.

Hoover Corporation.

Karl R. Milam,
Chief Executive Officer.

Dated: January 4, 2007.

U.S. Consumer Product Safety Commission.

John Gibson Mullan,
Director, Office of Compliance and Field Operations.

Ronald G. Yelenik,
Acting Legal Director, Compliance Legal Division.

Michelle Faust Gillice,
Trial Attorney, Compliance Legal Division.

United States of America Consumer Product Safety Commission

[CPSC Docket No. 07–C0003]

In the Matter of Hoover Company, Inc., A Corporation

Order

Upon consideration of the Settlement Agreement entered into between Hoover Company, Inc. (''Hoover'') and the staff of the U.S. Consumer Product Safety Commission (the ''Commission''), and the Commission having jurisdiction over the subject matter and over Hoover, and it appearing the Settlement Agreement is in the public interest, it is

Ordered, that the Settlement Agreement be, and hereby is, accepted; and it is

Further ordered, that Hoover shall pay a civil penalty in the amount of seven hundred fifty thousand dollars ($750,000.00). This payment shall be made payable to the United States Treasury within twenty (20) calendar days of service of the Final Order of the Commission upon Hoover. Upon the failure of Hoover to make full payment in the prescribed time, interest on the outstanding balance shall accrue and be paid at the federal rate of interest under the provisions of 28 U.S.C. 1961(a) and (b).

Provisionally accepted and Provisional Order issued on the 18th day of January, 2007.

By Order of the Commission.

Todd A. Stevenson, Secretary, Consumer Product Safety Commission.

[FR Doc. 07–292 Filed 1–23–07; 8:45 am]

BILLING CODE 6355–01–M

DEPARTMENT OF DEFENSE

GENERAL SERVICES ADMINISTRATION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[OMB Control No. 9000–0034]

Federal Acquisition Regulation; Information Collection; Examination of Recordsby Comptroller General and Contract Audit

AGENCIES: Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

ACTION: Notice of request for an extension to an existing OMB clearance.

SUMMARY: Under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the Federal Acquisition Regulation (FAR)

Secretariat has submitted to the Office of Management and Budget (OMB) a request to review and approve an extension of a currently approved information collection requirement concerning the examination of records by comptroller general and contract audit. A request for public comments was published in the **Federal Register** at 71 FR 65478, on November 8, 2006. No comments were received. The clearance currently expires on April 30, 2007.

Public comments are particularly invited on: Whether this collection of information is necessary for the proper performance of functions of the FAR, and whether it will have practical utility; whether our estimate of the public burden of this collection of information is accurate, and based on valid assumptions and methodology; ways to enhance the quality, utility, and clarity of the information to be collected; and ways in which we can minimize the burden of the collection of information on those who are to respond, through the use of appropriate technological collection techniques or other forms of information technology.

DATES: Submit comments on or before February 23, 2007.

ADDRESSES: Submit comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: FAR Desk Officer, OMB, Room 10102, NEOB, Washington, DC 20503, and a copy to the General Services Administration, FAR Secretariat (VIR), 1800 F Street, NW., Room 4035, Washington, DC 20405.

FOR FURTHER INFORMATION CONTACT: Mr. Michael Jackson, Contract Policy Division, GSA, (202) 208–4949.

SUPPLEMENTARY INFORMATION:

A. Purpose

The Audit and Records-Negotiation clause, 52.215–2; Contract Terms and Conditions Required to Implement Statutes or Executive Orders-Commercial Items clause, 52.212–5(d); and Audit and Records-Sealed Bidding clause, 52.214–26, implement the requirements of 10 U.S.C. 2313, 41 U.S.C. 254, and 10 U.S.C. 2306. The statutory requirements are that the Comptroller General and/or agency shall have access to, and the right to, examine certain books, documents and records of the contractor for a period of 3 years after final payment. The record retention periods required of the contractor in the clauses are for compliance with the aforementioned statutory requirements. The information must be retained so that audits necessary for contract surveillance, verification of contract pricing, and reimbursement of contractor costs can be performed.

B. Annual Reporting Burden

Respondents: 19,142.
Responses Per Respondent: 20.
Total Responses: 382,840.
*Hours Per Response:*0.167.
Total Burden Hours: 63,934.
Obtaining Copies of Proposals: Requesters may obtain a copy of the information collection documents from the General Services Administration, FAR Secretariat (VIR), Room 4035, 1800 F Street, NW., Washington, DC 20405, telephone (202) 501–4755. Please cite OMB Control Number 9000–0034, Examination of Records by Comptroller General and Contract Audit, in all correspondence.

Dated: January 18, 2007.

Ralph De Stefano,

Director, Contract Policy Division.

[FR Doc. 07–291 Filed 1–23–07; 8:45 am]

BILLING CODE 6820–EP–S

DEPARTMENT OF DEFENSE

Office of the Secretary

Federal Advisory Committee

AGENCY: Department of Defense.

ACTION: Notice of meeting.

SUMMARY: In accordance with section 10(a)(2) of Public Law 92–463, The Federal Advisory Committee Act, announcement is made of the following meeting:

Name of Committee: DoD Task Force on the Future of Military Health Care, a Subcommittee of the Defense Health Board.

Dates: February 6, 2007.

Times: 1 p.m.–4:30 p.m.

Location: National Transportation Safety Board Conference Center, 429 L'Enfant Plaza, Washington, DC 20594.

Agenda: The purpose of the meeting is to obtain, review, and evaluate information related to the Future of Military Health Care Task Force's congressionally-directed task to examine matters relating to the future of military health care. The Task Force members will receive briefings on topics related to the delivery of military health care. Additional information and meeting registration is available online at the Defense Health Board Web site, *http://www.ha.osd.mil/dhb.*

Due to the Task Force co-chairs' decision to accelerate the next meeting of the Task Force, the Committee Management Office for the Department of Defense has authorized a waiver to the fifteen day notification requirement.

FOR FURTHER INFORMATION CONTACT: Colonel Christine Bader, Executive Secretary, Defense Health Board, Skyline One, 5205 Leesburg Pike, Suite 810, Falls Church, VA 22041, (703) 681–3279, ext. 109. *http://www.ha.osd.mil/dhb.*

SUPPLEMENTARY INFORMATION: The session on February 6, 2007 will be open to the public in accordance with Section 552b(b) of Title 5, U.S.C., specifically subparagraph (1) thereof and Title 5, U.S.C., appendix 1, subsection 0(d). Open sessions of the meeting will be limited by spaced accommodations. Any interested person may attend, appear before or file statements with the Task Force at the time and in the manner permitted by the Task Force.

Dated: January 18, 2007.

L.M. Bynum,

Alternate OSD Federal Register, Liaison Officer, Department of Defense.

[FR Doc. 07–277 Filed 1–23–07; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Office of the Secretary

Defense Science Board

AGENCY: Department of Defense.

ACTION: Notice of Advisory Committee Meetings.

SUMMARY: The Defense Science Board Task Force on National Guard and Reserves in the GWOT will meet in closed session on February 5–6, 2007; at the Strategic Analysis Inc., 3601 Wilson Boulevard, Arlington, VA.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Acquisition, Technology & Logistics on scientific and technical matters as they affect the perceived needs of the Department of Defense. At these meetings, the Defense Science Board Task Force will: Assess the consequences for force structure, morale, and mission capability of deployments of members of the National Guard and the Reserves in the course of the global war on terrorism that are lengthy, frequent, or both.In accordance with Section 10(d) of the Federal Advisory Committee Act, Pub. L. No. 92–463, as amended (5 U.S.C. App. II), it has been determined that these Defense Science Board Task Force meetings concern matters listed in 5 U.S.C. 552b(c)(1) and that, accordingly, the meetings will be closed to the public.

FOR FURTHER INFORMATION CONTACT: LCDR Clifton Phillips, USN, Defense Science Board, 3140 Defense Pentagon, Room 3C553, Washington, DC 20301–3140, via e mail at *clifton.phillips@osd.mil,* or via phone at (703) 571–0083.

Dated: January 18, 2007.

C.R. Choate,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 07–274 Filed 1–23–07; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Office of the Secretary

Defense Science Board

AGENCY: Department of Defense.

ACTION: Notice of Advisory Committee Closed Meetings.

SUMMARY: The Defense Science Board Task Force on Nuclear Deterrence Skills will meet in closed session on February 1–2, 2007; at the Strategic Analysis Inc., 3601 Wilson Boulevard, Arlington, VA.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Acquisition, Technology & Logistics on scientific and technical matters as they affect the perceived needs of the Department of Defense. At these meetings, the Defense Science Board Task Force will: Assess all aspects of nuclear deterrent skills as well as the progress Department of Energy (DoE) has made since the publication of the Chiles Commission report.

In accordance with Section 10(d) of the Federal Advisory Committee Act, Pub. L. No. 92–463, as amended (5 U.S.C. App. II), it has been determined that these Defense Science board Task Force meetings concern matters listed in 5 U.S.C. 552b(c)(1) and that, accordingly, the meetings will be closed to the public.

FOR FURTHER INFORMATION CONTACT: LCDR Clifton Phillips, USN, Defense Science Board, 3140 Defense Pentagon, Room 3C553, Washington, DC 20301–3140, via e-mail at *clifton.phillips@osd.mil*, or via phone at (703) 571–0083.

Due to scheduling difficulties, there is insufficient time to provide timely notice required by Section 10(a) of the Federal Advisory Committee Act and Subsection 102–3.150(b) of the GSA Final Rule on Federal Advisory committee Management, 41 CFR part 102–3.150(b), which further requires publication at least 15 calendar days prior to the meeting.

Dated: January 18, 2007.

C.R. Choate,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 07–275 Filed 1–23–07; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Office of the Secretary

Defense Science Board

AGENCY: Department of Defense.

ACTION: Notice of Advisory Committee Closed Meetings.

SUMMARY: The Defense Science Board Task Force on Space Industrial Base will meet in closed session on *January 30–31, 2007;* at Science Applications International Corporation (SAIC), 4001 N. Fairfax Drive, Arlington, VA. This meeting is to assess the future direction of space requirements and identify the industrial base to meet the Nation's future requirements.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Acquisition, Technology & Logistics on scientific and technical matters as they affect the perceived needs of the Department of Defense. At these meetings, the Defense Science Board Task Force will: Assess the health of the U.S. space industrial base and determine if there is any adverse impact from export controls, in particular, on the health of lower-tier contractors; anticipate future space requirements and the shape of the space industrial base required to achieve the anticipated capabilities; and recommend improvements to current policies and processes, where applicable, while also identifying policies and processes that can shape the space industrial base to deliver future capabilities.

In accordance with Section 10(d) of the Federal Advisory Committee Act, Pub. L. No. 92–463, as amended (5 U.S.C. App. II), it has been determined that these Defense Science Board Task Force meetings concern matters listed in 5 U.S.C. 552b(c)(1) and that, accordingly, the meetings will be closed to the public.

FOR FURTHER INFORMATION CONTACT: LCDR Clifton Phillips, USN, Defense Science Board, 3140 Defense Pentagon, Room 3C553, Washington, DC 20301–3140, via e-mail at *clifton.phillips@osd.mil*, or via phone at (703) 571–0083.

Due to scheduling and work burden difficulties, there is insufficient time to provide timely notice required by Section 10(a) of the Federal Advisory Committee Act and Subsection 102–3.150(b) of the GSA Final Rule on Federal Advisory Committee Management, 41 CFR part 102–3.150(b), which further requires publication at least 15 calendar days prior to the meeting.

Dated: January 18, 2007.

C.R. Choate,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 07–276 Filed 1–23–07; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Department of the Army

Board of Visitors, United States Military Academy (USMA)

AGENCY: Department of the Army, DoD.

ACTION: Notice; correction.

SUMMARY: The notice of an open meeting scheduled for January 31, 2007 published in the **Federal Register** on December 8, 2006 (71 FR 71142) has a new meeting location and start time. The meeting will now be held in Room 236 Senate Russell Building, Washington, DC. The new start time for the meeting is approximately 8:30 a.m.

FOR FURTHER INFORMATION CONTACT: Lieutenant Colonel Shaun T. Wurzbach, United States Military Academy, West Point, NY 10996–5000, (845) 938–4200.

SUPPLEMENTARY INFORMATION: None.

Brenda S. Bowen,

Army Federal Register Liaison Officer.

[FR Doc. 07–283 Filed 1–23–07; 8:45 am]

BILLING CODE 3710–08–M

DEPARTMENT OF DEFENSE

Department of the Army; Corps of Engineers

Notice of Availability of the Draft Environmental Impact Statement and the Announcement of a Public Hearing for the Proposed Potash Corporation of Saskatchewan Phosphate Mine Continuation Near Aurora, in Beaufort County, NC

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DoD.

ACTION: Notice; extension of comment period.

SUMMARY: The comment period for the Draft Environmental Impact Statement

(DEIS) for the request for Department of the Army authorization, pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbor Act, from Potash Corporation of Saskatchewan Phosphate Division (PCS) for the continuation of its phosphate mining operation near Aurora, Beaufort County, NC published in the **Federal Register** on Friday, October 20, 2006 (71 FR 61962), required comments be submitted by January 22, 2007. The comment period has been extended until February 9, 2007.

FOR FURTHER INFORMATION CONTACT: Tom Walker, Telephone (828) 271–7980 ext. 222.

Brenda S. Bowen,

Army Federal Register Liaison Officer.

[FR Doc. 07–282 Filed 1–23–07; 8:45 am]

BILLING CODE 3710–GN–M

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Notice of Availability of the Draft Environmental Impact Statement for the Dam Safety Assurance Evaluation Report, Dover Dam, City of Dover, Tuscarawas County, OH

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DOD.

ACTION: Notice of availability.

SUMMARY: This notice replaces the previously published **Federal Register** notice dated January 9, 2007 (72 FR 958). Pursuant to the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers (Corps), Huntington District has prepared an Environmental Impact Statement (EIS) to disclose potential impacts to the natural, physical, and human environment resulting from modifications to Dover Dam. This high hazard dam does not conform to current design standards related to stability and sliding during a probably maximum flood. Modifications are proposed so the Dam will meet these standards.

DATES: Written comments on the Draft Environmental Impact Statement will be accepted for 45 days following publication of the U.S. Environmental Protection Agency's Notice of Availability for the Draft Environmental Impact State (DEIS) in the **Federal Register** anticipated to occur on or before January 26, 2007.

ADDRESSES: Send all written comments and suggestions concerning this proposed project to Rodney G. Cremeans, Project Manager PM–PP–P, U.S. Army Corps of Engineers, Huntington District, 502 Eighth Street, Huntington, WV 25701–2070. E-mail: *Rodney.G.Cremeans@Irh01.usace.army.mil*.

FOR FURTHER INFORMATION CONTACT: Mr. Rodney Cremeans, Telephone: (304) 399–5170.

SUPPLEMENTARY INFORMATION: Section 1203 of the Water Resources Development Act of 1986 (Pub. L. 99–662) provides for modification of completed Corps dams and related facilities for safety purposes due to new hydrologic or seismic data or changes in state-of-the-art design or construction criteria. The National Weather Service generalized estimates of Probable Maximum Precipitation (PMP) were used to develop flood scenarios and guide design criteria for structures such as Dover Dam. These rainfall estimates are considered extreme, with a very low probability of occurrence. However, the worst-case storms associated with the PMP events retain some probability of occurrence. The Corps has determined the dam cannot safely accommodate flooding from theoretical Probable Maximum Flood (PMF) events. The dam is also believed to be unstable against sliding under conditions below the PMF due to known faulting and uncertain foundation bedrock quality. The objectives of the project are to develop the most cost effective, environmentally sound plan to upgrade Dover Dam to meet current hydrologic design standards and to address stability issues associated with inadequate bedrock foundation. The objectives also include protecting project facilities including the adjacent park area and Ohio Route 800.

Three alternatives: (1) Raise Dam, (2) Dam Overtop and (3) No Federal Action are evaluated in detail in the EIS. The Raise Dam alternative would allow the dam to safely pass 100% of the PMF through raising the existing non-overflow sections with concrete parapet walls constructed on the existing dam. To address inadequate bedrock foundation and potential for sliding under PMF conditions, the Raise Dam alternative also includes installation of anchors in the spillway and stilling basin. The Dam Overtop alternative would modify the existing non-overflow section of the dam to withstand overtopping, and also includes installation of anchors in the spillway and stilling basin to address inadequate bedrock foundation. Under the No Federal Action alternative no modifications would be done. The Raise Dam alternative was chosen as the recommended plan because it more reliably meets project objectives, minimizes costs, and has the least adverse environmental effects.

The Corps invites full public participation to promote open communication and better decision-making. All persons and organizations that have an interest in the Dover Dam Project are urged to participate in this NEPA evaluation process. Assistance will be provided upon request to anyone having difficulty with learning how to participate.

A public meeting will be held on January 18th at 7 p.m. at the McDonald Marlite Conference Center in New Philadelphia, OH. The public hearing will be announced in advance through notices, media news releases, and/or mailings.

Copies of the Draft EIS may be reviewed at the following locations:

1. Dover Public Library, 525 N. Walnut Street, Dover, OH 44622.
2. Tuscarawas County Public Library, 121 Fair Avenue NW., New Philadelphia, OH 44663.
3. US Army Corps of Engineers Muskingum Area Office, 5336 State Route 800 NE, Dover, OH 44662–6910.
4. US Army Corps of Engineers, Huntington District, Room 3100, 502 Eighth Street, Huntington, WV 25701.
5. *http://www.Irh.usace.army.mil/projects/review*.

Brenda S. Bowen,

Army Federal Register Liaison Officer.

[FR Doc. 07–281 Filed 1–23–07; 8:45 am]

BILLING CODE 3710–GM–M

DEPARTMENT OF DEFENSE

Department of the Army; Corps of Engineers

Intent To Prepare a Draft Environmental Impact Statement for the Combined Structural and Operational Plan, Broward and Miami-Dade Counties, FL

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DOD.

ACTION: Notice of intent.

SUMMARY: The Jacksonville District, U.S. Army Corps of Engineers (Corps), intends to prepare a Draft Environmental Impact Statement (DEIS) for the Combined Structural and Operational Plan (CSOP) for the Central and Southern Florida Project, WCA–3A and B and the South Dade Conveyance System. The study is a cooperative effort between the Corps, Everglades National Park (ENP), U.S. Fish and Wildlife Service (USFWS), and South Florida Water Management District (SFWMD).

CSOP is an integrated structural and operational plan for two modifications of the Central and South Florida (C&SF) Project: the Modified Water Deliveries to ENP (MWD) Project and the Canal–111 (C–111) Project. The objective of CSOP is to define the operations for these projects in a manner consistent with their respective project purposes.

ADDRESSES: U.S. Army Corps of Engineers, Planning Division, Environmental Branch, P.O. Box 4970, Jacksonville, FL 32232–0019.

FOR FURTHER INFORMATION CONTACT: Mr. Ernest Clarke at (904) 232–1199 or e-mail at *ernest.clarke@saj02.usace.army.mil.*

SUPPLEMENTARY INFORMATION: a. *Authorization:* The MWD General Design Memorandum (GDM) and EIS was completed 1992, in response to the ENP Protection and Expansion Act of 1989. The C–111 General Reevaluation Report (GRR) with integrated EIS was approved in 1994 and the C–111 project was authorized in the Water Resources Development Act of 1996.

b. *Study Area:* The study area is located in Broward and Miami-Dade Counties, FL, and includes Water Conservation Area 3, ENP and other areas designated in previous Corps' reports: 1992 MWD GDM and 1994 C–111 GRR.

c. *Project Scope:* The objective of CSOP is to define the operations for the MWD and C–111 projects in a manner consistent with their respective purposes. The primary goal of the MWD project is to construct structural modifications to the original C&SF project and define their operations to allow for ecosystem restoration through improved water deliveries to Shark River Slough in ENP. The primary goal of the C–111 project modifications is to allow the restoration of habitat in Taylor Slough and the eastern panhandle of ENP through new water management operations. Refinements to the authorized structural improvements for the C–111 project are being addressed in a separate engineering report. The scope of the current effort includes developing the evaluating alternative plans for achieving MWD and C–111 project goals.

d. *Alternatives:* Alternatives to be discussed involve various ways to convey water through the C&SF system. Alternatives will involve alteration of the management of existing C&SF features as well of structural modifications to MWD features that have been congressionally authorized but not built. The evaluation of the alternatives and selection of a recommended plan will be documented in the DEIS. The alternative plans will be reviewed under provisions of appropriate laws and regulations, including the Endangered Species Act, Fish and Wildlife Coordination Act, Clean Water Act, and Farmland Protection Policy Act.

e. *Issues:* The DEIS will address the following issues: the relation between this project and related projects including MWD, C–111, IOP, and 8.5 SMA; impacts to aquatic and wetland habitats; water flows; hazardous and toxic waste; water quality; flood protection; aesthetics and recreation; fish and wildlife resources, including protected species; cultural resources; and other impacts identified through scoping, public involvement and interagency coordination.

f. *Public Involvement:* A scoping meeting is not anticipated. A Public meeting will be held after release of the Draft RGRR/SEIS; the exact location, date, and times will be announced in a public notice and local newspapers.

g. *DSEIS Preparation:* The DEIS is expected to be available for public review in the 3rd quarter of CY 2007.

Branda S. Bowen,

Army Federal Register Liaison Officer.

[FR Doc. 07–280 Filed 1–23–07; 8:45 am]

BILLING CODE 3710–AJ–M

DEPARTMENT OF EDUCATION

Notice of Proposed Information Collection Requests

AGENCY: Department of Education.

SUMMARY: The IC Clearance Official, Regulatory Information Management Services, Office of Management, invites comments on the proposed information collection requests as required by the Paperwork Reduction Act of 1995.

DATES: Interested persons are invited to submit comments on or before March 26, 2007.

SUPPLEMENTARY INFORMATION: Section 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that the Office of Management and Budget (OMB) provide interested Federal agencies and the public an early opportunity to comment on information collection requests. OMB may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The IC Clearance Official, Regulatory Information Management Services, Office of Management, publishes that notice containing proposed information collection requests prior to submission of these requests to OMB. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, e.g. new, revision, extension, existing or reinstatement; (2) Title; (3) Summary of the collection; (4) Description of the need for, and proposed use of, the information; (5) Respondents and frequency of collection; and (6) Reporting and/or Recordkeeping burden. OMB invites public comment.

The Department of Education is especially interested in public comment addressing the following issues: (1) is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology.

Dated: January 18, 2007.

Angela C. Arrington,

IC Clearance Official, Regulatory Information Management Services, Office of Management.

Institute of Education Sciences

Type of Review: Revision.

Title: National Assessment of Educational Progress 2008–2010 Operational and Pilot Surveys System Clearance.

Frequency: One time.

Affected Public: Individuals or household; State, Local, or Tribal Gov't, SEAs or LEAs.

Reporting and Recordkeeping Hour Burden:

Responses: 540,000.

Burden Hours: 141,236.

Abstract: This clearance package contains descriptions, supporting statements, and burden information for the 2008–2010 NAEP assessments. This is a System Clearance request for which a three-year clearance is requested for background materials for students, teachers, and schools.

Requests for copies of the proposed information collection request may be accessed from *http://edicsweb.ed.gov*, by selecting the ''Browse Pending Collections'' link and by clicking on link number 3254. When you access the information collection, click on ''Download Attachments'' to view. Written requests for information should be addressed to U.S. Department of Education, 400 Maryland Avenue, SW.,

Potomac Center, 9th Floor, Washington, DC 20202–4700. Requests may also be electronically mailed to *ICDocketMgr@ed.gov* or faxed to 202–245–6623. Please specify the complete title of the information collection when making your request.

Comments regarding burden and/or the collection activity requirements should be electronically mailed to *ICDocketMgr@ed.gov*. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339.

[FR Doc. E7–967 Filed 1–23–07; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

Notice of Proposed Information Collection Requests

AGENCY: Department of Education.

SUMMARY: The IC Clearance Official, Regulatory Information Management Services, Office of Management, invites comments on the proposed information collection requests as required by the Paperwork Reduction Act of 1995.

DATES: Interested persons are invited to submit comments on or before March 26, 2007.

SUPPLEMENTARY INFORMATION: Section 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that the Office of Management and Budget (OMB) provide interested Federal agencies and the public an early opportunity to comment on information collection requests. OMB may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The IC Clearance Official, Regulatory Information Management Services, Office of Management, publishes that notice containing proposed information collection requests prior to submission of these requests to OMB. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, *e.g.* new, revision, extension, existing or reinstatement; (2) Title; (3) Summary of the collection; (4) Description of the need for, and proposed use of, the information; (5) Respondents and frequency of collection; and (6) Reporting and/or Recordkeeping burden. OMB invites public comment.

The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology.

Dated: January 18, 2007.

Angela C. Arrington,

IC Clearance Official, Regulatory Information Management Services, Office of Management.

Institute of Education Sciences

Type of Review: Revision.

Title: Integrated Postsecondary Education Data System (IPEDS), Web-Based Collection System.

Frequency: Annually.

Affected Public: Not-for-profit institutions; Businesses or other for-profit; State, Local, or Tribal Gov't, SEAs or LEAs.

Reporting and Recordkeeping Hour Burden:

Responses: 69,290.

Burden Hours: 175,475.

Abstract: IPEDS is a system of surveys designed to collect basic data from approximately 6,600 Title IV postsecondary institutions in the United States. The IPEDS provides information on numbers of students enrolled, degrees completed, other awards earned, dollars expended, staff employed at postsecondary institutions, and cost and pricing information. The amendments to the Higher Education Act of 1998, Part C, Sec. 131, specify the need for the ''redesign of relevant data systems to improve the usefulness and timeliness of the data collected by such systems.'' As a consequence, in 2000 IPEDS began to collect data through a Web-based data collection system and to concentrate on those institutions that participate in Title IV federal student aid programs; other institutions may participate on a voluntary basis.

Requests for copies of the proposed information collection request may be accessed from *http://edicsweb.ed.gov,* by selecting the ''Browse Pending Collections'' link and by clicking on link number 3269. When you access the information collection, click on ''Download Attachments'' to view. Written requests for information should be addressed to U.S. Department of Education, 400 Maryland Avenue, SW., Potomac Center, 9th Floor, Washington, DC 20202–4700. Requests may also be electronically mailed to *ICDocketMgr@ed.gov* or faxed to 202–245–6623. Please specify the complete title of the information collection when making your request.

Comments regarding burden and/or the collection activity requirements should be electronically mailed to *ICDocketMgr@ed.gov.* Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339.

[FR Doc. E7–968 Filed 1–23–07; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

Office of Postsecondary Education; Overview Information; Fund for the Improvement of Postsecondary Education—Special Focus Competition: U.S.-Brazil Higher Education Consortia Program; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2007

Catalog of Federal Domestic Assistance (CFDA) Number: 84.116M.

Dates: Applications Available: January 24, 2007.

Deadline for Transmittal of Applications: April 30, 2007.

Deadline for Intergovernmental Review: July 14, 2007.

Eligible Applicants: Institutions of higher education (IHEs) or combinations of IHEs and other public and private nonprofit institutions and agencies.

Estimated Available Funds: The Administration has requested $21,989,000 for the Fund for the Improvement of Postsecondary Education for FY 2007, of which we intend to use $350,000 for the U.S.-Brazil Higher Education Consortia Program. The actual level of funding, if any, depends on final congressional action. However, we are inviting applications to allow enough time to complete the grant process if Congress appropriates funds for this program.

Estimated Range of Awards: $28,000–$30,000 for the first year. $200,000–$210,000 for four-year duration of grant.

Estimated Average Size of Awards: $29,000 for the first year. $205,000 for four-year duration of grant. $50,000 for short-term complementary grants. Short-term complementary grants support activities that complement partnerships between or among U.S. and Brazilian colleges and universities. The objectives of these activities (which may receive up to two years of funding) support the extension of projects through: (1) Outreach to local or regional communities in both countries; (2) scale-up of current activities to include

additional partners and organizations; or (3) the dissemination of project results. Proposed activities may add to work at groups of institutions currently funded by the U.S. Brazil Program or add to established partnerships not previously supported under the U.S. Brazil Program.

Maximum Award: We will reject any application that proposes a budget exceeding $215,000 for a single budget period of 12 months. The Assistant Secretary for Postsecondary Education may change the maximum amount through a notice published in the **Federal Register**.

Estimated Number of Awards: 12.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 24 months for short-term complementary grants. Up to 48 months for four-year grants.

Full Text of Announcement

I. Funding Opportunity Description

Purpose of Program: To provide grants or enter into cooperative agreements to improve postsecondary education opportunities by focusing on problem areas or improvement approaches in postsecondary education.

Priority: Under this competition, we are particularly interested in applications that address the following priority.

Invitational Priority: For FY 2007 this priority is an invitational priority. Under 34 CFR 75.105(c)(1), we do not give an application that meets this invitational priority a competitive or absolute preference over other applications.

This priority encourages proposals designed to support the formation of educational consortia of American and Brazilian institutions to support cooperation in the coordination of curricula, the exchange of students, and the opening of educational opportunities between the United States and Brazil. The invitational priority is issued in cooperation with Brazil. These awards support only the participation of U.S. institutions and students in these consortia. Brazilian institutions participating in any consortium proposal responding to the invitational priority may apply, respectively, to the Coordination of Improvement of Personnel of Superior Level (CAPES), Brazilian Ministry of Education, for additional funding under a separate but parallel Brazilian competition.

Program Authority: 20 U.S.C. 1138–1138d.

Applicable Regulations: The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 75, 77, 79, 80, 82, 84, 85, 86, 97, 98, and 99.

II. Award Information

Type of Award: Discretionary grants.

Estimated Available Funds: The Administration has requested $21,989,000 10 for the Fund for the Improvement of Postsecondary Education for FY 2007, of which we intend to use an estimated $350,000 for the U.S.-Brazil Higher Education Consortia Program. The actual level of funding, if any, depends on final congressional action. However, we are inviting applications to allow enough time to complete the grant process before the end of the current fiscal year, if Congress appropriates funds for this program.

Estimated Range of Awards: $28,000–$30,000 for the first year. $200,000–$210,000 for four-year duration of grant.

Estimated Average Size of Awards: $29,000 for the first year. $205,000 for four-year duration of grant. $50,000 for short-term complementary grants. Short-term complementary grants support activities that complement partnerships between or among U.S. and Brazilian colleges and universities. The objectives of these activities (which may receive up to two years of funding) support the extension of projects through: (1) Outreach to local or regional communities in both countries; (2) scale-up of current activities to include additional partners and organizations; or (3) the dissemination of project results. Proposed activities may add to work at groups of institutions currently funded by the U.S. Brazil Program or add to established partnerships not previously supported under the U.S. Brazil Program.

Maximum Award: We will reject any application that proposes a budget exceeding $215,000 for a single budget period of 12 months. The Assistant Secretary for Postsecondary Education may change the maximum amount through a notice published in the **Federal Register**.

Estimated Number of Awards: 12.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 24 months for short-term complementary grants. Up to 48 months for four-year grants.

III. Eligibility Information

1. *Eligible Applicants:* IHEs or combinations of IHEs and other public and private nonprofit institutions and agencies.

2. *Cost Sharing or Matching:* This program does not involve cost sharing or matching.

IV. Application and Submission Information

1. *Address to Request Application Package:* Sylvia W. Crowder, Fund for the Improvement of Postsecondary Education, U.S. Department of Education, 1990 K Street, NW., 6th floor, Washington, DC 20006–8544. Telephone: (202) 502–7514.

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

Individuals with disabilities may contact the Education Publications Center (ED Pubs), P.O. Box 1398, Jessup, MD 20794–1398. Telephone (toll free): 1–877–433–7827. FAX: (301) 470–1244. If you use a telecommunications device for the deaf (TDD), you may call (toll free): 1–877–576–7734.

You may also contact ED Pubs at its Web site: *http://www.ed.gov/pubs/edpubs.html* or you may contact ED Pubs at its e-mail address: *edpubs@inet.ed.gov*.

If you request an application from ED Pubs, be sure to identify this competition as follows: CFDA number 84.116M.

2. *Content and Form of Application Submission:* Requirements concerning the content of an application, together with the forms you must submit, are in the application package for this competition.

Page Limit: The application narrative (Part III of the application) is where you, the applicant, address the selection criteria that reviewers use to evaluate your application. You must limit Part III to the equivalent of no more than 20 pages (double spaced), using the following standards:

- A ''page'' is 8.5'' x 11'', on one side only, with 1'' margins at the top, bottom, and both sides.
- Double space (no more than three lines per vertical inch) all text in the application narrative, including titles, headings, footnotes, quotations, references, and captions, as well as all text in charts, tables, figures, and graphs.
- Use a font that is either 12 point or larger or no smaller than 10 pitch (characters per inch).

The page limit does not apply to Part I, the cover sheet; Part II, the budget section, including the narrative budget justification; Part IV, the assurances and certifications; or the one-page abstract, the resumes, the bibliography, or the letters of support. However, you must

include all of the application narrative in Part III.

We will reject your application if—

• You apply these standards and exceed the page limit; or

• You apply other standards and exceed the equivalent of the page limit.

3. *Submission Dates and Times:*

Applications Available: January 24, 2007.

Deadline for Transmittal of Applications: April 30, 2007.

Applications for grants under this program must be submitted electronically using the Grants.gov Apply site (Grants.gov). For information (including dates and times) about how to submit your application electronically or by mail or hand delivery if you qualify for an exception to the electronic submission requirement, please refer to section IV. 6. *Other Submission Requirements* in this notice.

Individuals with disabilities who need an accommodation or auxiliary aid in connection with the application process should contact the person listed under **FOR FURTHER INFORMATION CONTACT** in section VII of this notice.

We do not consider an application that does not comply with the deadline requirements.

Deadline for Intergovernmental Review: July 14, 2007.

4. *Intergovernmental Review:* This program is subject to Executive Order 12372 and the regulations in 34 CFR part 79. Information about Intergovernmental Review of Federal Programs under Executive Order 12372 is in the application package for this program.

5. *Funding Restrictions:* We reference regulations outlining funding restrictions in the *Applicable Regulations* section of this notice.

6. *Other Submission Requirements:* Applications for grants under this competition must be submitted electronically unless you qualify for an exception to this requirement in accordance with the instructions in this section.

a. *Electronic Submission of Applications.*

Applications for grants under the U.S. Brazil Higher Education Consortia Program, CFDA Number 84.116M must be submitted electronically using the Government wide Grants.gov Apply site at *http://www.Grants.gov*. Through this site, you will be able to download a copy of the application package, complete it offline, and then upload and submit your application. You may not e-mail an electronic copy of a grant application to us.

We will reject your application if you submit it in paper format unless, as described elsewhere in this section, you qualify for one of the exceptions to the electronic submission requirement *and* submit, no later than two weeks before the application deadline date, a written statement to the Department that you qualify for one of these exceptions. Further information regarding calculation of the date that is two weeks before the application deadline date is provided later in this section under *Exception to Electronic Submission Requirement.*

You may access the electronic grant application for the U.S. Brazil Higher Education Consortia Program at *http://www.Grants.gov*. You must search for the downloadable application package for this competition by the CFDA number. Do not include the CFDA number's alpha suffix in your search (e.g., search for 84.326, not 84.326A).

Please note the following:

• When you enter the Grants.gov site, you will find information about submitting an application electronically through the site, as well as the hours of operation.

• Applications received by Grants.gov are date and time stamped. Your application must be fully uploaded and submitted, and must be date and time stamped by the Grants.gov system no later than 4:30 p.m., Washington, DC time, on the application deadline date. Except as otherwise noted in this section, we will not consider your application if it is date and time stamped by the Grants.gov system later than 4:30 p.m., Washington, DC time, on the application deadline date. When we retrieve your application from Grants.gov, we will notify you if we are rejecting your application because it was date and time stamped by the Grants.gov system after 4:30 p.m., Washington, DC time, on the application deadline date.

• The amount of time it can take to upload an application will vary depending on a variety of factors including the size of the application and the speed of your Internet connection. Therefore, we strongly recommend that you do not wait until the application deadline date to begin the submission process through Grants.gov.

• You should review and follow the Education Submission Procedures for submitting an application through Grants.gov that are included in the application package for this competition to ensure that you submit your application in a timely manner to the Grants.gov system. You can also find the Education Submission Procedures pertaining to Grants.gov at *http://e-Grants.ed.gov/help/GrantsgovSubmissionProcedures.pdf*.

• To submit your application via Grants.gov, you must complete all steps in the Grants.gov registration process (see *http://www.grants.gov/applicants/get_registered.jsp*). These steps include (1) registering your organization, a multi-part process that includes registration with the Central Contractor Registry (CCR); (2) registering yourself as an Authorized Organization Representative (AOR); and (3) getting authorized as an AOR by your organization. Details on these steps are outlined in the Grants.gov 3-Step Registration Guide (see *http://www.grants.gov/section910/Grants.govRegistrationBrochure.pdf*). You also must provide on your application the same D–U–N–S Number used with this registration. Please note that the registration process may take five or more business days to complete, and you must have completed all registration steps to allow you to submit successfully an application via Grants.gov. In addition you will need to update your CCR registration on an annual basis. This may take three or more business days to complete.

• You will not receive additional point value because you submit your application in electronic format, nor will we penalize you if you qualify for an exception to the electronic submission requirement, as described elsewhere in this section, and submit your application in paper format.

• You must submit all documents electronically, including all information you typically provide on the following forms: Application for Federal Assistance (SF 424), the Department of Education Supplemental Information for SF 424, Budget Information—Non-Construction Programs (ED 524), and all necessary assurances and certifications. Please note that two of these forms—the SF 424 and the Department of Education Supplemental Information for SF 424—have replaced the ED 424 (Application for Federal Education Assistance).

• You must attach any narrative sections of your application as files in a .DOC (document), .RTF (rich text), or .PDF (Portable Document) format. If you upload a file type other than the three file types specified in this paragraph or submit a password-protected file, we will not review that material.

• Your electronic application must comply with any page-limit requirements described in this notice.

• After you electronically submit your application, you will receive from Grants.gov an automatic notification of receipt that contains a Grants.gov tracking number. (This notification indicates receipt by Grants.gov only, not receipt by the Department.) The

Department then will retrieve your application from Grants.gov and send a second notification to you by e-mail. This second notification indicates that the Department has received your application and has assigned your application a PR/Award number (an ED-specified identifying number unique to your application).

• We may request that you provide us original signatures on forms at a later date.

Application Deadline Date Extension in Case of Technical Issues with the Grants.gov System: If you are experiencing problems submitting your application through Grants.gov, please contact the Grants.gov Support Desk at 1–800–518–4726. You must obtain a Grants.gov Support Desk Case Number and must keep a record of it.

If you are prevented from electronically submitting your application on the application deadline date because of technical problems with the Grants.gov system, we will grant you an extension until 4:30 p.m., Washington, DC time, the following business day to enable you to transmit your application electronically or by hand delivery. You also may mail your application by following the mailing instructions described elsewhere in this notice.

If you submit an application after 4:30 p.m., Washington, DC time, on the application deadline date, please contact the person listed elsewhere in this notice under **FOR FURTHER INFORMATION CONTACT** and provide an explanation of the technical problem you experienced with Grants.gov, along with the Grants.gov Support Desk Case Number. We will accept your application if we can confirm that a technical problem occurred with the Grants.gov system and that that problem affected your ability to submit your application by 4:30 p.m., Washington, DC time, on the application deadline date. The Department will contact you after a determination is made on whether your application will be accepted.

Note: The extensions to which we refer in this section apply only to the unavailability of, or technical problems with, the Grants.gov system. We will not grant you an extension if you failed to fully register to submit your application to Grants.gov before the application deadline date and time or if the technical problem you experienced is unrelated to the Grants.gov system.

Exception to Electronic Submission Requirement: You qualify for an exception to the electronic submission requirement, and may submit your application in paper format, if you are unable to submit an application through the Grants.gov system because—

• You do not have access to the Internet; or

• You do not have the capacity to upload large documents to the Grants.gov system;

and

• No later than two weeks before the application deadline date (14 calendar days or, if the fourteenth calendar day before the application deadline date falls on a Federal holiday, the next business day following the Federal holiday), you mail or fax a written statement to the Department, explaining which of the two grounds for an exception prevent you from using the Internet to submit your application.

If you mail your written statement to the Department, it must be postmarked no later than two weeks before the application deadline date. If you fax your written statement to the Department, we must receive the faxed statement no later than two weeks before the application deadline date.

Address and mail or fax your statement to: Sylvia W. Crowder, U.S. Department of Education, 1990 K Street, NW., room 6154, Washington, DC 20006–8544.

FAX: (202) 502–7877.

Your paper application must be submitted in accordance with the mail or hand delivery instructions described in this notice.

b. *Submission of Paper Applications by Mail.*

If you qualify for an exception to the electronic submission requirement, you may mail (through the U.S. Postal Service or a commercial carrier) your application to the Department. You must mail the original and two copies of your application, on or before the application deadline date, to the Department at the applicable following address:

By mail through the U.S. Postal Service:

U.S. Department of Education, Application Control Center, *Attention:* (CFDA Number 84.116M), 400 Maryland Avenue, SW., Washington, DC 20202–4260

or

By mail through a commercial carrier:

U.S. Department of Education, Application Control Center, Stop 4260, *Attention:* (CFDA Number 84.116M), 7100 Old Landover Road, Landover, MD 20785–1506.

Regardless of which address you use, you must show proof of mailing consisting of one of the following:

(1) A legibly dated U.S. Postal Service postmark.

(2) A legible mail receipt with the date of mailing stamped by the U.S. Postal Service.

(3) A dated shipping label, invoice, or receipt from a commercial carrier.

(4) Any other proof of mailing acceptable to the Secretary of the U.S. Department of Education.

If you mail your application through the U.S. Postal Service, we do not accept either of the following as proof of mailing:

(1) A private metered postmark.

(2) A mail receipt that is not dated by the U.S. Postal Service.

If your application is postmarked after the application deadline date, we will not consider your application.

Note: The U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, you should check with your local post office.

c. *Submission of Paper Applications by Hand Delivery.*

If you qualify for an exception to the electronic submission requirement, you (or a courier service) may deliver your paper application to the Department by hand. You must deliver the original and two copies of your application by hand, on or before the application deadline date, to the Department at the following address: U.S. Department of Education, Application Control Center, *Attention:* (CFDA Number 84.116M), 550 12th Street, SW., Room 7041, Potomac Center Plaza, Washington, DC 20202–4260. The Application Control Center accepts hand deliveries daily between 8 a.m. and 4:30 p.m., Washington, DC time, except Saturdays, Sundays, and Federal holidays.

Note for Mail or Hand Delivery of Paper Applications: If you mail or hand deliver your application to the Department—

(1) You must indicate on the envelope and—if not provided by the Department—in Item 11 of the SF 424 the CFDA number, including suffix letter, if any, of the competition under which you are submitting your application; and

(2) The Application Control Center will mail to you a notification of receipt of your grant application. If you do not receive this notification within 15 business days from the application deadline date, you should call the U.S. Department of Education Application Control Center at (202) 245–6288.

V. Application Review Information

1. *Selection Criteria:* The selection criteria for this competition are from 34 CFR 75.210 of EDGAR and are listed in the application package.

2. *Review and Selection Process:* Additional factors we consider in selecting an application for an award are applications that demonstrate a bi-

lateral, innovative U.S.-Brazilian approach to training and education.

VI. Award Administration Information

1. *Award Notices:* If your application is successful, we notify your U.S. Representative and U.S. Senators and send you a Grant Award Notification (GAN). We may also notify you informally.

If your application is not evaluated or not selected for funding, we notify you.

2. *Administrative and National Policy Requirements:* We identify administrative and national policy requirements in the application package and reference these and other requirements in the *Applicable Regulations* section of this notice.

We reference the regulations outlining the terms and conditions of an award in the *Applicable Regulations* section of this notice and include these and other specific conditions in the GAN. The GAN also incorporates your approved application as part of your binding commitments under the grant.

3. *Reporting:* At the end of your project period, you must submit a final performance report, including financial information, as directed by the Secretary. If you receive a multi-year award, you must submit an annual performance report that provides the most current performance and financial expenditure information as specified by the Secretary in 34 CFR 75.118.

4. *Performance Measures:* The success of this competition depends upon (1) the extent to which funded projects are being replicated (i.e., adopted or adapted by others); and (2) the manner in which projects are being institutionalized and continued after funding. These two performance measures constitute the Fund for the Improvement of Postsecondary Education's (FIPSE's) indicators of the success of the program. If funded, you will be asked to collect and report data from your project on steps taken toward achieving these goals. Consequently, applicants are advised to include these two outcomes in conceptualizing the design, implementation, and evaluation of their proposed projects. Institutionalization and replication are important outcomes that ensure the ultimate success of international consortia funded through this program.

VII. Agency Contact

For Further Information Contact: Sylvia W. Crowder, Fund for the Improvement of Postsecondary Education, U.S.-Brazil Higher Education Consortia Program, 1990 K Street, NW., 6th floor, Washington, DC 20006–8544. Telephone: (202) 502–7514.

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

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

VIII. Other Information

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/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.*

Dated: January 18, 2007.

James F. Manning,

Delegated the Authority of Assistant Secretary for Postsecondary Education.

[FR Doc. E7–1016 Filed 1–23–07; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

Office of Postsecondary Education; Overview Information: International Research and Studies Program; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2007

Catalog of Federal Domestic Assistance (CFDA) Number: 84.017A.

Dates: Applications Available: January 24, 2007.

Deadline for Transmittal of Applications: March 12, 2007.

Eligible Applicants: Public and private agencies, organizations, institutions, and individuals.

Estimated Available Funds: The Administration has requested $5,822,000 for the International Research and Studies Program for FY 2007, of which we intend to use an estimated $1,553,000 for new awards. The actual level of funding, if any, depends on final congressional action. However, we are inviting applications to allow enough time to complete the grant process if Congress appropriates funds for this program.

Estimated Range of Awards: $50,000–$200,000 per year.

Estimated Average Size of Awards: $129,420.

Estimated Number of Awards: 12.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 36 months.

Full Text of Announcement

I. Funding Opportunity Description

Purpose of Program: The International Research and Studies Program provides grants to conduct research and studies to improve and strengthen instruction in modern foreign languages, area studies, and other international fields.

Priority: In accordance with 34 CFR 75.105(b)(2)(ii), these priorities are from the regulations for this program (34 CFR 660.10, 660.34).

Competitive Preference Priorities: For FY 2007 these priorities are competitive preference priorities. Under 34 CFR 75.105(c)(2)(i) we award up to an additional five points to an application, depending on the extent to which the application meets this priority.

These priorities are:

Competitive Preference Priority 1—Instructional Materials Applications

This priority is:

The development and publication of instructional materials that serve to enhance international understanding for use by students and teachers of the following critical language areas: Arabic, Chinese, Japanese, Korean, Russian, as well as Indic, Iranian, and Turkic language families.

Competitive Preference Priority 2—Research, Surveys and Studies Applications

This priority is:

Research, surveys, proficiency assessments, or studies that foster linkages between K–12 and postsecondary language training.

Program Authority: 20 U.S.C. 1125.

Applicable Regulations: (a) The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 75, 77, 80, 82, 84, 85, 86, 97, 98, and 99. (b) The regulations for this program in 34 CFR parts 655 and 660.

Note: The regulations in 34 CFR Part 86 apply to institutions of higher education only.

II. Award Information

Type of Award: Discretionary grants.

Estimated Available Funds: The Administration has requested $5,822,000 for the International Research and Studies Program for FY 2007, of which we intend to use an estimated $1,553,000 for new awards. The actual level of funding, if any, depends on final congressional action. However, we are inviting applications to allow enough time to complete the grant process if Congress appropriates funds for this program.

Estimated Range of Awards: $50,000–$200,000 per year.

Estimated Average Size of Awards: $129,420.

Estimated Number of Awards: 12.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 36 months.

III. Eligibility Information

1. *Eligible Applicants:* Public and private agencies, organizations, institutions, and individuals.

2. *Cost Sharing or Matching:* This program does not involve cost sharing or matching.

IV. Application and Submission Information

1. *Address to Request Application Package:* Mr. Ed McDermott, U.S. Department of Education, 1990 K Street, NW., suite 600, Washington, DC 20006–8521. Telephone: (202) 502–7636 or by e-mail: *ed.mcdermott@ed.gov.*

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

Individuals with disabilities may obtain a copy of the application package in an alternative format (e.g., Braille, large print, audiotape, or computer diskette) by contacting the program contact person listed in this section.

2. *Content and Form of Application Submission:* Requirements concerning the content of an application, together with the forms you must submit, are in the application package and instructions for this program. Page Limit: The application narrative is where you, the applicant, address the selection criteria that reviewers use to evaluate your application. You must limit the section of the narrative that addresses the selection criteria to the equivalent of no more than 30 pages, using the following standards:

• A ''page'' is 8.5″ x 11″, on one side only, with 1″ margins at the top, bottom, and both sides. Page numbers and an identifier may be outside of the 1″ margin.

• Double space (no more than three lines per vertical inch) all text in the application narrative, *except* titles, headings, footnotes, quotations, references, captions and all text in charts, tables, and graphs may be single spaced. Charts, tables, figures, and graphs in the application narrative count toward the page limit.

• Use a font that is either 12-point or larger or no smaller than 10 pitch (characters per inch). However, you may use a 10-point font in charts, tables, figures, and graphs.

• Use one of the following fonts: Times New Roman, Courier, Courier New or Arial. Applications submitted in any other font (including Times Roman and Arial Narrow) will be rejected.

• The page limit does not apply to Part I, the Application for Federal Assistance face sheet (SF 424); the supplemental information form required by the Department of Education; Part II, the budget information summary form (ED Form 524); and Part IV, the assurances and certifications. The page limit also does not apply to a table of contents. If you include any attachments or appendices not specifically requested, these items will be counted as part of the Program Narrative (Part III) for purposes of the page limit requirement. You must include your complete response to the selection criteria in the program narrative.

We will reject your application if—

• You apply these standards and exceed the page limit; or

• You apply other standards and exceed the Equivalent of the page limit.

3. *Submission Dates and Times:*

Applications Available: January 24, 2007.

Deadline for Transmittal of Applications: March 12, 2007. Applications for grants under this program must be submitted electronically using the Grants.gov Apply site (Grants.gov). For information (including dates and times) about how to submit your application electronically or by mail or hand delivery if you qualify for an exception to the electronic submission requirement, please refer to Section IV. 6. *Other submission Requirements* in this notice.

Individuals with disabilities who need an accommodation or auxiliary aid in connection with the application process should contact the person listed under **FOR FURTHER INFORMATION CONTACT** in section VII of this notice.

We do not consider an application that does not comply with the deadline requirements.

4. *Intergovernmental Review:* This program is not subject to Executive Order 12372 and the regulations in 34 CFR part 79.

5. *Funding Restrictions:* We reference the regulations outlining funding restrictions in the *Applicable Regulations* section of this notice.

6. *Other Submission Requirements:* Applications for grants under this program must be submitted electronically unless you qualify for an exception to this requirement in accordance with the instructions in this section.

a. *Electronic Submission of Applications.*

Applications for grants under the International Research and Studies Program—CFDA Number 84.017A must be submitted electronically using the Grants.gov Apply site at: *http://www.grants.gov.* Through this site, you will be able to download a copy of the application package, complete it offline, and then upload and submit your application. You may not e-mail an electronic copy of a grant application to us.

We will reject your application if you submit it in paper format unless, as described elsewhere in this section, you qualify for one of the exceptions to the electronic submission requirement *and* submit, no later than two weeks before the application deadline date, a written statement to the Department that you qualify for one of these exceptions. Further information regarding calculation of the date that is two weeks before the application deadline date is provided later in this section under *Exception to Electronic Submission Requirement.*

You may access the electronic grant application for the International Research and Studies Program at: *http://www.grants.gov.* You must search for the downloadable application package for this program by the CFDA number. Do not include the CFDA number's alpha suffix in your search.

Please note the following:

• When you enter the Grants.gov site, you will find information about submitting an application electronically through the site, as well as the hours of operation.

• Applications received by Grants.gov are time and date stamped. Your application must be fully uploaded and submitted, and must be date/time stamped by the Grants.gov system no later than 4:30 p.m., Washington, DC time, on the application deadline date. Except as otherwise noted in this section, we will not consider your application if it is date/time stamped by the Grants.gov system later than 4:30 p.m., Washington, DC time, on the application deadline date. When we retrieve your application from Grants.gov, we will notify you if we are

rejecting your application because it was date/time stamped by the Grants.gov system after 4:30 p.m., Washington, DC time, on the application deadline date.

• The amount of time it can take to upload an application will vary depending on a variety of factors including the size of the application and the speed of your Internet connection. Therefore, we strongly recommend that you do not wait until the application deadline date to begin the submission process through Grants.gov.

• You should review and follow the Education Submission Procedures for submitting an application through Grants.gov that are included in the application package for this program to ensure that you submit your application in a timely manner to the Grants.gov system. You can also find the Education Submission Procedures pertaining to Grants.gov at: *http://e-Grants.ed.gov/help/GrantsgovSubmissionProcedures.pdf.*

• To submit your application via Grants.gov, you must complete all the steps in the Grants.gov registration process (see *http://www.grants.gov/applicants/get_registered.jsp*). These steps include (1) registering your organization, (2) registering yourself as an Authorized Organization Representative (AOR), and (3) getting authorized as an AOR by your organization. Details on these steps are outlined in the Grants.gov 3-Step Registration Guide (see *http://www.grants.gov/section910/Grants.govRegistrationBrochure.pdf*). You also must provide on your application the same D-U-N-S Number used with this registration. Please note that the registration process may take five or more business days to complete, and you must have completed all registration steps to allow you to successfully submit an application via Grants.gov.

For individuals who plan to submit a grant application, you must follow the registration steps for individuals (see *http://www.grants.gov/applicants/get_registered.jsp*).

• You will not receive additional point value because you submit your application in electronic format, nor will we penalize you if you qualify for an exception to the electronic submission requirement, as described elsewhere in this section, and submit your application in paper format.

• You must submit all documents electronically including all information typically included on the Application for Federal Assistance (SF 424), Budget Information—Non-Construction Programs (ED 524), and all necessary assurances and certifications. You must attach any narrative sections of your application as files in a .DOC (document), .RTF (rich text), or .PDF (Portable Document) format. If you upload a file type other than the three file types specified above or submit a password protected file, we will not review that material.

• Your electronic application must comply with any page limit requirements described in this notice.

• After you electronically submit your application, you will receive an automatic acknowledgment from Grants.gov that contains a Grants.gov tracking number. The Department will retrieve your application from Grants.gov and send you a second confirmation by e-mail that will include a PR/Award number (an ED-specified identifying number unique to your application).

• We may request that you provide us original signatures on forms at a later date.

Application Deadline Date Extension in Case of Technical Issues with the Grants.gov System: If you are prevented from electronically submitting your application on the application deadline date because of technical problems with the Grants.gov system, we will grant you an extension until 4:30 p.m., Washington, DC time, the following business day to enable you to transmit your application electronically, or by hand delivery. You also may mail your application by following the mailing instructions as described elsewhere in this notice. If you submit an application after 4:30 p.m., Washington, DC time, on the deadline date, please contact either of the persons listed elsewhere in this notice under **FOR FURTHER INFORMATION CONTACT**, and provide an explanation of the technical problem you experienced with Grants.gov, along with the Grants.gov Support Desk Case Number (if available). We will accept your application if we can confirm that a technical problem occurred with the Grants.gov system and that that problem affected your ability to submit your application by 4:30 p.m., Washington, DC time, on the application deadline date. The Department will contact you after a determination is made on whether your application will be accepted.

Note: Extensions referred to in this section apply only to the unavailability of or technical problems with the Grants.gov system. We will not grant you an extension if you failed to fully register to submit your application to Grants.gov before the deadline date and time or if the technical problem you experienced is unrelated to the Grants.gov system.

Exception to Electronic Submission Requirement: You qualify for an exception to the electronic submission requirement, and may submit your application in paper format, if you are unable to submit an application through the Grants.gov system because—

• You do not have access to the Internet; or

• You do not have the capacity to upload large documents to the Grants.gov system;

and

• No later than two weeks before the application deadline date (14 calendar days or, if the fourteenth calendar day before the application deadline date falls on a Federal holiday, the next business day following the Federal holiday), you mail or fax a written statement to the Department, explaining which of the two grounds for an exception prevent you from using the Internet to submit your application. If you mail your written statement to the Department, it must be postmarked no later than two weeks before the application deadline date. If you fax your written statement to the Department, we must receive the faxed statement no later than two weeks before the application deadline date.

Address and mail or fax your statement to: Ed McDermott, U.S. Department of Education, 1990 K Street, NW., 6th Floor, Washington, DC 20006–8521. FAX: (202) 502–7860.

Your paper application must be submitted in accordance with the mail or hand delivery instructions described in this notice.

b. *Submission of Paper Applications by Mail.*

If you qualify for an exception to the electronic submission requirement, you may mail (through the U.S. Postal Service or a commercial carrier) your application to the Department. You must mail the original and two copies of your application, on or before the application deadline date, to the Department at the applicable following address:

By mail through the U.S. Postal Service:
U.S. Department of Education, Application Control Center, *Attention:* (CFDA Number 84.017A), 400 Maryland Avenue, SW., Washington, DC 20202–4260

or

By mail through a commercial carrier:
U.S. Department of Education, Application Control Center—Stop 4260, *Attention:* (CFDA Number 84.017A), 7100 Old Landover Road, Landover, MD 20785–1506.

Regardless of which address you use, you must show proof of mailing consisting of one of the following:

(1) A legibly dated U.S. Postal Service postmark,

(2) A legible mail receipt with the date of mailing stamped by the U.S. Postal Service,

(3) A dated shipping label, invoice, or receipt from a commercial carrier, or

(4) Any other proof of mailing acceptable to the Secretary of the U.S. Department of Education.

If you mail your application through the U.S. Postal Service, we do not accept either of the following as proof of mailing:

(1) A private metered postmark, or

(2) A mail receipt that is not dated by the U.S. Postal Service.

If your application is postmarked after the application deadline date, we will not consider your application.

Note: The U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, you should check with your local post office.

c. *Submission of Paper Applications by Hand Delivery.*

If you qualify for an exception to the electronic submission requirement, you (or a courier service) may deliver your paper application to the Department by hand. You must deliver the original and two copies of your application, by hand, on or before the application deadline date, to the Department at the following address: U.S. Department of Education, Application Control Center, Attention: (CFDA Number 84.017A), 550 12th Street, SW., Room 7041, Potomac Center Plaza, Washington, DC 20202–4260.

The Application Control Center accepts hand deliveries daily between 8 a.m. and 4:30 p.m., Washington, DC time, except Saturdays, Sundays, and Federal holidays.

Note for Mail or Hand Delivery of Paper Applications: If you mail or hand deliver your application to the Department:

(1) You must indicate on the envelope and—if not provided by the Department—in Item 11 of the Application for Federal Education Assistance (SF 424) the CFDA number—and suffix letter, if any—of the competition under which you are submitting your application.

(2) The Application Control Center will mail a grant application receipt acknowledgment to you. If you do not receive the grant application receipt acknowledgment within 15 business days from the application deadline date, you should call the U.S. Department of Education Application Control Center at (202) 245–6288.

V. Application Review Information

Selection Criteria: The selection criteria for this program are from 34 CFR 655.31, 660.31, 660.32, and 660.33 and are as follows—

For instructional materials—

Need for the project. (10 points); Potential for the use of materials in programs to others (5 points); Account of related materials (10 points); Likelihood of achieving results (10 points); Expected contribution to other programs (10 points); Plan of operation (10 points); Quality of key personnel (10 points); Budget and cost effectiveness (5 points); Evaluation plan (15 points); Adequacy of resources (5 points); Description of final format (5 points); and Provisions for pre-testing and revision (5 points).

For research, surveys and studies—

Need for the project (10 points); Usefulness of expected results (10 points); Development of new knowledge (10 points); Formulation of problems and knowledge of related research (10 points); Specificity of statement of procedures (5 points; Adequacy of methodology and scope of project (10 points); Plan of operation (10 points); Quality of key personnel (10 points); Budget and cost effectiveness (5 points); Evaluation plan (15 points); and Adequacy of resources (5 points).

VI. Award Administration Information

1. *Award Notices:* If your application is successful, we notify your U.S. Representative and U.S. Senators and send you a Grant Award Notification (GAN). We may also notify you informally.

If your application is not evaluated or not selected for funding, we notify you.

2. *Administrative and National Policy Requirements:* We identify administrative and national policy requirements in the application package and reference these and other requirements in the *Applicable Regulations* section of this notice.

We reference the regulations outlining the terms and conditions of an award in the *Applicable Regulations* section of this notice and include these and other specific conditions in the GAN. The GAN also incorporates your approved application as part of your binding commitments under the grant.

3. *Reporting:* At the end of your project period, you must submit a final performance report, including financial information, as directed by the Secretary. If you receive a multi-year award, you must submit an annual performance report that provides the most current performance and financial expenditure information as specified by the Secretary in 34 CFR 75.118. Grantees are required to use the electronic data instrument Evaluation of Exchange, Language, International, and Area Studies (EELIAS) to complete the final report. Electronically formatted instructional materials such as CDs, DVDs, videos, computer diskettes and books produced by the grantee as part of the grant approved activities are also acceptable as final reports.

4. *Performance Measures:* Under the Government Performance and Results Act of 1993 (GPRA), the objective for the IRS program is to support the development of materials and conduct of research in less commonly taught languages and area studies to inform international education.

The Department will use the following measures to evaluate its success in meeting this objective.

IRS Performance Measure 1: Number of outreach activities that are adopted or further disseminated within a year, divided by the total number of IRS projects conducted in the current year.

IRS Performance Measure 2: Percent of projects judged to be successful by the program officer, based on a review of information provided in annual performance reports.

The information provided by grantees in their performance reports submitted via the electronic Evaluation of Exchange, Language, International, and Area Studies system will be the source of data for these measures.

VII. Agency Contact

For Further Information Contact: Ed McDermott, International Education Programs Service, U.S. Department of Education, 1990 K Street, NW., suite 6082, Washington, DC 20006–8521. *Telephone:* (202) 502–7636 or by *e-mail: ed.mcdermott@ed.gov*

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

Individuals with disabilities may obtain this document in an alternative format (e.g., Braille, large print, audiotape, or computer diskette) on request to one of the program contact persons listed in this section.

VIII. Other Information

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/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.*

Dated: January 18, 2007.

James F. Manning,

Delegated the Authority of Assistant Secretary for Postsecondary Education.

[FR Doc. E7–1019 Filed 1–23–07; 8:45 am]

BILLING CODE 4000–01–P

ELECTION ASSISTANCE COMMISSION

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Election Assistance Commission (EAC).

ACTION: Notice and request for comments.

SUMMARY: The EAC, as part of its continuing effort to reduce paperwork and respondent burden in accordance with the Paperwork Reduction Act of 1995, invites the general public and other Federal agencies to take this opportunity to comment on a proposed information collection. 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 information collection, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the information collection on respondents. Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

DATES: Written comments must be submitted on or before March 24, 2007.

ADDRESSES: Submit comments and recommendations on the proposed information collection in writing to the U.S. Election Assistance Commission, 1225 New York Avenue, NW., Suite 1100, Washington, DC 20005, ATTN: Brian Hancock, Director of Voting System Certification; or via fax to 202–566–1392.

FOR FURTHER INFORMATION CONTACT: To request more information on this proposed information collection or to obtain a copy of the EAC Voting System Testing and Certification Program Manual, please, write to the above address or call Brian Hancock, Director of Voting System Certification, 1225 New York Avenue, Suite 1100, Washington, DC, (202) 566–3100; Fax: (202) 566–1392. You may also view the proposed collection instrument by visiting the EAC Web site at *http://www.eac.gov.*

SUPPLEMENTARY INFORMATION:

Title: EAC Voting System Testing and Certification Program Manual.

OMB Number: 3265–0004.

Type of Review: Extension with revisions of a currently approved collection.

Needs and Uses: HAVA requires that the EAC certify and decertify voting systems (42 U.S.C. 15371). Section 231(a)(1) of HAVA specifically requires to EAC to ''* * * provide for the certification, decertification and recertification of voting system hardware and software by accredited laboratories.'' The EAC will perform this mandated function through the use of its Voting System Testing and Certification Program. Voting systems certified by the EAC will be used by citizens to cast votes in Federal Elections. Therefore, it is paramount that the program operates in a reliable and effective manner. In order to certify a voting system, it is necessary for the EAC to (1) Require voting system manufacturers to submit information about their organization and the voting systems they submit for testing and certification; (2) require voting system manufacturers to retain voting system technical and test records; and (3) to provide a mechanism for election officials to report events which may effect a voting system's certification.

Affected Public: Business or other for-profit institutions and state and local election officials.

Estimated Number of Respondents: 94 annually.

Total Annual Responses: 99 annually.

Estimated Total Annual Burden Hours: 119 hours.

Thomas R. Wilkey,

Executive Director, U.S. Election Assistance Commission.

[FR Doc. 07–290 Filed 1–23–07; 8:45 am]

BILLING CODE 6820–KF–M

DEPARTMENT OF ENERGY

Office of Fossil Energy; Ultra-Deepwater Advisory Committee: Solicitation of Nominations for Appointment as a Member to the Ultra-Deepwater Advisory Committee

AGENCY: Department of Energy.

ACTION: Notice.

SUMMARY: The U.S. Department of Energy (DOE) Office of Fossil Energy is soliciting nominations for candidates to serve as members of the Ultra-Deepwater Advisory Committee. The Advisory Committee shall advise the Secretary of Energy on the development and implementation of programs under Subtitle J, Section 999 of the Energy Policy Act of 2005 (EPACT) related to ultra-deepwater natural gas and other petroleum resources and review and provide written comments on the annual plan as described in this subtitle of the EPACT. The membership of the Advisory Committee must be in accordance with the provisions of the Federal Advisory Committee Act and some members of the Advisory Committee may be appointed as special Government employees of the Department of Energy.

DATES: Nominations must be received by February 2, 2007.

FOR FURTHER INFORMATION CONTACT: For information regarding this Request for Nominations please contact Ms. Elena Melchert, Mr. Bill Hochheiser, or Mr. James Slutz, Designated Federal Official (DFO), Ultra-Deepwater Advisory Committee, at *ultradeepwater@hq.doe.gov* or (202) 586–5600. Complete text of Subtitle J, Section 999 of the Energy Policy Act of 2005 can be found on the DOE Office of Fossil Energy Web site at *http://www.fe.doe.gov/programs/oilgas/advisorycommittees/UltraDeepwater.html.*

SUPPLEMENTARY INFORMATION:

Background: Under Subtitle J, Section 999, the Secretary of Energy is required to carry out a program of research, development, demonstration, and commercial application of technologies for ultra-deepwater and unconventional natural gas and other petroleum resource exploration and production, including addressing the technology challenges for small producers, safe operations, and environmental mitigation (including reduction of greenhouse gas emissions and sequestration of carbon). The activities should maximize the value of natural gas and other petroleum resources of the United States by increasing the supply

of such resources through reducing the cost and increasing the efficiency of exploration for and production of such resources while improving safety and minimizing environmental impacts. In support of this subtitle, the Secretary will contract with a corporation that is structured as a program consortium [REF: Energy Policy Act of 2005, Pub. L. No. 109–58, § 999B, 119 Stat. 917–21] to administer the activities outlined above.

The program should include improving safety and minimizing environmental impacts of activities involving ultra-deepwater architecture and technology, including drilling to formations in the Outer Continental Shelf to depths greater than 15,000 feet. Projects should focus on the development and demonstration of individual exploration and production technologies as well as integrated systems technologies including new architectures for production in ultra-deepwater (water depths greater than or equal to 1500 meters). The Secretary is also required to prepare an annual plan that describes the ongoing and prospective activities of the program.

In May 2006, the Secretary established the Ultra-Deepwater Advisory Committee to advise the Department on the development and implementation of programs related to ultra-deepwater natural gas and other petroleum resources, and to review and comment on the annual plan.

Qualifications for membership of this committee include: (A) Individuals with extensive research experience or operational knowledge of offshore natural gas and other petroleum exploration and production; (B) individuals broadly representative of the affected interests in ultra-deepwater natural gas and other petroleum production, including interests in environmental protection and safe operations; (C) no individuals who are Federal employees; and (D) no individuals who are board members, officers, or employees of the program consortium [REF: Energy Policy Act of 2005, Pub. L. No. 109–58, § 999D(a)(2), 119 Stat. 922].

How to Apply: Candidates who wish to be considered for appointment to the Committee must provide the requested information by February 2, 2007. The format to be used for nomination is a resume that addresses the specific qualification criteria stated in Section 999D(a)(2) of the EPACT and other information. Details and specifications for preparing the resume are summarized below and can be found at *http://www.fe.doe.gov/programs/oilgas/advisorycommittees/UltraDeepwater.html.*

Resume must address all the following: (Incomplete resumes will not be considered): Full name; Professional Title (if applicable); Employment Affiliation; Address; Phone; E-mail; Organization Being Represented, if applicable; Organization Address; Organization Phone Number; Organization website address; Brief description of organization being represented; Education; Professional Experience related to research or operational knowledge of offshore natural gas and other petroleum resource exploration and production, and related experience broadly associated with the affected interests in ultra-deepwater natural gas and other petroleum resource production, including interests in environmental protection and safe operations; Affiliations and Awards; Contributions to the Committee: please provide a statement that highlights the key contributions you hope to make if appointed to the Committee; Relationship to the program consortium [REF: Energy Policy Act of 2005, Pub. L. No. 109–58, § 999B, 119 Stat. 917–21], please provide a statement that highlights your degree of involvement with this organization, especially include any leadership and/or strategic planning activities, note that only board members, officers, and employees of the program consortium are ineligible for appointment to this Committee.

In accordance with the Federal Advisory Committee Act [REF: 5 U.S.C. App. 2], this committee's membership will be balanced in terms of the points of view represented. All resumes must be received by February 2, 2007. Candidates may use the form found at *http://www.fe.doe.gov/programs/oilgas/advisorycommittees/UltraDeepwater.html* to address the required resume elements. Candidates who wish to be considered for appointment to the Committee must submit a resume via one of the following methods.

1. E-mail to *UltraDeepwater@hq.doe.gov* (with resume embedded within the body of the e-mail message; no attachment),

2. Facsimile to 202/586–6221, Attn: UDAC Nomination,

3. Overnight delivery service to: U.S. Department of Energy, Mail Stop FE–30, 1000 Independence Avenue, SW., Washington, DC 20585. No resumes should be sent via the U.S. Postal Service due to extensive security processing that can damage documents and result in extensive delays.

4. Resume Submission Online at *http://www.fe.doe.gov/programs/oilgas/advisorycommittees/UltraDeepwater.html.*

For security reasons, no email attachments are allowed, nor will they be opened if included.

The closing date for receipt of resumes is February 2, 2007. All resumes received will be acknowledged within 10 working days from date of receipt. Members will have their travel expenses reimbursed, but their time will not be compensated. Some members of the Advisory Committee may be appointed as special Government employees of the Department of Energy. Questions regarding the nomination process should be directed to B. Hochheiser or E. Melchert at 202/586–5600.

Issued in Washington, DC on January 18, 2007.

Rachel M. Samuel,

Deputy Advisory Committee, Management Officer.

[FR Doc. E7–973 Filed 1–23–07; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Office of Fossil Energy; Unconventional Resources Technology Advisory Committee: Solicitation of Nominations for Appointment as a Member to the Unconventional Resources Technology Advisory Committee

AGENCY: Department of Energy.

ACTION: Notice.

SUMMARY: The U.S. Department of Energy (DOE) Office of Fossil Energy is soliciting nominations for candidates to serve as members of the Unconventional Resources Technology Advisory Committee. The Advisory Committee shall advise the Secretary of Energy on the development and implementation of programs under Subtitle J, Section 999 of the Energy Policy Act of 2005 (EPACT) related to onshore unconventional natural gas and other petroleum resources, and review and provide written comments on the annual plan as also described in this subtitle of the EPACT. The membership of the Advisory Committee must be in accordance with the provisions of the Federal Advisory Committee Act and some members of the Advisory Committee may be appointed as special Government employees of the Department of Energy.

DATES: Nominations must be received by February 2, 2007.

FOR FURTHER INFORMATION CONTACT: For information regarding this Request for Nominations please contact Ms. Elena

Melchert, Mr. Bill Hochheiser, or Mr. James Slutz, Designated Federal Official (DFO), Unconventional Resources Technology Advisory Committee, at *UnconventionalResources@hq.doe.gov* or (202) 586–5600. Complete text of Subtitle J, Section 999 of the Energy Policy Act of 2005 can be found on the DOE Office of Fossil Energy Web site at *http://www.fe.doe.gov/programs/oilgas/advisorycommittees/UnconventionalResources.html.*

SUPPLEMENTARY INFORMATION:

Background: Under Subtitle J, Section 999, the Secretary of Energy is required to carry out a program of research, development, demonstration, and commercial application of technologies for ultra-deepwater and unconventional natural gas and other petroleum resource exploration and production, including addressing the technology challenges for small producers, safe operations, and environmental mitigation (including reduction of greenhouse gas emissions and sequestration of carbon). The activities should maximize the value of natural gas and other petroleum resources of the United States by increasing the supply of such resources through reducing the cost and increasing the efficiency of exploration for and production of such resources while improving safety and minimizing environmental impacts. In support of this subtitle, the Secretary will contract with a corporation that is structured as a program consortium [REF: Energy Policy Act of 2005, Pub. L. No. 109–58, § 999B, 119 Stat. 917–21] to administer the activities outlined above.

The program should include improving safety and minimizing environmental impacts of activities onshore unconventional natural gas and other petroleum resource exploration and production technology. Projects should focus on areas including advanced coalbed methane, deep drilling, natural gas production from tight sands, natural gas production from gas shales, stranded gas, innovative exploration and production techniques, enhanced recovery techniques, and environmental mitigation of unconventional natural gas and other petroleum resources exploration and production. The Secretary is also required to prepare an annual plan that describes the ongoing and prospective activities of the program.

In May 2006, the Secretary established the Unconventional Resources Technology Advisory Committee to advise the Department on the development and implementation of programs related to unconventional natural gas and other petroleum resources, and to review and comment on the annual plan.

Qualifications for membership of this committee include: (A) Employees or representatives of independent producers of natural gas and other petroleum, including small producers; (B) individuals with extensive research experience or operational knowledge of unconventional natural gas and other petroleum resource exploration and production; (C) individuals broadly representative of the affected interests in unconventional natural gas and other petroleum resource exploration and production, including interests in environmental protection and safe operations; (D) individuals with expertise in the various geographic areas of potential supply of unconventional onshore natural gas and other petroleum in the United States; (E) no individuals who are Federal employees; and (F) no individuals who are board members, officers, or employees of the program consortium [REF: Energy Policy Act of 2005, Pub. L. No. 109–58, § 999D(b)(2), 119 Stat 922–23].

How to Apply: Candidates who wish to be considered for appointment to the Committee must provide the required information by February 2, 2007. The format to be used for nomination is a resume that addresses the specific qualification criteria stated in Section 999D(b)(2) of the EPACT and other information. Details and specifications for preparing the resume are summarized below and can be found at *http://www.fe.doe.gov/programs/oilgas/advisorycommittees/UnconventionalResources.html.*

Resume must address the following: (Incomplete resumes will not be considered): Full name; Professional Title (if applicable); Employment Affiliation; Address; Phone; E-mail; Organization Being Represented, if applicable; Organization Address; Organization Phone Number; Organization Web site address; Brief description of organization being represented; Education; Professional Experience related to employment or representation of independent producers of natural gas and other petroleum, including small producers, research experience or operational knowledge of unconventional natural gas and other petroleum resource exploration and production, experience broadly representative of the affected interests in unconventional natural gas and other petroleum resource exploration and production, including interests in environmental protection and safe operations, expertise in the various geographic areas of potential supply of unconventional onshore natural gas and other petroleum in the United States; Affiliations and Awards; Contributions to the Committee: please provide a statement that highlights the key contributions you hope to make if appointed to the Committee; Relationship to the program consortium [REF: Energy Policy Act of 2005, Pub. L. No. 109–58, § 999B, 119 Stat. 917–21], please provide a statement that highlights your degree of involvement with this organization, especially include any leadership and or strategic planning activities, note that only board members, officers, and employees of the program consortium are ineligible for appointment to this Committee.

In accordance with the Federal Advisory Committee Act [REF: 5 U.S.C. App. 2], this committee's membership will be balanced in terms of the points of view represented. All resumes must be received by February 2, 2007. Candidates may use the form found at *http://www.fe.doe.gov/programs/oilgas/advisorycommittees/UnconventionalResources.html* to address the required resume elements. Candidates who wish to be considered for appointment to the Committee must submit a resume via one of the following methods.

1. E-mail to *UnconventionalResources@hq.doe.gov* (with resume embedded within the body of the e-mail message; no attachment.),

2. Facsimile to 202/586–6221, Attn: URTAC Nomination,

3. Overnight delivery service to: U.S. Department of Energy, Mail Stop FE–30, 1000 Independence Avenue, SW., Washington, DC 20585. No resumes should be sent via the U.S. Postal Service due to extensive security processing that can damage documents and result in extensive delays.

4. Resume Submission Online at *http://www.fe.doe.gov/programs/oilgas/advisorycommittees/UnconventionalResources.html.*

For security reasons, no e-mail attachments are allowed, nor will they be opened if included.

The closing date for receipt of resumes is February 2, 2007.

All resumes received will be acknowledged within 10 working days from date of receipt. Members will have their travel expenses reimbursed, but their time will not be compensated. Some members of the Advisory Committee may be appointed as special Government employees of the Department of Energy. Questions regarding the nomination process should be directed to B. Hochheiser or E. Melchert at 202/586–5600.

Issued in Washington, DC on January 18, 2007.

Rachel M. Samuel,

Deputy Advisory Committee, Management Officer.

[FR Doc. E7–976 Filed 1–23–07; 8:45 am]

BILLING CODE 6450–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2006–0661; FRL–8111–4]

Chloropicrin Risk Assessments (Phase 3 of 6-Phase Process); Notice of Availability; Extension of Comment Period

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice; extension of comment period.

SUMMARY: EPA issued a notice in the **Federal Register** of November 29, 2006 (71 FR 69112) (FRL–8087–4), concerning the availability of the risk assessments for the fumigant pesticide chloropicrin. This document announces EPA's decision to extend the comment period for 30 days, February 23, 2007.

DATES: Comments, identified by docket identification (ID) number EPA–HQ–OPP–2006–0661 must be received on or before February 23, 2007.

ADDRESSES: Follow the detailed instructions as provided under **ADDRESSES** in the **Federal Register** of November 29, 2006.

FOR FURTHER INFORMATION CONTACT: Nathan Mottl, Special Review and Reregistration Division (7508P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460–0001; telephone number: (703) 305–0208; e-mail address: *mottl.nathan@epa.gov*.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

The Agency included in the notice a list of those who may be potentially affected by this action. If you have questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

B. What Should I Consider as I Prepare My Comments for EPA?

1. *Submitting Confidential Business Information (CBI).* Do not submit this information to EPA through regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for preparing your comments.* When submitting comments, remember to:

i. Identify the document by docket ID number and other identifying information (subject heading, **Federal Register** date and page number).

ii. Follow directions. The Agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

iii. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

iv. Describe any assumptions and provide any technical information and/or data that you used.

v. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

vi. Provide specific examples to illustrate your concerns and suggest alternatives.

vii. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

viii. Make sure to submit your comments by the comment period deadline identified.

C. How and to Whom Do I Submit Comments?

To submit comments, or access the official public docket, please follow the detailed instructions as provided in the **SUPPLEMENTARY INFORMATION** of the November 29, 2006 **Federal Register** document. If you have questions, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

II. What Action is EPA Taking?

This document announces EPA's decision to extend the public comment period for the fumigant pesticide chloropicrin established in the **Federal Register** of November 29, 2006. In that document, EPA announced the availability of the risk assessments for chloropicrin. EPA is hereby extending the comment period, which was set to end on February 23, 2007.

III. What is the Agency's Authority for Taking this Action?

Section 4(g)(2) of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, directs that, after submission of all data concerning a pesticide active ingredient, the Administrator shall determine whether pesticides containing such active ingredient are eligible for reregistration. Further provisions are made to allow a public comment period. However, the Administrator may extend the comment period, if additional time for comment is requested. In this case, Chloropicrin Manufacturers Task Force and the Crop Protection Coalition, have requested additional time (60 days and 45 days, respectively) to develop comments. The Agency believes that an additional 30 days is adequate.

List of Subjects

Environmental protection, Fumigants, Pesticides and pests.

Dated: January 12, 2007.

Debra Edwards,

Director, Special Review and Reregistration Division, Office of Pesticide Programs.

[FR Doc. E7–984 Filed 1–23–07; 8:45 am]

BILLING CODE 6560–50–S

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2006–0995; FRL–8109–7]

Notice of Filing of a Pesticide Petition for the Establishment of Tolerances for Pendimethalin in or on Beans and Peas

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This notice announces the initial filing of a pesticide petition proposing the establishment of tolerances for residues of pesticide chemical pendimethalin in or on beans and peas.

DATES: Comments must be received on or before February 23, 2007.

ADDRESSES: Submit your comments, identified by docket identification (ID) number EPA–HQ–OPP–2006–0995 and pesticide petition number 6F7149, by one of the following methods:

• Federal eRulemaking Portal: *http://www.regulations.gov*. Follow the on-line instructions for submitting comments.

• *Mail*: Office of Pesticide Programs (OPP) Regulatory Public Docket (7502P), Environmental Protection Agency, 1200

Pennsylvania Ave., NW., Washington, DC 20460-0001.

• *Delivery*: OPP Regulatory Public Docket (7502P), Environmental Protection Agency, Rm. S-4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Drive, Arlington, VA. Deliveries are only accepted during the Docket's normal hours of operation 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. Special arrangements should be made for deliveries of boxed information. The Docket telephone number is (703) 305-5805.

Instructions: Direct your comments to docket ID number EPA–HQ–OPP–2006–0995. EPA's policy is that all comments received will be included in the docket without change and may be made available on-line 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 regulations.gov or e-mail. The Federal regulations.gov website 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 regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the 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.

Docket: All documents in the docket are listed in the docket 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, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either in the electronic docket at *http://www.regulations.gov*, or, if only available in hard copy, at the OPP Regulatory Public Docket in Rm. S-4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Drive, Arlington, VA. The hours of operation of this Docket Facility are from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The Docket telephone number is (703) 305-5805.

FOR FURTHER INFORMATION CONTACT: Philip V. Errico, Registration Division (7505P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001; (703) 305-6663; e-mail address: *errico.philip@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. Potentially affected entities may include, but are not limited to:

• Crop production (NAICS code 111).
• Animal production (NAICS code 112).
• Food manufacturing (NAICS code 311).
• Pesticide manufacturing (NAICS code 32532).

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in this unit could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether this action might apply to certain entities. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT** .

B. What Should I Consider as I Prepare My Comments for EPA?

1. *Submitting CBI.* Do not submit this information to EPA through regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for preparing your comments.* When submitting comments, remember to:

i. Identify the document by docket ID number and other identifying information (subject heading, **Federal Register** date and page number).

ii. Follow directions. The Agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

iii. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

iv. Describe any assumptions and provide any technical information and/or data that you used.

v. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

vi. Provide specific examples to illustrate your concerns and suggest alternatives.

vii. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

viii. Make sure to submit your comments by the comment period deadline identified.

II. What Action is the Agency Taking?

EPA is printing a summary of a pesticide petition received under section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a, proposing the establishment or amendment of regulations in 40 CFR part 180 for residues of pesticide chemicals in or on various food commodities. EPA has determined that this pesticide petition contains data or information regarding the elements set forth in FFDCA section 408(d)(2); however, EPA has not fully evaluated the sufficiency of the submitted data at this time or whether the data support granting of the pesticide petition. Additional data may be needed before EPA rules on this pesticide petition.

Pursuant to 40 CFR 180.7(f), a summary of the petition included in this notice, prepared by the petitioner along with a description of the analytical method available for the detection and measurement of the pesticide chemical residues is available on EPA's Electronic Docket at *http://www.regulations.gov/*. To locate this information on the home page of EPA's Electronic Docket, select ''Quick Search'' and type the OPP docket ID number. Once the search has located the docket, clicking on the ''Docket ID'' will bring up a list of all documents in the docket for the

pesticide including the petition summary.

New Tolerance

PP 6F7149. BASF Corporation, 26 Davis Drive, P.O. Box 13528, Research Triangle Park, NC 27709-3528, proposes to establish a tolerance for residues of the herbicide, pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine and its metabolite, 4-[(1-ethylpropyl)amino}-2-methyl-3,5-dinitrobenzyl alcohol in or on food commodities beans; beans, forage; beans, hay; and peas (except field peas) each at 0.01 parts per million (ppm). Aqueous organic solvent extraction, column clean up, and quantitation by gas chromatography is used to measure and evaluate the chemical residues.

List of Subjects

Environmental protection, Agricultural commodities, Feed additives, Food additives, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: January 12, 2007.

Lois Rossi,

Director, Registration Division, Office of Pesticide Programs.

[FR Doc. E7–924 Filed 1–23–07; 8:45 am]

BILLING CODE 6560–50–S

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2006–0936; FRL–8110–9]

Notice of Filing of Pesticide Petitions for Establishment or Amendment to Regulations for Residues of Pesticide Chemicals in or on Various Commodities

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This notice announces the initial filing of pesticide petitions proposing the establishment or amendment of regulations for residues of pesticide chemicals in or on various commodities.

DATES: Comments must be received on or before February 23, 2007.

ADDRESSES: Submit your comments, identified by docket identification (ID) number and pesticide petition number (PP), by one of the following methods. Refer to Unit II. for specific docket ID numbers for each pesticide petition.

- *Federal eRulemaking Portal*: *http://www.regulations.gov*. Follow the on-line instructions for submitting comments.
- *Mail*: Office of Pesticide Programs (OPP) Regulatory Public Docket (7502P), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460–0001.
- *Delivery*: OPP Regulatory Public Docket (7502P), Environmental Protection Agency, Rm. S-4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA. Deliveries are only accepted during the Docket's normal hours of operation (8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays). Special arrangements should be made for deliveries of boxed information. The Docket Facility telephone number is (703) 305–5805.

Instructions: Direct your comments to the assigned docket ID number for the pesticide petition. EPA's policy is that all comments received will be included in the docket without change and may be made available on-line 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 regulations.gov or e-mail. The regulations.gov website 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 regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the 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.

Docket: All documents in the docket are listed in the docket 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, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either in the electronic docket at *http://www.regulations.gov*, or, if only available in hard copy, at the OPP Regulatory Public Docket in Rm. S-4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA. The hours of operation of this Docket Facility are from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The Docket Facility telephone number is (703) 305–5805.

FOR FURTHER INFORMATION CONTACT: The person listed at the end of the pesticide petition summary of interest.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. Potentially affected entities may include, but are not limited to:

- Crop production (NAICS code 111).
- Animal production (NAICS code 112).
- Food manufacturing (NAICS code 311).
- Pesticide manufacturing (NAICS code 32532).

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in this unit could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether this action might apply to certain entities. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed at the end of the pesticide petition summary of interest.

B. What Should I Consider as I Prepare My Comments for EPA?

1. *Submitting CBI*. Do not submit this information to EPA through regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in

accordance with procedures set forth in 40 CFR part 2.

2. *Tips for preparing your comments.* When submitting comments, remember to:

i. Identify the document by the docket ID number and other identifying information (subject heading, **Federal Register** date and page number).

ii. Follow directions. The Agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

iii. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

iv. Describe any assumptions and provide any technical information and/or data that you used.

v. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

vi. Provide specific examples to illustrate your concerns, and suggest alternatives.

vii. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

viii. Make sure to submit your comments by the comment period deadline identified.

II. Docket ID Numbers

When submitting comments, please use the docket ID number assigned to the pesticide petition.

PP Number	Docket ID Number
PP 5E6903	EPA–HQ–OPP–2006–0481
PP 6F7061	EPA–HQ–OPP–2006–0993

III. What Action is the Agency Taking?

EPA is printing a summary of pesticide petitions received under section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a, proposing the establishment or amendment of regulations in 40 CFR part 180 for residues of pesticide chemicals in or on various food commodities. EPA has determined that these pesticide petitions contain data or information regarding the elements set forth in FFDCA section 408(d)(2); however, EPA has not fully evaluated the sufficiency of the submitted data at this time or whether the data support granting of the pesticide petitions. Additional data may be needed before EPA rules on these pesticide petitions.

Pursuant to 40 CFR 180.7(f), a summary of the petitions included in this notice, prepared by the petitioner along with a description of the analytical method available for the detection and measurement of the pesticide chemical residues is available on-line at *http://www.regulations.gov*. To locate this information on the regulations.gov website follow these steps:

• Select ''Advanced Search,'' then ''Docket Search.''

• In the ''Docket ID'' field, typethe docket ID number in the following form: ''OPP–year–docket number'' (example: OPP–2005–9999); do not include ''EPA–HQ'' in the docket ID number.

• Click the ''Submit'' button.

• Once the search locates the docket, click on the docket ID number to open the docket.

New Tolerance

1. *PP 5E6903*. (Docket ID number EPA–HQ–OPP–2006–0481). Valent U.S.A. Corporation, 1600 Riviera Avenue, Walnut Creek, CA 94596–8025, proposes to establish an import tolerance for residues of the fungicide fluopicolide in or on the food commodities grape, juice, and grape, wine at 2.0 parts per million (ppm), and the processed commodity grape, raisin at 9.0 ppm. In plant commodities, the analytical method included the combined residues of fluopicolide, 2,6-dichlorobenzamide and 3-chloro-5-trifluoromethylnicotinic acid, all calculated as fluopicolide. These residues were determined by liquid chromatography/mass spectrometry/mass spectrometry (LC/MS/MS). Extraction efficiency testing has shown that the residues of concern are extracted effectively by the method even after storage. Stability testing has shown the parent compound and the metabolites to be stable during storage for up to 24 months. Contact: Janet Whitehurst; telephone number: (703) 305–6129; e-mail address:*whitehurst.janet@epa.gov*.

2. *PP 6F7061*. (Docket ID number EPA–HQ–OPP–2006–0993). Dow AgroSciences LLC, 9330 Zionsville Road, Indianapolis, IN 46268, proposes to establish a tolerance for residues of the herbicide florasulam in or on the food commodities wheat, barley, oat, rye, triticale (grain) at 0.01 ppm and wheat, barley, oat, rye, triticale (forage, hay, and straw) at 0.05 ppm. Gas chromatography and mass selective detection (GC-MSD) is use to measure and evaluate the chemical residues. Contact: Hope Johnson, telephone number: (703) 305–5410; e-mail address: *johnson.hope@epa.gov*.

List of Subjects

Environmental protection, Agricultural commodities, Feed additives, Food additives, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: January 10, 2007.

Lois Rossi,

Director, Registration Division, Office of Pesticide Programs.

[FR Doc. E7–1009 Filed 1–23–07; 8:45 am]

BILLING CODE 6560–50–S

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2006–0689; FRL–8088–7]

Issuance of Experimental Use Permits

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: EPA has granted experimental use permits (EUPs) to the following pesticide applicants. An EUP permits use of a pesticide for experimental or research purposes only in accordance with the limitations in the permit.

FOR FURTHER INFORMATION CONTACT: Mike Mendelsohn, Biopesticides and Pollution Prevention Division (7511P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460–0001; telephone number: (703) 308–8715; e-mail address: *mendelsohn.mike@epa.gov*.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

This action is directed to the public in general. Although this action may be of particular interest to those persons who conduct or sponsor research on pesticides, the Agency has not attempted to describe all the specific entities that may be affected by this action. If you have any questions regarding the information in this action, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

B. How Can I Get Copies of this Document and Other Related Information?

1. *Docket*. EPA has established a docket for this action under docket identification (ID) number EPA–HQ–OPP–2006–0689. Publicly available docket materials are available either in the electronic docket at *http://www.regulations.gov*, or, if only available in hard copy, at the Office of

Pesticide Programs (OPP) Regulatory Public Docket in Rm. S–4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA. The hours of operation of this Docket Facility are from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The Docket Facility telephone number is (703) 305–5805.

2. *Electronic access*. You may access this **Federal Register** document electronically through the EPA Internet under the ''**Federal Register**'' listings at *http://www.epa.gov/fedrgstr*.

II. EUP

EPA has issued the following EUPs:

524–EUP–97. Issuance. Monsanto Co., 800 North Lindbergh Blvd., St. Louis, MO 63167. This EUP allows the use of 165,700 lbs of corn seed containing the following plant-incorporated protectants (PIPs) in the amounts specified: 0.47 lbs of the Bacillus thuringiensis Cry1A.105 protein and the genetic material necessary for its production (vector PV-ZMIR245) in Event MON 89034 corn, 0.41 lbs of the Bacillus thuringiensis Cry2Ab2 protein and the genetic material necessary for its production (vector PV-ZMIR245) in Event MON 89034 corn, and 1.49 lbs of the Bacillus thuringiensis Cry3Bb1 protein and the genetic material necessary for its production (vector ZMIR39) in Event MON 88017 corn. This EUP allows the use of this seed on 1,356 acres MON 89034 corn; 363 acres MON 88017 corn; 617 acres MON 89034 x MON 88017 corn; and 461 acres non-Bt corn for 2006–2007, and 3,541 acres MON 89034 corn; 1,298 acres MON 88017 corn; 1,110 acres MON 89034 x MON 88017 corn; and 531 acres non-Bt corn for 2007–2008. Eight trial protocols will be conducted, including:

- Breeding and observation nursery.
- Inbred seed increase production.
- Line per se hybrid yield and herbicide tolerance trials.
- Insect efficacy trials.
- Product characterization and performance trials.
- Insect resistance management trials.
- Benefit assessment trials.
- Seed treatment trials.

The program is authorized only in the States of Alabama, Arizona, California, Colorado, Florida, Georgia, Hawaii, Idaho, Iowa, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Mississippi, North Carolina, Nebraska, Ohio, Oregon, Pennsylvania, Puerto Rico, South Dakota, Tennessee, Texas, Washington, and Wisconsin. The EUP is effective from June 29, 2005 to June 30, 2008, along with associated activities such as collection of field data and harvesting and processing of seed after last planting.

Temporary and permanent exemptions from the requirement of a tolerance have been established for residues of the active ingredients in or on all corn commodities. One comment from a private citizen was received in response to the notice of receipt for this permit application, which was published in the **Federal Register** on May 26, 2006 (71 FR 30403) (FRL–8066–8). The private citizen indicated that she does not favor genetically engineered corn and expressed the viewpoint that the permittee should be required to request permission from neighbors prior to testing. The commenter also expressed concern about the mechanics of submitting comments via the *http://www.regulations.gov* site for the notice of receipt. The Agency understands the commenter's concerns and recognizes that some individuals believe that genetically modified crops and food should be banned completely. Nonetheless, under the Federal Insecticide, Fungicide, Rodenticide Act (FIFRA), the Agency is tasked with reviewing applications for EUPs for any pesticide, including PIPs, and granting such applications to the extent that the conditions of FIFRA section 5, and the regulations thereunder, have been met (subject to such terms and conditions as the Agency determines are warranted). In this instance, EPA has determined that the relevant statutory and regulatory conditions have been met. In addition, there is nothing in FIFRA or in the Agency's regulations enacted thereunder that compels, and EPA does not otherwise require, a permittee to notify neighbors prior to testing as suggested. Finally, the Agency understands some of the adjustments needed to use the new electronic docketing system. One tip that should help in the future is that when commenting on notices of receipt, commenters should either choose ''Notices'' or ''All Document Types'' in the ''Document Type'' box. If ''Proposed Rules,'' ''Rules,'' or ''Other'' are selected, ''Notices'' will not be selected in the search.

67979–EUP–4. Amendment/Extension. Syngenta Seeds, Inc., P.O. Box 12257, 3054 East Cornwallis Rd., Research Triangle Park, NC 27709–2257. This EUP allows the use of 50,420 lbs MIR604 and Bt11 corn seed containing the following PIPs in the amounts specified: A combined 0.0454 lbs of modified Cry3A Bacillus thuringiensis protein and the genetic material necessary for its production (via elements of pZM26) in Event MIR604 corn (SYN-IR6Ø4-5) and Bt11 Bacillus thuringiensis Cry1Ab delta-endotoxin and the genetic material necessary for its production (plasmid vector pZ01502) in corn. This EUP allows the use of this seed on 2,300 acres MIR604 modified Cry3A corn, 670 acres Bt11 Cry1Ab corn, 965 acres MIR604 x Bt11 corn, and 2,959 acres non-Bt corn. Five trial protocols will be conducted, including:

- Breeding and observation.
- Efficacy evaluation.
- Agronomic observation.
- Inbred and hybrid production.
- Regulatory studies.

The program is authorized only in the States of California, Colorado, Florida, Hawaii, Iowa, Illinois, Indiana, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Mississippi, New Mexico, Nebraska, New York, Ohio, Pennsylvania, Puerto Rico, South Dakota, Texas, Virginia, and Wisconsin. The EUP is effective from March 2, 2006 to February 28, 2007, along with associated activities such as collection of field data and harvesting and processing of seed after last planting.

Temporary and permanent exemptions from the requirement of a tolerance have been established for residues of the active ingredients in or on all corn commodities. Three identical comments from a private citizen and one comment from a grower association were received in response to the notice of receipt for this permit application, which was published in the **Federal Register** on January 25, 2006 (71 FR 4141) (FRL–7757–7). The private citizen indicated that she does not favor genetically engineered corn, opposed testing under this EUP except in fully enclosed greenhouses, and expressed the viewpoint that the permittee should be required to request permission from neighbors prior to testing. The Agency understands the commenter's concerns and recognizes that some individuals believe that genetically modified crops and food should be banned completely. Nonetheless, under FIFRA, the Agency is tasked with reviewing applications for EUPs for any pesticide, including PIPs, and granting such applications to the extent that the conditions of FIFRA section 5, and the regulations thereunder, have been met (subject to such terms and conditions as the Agency determines are warranted). In this instance, EPA has determined that the relevant statutory and regulatory conditions have been met. In addition, there is nothing in FIFRA or in the Agency's regulations enacted thereunder that compels, and EPA does not otherwise require, a permittee to notify neighbors prior to testing as

suggested. Finally although certain containment provisions were required per the experimental program, the Agency did not require testing to be conducted in fully enclosed greenhouses because such a requirement was not necessary to mitigate risk. In contrast to the comments from the private citizen, the grower association requested that the Agency expeditiously grant the EUP and stated their position that agricultural biotechnology in many cases helps reduce the use of chemicals, improves profits, and preserves the environment. They also mentioned the benefit to insect resistance management that the material being tested under this EUP is intended to bring.

Authority: 7 U.S.C. 136c.

List of Subjects

Environmental protection, Experimental use permits.

Dated: January 12, 2007.

Janet L. Andersen,

Director, Biopesticides and Pollution Prevention Division, Office of Pesticide Programs.

[FR Doc. E7–988 Filed 1–23–07; 8:45 am]

BILLING CODE 6560–50–S

ENVIRONMENTAL PROTECTION AGENCY

[FRL–8271–9; Docket ID No. EPA–HQ–ORD–2006–0868]

Metabolically-Derived Human Ventilation Rates: A Revised Approach Based Upon Oxygen Consumption Rates

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of public comment period.

SUMMARY: EPA is announcing a 30-day public comment period for the draft document titled, ''Metabolically-Derived Human Ventilation Rates: A Revised Approach Based Upon Oxygen Consumption Rates'' (EPA/600/R–06/129A). The document was prepared by the National Center for Environmental Assessment (NCEA) within EPA's Office of Research and Development (ORD).

In 1997, NCEA published the Exposure Factors Handbook. This comprehensive document provides summaries of available statistical data on various factors that can impact an individual's exposure to environmental contaminants. NCEA maintains the Exposure Factors Handbook and periodically updates the document using current literature and other reliable data made available through research. Many program offices within EPA rely on the data from this handbook to conduct their exposure and risk assessments.

One important determinant of a person's exposure to contaminants in air is the ventilation rate, or the volume of air that is inhaled by an individual in a specified time period. Ventilation rates, also known as breathing or inhalation rates, are given in Chapter 5 of the Exposure Factors Handbook. Calculations of the currently recommended ventilation rates were limited by their dependence on a ''ventilatory equivalent,'' which relied on a person's fitness level. This draft report, ''Metabolically-Derived Human Ventilation Rates: A Revised Approach Based Upon Oxygen Consumption Rates,'' presents a revised approach that calculates ventilation rates directly from an individual's oxygen consumption rate, and applies this method to data provided from more recent sources, such as the 1999–2002 National Health and Nutrition Examination Survey (NHANES) and EPA's Consolidated Human Activity Database (CHAD). In the next edition of the Exposure Factors Handbook, NCEA would like to update the ventilation rate values using this revised approach and the more recently released data.

EPA is releasing the draft, ''Metabolically-Derived Human Ventilation Rates: A Revised Approach Based Upon Oxygen Consumption Rates,'' solely for the purpose of pre-dissemination peer review under applicable information quality guidelines. This document has not been formally disseminated by EPA. It does not represent and should not be construed to represent any Agency policy or determination. EPA will consider any public comments submitted in accordance with this notice when revising the document.

DATES: The 30-day public comment period begins January 24, 2007, and ends February 23, 2007. Technical comments should be in writing and must be received by EPA by February 23, 2007. In a subsequent **Federal Register** notice EPA will announce the details of an external peer review meeting that will be conducted via teleconference.

ADDRESSES: The draft, ''Metabolically-Derived Human Ventilation Rates: A Revised Approach Based Upon Oxygen Consumption Rates,'' is available primarily via the Internet on the National Center for Environmental Assessment's home page under the Recent Additions and the Data and Publications menus at *http://www.epa.gov/ncea.* A limited number of paper copies are available from the Technical Information Staff, NCEA–W; telephone: 202–564–3261; facsimile: 202–565–0050. If you are requesting a paper copy, please provide your name, your mailing address, and the document title, ''Metabolically-Derived Human Ventilation Rates: A Revised Approach Based Upon Oxygen Consumption Rates'' (EPA/600/R–06/129A).

Comments may be submitted electronically via *www.regulations.gov,* by mail, by facsimile, or by hand delivery/courier. Please follow the detailed instructions provided in the **SUPPLEMENTARY INFORMATION** section of this notice.

FOR FURTHER INFORMATION CONTACT: For information on the public comment period, contact the Office of Environmental Information Docket; telephone: 202–566–1752; facsimile: 202–566–1753; or e-mail: *ORD.Docket@epa.gov.*

For technical information, contact Laurie Schuda, NCEA; telephone: 202–564–3206; facsimile: 202–564–2018; or e-mail: *schuda.laurie@epa.gov.*

SUPPLEMENTARY INFORMATION:

How To Submit Technical Comments to the Docket at www.regulations.gov

Submit your comments, identified by Docket ID No. EPA–HQ–ORD 2006–0868 by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail: ORD.Docket@epa.gov.*
- *Fax:* 202–566–1753.
- *Mail:* Office of Environmental Information (OEI) Docket (Mail Code: 2822T), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. The phone number is 202–566–1752.
- *Hand Delivery:* The OEI Docket is located in the EPA Headquarters Docket Center, Room 3334, EPA West Building, 1301 Constitution Ave., NW., Washington, DC. The EPA Docket Center 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. Such deliveries are only accepted during the docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

If you provide comments by mail or hand delivery, please submit one unbound original with pages numbered consecutively, and three copies of the comments. For attachments, provide an

index, number pages consecutively with the comments, and submit an unbound original and three copies.

Instructions: Direct your comments to Docket ID No. EPA–HQ–ORD–2006–0868. Please ensure that your comments are submitted within the specified comment period. Comments received after the closing date will be marked ''late,'' and may only be considered if time permits. It is EPA's policy to include all comments it receives in the public docket without change and to make the comments available online at *www.regulations.gov,* including any personal information provided, unless a comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or e-mail. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *www.regulations.gov,* your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.*

Docket: Documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information whose disclosure is restricted by statute. Certain other materials, such as copyrighted material, are publicly available only in hard copy. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the OEI Docket in the EPA Headquarters Docket Center.

Dated: January 12, 2007.

George Alapas,

Acting Director, National Center for Environmental Assessment.

[FR Doc. E7–826 Filed 1–23–07; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

Notice of Public Information Collection(s) Being Submitted for Review to the Office of Management and Budget

January 18, 2007.

SUMMARY: The Federal Communications Commission, as part of its continuing effort to reduce paperwork burden invites the general public and other Federal agencies to take this opportunity to comment on the following information collection(s), as required by Paperwork Reduction Act (PRA) of 1995, Public Law 104–13. An agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act (PRA) that does not display a valid control number. Comments are requested concerning (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

DATES: Written Paperwork Reduction Act (PRA) comments should be submitted on or before. If you anticipate that you will be submitting PRA comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the FCC contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Allison E. Zaleski, Office of Management and Budget, Room 10236 NEOB, Washington, DC 20503, (202) 395–6466, or via fax at (202) 395–5167 or via Internet at *Allison_E._Zaleski@omb.eop.gov* and to *LeslieF.Smith@fcc.gov*, Federal Communications Commission, Room 1–C216, 445 12 Street, SW., Washington, DC 20554, or an e-mail to *PRA@fcc.gov.* If you would like to obtain or view a copy of this information collection, you may do so by visiting the FCC PRA Web page at: *http://www.fcc.gov/omd/pra.*

FOR FURTHER INFORMATION CONTACT: For additional information or copies of the information collection(s), contact Leslie F. Smith at (202) 418–0217 or via the Internet at *Leslie.Smith@fcc.gov.*

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–1088.

Title: Rules and Regulations Implementing the Telephone Consumer Protection Act (TCPA) of 1991, *Report and Order and Third Order on Reconsideration,* CG Docket No. 05–338, FCC 06–42.

Form Number: FCC Form 1088.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for-profit entities; Not-for-profit institutions; and Individuals or households.

Number of Respondents: 5,000,000.

Estimated Time per Response: 3–30 minutes.

Frequency of Response: Recordkeeping; Monthly, annual, and on occasion reporting requirements; Third party disclosure.

Obligation to Respond: Required to obtain or retain benefits.

Total Annual Burden: 3,380,000 hours.

Total Annual Cost: $8,000,000.

Nature and Extent of Confidentiality: An assurance of confidentiality is not offered, although, individuals or households, who provide sensitive information, *e.g.,* ''personally identifiable information,'' should submit FCC Form 1088 via mail rather than electronically.

Privacy Impact Assessment: No; a PIA will be done when the system of records notice is revised.

Needs and Uses: On April 5, 2006, the Commission adopted a *Report and Order and Third Order On Reconsideration, In the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991; Junk Fax Prevention Act of 2005*; CG Docket Nos. 02–278 and 05–338, FCC 06–42, which modified the Commission's facsimile advertising rules to implement the Junk Fax Prevention Act. The *Report and Order and Third Order on Reconsideration* contains information collection requirements pertaining to: (1) *Opt-out Notice and Do-Not-Fax Requests Recordkeeping* in which the rules require senders of unsolicited facsimile advertisements to include a notice on the first page of the facsimile that informs the recipient of the ability and

means to request that they not receive future unsolicited facsimile advertisements from the sender; (2) *Established Business Relationship Recordkeeping* whereas the Junk Fax Prevention Act provides that the sender, *e.g.,* a person, business, or a nonprofit/institution, is prohibited from faxing an unsolicited advertisement to a facsimile machine unless the sender has an ''established business relationship'' (EBR) with the recipient; (3) *Facsimile Number Recordkeeping* in which the Junk Fax Prevention Act provides that an EBR alone does not entitle a sender to fax an advertisement to an individual or business. The fax number must also be provided voluntarily by the recipient; and (4) *Express Invitation or Permission Recordkeeping* where in the absence of an EBR, the sender must obtain the prior express invitation or permission from the consumer before sending the facsimile advertisement.

Section 227 of the Communications Act of 1934, as amended, and the FCC's parallel rules restrict various telemarketing and advertising activities. The new Junk Fax/Telemarketing Form, FCC Form 1088, is designed specifically for complaints that involve (1) junk faxes, (2) telemarketing (including do-not-call violations), and (3) other related issues such as prerecorded messages, automatic telephone dialing systems, and unsolicited commercial email messages to wireless telecommunications devices (cell phones, pagers). FCC Form 1088 will allow the Commission to collect detailed information from consumers concerning possible violations of the Communications Act and the FCC's fax and telemarketing rules, which will enable the Commission to investigate rule violations more efficiently and to initiate enforcement actions against violators as appropriate. By collecting their complaints and related information in a single, comprehensive template, the form will provide a standardized way for consumers to file complaints, thus eliminating the need for further documentation or questions from FCC investigators to determine whether violations have occurred. This ensures that consumers can present their complaints in a way that maximizes the FCC's ability to take enforcement actions against violators and protects complainants and other consumers from unlawful telemarketing and faxing that is intrusive, uninvited, and possibly costly. Furthermore, the form's format avoids the need for complainants to compose narratives that describe unwanted telemarketing or faxing, and instead permits complainants to answer questions, principally by simply selecting options presented on the form, which should reduce the time to file a complaint. The form will allow the Commission to gather and to review this information more efficiently. The information the form collects may ultimately become the foundation for enforcement actions and/or rulemaking proceedings, as appropriate.

FCC Form 1088 asks for the complainant's contact information, including name, address, telephone number and e-mail address; then presents a ''gateway'' question to determine the general topic of the complaint: (1) A fax or (2) a call or message to a residential telephone, business telephone, emergency telephone or patient telephone, wireless telecommunications device, or any service for which the called party is charged. After the complainant answers this question, the form asks additional questions geared to the specific type of incident reported. The form poses certain mandatory threshold questions that must be answered for the Commission to determine whether a violation has occurred. It also presents optional questions for complainants who wish to provide the Commission with more detailed information that a complainant believes may assist the Commission in investigating the complaint. Finally, the form permits a complainant to attest to the accuracy of the information provided by ensuring that the Commission has documentation necessary for any possible enforcement actions without further contacting the complainant to obtain a sworn declaration or other materials. The Commission believes the new FCC Form 1088 to be a logical extension of its Junk Fax and Telemarketing rulemaking efforts.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. 07–309 Filed 1–23–07; 8:45 am]

BILLING CODE 6712–01–M

FEDERAL COMMUNICATIONS COMMISSION

Notice of Public Information Collection(s) Being Submitted to OMB for Review and Approval

January 12, 2007.

SUMMARY: The Federal Communications Commissions, as part of its continuing effort to reduce paperwork burden invites the general public and other Federal agencies to take this opportunity to comment on the following information collection, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. An agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act (PRA) that does not display a valid control number. Comments are requested concerning (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

DATES: Written comments should be submitted on or before February 23, 2007. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: You may submit your Paperwork Reduction Act (PRA) comments by e-mail or U.S. postal mail. To submit your comments by e-mail send them to *PRA@fcc.gov.* To submit your comments by U.S. mail, mark them to the attention of Cathy Williams, Federal Communications Commission, Room 1–C823, 445 12th Street, SW., Washington, DC 20554 and Allison E. Zaleski, Office of Management and Budget (OMB), Room 10236 NEOB, Washington, DC 20503, (202) 395–6466 or via the Internet at *Allison_E._Zaleski@omb.eop.gov.*

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection(s) send an e-mail to *PRA@fcc.gov* or contact Cathy Williams at (202) 418–2918. If you would like to obtain a copy of the information collection, you may do so by visiting the FCC PRA Web page at: *http://www.fcc.gov/omd/pra.*

SUPPLMENTARY INFORMATION:

OMB Control Number: 3060–0029.

Title: Application for TV Broadcast Station License; Application for Construction Permit for Reserved Channel Noncommercial Educational (NCE) Broadcast Station; Application for Authority to Construct or Make Changes

in an FM Translator or FM Booster Station.

Form Number: FCC Forms 302–TV, 340 and 349.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for-profit entities; Not-for-profit institutions; State, local or tribal government.

Number of Respondents: 2,785.

Estimated Time per Response: 0.50–4 hours.

Frequency of Response: On occasion reporting requirement; Third party disclosure requirement.

Obligation to Respond: Required to obtain or retain benefits.

Total Annual Burden: 8,370 hours.

Total Annual Cost: $19,389,625.

Privacy Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: There is no need for confidentiality.

Needs and Uses: On November 3, 2006, the Commission adopted the Report and Order (''R&O''), Revision of Procedures Governing Amendments to FM Table of Allotments and Changes of Community of License in the Radio Broadcast Services, MB Docket 05–210, FCC 06–163. In this R&O, the Commission extended to noncommercial educational FM licensees and permittees the same ability to request changes of community of license by first come-first served minor modification application as was being granted to other commercial full-service AM standard band and FM licensees and permittees. Previously, because a change in an NCE station's community of license was considered a major modification in the station's facilities, an NCE applicant had to await the opening of an announced Noncommercial Educational (NCE) new and major change application filing window. Filing on a first-come first-served basis will significantly reduce the risk of application mutual exclusivity. The application of this new procedure to NCE stations was not proposed in the Notice of Proposed Rule Making in this proceeding, but the Commission found it to be a logical outgrowth of a proposal in that proceeding based on comments received, and accordingly adopted the change in the R&O. Thus, the Commission proposes to revise FCC Form 340 to accommodate NCE applicants who seek to change their NCE station's community of license by minor modification application.

Specifically, the Commission revises the FCC Form 340 to reflect the requirement that NCE applicants employing this procedure must include an exhibit demonstrating that the proposed community of license change comports with the fair, efficient and equitable distribution of radio service policies under Section 307(b) of the Communications Act of 1934, as amended. NCE applicants proposing a change in community of license must provide Section 307(b) information demonstrating the merits of locating the station in the new community, as opposed to the current community of license. This form, FCC Form 340, is the only form being revised by the FCC's action in this information collection. FCC Forms 302–TV and 349 remain unchanged.

FCC Form 302–TV is used by licensees and permittees of TV broadcast stations to obtain a new or modified station license and/or to notify the Commission of certain changes in the licensed facilities of these stations. FCC 340 is used to apply for authority to construct a new noncommercial educational FM or TV station or to make changes in the existing facilities of such a station. The FCC 340 is to be used if the broadcast station will operate on a channel that is reserved exclusively for noncommercial educational use and on non-reserved channels if the applicant proposes to build and operate a NCE station.

FCC Form 349 is used to apply for authority to construct a new FM translator or FM booster broadcast station, or to make changes in the existing facilities of such stations. This form also includes the third party disclosure requirement of 47 CFR 73.3580 (3060–0031). Section 73.3580 requires local public notice in a newspaper of general circulation of all application filings for new or major change in facilities. This notice must be completed within 30 days of the tendering of the application. This notice must be published at least twice a week for two consecutive weeks in a three-week period. A copy of this notice must be placed in the public inspection file along with the application.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. E7–723 Filed 1–23–07; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

Notice of Public Information Collection(s) Being Submitted to OMB for Review and Approval

January 19, 2007.

SUMMARY: The Federal Communications Commissions, as part of its continuing effort to reduce paperwork burden invites the general public and other Federal agencies to take this opportunity to comment on the following information collection, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. An agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act (PRA) that does not display a valid control number. Comments are requested concerning (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

DATES: Written comments should be submitted on or before February 23, 2007. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: You may submit your Paperwork Reduction Act (PRA) comments by e-mail or U.S. postal mail. To submit your comments by e-mail send them to *PRA@fcc.gov.* To submit your comments by U.S. mail, mark them to the attention of Cathy Williams, Federal Communications Commission, Room 1–C823, 445 12th Street, SW., Washington, DC 20554 and Allison E. Zaleski, Office of Management and Budget (OMB), Room 10236 NEOB, Washington, DC 20503, (202) 395–6466 or via the Internet at *Allison_E._Zaleski@omb.eop.gov*.

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection(s) send an e-mail to *PRA@fcc.gov* or contact Cathy Williams at (202) 418–2918. If you

would like to obtain a copy of the information collection, you may do so by visiting the FCC PRA Web page at: *http://www.fcc.gov/omd/pra.*

SUPPLMENTARY INFORMATION:

OMB Control Number: 3060–0692.

Title: Home Wiring Provisions.

Form Number: Not applicable.

Type of Review: Extension of a currently approved collection.

Respondents: Individuals or households; Business or other for-profit entities.

Number of Respondents: 22,500.

Estimated Time per Response: 5 minutes–20 hours.

Frequency of Response: Recordkeeping requirement; On occasion reporting requirement; Annual reporting requirement; Third party disclosure requirement.

Obligation to Respond: Required to obtain or retain benefits.

Total Annual Burden: 46,114 hours.

Total Annual Cost: None.

Privacy Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: There is no need for confidentiality.

Needs and Uses: This information collection accounts for the information collection requirement stated in 47 CFR 76.613, where MVPDs causing harmful signal interference may be required by the Commission's engineer in charge (EIC) to prepare and submit a report regarding the cause(s) of the interference, corrective measures planned or taken, and the efficacy of the remedial measures.

47 CFR 76.620 applies the Commission's signal leakage rules to all non-cable MVPDs. Our rules require that each cable system perform an independent signal leakage test annually, therefore, non-cable MVPDs will now be subject to the same requirement, although the Second Order on Reconsideration, FCC 03–9, has exempted small non-cable MVPDs. We recognize, however, that immediate compliance with these requirements may present hardships to existing non-cable MVPDs not previously subject to such rules. We will allow a five-year transition period from the effective date of these rules to afford non-cable MVPDs time to comply with our signal leakage rules other than 47 CFR 76.613. The transition period will apply only to systems of those non-cable MVPDs that have been substantially built as of January 1, 1998.

47 CFR 76.802, Disposition of Cable Home Wiring, gives individual video service subscribers in single unit dwellings and MDUs the opportunity to purchase their cable home wiring at replacement cost upon voluntary termination of service. In calculating hour burdens for notifying individual subscribers of their purchase rights, we make the following assumptions:

(1) There are approximately 20,000 MVPDs serving approximately 72,000,000 subscribers in the United States.

(2) The average rate of churn (subscriber termination) for all MVPDs is estimated to be 1% per month, or 12% per year.

(3) MVPDs own the home wiring in 50% of the occurrences of voluntary subscriber termination.

(4) Subscribers or property owners already have gained ownership of the wiring in the other 50% of occurrences (*e.g.*, where the MVPD has charged the subscriber for the wiring upon installation, has treated the wiring as belonging to the subscriber for tax purposes, or where state and/or local law treats cable home wiring as a fixture).

(5) Where MVPDs own the wiring, we estimate that they intend to actually remove the wiring 5% of the time, thus initiating the disclosure requirement.

We believe in most cases that MVPDs will choose to abandon the home wiring because the cost and effort required to remove the wiring generally outweigh its value. The burden to disclose the information at the time of termination will vary depending on the manner of disclosure, *e.g.*, by telephone, customer visit or registered mail. Virtually all voluntary service terminations are done by telephone.

In addition, 47 CFR 76.802 states that if a subscriber in an MDU declines to purchase the wiring, the MDU owner or alternative provider (where permitted by the MDU owner) may purchase the home wiring where reasonable advance notice has been provided to the incumbent.

(1) According to the 2000 U.S. Census, the nation's population was approximately 281,000,000.

(2) The American Housing Survey for the United States, 2001, Table 2–25, and the 2000 Census stated that the total number of living units of all types in the United States was approximately 106,000,000, or an average of 2.65 people per unit.

(3) The American Housing Survey also estimated that 24,600,000 occupied housing units were classified as ''multi-units,'' that is, they are in MDUs with two or more units per building.

(4) The American Housing Survey data also found that there were approximately 7,600,000 buildings classified as MDUs in the United States.

(5) Approximately 66,000,000 people resided in these 24,600,000 occupied housing units in these MDUs in 2000.

(6) We estimate that 2,000 MDU owners will provide advance notice to the incumbent MVPD that the MDU owner wishes to use the home run wiring to receive service from an alternative video service provider.

47 CFR 76.802 also states that, to inform subscribers of per-foot replacement costs, MVPDs may develop replacement cost schedules based on readily available information; if the MVPD chooses to develop such schedules, it must place them in a public file available for public inspection during regular business hours.

We estimate that 50% of MVPDs will develop such cost schedules to place in their public files. Virtually all individual subscribers terminate service via telephone, and few subscribers are anticipated to review cost schedules on public file.

47 CFR 76.804 Disposition of Home Run Wiring. We estimate the burden for notification and election requirements for building-by-building and unit-by-unit disposition of home run wiring as described below. Note that these requirements apply only when an MVPD owns the home run wiring in an MDU and does not (or will not at the conclusion of the notice period) have a legally enforceable right to remain on the premises against the wishes of the entity that owns or controls the common areas of the MDU or have a legally enforceable right to maintain any particular home run wire dedicated to a particular unit on the premises against the MDU owner's wishes.

We use the term ''MDU owner'' to include whatever entity owns or controls the common areas of an apartment building, condominium or cooperative. For building-by-building disposition of home run wiring, the MDU owner gives the incumbent service provider a minimum of 90 days' written notice that its access to the entire building will be terminated. The incumbent then has 30 days to elect what it will do with the home run wiring. Where parties negotiate a price for the wiring and are unable to agree on a price, the incumbent service provider must elect among abandonment, removal of the wiring, or arbitration for a price determination. Also, regarding cable home wiring, when the MDU owner notifies the incumbent service provider that its access to the building will be terminated, the incumbent provider must, within 30 days of the initial

notice and in accordance with our home wiring rules:

(1) Offer to sell to the MDU owner any home wiring within the individual dwelling units which the incumbent provider owns and intends to remove, and

(2) Provide the MDU owner with the total per-foot replacement cost of such home wiring.

The MDU owner must then notify the incumbent provider as to whether the MDU owner or an alternative provider intends to purchase the home wiring not later than 30 days before the incumbent's access to the building will be terminated. For unit-by-unit disposition of home run wiring, an MDU owner must provide at least 60 days' written notice to the incumbent MVPD that it intends to permit multiple MVPDs to compete for the right to use the individual home run wires dedicated to each unit. The incumbent service provider then has 30 days to provide the MDU owner with a written election as to whether, for all of the incumbent's home run wires dedicated to individual subscribers who may later choose the alternative provider's service, it will remove the wiring, abandon the wiring, or sell the wiring to the MDU owner.

In other words, the incumbent service provider will be required to make a single election for how it will handle the disposition of individual home run wires whenever a subscriber wishes to switch service providers; that election will then be implemented each time an individual subscriber switches service providers.

Where parties negotiate a price for the wiring and are unable to agree on a price, the incumbent service provider must elect among abandonment, removal of the wiring, or arbitration for a price determination. The MDU owner also must provide reasonable advance notice to the incumbent provider that it will purchase, or that it will allow an alternative provider to purchase, the cable home wiring when a terminating individual subscriber declines. If the alternative provider is permitted to purchase the wiring, it will be required to make a similar election during the initial 30-day notice period for each subscriber who switches back from the alternative provider to the incumbent MVPD.

While the American Housing Survey estimates that there were some 7,600,000 MDUs with 24,600,000 resident occupants in the United States in 2000, we estimate that there will be only 12,500 notices and 12,500 elections being made on an annual basis. In many buildings, the MDU owner will be unable to initiate the notice and election processes because the incumbent MVPD service provider continues to have a legally enforceable right to remain on the premises. In other buildings, the MDU owner may simply have no interest in acquiring a new MVPD service provider.

OMB Control Number: 3060–1032.

Title: Commercial Availability of Navigation Devices and Compatibility Between Cable Systems and Consumer Electronics Equipment, CS Docket No. 97–80 and PP Docket No. 00–67.

Form Number: Not applicable.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for-profit entities.

Number of Respondents: 611.

Estimated Time per Response: 30 seconds–40 hours.

Frequency of Response: Recordkeeping requirement; On occasion reporting requirement; Third party disclosure requirement.

Obligation to Respond: Voluntary.

Total Annual Burden: 97,928 hours.

Total Annual Cost: None.

Privacy Impact Assessment: No impact(s).

Nature and Extend of Confidentiality: There is no need for confidentiality.

Needs and Uses: On March 17, 2005, the FCC released a Second Report and Order (2005 Deferral Order), In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, CS Docket No. 97–80, FCC 05–76, in which the Commission set forth reporting requirements for certain cable providers, the National Cable and Telecommunications Association (NCTA), and the Consumer Electronics Association (CEA). The cable providers are responsible for filing status reports regarding deployment and support of point of deployment modules, more commonly known as CableCARDs. The NCTA and CEA are required to file status reports to keep the FCC abreast of negotiations over bidirectional support and software-based security solutions for digital cable products available at retail.

On October 9, 2003, the FCC released the Second Report and Order and Second Further Notice of Proposed Rulemaking (2nd R&O), In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Compatibility Between Cable Systems and Consumer Electronics Equipment, CS Docket No. 97–80, PP Docket No. 00–67, FCC 03–225, the Commission adopted final rules that set technical and other criteria that manufacturers would have to meet in order to label or market unidirectional digital cable televisions and other unidirectional digital cable products as ''digital cable ready.'' This regime includes testing and self-certification standards, certification recordkeeping requirements, and consumer information disclosures in appropriate post-sale materials that describe the functionality of these devices and the need to obtain a security module from their cable operator. To the extent manufacturers have complaints regarding the certification process, they may file formal complaints with the Commission. In addition, should manufacturers have complaints regarding administration of the Dynamic Feedback Arrangement Scrambling Technique or DFAST license which governs the scrambling technology needed to build unidirectional digital cable products, they may also file complaints with the FCC. The 2nd R&O also prohibits MVPDs from encoding content to activate selectable output controls on unidirectional digital cable products, or the down-resolution of unencrypted broadcast television programming. MVPDs are also limited in the levels of copy protection that could be applied to various categories of programming. As a part of these encoding rules is a petition process for new services within existing business models, a PR Newswire Notice relating to initial classification of new business models, and a complaints process for disputes regarding new business models.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. E7–1011 Filed 1–23–07; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

[Report No. 2802]

Petition for Reconsideration of Action in Rulemaking Proceeding

December 28, 2006.

A Petition for Reconsideration has been filed in the Commission's Rulemaking proceeding listed in this Public Notice and published pursuant to 47 CFR 1.429(e). The full text of this document is available for viewing and copying in Room CY–B402, 445 12th Street, SW., Washington, DC or may be purchased from the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI) (1–800–378–3160). Oppositions to this petition must be filed by

February 8, 2007. See Section 1.4(b)(1) of the Commission's rules (47 CFR 1.4(b)(1)). Replies to an opposition must be filed within 10 days after the time for filing oppositions have expired.

Subject: In the Matter of Amendment of Section 73.202(b), Table of Allotments, FM Broadcast Stations (Port Norris, New Jersey, Fruitland, and Willards, Maryland, Chester, Lakeside, and Warsaw, Virginia) (MB Docket No. 04–409) (RM–11108) (RM–11234).

Number of Petitions Filed: 1.

Marlene H. Dortch,

Secretary.

[FR Doc. E7–1020 Filed 1–23–07; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL ELECTION COMMISSION

[Notice 2007–1]

Privacy Act of 1974; Systems of Records

AGENCY: Federal Election Commission.

ACTION: Proposed Notice of Revised System of Records.

SUMMARY: In accordance with the Privacy Act of 1974, as amended, 5 U.S.C. 552a, the Federal Election Commission (''the Commission'' or ''the FEC'') is publishing for comment a revised system of records that is maintained by the Commission. The system entitled Inspector General Investigative Records (FEC 12) has been revised to: include additional routine uses (3 through 17); expand the list of ''Categories of records in the system;'' include additional data elements required for systems of records notices, including ''Security Classification,'' ''Purpose,'' ''Disclosure to consumer reporting agencies,'' and ''Exemptions claimed for the system;'' and incorporate administrative and technical changes that have taken place since the last publication of FEC systems of records on December 15, 1997. 62 FR 65694. The minor changes include: clarifying the ''System location;'' adding new language to explain but not increase the ''Categories of individuals covered by the system;'' clarifying the language for ''Storage;'' adding new language under ''Retrievability;'' expanding the ''Safeguards;'' adding language to ''Retention and disposal;'' making a technical change to the ''System manager(s);'' clarifying the ''Notification,'' ''Record access,'' and ''Contesting record'' procedures; and updating the ''Record source categories.'' The revised system of records should provide improved protection for the privacy rights of individuals.

DATES: Comments on the proposed revisions to the existing records system, must be received no later than February 23, 2007. The revisions will be effective March 5, 2007 unless the Commission receives comments that would result in a contrary determination.

ADDRESSES: Comments should be addressed in writing to Thomasenia P. Duncan, Privacy Act Officer, Federal Election Commission, 999 E Street, NW., Washington, DC 20463, and must be received by close of business on February 23, 2007. Comments also may be sent via electronic mail to *Privacy@fec.gov.*

SUPPLEMENTARY INFORMATION: The primary purpose for this publication is to revise a system of records maintained by the FEC. The FEC has undertaken a review of its Privacy Act system of records, and as a result of this review, the FEC proposes to amend the system entitled Inspector General Investigative Files (FEC 12) to: include additional routine uses (3 through 17); expand the list of ''Categories of records in the system;'' include additional data elements required in a system of records, including ''Security classification,'' ''Purpose,'' ''Disclosure to consumer reporting agencies,'' and ''Exemptions claimed for the system;'' and incorporate administrative and technical changes that have taken place since the last publication. The minor changes include: clarifying the ''System location;'' adding new language to explain but not increase the ''Categories of individuals covered by the system;'' clarifying the language for ''Storage;'' adding new language under ''Retrievability;'' expanding the ''Safeguards;'' adding language to ''Retention and disposal;'' making a technical change to the ''System manager(s);'' clarifying the ''Notification,'' ''Record access,'' and ''Contesting record'' procedures; and updating the ''Record source categories.''

As required by 5 U.S.C. 552a(r) of the Privacy Act of 1974, as amended, and OMB Circular A–130, Appendix I, the FEC has submitted a report describing the altered system of records covered by this notice to the Office of Management and Budget and to Congress.

Dated: January 11, 2007.

Robert D. Lenhard,

Chairman, Federal Election Commission.

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FEC 12 Inspector General Investigative Files.

FEC 12

SYSTEM NAME:

Inspector General Investigative Files.

SECURITY CLASSIFICATION:

Records in this system are sensitive but unclassified.

SYSTEM LOCATION:

Federal Election Commission, Office of the Inspector General (OIG), 999 E Street, NW., Washington, DC 20463.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who are the subjects of complaints relating to the programs and operations of the Commission. Subjects include, but are not limited to, current and former FEC employees; current and former employees of contractors and subcontractors in their personal capacity, where applicable; and other persons whose actions affect the FEC, its programs or operations.

CATEGORIES OF RECORDS IN THE SYSTEM:

Complaints, referrals from other agencies, correspondence, investigative notes, interviews, statements from witnesses, transcripts taken during investigation, affidavits, copies of all subpoenas issued and responses thereto, interrogatories and responses thereto, reports, internal staff memoranda, staff working papers and other documents and records or copies obtained or relating to complaints and investigations. May include the name, address, telephone number, e-mail address, employment information, and financial records of the subjects.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Inspector General Act Amendments of 1988, Pub. L. 100–504, amending the Inspector General Act of 1978, Pub. L. 95–452, 5 U.S.C. app. 3.

PURPOSE(S):

These records are used to document the conduct and outcome of inquiries, complaints, and investigations concerning allegations of fraud, waste, and abuse that affect the FEC. The information is used to report the results of investigations to FEC management, contractors, prosecutors, law enforcement agencies, Congress, and others for an action deemed appropriate. These records are used also to retain sufficient information to fulfill reporting requirements and to maintain records related to the OIG's activities.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

These records and information contained in these records may be disclosed as follows:

1. To the Department of Justice when:

a. The agency, or any component thereof; or

b. Any employee of the agency in his or her official capacity; or

c. Any employee of the agency in his or her individual capacity where the Department of Justice has agreed to represent the employee; or

d. The United States, where the agency determines that litigation is likely to affect the agency or any of its components, is a party to litigation or has an interest in such litigation, and the use of such reports by the Department of Justice is deemed by the Inspector General, after careful review, to be relevant and necessary to the litigation, provided, however, that in each case the Inspector General determines that disclosure of the records to the Department of Justice is a use of the information contained in the records that is compatible with the purpose for which the records were collected.

2. To disclose them in a proceeding before a court or adjudicative body before which the agency is authorized to appear when:

a. The agency, or any component thereof; or

b. Any employee of the agency in his or her official capacity; or

c. Any employee of the agency in his or her individual capacity where the agency has agreed to represent the employee; or

d. The United States, where the agency determines that litigation is likely to affect the agency, or any of its components, is a party to litigation or has an interest in such litigation, and the Inspector General determines that, after careful review, the use of such records is relevant and necessary to the litigation, provided, however, that the Inspector General determines that disclosure of the records is compatible with the purpose for which the records were collected.

3. To the appropriate Federal, foreign, State, local, tribal, or other public authority responsible for enforcing, investigating or prosecuting such violation or charged with enforcing or implementing the statute, rule, regulation, or order issued pursuant thereto, when information indicates a violation or potential violation of law, whether civil, criminal or regulatory in nature, and whether arising by general statute or particular program statute, or by regulation, rule, or order issued pursuant thereto, if the information disclosed is relevant to any enforcement, regulatory, investigative or prosecutorial responsibility of the receiving entity.

4. To any source or potential source from which information is requested in the course of an investigation concerning the retention of an employee or other personnel action (other than hiring), or the retention of a security clearance, contract, grant, license, or other benefit, to the extent necessary to identify the individual, inform the source of the nature and purpose of the investigation, and to identify the type of information requested.

5. To a Federal, State, local, foreign, tribal or other public authority of the fact that this system of records contains information relevant to the retention of an employee, the retention of a security clearance, the letting of a contract, or the issuance or retention of a license, grant, or other benefit. The other agency or licensing organization may then make a request supported by written consent of the individual for the entire record if it so chooses. No disclosure will be made unless the information has been determined to be sufficiently reliable to support a referral to another office within the agency or to another Federal agency for criminal, civil, administrative, personnel, or regulatory action.

6. To the White House in response to an inquiry made at the written request of the individual about whom the record is maintained. Disclosure will not be made until the White House has furnished appropriate documentation of the individual's request, such as a copy of the individual's written request.

7. To a congressional office from the record of an individual in response to an inquiry from the congressional office made at the written request of the individual about whom the record is maintained. Disclosure will not be made until the congressional office has furnished appropriate documentation of the individual's request, such as a copy of the individual's written request.

8. To the National Archives and Records Administration or to the General Services Administration for records management inspections conducted under 44 U.S.C. 2903 and 2904.

9. To agency or OIG contractors (including employees of contractors), grantees, experts, or volunteers who have been engaged to assist the agency or OIG in the performance of a contract, service, grant, cooperative agreement, or other activity related to this system of records and who need to have access to the records in order to perform the activity for the agency or OIG. Recipients shall be required to comply with the requirements of the Privacy Act of 1974, as amended, 5 U.S.C. 552a.

10. To an authorized appeal grievance examiner, formal complaints examiner, equal employment opportunity investigator, arbitrator or other person properly engaged in investigation or settlement of an administrative grievance, complaint, claim, or appeal filed by an employee or former employee, but only to the extent that information is relevant and necessary to the proceeding. Agencies that may obtain information under this routine use include, but are not limited to, the Office of Personnel Management, Office of Special Counsel, Merit Systems Protection Board, Federal Labor Relations Authority, Equal Employment Opportunity Commission, and Office of Government Ethics.

11. To the Office of Personnel Management for matters concerned with oversight activities (necessary for the Office of Personnel Management to carry out its legally-authorized Government-wide personnel management programs and functions) and in their role as an investigation agency.

12. To officials of labor organizations when relevant and necessary to their duties of exclusive representation concerning personnel policies, practices, and matters affecting work conditions.

13. To agencies, offices, or establishments of the executive, legislative, or judicial branch of the Federal or State government after receipt of request and where the records or information is relevant and necessary to a decision on an employee's disciplinary or other administrative action (excluding a decision on hiring). The agency will take reasonable steps to ensure that the records are timely, relevant, accurate, and complete enough to assure fairness to the employee affected by the disciplinary or administrative action.

14. To debt collection contractors to collect debts owed to the Government, as authorized under the Debt Collection Act of 1982, 31 U.S.C. 3718, and subject to the Privacy Act safeguards.

15. To officials who have been engaged to assist the Office of Inspector General in the conduct of inquiries, complaints, and investigations who need to have access to the records in order to perform the work. This disclosure category includes members of the President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency, and officials

and administrative staff within their chain of command. Recipients shall be required to comply with the requirements of the Privacy Act.

16. Information may be disclosed to officials charged with the responsibility to conduct qualitative assessment reviews of internal safeguards and management procedures employed in investigative operations. This disclosure category includes members of the President's Council on Integrity and Efficiency, Executive Council on Integrity and Efficiency, and officials and administrative staff within their investigative chain of command, as well as authorized officials of the Department of Justice and the Federal Bureau of Investigation. Recipients shall be required to comply with the requirements of the Privacy Act.

17. To appropriate agencies, entities, and persons when (1) It is suspected or confirmed that the security or confidentiality of information in the system of records has been compromised; (2) the Commission has determined that as a result of the suspected or confirmed compromise there is a risk of harm to economic or property interests, identity theft or fraud, or harm to the security or integrity of this system or other systems or programs (whether maintained by the Commission or another agency or entity) that rely upon the compromised information; and (3) the disclosure is made to such agencies, entities, and persons who are reasonably necessary to assist in connection with the Commission's efforts to respond to the suspected or confirmed compromise and prevent, minimize, or remedy such harm.

DISCLOSURE TO CONSUMER REPORTING AGENCIES:

We may disclose the record or information from this system, pursuant to 5 U.S.C. 552a(b)(12), to consumer reporting agencies as defined in the Fair Credit Reporting Act, 15 U.S.C. 1681a(f) or the Federal Claims Collection Act of 1966, as amended, 31 U.S.C. 3701(a)(3), in accordance with section 3711(f) of Title 31.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records are stored in both a paper and electronic format.

RETRIEVABILITY:

The records may be retrieved by the name of the subject of the complaint/investigation or by a unique control number assigned to each complaint/investigation.

SAFEGUARDS:

The records are maintained in limited access areas within the building. Access is limited to Office of Inspector General employees whose official duties require access. The paper records and electronic information not stored on computers are maintained in lockable cabinets in a locked room. Information stored on computers is on a restricted access server located in a locked room. All electronic records are protected from unauthorized access through appropriate administrative, physical, and technical safeguards. These safeguards include the application of appropriate access control mechanisms to ensure the confidentiality, integrity, and availability of those records are only accessed by those with a need to know and dictated by their official duties.

RETENTION AND DISPOSAL:

These records will be maintained permanently until disposition authority is granted by the National Archives and Records Administration. Upon approval, the records will be retained in accordance with NARA's schedule and disposed of in a secure manner.

SYSTEM MANAGER(S) AND ADDRESS:

Inspector General, Federal Election Commission, 999 E Street, NW., Washington, DC 20463, (202/694–1015).

NOTIFICATION PROCEDURE:

A request for notification of the existence of records may be made in person or in writing to the FEC Inspector General, 999 E Street, NW., Washington, DC 20463. For additional information, refer to the Commission's access regulations at 11 CFR parts 1.1–1.5, 41 FR 43064 (1976).

RECORD ACCESS PROCEDURES:

An individual interested in gaining access to a record pertaining to him or her may make a request in person or in writing to the FEC Inspector General at the following address: 999 E Street, NW., Washington, DC 20463. For additional information, refer to the Commission's access regulations at 11 CFR parts 1.1–1.5, 41 FR 43064 (1976).

CONTESTING RECORD PROCEDURES:

Individuals interested in contesting the information contained in their records or the denial of access to such information should notify the FEC Inspector General at the following address: 999 E Street, NW., Washington, DC, 20463. For additional information, refer to the Commission's regulations for contesting initial denials for access to or amendment of records, 11 CFR parts 1.7–1.9, 41 FR 43064 (1976).

RECORD SOURCE CATEGORIES:

Complaints, subjects, third parties who have been requested to produce relevant information, referring agencies, and OIG personnel assigned to handle complaints/investigations.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

System exempt under 5 U.S.C. 552a(j)(2) and 5 U.S.C. 552a(k)(2). See 11 CFR 1.14.

[FR Doc. E7–955 Filed 1–23–07; 8:45 am]

BILLING CODE 6715–01–P

FEDERAL MARITIME COMMISSION

Notice of Agreements Filed

The Commission hereby gives notice of the filing of the following agreements under the Shipping Act of 1984. Interested parties may submit comments on agreements to the Secretary, Federal Maritime Commission, Washington, DC 20573, within ten days of the date this notice appears in the **Federal Register**. Copies of agreements are available through the Commission's Office of Agreements (202–523–5793 or *tradeanalysis@fmc.gov*).

Agreement No.: 011654–017.

Title: Middle East Indian Subcontinent Discussion Agreement.

Parties: A.P. Moller-Maersk A/S; China Shipping Navigation Co., Ltd. d/b/a Indotrans; CMA CGM S.A.; Emirates Shipping Line FZE; Hapag-Lloyd AG; MacAndrews & Company Limited; Shipping Corporation of India, Ltd.; The National Shipping Company of Saudi Arabia; United Arab Shipping Company (S.A.G.); and Zim Integrated Shipping Services, Ltd.

Filing Party: Wayne R. Rohde, Esq.; Sher & Blackwell LLP; 1850 M Street, NW., Suite 900; Washington, DC 20036.

Synopsis: The amendment changes China Shipping Navigation Co.'s name to Swire Shipping Limited and updates that entity's address.

Agreement No.: 011985.

Title: CSAV/NYK ECUS–WCSA Space Charter Agreement.

Parties: Compania Sud Americana de Vapores S.A. and Nippon Yusen Kaisha.

Filing Party: Wayne R. Rohde, Esq.; Sher & Blackwell LLP; 1850 M Street, NW.; Suite 900; Washington, DC 20036.

Synopsis: The agreement authorizes CSAV to charter space to NYK for the carriage of motor vehicles on car carriers from Baltimore and Miami to ports in Chile and Peru through February 15, 2007.

Agreement No.: 011986.

Title: CMA CGM/MARUBA Central America to Miami Space Charter Agreement.

Parties: CMA CGM S.A. and MARUBA S.A.

Filing Party: Paul M. Keane, Esq.; Cichanowicz, Callan, Keane, Vengrow & Textor, LLP; 61 Broadway; Suite 3000; New York, NY 10006–2802.

Synopsis: The agreement authorizes CMA CGM to charter space to MARUBA between the U.S. East Coast and ports throughout Central America and the Caribbean.

By Order of the Federal Maritime Commission.

Dated: January 19, 2007.

Bryant L. VanBrakle,

Secretary.

[FR Doc. E7–1000 Filed 1–23–07; 8:45 am]

BILLING CODE 6730–01–P

FEDERAL MARITIME COMMISSION

Ocean Transportation Intermediary License Revocations

The Federal Maritime Commission hereby gives notice that the following Ocean Transportation Intermediary licenses have been revoked pursuant to section 19 of the Shipping Act of 1984 (46 U.S.C. chapter 409) and the regulations of the Commission pertaining to the licensing of Ocean Transportation Intermediaries, 46 CFR part 515, effective on the corresponding date shown below:

License Number: 017096F.
Name: Aero Costa International, Inc.
Address: 22010 S. Wilmington Ave., Ste. 208, Carson, CA 90745.
Date Revoked: December 31, 2006.
Reason: Failed to maintain a valid bond.

License Number: 011335N.
Name: Aeronet, Inc.
Address: 42 Corporate Park, Ste. 150, Irvine, CA 92606.
Date Revoked: December 28, 2006.
Reason: Failed to maintain a valid bond.

License Number: 007438N.
Name: Allied Freight Forwarding, Inc.
Address: 700 Oakmont Lane, Westmont, Il 60559–5546.
Date Revoked: December 7, 2006.
Reason: Surrendered license voluntarily.

License Number: 016233N.
Name: Amfak Container Line, Inc., Dba Freight Brokers Italia Srl.
Address: 207 Meadow Road, Edison, NJ 08817.
Date Revoked: December 4, 2006.
Reason: Failed to maintain a valid bond.

License Number: 019591NF.
Name: Con-Way Global Solutions, Inc. dba Con-Way Air Express.
Address: 110 Parkland Plaza, Ann Arbor, MI 48103.
Date Revoked: December 6, 2006.
Reason: Surrendered license voluntarily.

License Number: 018742F.
Name: FMD International Business, Inc. dba Triton Cargo USA.
Address: 576 NW 87th Terrace, Coral Spring, FL 33071.
Date Revoked: December 20, 2006.
Reason: Failed to maintain a valid bond.

License Number: 000149F.
Name: M.G. Otero Company, Inc.
Address: 109 West Lemon Ave., 2nd Floor, Monrovia, CA 91016.
Date Revoked: December 26, 2006.
Reason: Failed to maintain a valid bond.

License Number: 019566F.
Name: Guomei Ma dba MTEK International.
Address: 26888 Arcadia Drive, Flat Rock, MI 48134.
Date Revoked: November 8, 2006.
Reason: Surrendered license voluntarily.

License Number: 015924N.
Name: Normas World Trading Company, Inc.
Address: 872 Bettina Court, Ste. 203, Houston, TX 77024.
Date Revoked: December 31, 2006.
Reason: Failed to maintain a valid bond.

License Number: 002996F.
Name: Pecan International Forwarders, Inc.
Address: 147–02 Farmers Blvd, Jamaica, NY 11434.
Date Revoked: December 31, 2006.
Reason: Failed to maintain a valid bond.

License Number: 002263F.
Name: St. John Bros., Inc.
Address: Bldg. #1, East Access Rd., N.O. Int'l. Airport, Kenner, LA 70063.
Date Revoked: December 20, 2006.
Reason: Failed to maintain a valid bond.

License Number: 016535F.
Name: World Trans Logistic Inc. dba World Air Logistic Co.
Address: 273 E. Rondondo Beach Blvd., Gardena, CA 90248.
Date Revoked: December 24, 2006.
Reason: Failed to maintain a valid bond.

Sandra L. Kusumoto,

Director, Bureau of Certification and Licensing.

[FR Doc. E7–1003 Filed 1–23–07; 8:45 am]

BILLING CODE 6730–01–P

FEDERAL MARITIME COMMISSION

Ocean Transportation Intermediary License Applicants

Notice is hereby given that the following applicants have filed with the Federal Maritime Commission an application for license as a Non-Vessel—Operating Common Carrier and Ocean Freight Forwarder—Ocean Transportation Intermediary pursuant to section 19 of the Shipping Act of 1984 as amended (46 U.S.C. Chapter 409 and 46 CFR part 515).

Persons knowing of any reason why the following applicants should not receive a license are requested to contact the Office of Transportation Intermediaries, Federal Maritime Commission, Washington, DC 20573.

Non-Vessel—Operating Common Carrier Ocean Transportation Intermediary Applicants:

PATJAM Shipping, Moving and Storage Inc., dba Patrick's Shipping Inc., 3477 NW. 19th Street, Lauderdale Lakes, FL 33311, *Officers:* Patrick McNeil, President (Qualifying Individual), Michael Scarlett, Secretary.

Shiplane Transport, Inc., 2620 N. Oak Park, Chicago, IL 60707, *Officers:* Elizabeth Esparza, Vice President, (Qualifying Individual), Peter F. Kennedy, President.

Conceptum TBS Projects LLC, 612 E. Grassy Sprain Road, Yonkers, NY 10710, *Officer:* John Broadbent, President (Qualifying Individual).

Non-Vessel-Operating Common Carrier and Ocean Freight Forwarder Transportation Intermediary Applicants:

Loginorth Inc., 7088 NW. 50 Street, Miami, FL 33166, *Officer:* Mario A. De Jesus, President (Qualifying Individual).

Eagle Logistic Service, Inc., 708 3rd Avenue, 5th Floor, New York, NY 10017, *Officers:* Ching Leung Cheung, President (Qualifying Individual), Xiao Peng Wei, Vice President.

Goal Ocean & Air Logistics Inc., 1817 West 7 Street, Suite 2R, Brooklyn, NY 11223, *Officers:* Cheuk Shing Yu, President, (Qualifying Individual) Yat Sing Tse, Secretary.

Ocean Freight Forwarder—Ocean Transportation Intermediary Applicant:

GAL International Inc., 5070 Parkside Avenue, Suite 3104, Philadelphia, PA 19131, *Officers:* Gbola Laosebikan, President, (Qualifying Indiviual) Ope Blaize, Vice President.

Dated: January 19, 2007.

Bryant L. VanBrakle,

Secretary.

[FR Doc. E7–1001 Filed 1–23–07; 8:45 am]

BILLING CODE 6730–01–P

FEDERAL RESERVE SYSTEM

Sunshine Act Meeting

AGENCY HOLDING THE MEETING: Board of Governors of the Federal Reserve System.

TIME AND DATE: 12:00 p.m., Monday, January 29, 2007.

PLACE: Marriner S. Eccles Federal Reserve Board Building, 20th and C Streets, NW., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.

2. Any items carried forward from a previously announced meeting.

FOR FURTHER INFORMATION CONTACT: Michelle Smith, Director, or Dave Skidmore, Assistant to the Board, Office of Board Members at 202–452–2955.

SUPPLEMENTARY INFORMATION: You may call 202–452–3206 beginning at approximately 5 p.m. two business days before the meeting for a recorded announcement of bank and bank holding company applications scheduled for the meeting; or you may contact the Board's Web site at *http://www.federalreserve.gov* for an electronic announcement that not only lists applications, but also indicates procedural and other information about the meeting.

Board of Governors of the Federal Reserve System, January 19, 2007.

Robert deV. Frierson,

Deputy Secretary of the Board.

[FR Doc. 07–311 Filed 1–19–07; 5:06 pm]

BILLING CODE 6210–01–S

FEDERAL RETIREMENT THRIFT INVESTMENT BOARD

Employee Thrift Advisory Council

Time and Date: 2 p.m. (EST), February 7, 2007.

Place: 4th Floor Conference Room, 1250 H Street, NW., Washington, DC.

Status: Open.

Matters to be Considered:

1. Approval of the minutes of the March 7, 2006 meeting.

2. Report of the Executive Director on Thrift Savings Plan status.

3. Ennis Knupp Report.

4. Watson Wyatt Worldwide survey report.

5. Legislation.

6. New business.

Contact Person for More Information: Thomas K. Emswiler, Committee Management Officer, (202) 942–1660.

Dated: January 19, 2007.

Thomas K. Emswiler,

General Counsel, Federal Retirement Thrift Investment Board.

[FR Doc. 07–312 Filed 1–19–07; 5:08 pm]

BILLING CODE 6760–01–P

FEDERAL TRADE COMMISSION

Agency Information Collection Activities; Submission for OMB Review; Comment Request

AGENCY: Federal Trade Commission (''FTC'' or ''Commission'').

ACTION: Notice.

SUMMARY: The information collection requirements described below will be submitted to the Office of Management and Budget (''OMB'') for review, as required by the Paperwork Reduction Act (''PRA''). The FTC is seeking public comments on its proposal to extend through February 28, 2010 the current PRA clearance for information collection requirements contained in its Alternative Fuel Rule. That clearance expires on February 28, 2007.

DATES: Comments must be filed by February 23, 2007.

ADDRESSES: Interested parties are invited to submit written comments. Comments should refer to ''Alternative Fuel Rule: FTC File No. R311002'' to facilitate the organization of comments. A comment filed in paper form should include this reference both in the text and on the envelope and should be mailed or delivered, with two complete copies, to the following address: Federal Trade Commission, Room H–135 (Annex J), 600 Pennsylvania Ave., NW., Washington, DC 20580. Because paper mail in the Washington area and at the Commission is subject to delay, please consider submitting your comments in electronic form, as prescribed below. However, if the comment contains any material for which confidential treatment is requested, it must be filed in paper form, and the first page of the document must be clearly labeled ''Confidential.'' [1]

Comments filed in electronic form should be submitted by following the instructions on the Web-based form at *https://secure.commentworks.com/AlternativeFuelRule.* To ensure that the Commission considers an electronic comment, you must file it on the Web-based form at the *https://secure.commentworks.com/AlternativeFuelRule* Weblink. If this notice appears at *www.regulations.gov,* you may also file an electronic comment through that Web site. The Commission will consider all comments that regulations.gov forwards to it.

All comments should additionally be submitted to: Office of Management and Budget, *Attention:* Desk Officer for the Federal Trade Commission. Comments should be submitted via facsimile to (202) 395–6974 because U.S. Postal Mail is subject to lengthy delays due to heightened security precautions.

The FTC Act and other laws the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. All timely and responsive public comments will be considered by the Commission and will be available to the public on the FTC Web site, to the extent practicable, at *http://www.ftc.gov.* As a matter of discretion, the FTC makes every effort to remove home contact information for individuals from the public comments it receives before placing those comments on the FTC Web site. More information, including routine uses permitted by the Privacy Act, may be found in the FTC's privacy policy at *http://www.ftc.gov/ftc/privacy.htm.*

FOR FURTHER INFORMATION CONTACT: Requests for copies of the collection of information and supporting documentation should be addressed to Hampton Newsome, Attorney, Division of Enforcement, Bureau of Consumer Protection, Federal Trade Commission, 600 Pennsylvania Avenue, NW., NJ–2122, Washington, DC 20580, (202) 326–2889.

SUPPLEMENTARY INFORMATION: On September 22, 2006, the FTC sought comment on the information collection requirements associated with the Alternative Fuel Rule (''Rule''), 16 CFR part 309 (Control Number: 3084–0094). See 71 FR 55474. No comments were received. Pursuant to the OMB regulations, 5 CFR Part 1320, that implement the PRA, 44 U.S.C. 3501–3520, the FTC is providing this second

[1] Commission Rule 4.2(d), 16 CFR 4.2(d). The comment must be accompanied by an explicit request for confidential treatment, including the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. The request will be granted or denied by the Commission's General Counsel, consistent with applicable law and the public interest. *See* Commission Rule 4.9(c), 16 CFR 4.9(c).

opportunity for public comment while seeking OMB approval to extend the existing paperwork clearance for the Rule. All comments should be filed as prescribed in the **ADDRESSES** section above, and must be received on or before February 23, 2007.

The Rule, which implements the Energy Policy Act of 1992, Pub. L. 102–486, requires disclosure of specific information on labels posted on fuel dispensers for non-liquid alternative fuels and on labels on Alternative Fueled Vehicles (AFVs). To ensure the accuracy of these disclosures, the Rule also requires that sellers maintain records substantiating product-specific disclosures they include on these labels.

Burden Statement

It is common practice for alternative fuel industry members to determine and monitor fuel ratings in the normal course of their business activities. This is because industry members must know and determine the fuel ratings of their products in order to monitor quality and to decide how to market them. ''Burden'' for PRA purposes is defined to exclude effort that would be expended regardless of any regulatory requirement. 5 CFR 1320.2(b)(2). Moreover, as originally anticipated when the Rule was promulgated in 1995, many of the information collection requirements and the originally-estimated hours were associated with one-time start up tasks of implementing standard systems and processes.

Other factors also limit the burden associated with the Rule. Certification may be a one-time event or require only infrequent revision. Disclosures on electric vehicle fuel dispensing systems may be useable for several years.[2] Nonetheless, there is still some burden associated with posting labels. There also will be some minimal burden associated with new or revised certification of fuel ratings and recordkeeping. The burden on vehicle manufacturers is limited because only newly-manufactured vehicles will require label posting and manufacturers produce very few new models each year.

Estimated total annual hours burden: 24,000 total burden hours, rounded

Non-liquid alternative fuels:

Certification: Staff estimates that the Rule's fuel rating certification requirements will affect approximately 550 industry members (compressed natural gas producers and distributors and manufacturers of electric vehicle fuel dispensing systems) and consume approximately one hour each per year for a total of 550 hours.

Recordkeeping: Staff estimates that all 1,900 industry members (non-liquid fuel producers, distributors, and retailers) will be subject to the Rule's recordkeeping requirements (associated with fuel rating certification) and that compliance will require approximately one-tenth hour each per year for a total of 190 hours.

Labeling: Staff estimates that labeling requirements will affect approximately nine of every ten industry members (or roughly 1,700 members), but that the number of annually affected members is only 340 because labels may remain effective for several years (staff assumes that in any given year approximately 20% of 1,700 industry members will need to replace their labels). Staff estimates that industry members require approximately one hour each per year for labeling their fuel dispensers for a total of 340 hours.

Sub-total: 1,080 hours (550 + 190 + 340).

AFV manufacturers:

Recordkeeping: Staff estimates that all 58 manufacturers will require 30 minutes to comply with the Rule's recordkeeping requirements for a total of 29 hours.

Producing labels: Staff estimates 2.5 hours as the average time required of manufacturers to produce labels for each of the five new AFV models introduced industry-wide each year for a total of 12.5 hours.

Posting labels: Staff estimates 2 minutes as the average time to comply with the posting requirements for each of the approximately 680,000 new AFVs manufactured each year for a total of 22,667 hours.

Sub-total: 22,709 hours (29 + 12.5 + 22,667).

Thus, the total burden for these industries combined is approximately 24,000 hours (1,080 + 22,709), rounded.

Estimated labor costs: $698,000, rounded.

Labor costs are derived by applying appropriate hourly cost figures to the burden hours described above. According to Bureau of Labor Statistics data for 2005 (most recent available whole-year information), the average compensation for producers and distributors in the fuel industry is $19.34 per hour and $9.13 per hour for service station employees; the average compensation for workers in the vehicle industry is $29.90 per hour.

Non-liquid alternative fuels:

Certification and labeling: Generally, all of the estimated hours except for recordkeeping will be performed by producers and distributors of fuels. Thus, the associated labor costs would be $17,212.60. [(550 certification hours + 340 labeling hours) × $19.34]

Recordkeeping: Only 1/6 of the total 190 recordkeeping hours will be performed by the producers and distributors of fuels (1/6 of 190 hours = approximately 32 hours; 32 hours × $19.34 = $618.88); the other 5/6 is attributable to service station employees (5/6 of 190 hours = approximately 158 hours; 158 hours × $9.13 = $1,442.54). Thus, the labor cost due to recordkeeping for the entire industry is approximately $2,061.42 ($618.88 for producers and distributors of fuels + $1,442.54 for service station employees) and the total paperwork related labor cost for the entire industry is approximately $19,274.02 ($17,212.60 for certification and labeling costs + $2,061.42 for recordkeeping costs).

AFV manufacturers:

The maximum labor cost for the entire industry is approximately $678,999.10 per year for recordkeeping and producing and posting labels (22,709 total hours × $29.90/hour).

Thus, the estimated total labor cost for both industries for all paperwork requirements is $698,000 ($19,274.02 + $678,999.10) per year, rounded.

Estimated annual non-labor cost burden: $259,000 rounded.

Non-liquid alternative fuels:

Staff believes that there are no current start-up costs associated with the Rule, inasmuch as the Rule has been effective since 1995. Industry members, therefore, have in place the capital equipment and means necessary to determine automotive fuel ratings and comply with the Rule. Industry members, however, incur the cost of procuring fuel dispenser and AFV labels to comply with the Rule. The estimated annual fuel labeling cost, based on estimates of 540 fuel dispensers (assumptions: an estimated 20% of 1,350 total fuel retailers need to replace labels in any given year given an approximate five-year life for labels—i.e., 270 retailers—multiplied by an average of two dispensers per retailer) at thirty-eight cents for each label (per industry sources), is $205.00 ($0.38 × 540).

AFV manufacturers:

Here, too, staff believes that there are no current start-up costs associated with the Rule, for the same reasons as stated immediately above regarding the non-liquid alternative fuel industry. However, based on the labeling of an estimated 680,000 new and used AFVs each year at thirty-eight cents for each label (per industry sources), the annual

[2] Label specifications were designed to produce labels to withstand the elements for several years.

AFV labeling cost is estimated to be $258,400 ($0.38 × 680,000).

Thus, the estimated total annual non-labor cost burden associated with the Rule is $259,000 ($205 + $258,400), rounded.

William Blumenthal,

General Counsel.

[FR Doc. E7–952 Filed 1–23–07; 8:45 am]

BILLING CODE 6750–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

Annual Update of the HHS Poverty Guidelines

AGENCY: Department of Health and Human Services.

ACTION: Notice.

SUMMARY: This notice provides an update of the HHS poverty guidelines to account for last calendar year's increase in prices as measured by the Consumer Price Index.

DATES: *Effective Date:* Date of publication, unless an office administering a program using the guidelines specifies a different effective date for that particular program.

ADDRESSES: Office of the Assistant Secretary for Planning and Evaluation, Room 404E, Humphrey Building, Department of Health and Human Services (HHS), Washington, DC 20201.

FOR FURTHER INFORMATION CONTACT: For information about how the guidelines are used or how income is defined in a particular program, contact the Federal, State, or local office that is responsible for that program. Contact information for two frequently requested programs is given below:

For information about the Hill-Burton Uncompensated Services Program (free or reduced-fee health care services at certain hospitals and other facilities for persons meeting eligibility criteria involving the poverty guidelines), contact the Office of the Director, Division of Facilities Compliance and Recovery, Health Resources and Services Administration, HHS, Room 10–105, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. To speak to a person, call (301) 443–5656. To receive a Hill-Burton information package, call 1–800–638–0742 (for callers outside Maryland) or 1–800–492–0359 (for callers in Maryland). You may also visit *http://www.hrsa.gov/hillburton/default.htm.* The Division of Facilities Compliance and Recovery notes that as set by 42 CFR 124.505(b), the effective date of this update of the poverty guidelines for facilities obligated under the Hill-Burton Uncompensated Services Program is sixty days from the date of this publication.

For information about the percentage multiple of the poverty guidelines to be used on immigration forms such as USCIS Form I–864, Affidavit of Support, contact U.S. Citizenship and Immigration Services at 1–800–375–5283 or visit *http://www.uscis.gov/files/form/I-864p.pdf.*

For information about the number of people in poverty or about the Census Bureau poverty thresholds, visit the Poverty section of the Census Bureau's Web site at *http://www.census.gov/hhes/www/poverty/poverty.html* or contact the Census Bureau's Demographic Call Center Staff at (301) 763–2422 or 1–866–758–1060 (toll-free).

For general questions about the poverty guidelines themselves, contact Gordon Fisher, Office of the Assistant Secretary for Planning and Evaluation, Room 404E, Humphrey Building, Department of Health and Human Services, Washington, DC 20201—telephone: (202) 690–7507—or visit *http://aspe.hhs.gov/poverty/.*

SUPPLEMENTARY INFORMATION:

Background

Section 673(2) of the Omnibus Budget Reconciliation Act (OBRA) of 1981 (42 U.S.C. 9902(2)) requires the Secretary of the Department of Health and Human Services to update, at least annually, the poverty guidelines, which shall be used as an eligibility criterion for the Community Services Block Grant program. The poverty guidelines also are used as an eligibility criterion by a number of other Federal programs. The poverty guidelines issued here are a simplified version of the poverty thresholds that the Census Bureau uses to prepare its estimates of the number of individuals and families in poverty.

As required by law, this update is accomplished by increasing the latest published Census Bureau poverty thresholds by the relevant percentage change in the Consumer Price Index for All Urban Consumers (CPI–U). The guidelines in this 2007 notice reflect the 3.2 percent price increase between calendar years 2005 and 2006. After this inflation adjustment, the guidelines are rounded and adjusted to standardize the differences between family sizes. The same calculation procedure was used this year as in previous years. (Note that these 2007 guidelines are roughly equal to the poverty thresholds for calendar year 2006 which the Census Bureau expects to publish in final form in August 2007.) The guideline figures shown represent annual income.

2007 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

Persons in family	Poverty guideline
1	$10,210
2	13,690
3	17,170
4	20,650
5	24,130
6	27,610
7	31,090
8	34,570

For families with more than 8 persons, add $3,480 for each additional person.

2007 POVERTY GUIDELINES FOR ALASKA

Persons in family	Poverty guideline
	$12,770
2	17,120
3	21,470
4	25,820
5	30,170
6	34,520
7	38,870
8	43,220

For families with more than 8 persons, add $4,350 for each additional person.

2007 POVERTY GUIDELINES FOR HAWAII

Persons in family	Poverty guideline
1	$11,750
2	15,750
3	19,750
4	23,750
5	27,750
6	31,750
7	35,750
8	39,750

For families with more than 8 persons, add $4,000 for each additional person.

Separate poverty guideline figures for Alaska and Hawaii reflect Office of Economic Opportunity administrative practice beginning in the 1966–1970 period. (Note that the Census Bureau poverty thresholds—the version of the poverty measure used for statistical purposes—have never had separate figures for Alaska and Hawaii.) The poverty guidelines are not defined for Puerto Rico or other outlying jurisdictions. In cases in which a

Federal program using the poverty guidelines serves any of those jurisdictions, the Federal office that administers the program is generally responsible for deciding whether to use the contiguous-states-and-DC guidelines for those jurisdictions or to follow some other procedure.

Due to confusing legislative language dating back to 1972, the poverty guidelines have sometimes been mistakenly referred to as the ''OMB'' (Office of Management and Budget) poverty guidelines or poverty line. In fact, OMB has never issued the guidelines; the guidelines are issued each year by the Department of Health and Human Services. The poverty guidelines may be formally referenced as ''the poverty guidelines updated periodically in the **Federal Register** by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2).''

Some programs use a percentage multiple of the guidelines (for example, 125 percent or 185 percent of the guidelines), as noted in relevant authorizing legislation or program regulations. Non-Federal organizations that use the poverty guidelines under their own authority in non-federally-funded activities can choose to use a percentage multiple of the guidelines such as 125 percent or 185 percent.

The poverty guidelines do not make a distinction between farm and non-farm families, or between aged and non-aged units. (Only the Census Bureau poverty thresholds have separate figures for aged and non-aged one-person and two-person units.)

Note that this notice does not provide definitions of such terms as ''income'' or ''family.'' This is because there is considerable variation in how different programs that use the guidelines define these terms, traceable to the different laws and regulations that govern the various programs. Therefore, questions about how a particular program applies the poverty guidelines (*e.g.*, Is income before or after taxes? Should a particular type of income be counted? Should a particular person be counted in the family or household unit?) should be directed to the organization that administers the program.

Dated: January 17, 2007.

Michael O. Leavitt,

Secretary of Health and Human Services.

[FR Doc. 07–268 Filed 1–19–07; 8:45 am]

BILLING CODE 4151–05–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Disease, Disability, and Injury Prevention and Control Special Emphasis Panel (SEP): NIOSH Occupational Health and Safety Research, Program Announcement Number (PAR) 06–484

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), the Centers for Disease Control and Prevention (CDC) announces the aforementioned meeting:

Time and Date: 8 a.m.–5 p.m., February 9, 2007 (Closed).

Place: 1750 New York Avenue, NW., Washington, DC 20006.

Status: The meeting will be closed to the public in accordance with provisions set forth in section 552b(c)(4) and (6), Title 5 U.S.C., and the Determination of the Director, Management Analysis and Services Office, CDC, pursuant to Public Law 92–463.

Matters To Be Discussed: The SEP meeting will include the review, discussion, and evaluation of applications received in response to ''NIOSH Occupational Health and Safety Research,'' PAR 06–484. The applications being reviewed include information of a confidential nature, including personal information concerning individuals associated with the applications.

Contact Person for More Information: Horace M. Stiles, DDS, PhD, MPH, Designated Federal Officer, 15111 Farm Market Road, Maypearl, Texas 76064–1902, telephone 404.498.2584.

The Director, Management Analysis and Services Office, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities, for both CDC and the Agency for Toxic Substances and Disease Registry.

Dated: January 18, 2007.

Elaine L. Baker,

Acting Director, Management Analysis and Services Office, Centers for Disease Control and Prevention.

[FR Doc. E7–987 Filed 1–23–07; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

Submission for OMB Review; Comment Request

Title: 45 CFR 1304 Head Start Program Performance Standards.

OMB No. 0970–0148.

Description: Head Start Program Performance Standards require Head Start and Early Head Start Programs and Delegate Agencies to maintain program records. The Administration for Children and Families, Office of Head Start, is proposing to renew, without changes, the authority to require certain record keeping in all programs as provided for in 45 CFR part 1304 Head Start Program Performance Standards. These standards prescribe the services that Head Start and Early Head Start programs provide to enrolled children and their families.

Respondents: Head Start and Early Head Start grantees and delegate agencies.

ANNUAL BURDEN ESTIMATES

Instrument	Number of respondents	Number of responses per respondent	Average burden hours per response	Total burden hours
Standard	2,590	16	41.8	1,732,192
Estimated Total Annual Burden Hours:				1,732,192

Additional Information: Copies of the proposed collection may be obtained by writing to the Administration for Children and Families, Office of Administration, Office of Information Services, 370 L'Enfant Promenade, SW., Washington, DC 20447, Attn: ACF Reports Clearance Officer. All requests should be identified by the title of the information collection. E-mail address: *infocollection@acf.hhs.gov.*

OMB Comment: OMB is required to make a decision concerning the collection of information between 30 and 60 days after publication of this document in the **Federal Register**. Therefore, a comment is best assured of having its full effect if OMB receives it within 30 days of publication. Written comments and recommendations for the proposed information collection should be sent directly to the following: Office of Management and Budget, Paperwork

Reduction Project, Attn: Desk Officer for ACF, Fax: 202–395–6974.

Dated: January 18, 2007.

Robert Sargis,

Reports Clearance Officer.

[FR Doc. 07–272 Filed 1–23–07; 8:45 am]

BILLING CODE 4184–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

Submission for OMB Review; Comment Request

Title: Annual Maintenance-of-Effort (MOE) Report.

OMB No. 0970–0248.

Description: The Administration for Children and Families (ACF) is requesting a three-year extension of the ACF–204 (Annual MOE Report). The report is used to collect descriptive program characteristics information on the programs operated by States and Territories in association with their Temporary Assistance for Needy Families (TANF) programs. All State and Territory expenditures claimed toward States' and Territories' MOE requirements must be appropriate, i.e., meet all applicable MOE requirements. The Annual MOE Report provides the ability to learn about and to monitor the nature of State and Territory expenditures used to meet State's and Territories' MOE requirements, and it is an important source of information about the different ways that States and Territories are using their resources to help families attain and maintain self-sufficiency.

In addition, the report is used to obtain State and Territory program characteristics for ACF's annual report to Congress, and the report serves as a useful resource to use in Congressional hearings about how TANF programs are evolving, in assessing State the Territory MOE expenditures, and in assessing the need for legislative changes.

Respondents: The 50 States of the United States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

ANNUAL BURDEN ESTIMATES

Instrument	Number of respondents	Number of responses per respondent	Average burden hours per response	Total burden hours
ACF–204	54	1	128	6,912
Estimated Total Annual Burden Hours:				6,912

OMB Comment: OMB required to make a decision concerning the collection of information between 30 and 60 days after publication of this document in the **Federal Register**. Therefore, a comment is best assured of having its full effect if OMB receives it within 30 days of publication. Written comments and recommendations for the proposed information collection should be sent directly to the following: Office of Management and Budget, Paperwork Reduction Project, Attn: Desk Officer for ACF, Fax: 202–395–6974.

Dated: September 18, 2007.

Robert Sargis,

Reports Clearance Officer.

[FR Doc. 07–273 Filed 1–23–07; 8:45 am]

BILLING CODE 4184–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 2007D–0017]

Guidance for Industry: Certain Human Cells, Tissues, and Cellular and Tissue-Based Products Recovered From Donors Who Were Tested for Communicable Diseases Using Pooled Specimens or Diagnostic Tests; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of a document entitled ''Guidance for Industry: Certain Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps) Recovered From Donors Who Were Tested for Communicable Diseases Using Pooled Specimens or Diagnostic Tests'' dated January 2007. The guidance document provides establishments that make HCT/P donor eligibility determinations with recommendations concerning the donor eligibility requirements contained in 21 CFR part 1271, subpart C, which became effective on May 25, 2005. The guidance applies only to certain HCT/Ps that were not regulated as HCT/Ps before May 25, 2005, and that were recovered from donors beginning on or after the May 25, 2005, and within 30 days of the date of publication of this document in the **Federal Register**. This guidance has an immediate implementation date because FDA has determined that prior public participation is not feasible or appropriate. In certain cases, donor retesting needs to be initiated quickly, and the availability of certain HCT/Ps may be critical to their intended recipients.

DATES: Submit written or electronic comments on agency guidances at any time.

ADDRESSES: Submit written requests for single copies of the guidance to the Office of Communication, Training, and Manufacturers Assistance (HFM–40), Center for Biologics Evaluation and Research (CBER), Food and Drug Administration, 1401 Rockville Pike, suite 200N, Rockville, MD 20852–1448. Send one self-addressed adhesive label to assist the office in processing your requests. The guidance may also be obtained by mail by calling CBER at 1–800–835–4709 or 301–827–1800. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the guidance document.

Submit written comments on the 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.*

FOR FURTHER INFORMATION CONTACT: Valerie A. Butler, Center for Biologics Evaluation and Research (HFM–17), Food and Drug Administration, 1401 Rockville Pike, suite 200N, Rockville, MD 20852–1448, 301–827–6210.

SUPPLEMENTARY INFORMATION:

I. Background

FDA is announcing the availability of a document entitled ''Guidance for Industry: Certain Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps) Recovered From Donors Who

Were Tested for Communicable Diseases Using Pooled Specimens or Diagnostic Tests'' dated January 2007. The guidance document provides establishments that make HCT/P donor eligibility determinations with recommendations concerning the donor eligibility requirements under part 1271 (21 CFR part 1271), subpart C, when donors of certain HCT/Ps were tested for communicable diseases using pooled specimens or diagnostic tests. The effective date of the regulations contained in part 1271, subpart C, was May 25, 2005 (69 FR 29785, May 25, 2004). The guidance is applicable to certain HCT/Ps that were not regulated as HCT/Ps before May 25, 2005, and that were recovered from donors on or after May 25, 2005, and within 30 days of the date of publication of this document in the **Federal Register**. FDA has determined that donor retesting, in certain cases, needs to be conducted in a timely manner in order to be feasible, and the availability of certain HCT/Ps may be critical to their intended recipients.

The guidance is being issued consistent with FDA's good guidance practices regulation § 10.115 (21 CFR 10.115). The guidance represents FDA's current thinking on this topic. 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 statutes and regulations.

II. 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 part 1271, subpart C, have been approved under OMB control number 0910–0543; the collections of information in part 1271, subpart D, and Form FDA–3486 have been approved under OMB control number 0910–0559.

III. Comments

FDA is soliciting public comment, but is implementing this guidance immediately in accordance with § 10.115(g)(2) and (3) without initially seeking prior comment because the agency has determined that prior public participation is not feasible or appropriate. In certain cases, donor retesting needs to be initiated quickly, and the availability of certain HCT/Ps may be critical to their intended recipients. Interested persons may, at any time, submit to the Division of Dockets Management (See **ADDRESSES**) written or electronic comments regarding the guidance. 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 the brackets in the heading of this document. A copy of the guidance and received comments are available for public examination in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

IV. Electronic Access

Persons with access to the Internet may obtain the guidance at either *http://www.fda.gov/cber/guidelines.htm* or *http://www.fda.gov/ohrms/dockets/default.htm*.

Dated: January 17, 2007.

Jeffrey Shuren,

Assistant Commissioner for Policy.

[FR Doc. E7–978 Filed 1–23–07; 8:45 am]

BILLING CODE 4160–01–S

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Agency Information Collection Activities: Visa Waiver Program Carrier Agreement (Form I–775)

AGENCY: Bureau of Customs and Border Protection, Department of Homeland Security.

ACTION: Proposed collection; comments requested.

SUMMARY: The Bureau of Customs and Border Protection (CBP) of the Department of Homeland Security 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: Visa Waiver Program Carrier Agreement (Form I–775). This is a proposed extension of an information collection that was previously approved. CBP is proposing that this information collection be extended without a change to the burden hours. This document is published to obtain comments form the public and affected agencies. This proposed information collection was previously published in the **Federal Register** (71 FR 67149) on November 20, 2006, allowing for a 60-day comment period. This notice allows for an additional 30 days for public comments. This process is conducted in accordance with 5 CFR 1320.10.

DATES: Written comments should be received on or before February 23, 2007.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to Nathan Lesser, Desk Officer, Department of Homeland Security/Customs and Border Protection, and sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

SUPPLEMENTARY INFORMATION: The Bureau of Customs and Border Protection (CBP) encourages the general public and affected Federal agencies to submit written comments and suggestions on proposed and/or continuing information collection requests pursuant to the Paperwork Reduction Act of 1995 (Pub. L.104–13). Your comments should address one 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/component, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agencies/components 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 collections of information on those who are to respond, including 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.

Title: Visa Waiver Program Carrier Agreement.

OMB Number: 1651–0110.

Form Number: Form I–775.

Abstract: The Form I–775 provides for certain aliens to be exempt from the non-immigrant visa requirements if seeking entry as a visitor for no more than 90 days, provided that no potential threat exists to the security of the United States.

Current Actions: There are no changes to the information collection. This submission is to extend the expiration date.

Type of Review: Extension (without change).

Affected Public: Individuals.

Estimated Number of Respondents: 400.

Estimated Time Per Respondent: 2 hours.

Estimated Total Annual Burden Hours: 800.

Estimated Total Annualized Cost on the Public: N/A.

If additional information is required contact: Tracey Denning, Bureau of Customs and Border Protection, 1300 Pennsylvania Avenue, NW., Room 3.2.C, Washington, DC 20229, at 202–344–1429.

Dated: January 16, 2007.

Tracey Denning,

Agency Clearance Officer, Information Services Branch.

[FR Doc. E7–959 Filed 1–23–07; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[OR–130–1020–PH; GP7–0053]

Notice of Public Meeting, Eastern Washington Resource Advisory Council Meeting

AGENCY: Bureau of Land Management, U.S. Department of the Interior.

ACTION: Notice of public meeting.

SUMMARY: In accordance with the Federal Land Policy and Management Act of 1976 and the Federal Advisory Committee Act of 1972, the U.S. Department of the Interior, Bureau of Land Management Eastern Washington Resource Advisory Council will meet as indicated below.

DATES: The Eastern Washington Resource Advisory Council will meet Friday, February 23, 2007 at the Spokane District Office, Bureau of Land Management, 1103 North Fancher Road, Spokane Valley, Washington 99212–1275.

SUPPLEMENTARY INFORMATION: The meeting will start at 8 a.m., adjourn at 4 p.m., and will be open to the public. The meeting will focus on establishing the Council's agenda for calendar year 2007. The meeting will also include updates on the status of projects and issues discussed at previous meetings. There will be an opportunity for public comment at 3 p.m.

FOR FURTHER INFORMATION CONTACT: Scott Pavey or Sandie Gourdin, Bureau of Land Management, Spokane District Office, 1103 N. Fancher Road, Spokane Valley, Washington 99212–1275, or call (509) 536–1200.

Dated: January 18, 2007.

Richard Bailey,

Acting District Manager.

[FR Doc. E7–989 Filed 1–23–07; 8:45 am]

BILLING CODE 4310–33–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–550]

In the Matter of Certain Modified Vaccinia Ankara (''MVA'') Viruses and Vaccines and Pharmaceutical Compositions Based Thereon; Notice of Commission Decision To Request Supplemental Briefing and To Extend the Target Date for Completion of the Investigation

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has requested supplemental briefing in the above-captioned investigation and has determined to extend the target date for completion of the investigation.

FOR FURTHER INFORMATION CONTACT: James A. Worth, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone (202) 205–3065. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone (202) 205–2000. General information concerning the Commission may also be obtained by accessing its Internet server (*http://www.usitc.gov*). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov*. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205–1810.

SUPPLEMENTARY INFORMATION: This investigation was instituted on September 23, 2005, based on a complaint filed by Bavarian Nordic A/S of Denmark. The complaint alleged violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain modified vaccinia ankara (''MVA'') viruses and vaccines and pharmaceutical compositions based thereon by reason of infringement of various claims of United States Patent Nos. 6,761,893 and 6,913,752. The complaint also alleged violations of section 337 in the importation of certain MVA viruses and vaccines and pharmaceutical compositions based thereon or in the sale of such articles by reason of misappropriation of trade secrets, the threat or effect of which is to destroy or substantially injure an industry in the United States. The complaint named a single respondent, Acambis PLC (''Acambis'') of the United Kingdom. Only the patent allegations remain in this investigation.

After a hearing and post-hearing briefing, the ALJ issued a final initial determination (''final ID'') on September 6, 2006, finding no violation of section 337. The ALJ held that the patents were infringed but invalid.

Bavarian Nordic, Acambis, and the Commission investigative attorney filed petitions for review of the final ID. By notice of November 22, 2006, the Commission determined to review the final ID in its entirety, as well as Order No. 10, to extend the target date for completion of the investigation to January 31, 2007, and to ask the parties for briefing on the issues on review and on remedy, public interest and bonding. The parties submitted their initial and reply briefs on December 12 and December 22, 2006, respectively.

In view of information set out in the briefs on review, the Commission has requested briefing on whether this investigation has become or will shortly become moot, and if so, whether the investigation should be terminated. This information includes a press release by Acambis dated November 14, 2006 indicating that its ''proposal is no longer being considered for award as part of the U.S. Government's Modified Vaccinia Ankara (''MVA'') smallpox vaccine tender process.'' To accommodate briefing on this issue, the Commission has determined to extend the target date for completion of this investigation to February 21, 2007.

This action is taken under the authority of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and in section 210.51(a) of the Commission's Rules of Practice and Procedure (19 CFR 210.51(a)).

Issued: January 19, 2007.

By order of the Commission.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E7–985 Filed 1–23–07; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF LABOR

Employee Benefits Security Administration

Notice of a Proposed Amendment to Prohibited Transaction Exemption (PTE) 2000–58, 65 FR 67765 (November 13, 2000) and PTE 2002–41, 67 FR 54487 (August 22, 2002) Involving Bear, Stearns & Co. Inc., Prudential Securities Incorporated, et al. to Add Dominion Bond Rating Service Limited and Dominion Bond Rating Service, Inc. to the Definition of ''Rating Agency'' (D–11370)

AGENCY: Employee Benefits Security Administration, Department of Labor.

ACTION: Notice of a Proposed Amendment to the Underwriter Exemptions.[1]

SUMMARY: This document contains a notice of pendency before the Department of Labor (the Department) of a proposed amendment to the Underwriter Exemptions. The Underwriter Exemptions are individual exemptions that provide relief for the origination and operation of certain asset pool investment trusts and the acquisition, holding and disposition by employee benefit plans (Plans) of certain asset-backed pass-through certificates representing undivided interests in those investment trusts. The proposed amendment, if granted, would expand the definition of ''Rating Agency'' in section III. X of the Underwriter Exemptions to include Dominion Bond Rating Service Limited (DBRS Limited) and Dominion Bond Rating Service, Inc. (DBRS, Inc.). The proposed amendment, if granted, would affect the participants and beneficiaries of the Plans participating in such transactions and the fiduciaries with respect to such plans.

DATE: Written comments and requests for a hearing should be received by the Department by February 23, 2007.

ADDRESSES: All written comments and requests for a public hearing (preferably, three copies) should be sent to the Office of Exemption Determinations, Employee Benefits Security Administration, Room N–5700, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210, (Attention: Exemption Application Number D–11370). Interested persons are invited to submit comments and/or hearing requests to the Department by the end of the scheduled comment period either by facsimile to (202) 219–0204 or by electronic mail to *moffitt.betty@dol.gov*. The application pertaining to the proposed amendment (Application) and the comments received will be available for public inspection in the Public Disclosure Room of the Employee Benefits Security Administration, U.S. Department of Labor, Room N–1513, 200 Constitution Avenue, NW., Washington, DC 20210.

FOR FURTHER INFORMATION CONTACT: Wendy M. McColough of the Department, telephone (202) 693–8540. (This is not a toll-free number.)

SUPPLEMENTARY INFORMATION: Notice is hereby given of the pendency before the Department of a proposed exemption to amend the Underwriter Exemptions. The Underwriter Exemptions are a group of individual exemptions that provide substantially identical relief for the operation of certain asset-backed or mortgage-backed investment pools and the acquisition and holding by Plans of certain securities representing interests in those investment pools. These exemptions provide relief from certain of the prohibited transaction restrictions of sections 406(a), 406(b) and 407(a) of the Employee Retirement Income Security Act of 1974, as amended (ERISA or the Act) and from the taxes imposed by section 4975(a) and (b) of the Internal Revenue Code of 1986, as amended (the Code), by reason of certain provisions of section 4975(c)(1) of the Code. All of the Underwriter Exemptions were amended by PTE 97–34, 62 FR 39021 (July 21, 1997) and PTE 2000–58, 65 FR 67765 (November 13, 2000) and certain of the Underwriter Exemptions were amended by PTE 2002–41, 67 FR 54487 (August 22, 2002).

The Department is proposing this amendment to the Underwriter Exemptions pursuant to section 408(a) of the Act and section 4975(c)(2) of the Code, and in accordance with the procedures set forth in 29 CFR part 2570, subpart B (55 FR 32836, 32847, August 10, 1990).[2] In addition, the Department is proposing to provide the same individual exemptive relief to: Deutsche Bank AG, New York Branch and Deutsche Morgan Grenfell/C.J. Lawrence Inc., Final Authorization Number (FAN) 97–03E (December 9, 1996); Credit Lyonnais Securities (USA) Inc., FAN 97–21E (September 10, 1997); ABN AMRO Inc., FAN 98–08E (April 27, 1998); Ironwood Capital Partners Ltd., FAN 99–31E (December 20, 1999) (supersedes FAN 97–02E (November 25, 1996)); William J. Mayer Securities LLC, FAN 01–25E (October 15, 2001); Raymond James & Associates Inc. & Raymond James Financial Inc., FAN 03–07E (June 14, 2003); WAMU Capital Corporation, FAN 03–14E (August 24, 2003); and Terwin Capital LLC, FAN 04–16E (August 18, 2004); which previously received the approval of the Department to engage in transactions substantially similar to the transactions

[1] The term ''Underwriter Exemptions'' refers to the following PTEs: PTE 89–88, 54 FR 42582 (October 17, 1989); PTE 89–89, 54 FR 42569 (October 17, 1989); PTE 89–90, 54 FR 42597 (October 17, 1989); PTE 90–22, 55 FR 20542 (May 17, 1990); PTE 90–23, 55 FR 20545 (May 17, 1990); PTE 90–24, 55 FR 20548 (May 17, 1990); PTE 90–28, 55 FR 21456 (May 24, 1990); PTE 90–29, 55 FR 21459 (May 24, 1990); PTE 90–30, 55 FR 21461 (May 24, 1990); PTE 90–31, 55 FR 23144 (June 6, 1990); PTE 90–32, 55 FR 23147 (June 6, 1990); PTE 90–33, 55 FR 23151 (June 6, 1990); PTE 90–36, 55 FR 25903 (June 25, 1990); PTE 90–39, 55 FR 27713 (July 5, 1990); PTE 90–59, 55 FR 36724 (September 6, 1990); PTE 90–83, 55 FR 50250 (December 5, 1990); PTE 90–84, 55 FR 50252 (December 5, 1990); PTE 90–88, 55 FR 52899 (December 24, 1990); PTE 91–14, 55 FR 48178 (February 22, 1991); PTE 91–22, 56 FR 03277 (April 18, 1991); PTE 91–23, 56 FR 15936 (April 18, 1991); PTE 91–30, 56 FR 22452 (May 15, 1991); PTE 91–62, 56 FR 51406 (October 11, 1991); PTE 93–31, 58 FR 28620 (May 5, 1993); PTE 93–32, 58 FR 28623 (May 14, 1993); PTE 94–29, 59 FR 14675 (March 29, 1994); PTE 94–64, 59 FR 42312 (August 17, 1994); PTE 94–70, 59 FR 50014 (September 30, 1994); PTE 94–73, 59 FR 51213 (October 7, 1994); PTE 94–84, 59 FR 65400 (December 19, 1994); PTE 95–26, 60 FR 17586 (April 6, 1995); PTE 95–59, 60 FR 35938 (July 12, 1995); PTE 95–89, 60 FR 49011 (September 21, 1995); PTE 96–22, 61 FR 14828 (April 3, 1996); PTE 96–84, 61 FR 58234 (November 13, 1996); PTE 96–92, 61 FR 66334 (December 17, 1996); PTE 96–94, 61 FR 68787 (December 30, 1996); PTE 97–05, 62 FR 1926 (January 14, 1997); PTE 97–28, 62 FR 28515 (May 23, 1997); PTE 97–34, 62 FR 39021 (July 21, 1997); PTE 98–08, 63 FR 8498 (February 19, 1998); PTE 99–11, 64 FR 11046 (March 8, 1999); PTE 2000–19, 65 FR 25950 (May 4, 2000); PTE 2000–33, 65 FR 37171 (June 13, 2000); PTE 2000–41, 65 FR 51039 (August 22, 2000); PTE 2000–55, 65 FR 37171 (November 13, 2000); PTE 2002–19, 67 FR 14979 (March 28, 2002); PTE 2003–31, 68 FR 59202 (October 14, 2003); and PTE 2006–07, 71 FR 32134 (June 2, 2006), each as subsequently amended by PTE 97–34, 62 FR 39021 (July 21, 1997) and PTE 2000–58, 65 FR 67765 (November 13, 2000) and for certain of the exemptions, amended by PTE 2002–41, 67 FR 54487 (August 22, 2002).

In addition, the Department notes that it is also proposing individual amendments for: Deutsche Bank AG, New York Branch and Deutsche Morgan Grenfell/C.J. Lawrence Inc., Final Authorization Number (FAN) 97–03E (December 9, 1996); Credit Lyonnais Securities (USA) Inc., FAN 97–21E (September 10, 1997); ABN AMRO Inc., FAN 98–08E (April 27, 1998); Ironwood Capital Partners Ltd., FAN 99–31E (December 20, 1999) (supersedes FAN 97–02E (November 25, 1996)); William J. Mayer Securities LLC, FAN 01–25E (October 15, 2001); Raymond James & Associates Inc. & Raymond James Financial Inc., FAN 03–07E (June 14, 2003); WAMU Capital Corporation, FAN 03–14E (August 24, 2003); and Terwin Capital LLC, FAN 04–16E (August 18, 2004); which received the approval of the Department to engage in transactions substantially similar to the transactions described in the Underwriter Exemptions pursuant to PTE 96–62, 61 FR 39988 (July 31, 1996).

[2] Section 102 of Reorganization Plan No. 4 of 1978 (5 U.S.C. App. 1 [1996]) generally transferred the authority of the Secretary of the Treasury to issue exemptions under section 4975(c)(2) of the Code to the Secretary of Labor.

described in the Underwriter Exemptions pursuant to PTE 96–62, 61 FR 39988 (July 31, 1996).

1. The Underwriter Exemptions permit Plans to purchase certain securities representing interests in asset-backed or mortgage-backed investment pools. The securities generally take the form of certificates issued by a trust (Trust). The Underwriter Exemptions permit transactions involving a Trust (including the servicing, management and operation of the Trust) and certificates evidencing interests therein (including the sale, exchange or transfer of certificates in the initial issuance of the certificates or in the secondary market for such certificates). The securities acquired by a Plan have been rated in one of the three highest rating categories (or four in the case of Designated Transactions [3]) by a rating agency as defined in the Underwriter Exemptions (Rating Agency). The Rating Agency, in assigning a rating to such securities, takes into account the fact that the Issuer [4] may hold interest rate swaps or yield supplement agreements with notional principal amounts or, in Designated Transactions, securities may be issued by an Issuer holding residential and home equity loans with LTV ratios in excess of 100%. Section III.X. of the Underwriter Exemptions defines ''Rating Agency'' as Standard & Poor's Rating Services, a division of The McGraw-Hill Companies, Inc., Moody's Investors Services, Inc., Fitch Inc., or any successors thereto.

2. Section II of the original Underwriter Exemptions, PTE 89–88, 54 FR 42582 (October 17, 1989); PTE 89–89, 54 FR 42569 (October 17, 1989); and PTE 89–90, 54 FR 42597 (October 17, 1989), sets forth the general conditions which must be met in order for an investing Plan to avail itself of the relief provided by one of the exemptions. Section II.A(3) requires that any certificate acquired by a plan in reliance on the exemption must have received a rating at the time of acquisition that is in one of the three highest categories from either Standard & Poor's Corporation, Moody's Investors Services, Inc. or Duff & Phelps. The Department proposed an amendment to this condition by notice at 55 FR 25914 (June 25, 1990) in response to a request from the three individual exemption applicants that Fitch Investors Service, Inc. (Fitch Inc.) be added to the rating agencies described in section II.A.(3) of PTE 89–88, PTE 89–89, and PTE 89–90.[5]

To support this request, Fitch Inc. submitted letters to the Department which provided information on Fitch Inc's rating programs in general and its experience in rating asset backed securities in particular. Based on the information provided by Fitch Inc., the requests submitted on behalf of the applicants and the Department's previous consideration of Fitch Inc. in conjunction with several other Underwriter Exemptions, the Department amended PTE 89–88, PTE 89–89, and PTE 89–90 by notice at 55 FR 48939 (November 23, 1990) to include Fitch Inc. as an acceptable rating agency for the rating of certificates described in the exemptions.[6]

3. The proposed amendment was requested by Application, dated April 5, 2006, on behalf of the Securities Industry and Financial Markets Association (SIFMA) [7], the American Securitization Forum (ASF), DBRS Limited and DBRS, Inc. (collectively, the Co-Applicants). The Co-Applicants request that the Department amend the Underwriter Exemptions to add DBRS Limited and DBRS, Inc. to the group of entities included in the definition of ''Rating Agency'' in section III.X. of the Underwriter Exemptions. The Co-Applicants provide that DBRS Limited was recognized as a nationally recognized statistical rating organization (NRSRO) for purposes of Rule 15c3–1 under the Securities Exchange Act of 1934 by virtue of receiving a ''no action'' letter from the Securities and Exchange Commission (SEC) on February 24, 2003. As the Co-Applicants explain below, the Co-Applicants believe that DBRS, Inc., its affiliate, is also considered to be covered under this no action letter. Accordingly, ''DBRS'' shall hereinafter refer both to DBRS Limited and DBRS, Inc., except where the context indicates otherwise. The Co-Applicants state that SIFMA and ASF agreed to make this request on behalf of their member underwriters for the reasons outlined below and because The Bond Market Association (TBMA), now merged into SIFMA, was the original entity that requested the exemptive relief granted by the Department pursuant to PTE 97–34, 62 FR 39021 (July 21, 1997), PTE 2000–58, 65 FR 67765 (Nov.13, 2000) and PTE 2002–41, 67 FR 54487 (August 22, 2002). ASF was formed in February 2002, as an adjunct forum for TBMA to more specifically represent the interests of underwriters and other organizations related to the securitization markets (although ASF is part of the same legal entity as TBMA).

4. The Co-Applicants represent that, if the requested amendment is not granted, possible violations of the prohibited transaction provisions of sections 406(a), 406(b) and 407(a) of ERISA (and the corresponding provisions of sections 4975(c)(1)(A) through (F) of the Code) resulting from: (a) The purchase and sale of securities by a Plan to which any of the other parties is a party in interest; [8] and (b) the servicing, management and operation of an issuer may occur if DBRS Limited or DBRS, Inc. ratings are used for such transactions. The Co-Applicants believe that, if the requested amendment is not granted, this would result in the loss of opportunities for an investing Plan to achieve a current market return through investment in securities that have received a rating from an NRSRO as high as or higher than that of comparable instruments in which the Plan is clearly permitted to invest. The Co-Applicants assert that it is in the interests of Plan participants and beneficiaries that a Plan has the opportunity to diversify its investment portfolio by purchasing securities rated

[3] ''Designated Transaction'' means a securitization transaction in which the assets of the Issuer (see below) consist of secured consumer receivables, secured credit instruments or secured obligations that bear interest or are purchased at a discount and are: (i) Motor vehicle, home equity and/or manufactured housing consumer receivables; and/or (ii) motor vehicle credit instruments in transactions by or between business entities; and/or (iii) single-family residential, multi-family residential, home equity, manufactured housing and/or commercial mortgage obligations that are secured by single-family residential, multi-family residential, commercial real property or leasehold interests therein.

[4] ''Issuer'' means an investment pool, the corpus or assets of which are held in trust (including a grantor or owner Trust) or whose assets are held by a partnership, special purpose corporation or limited liability company (which Issuer may be a Real Estate Mortgage Investment Conduit (REMIC) or a Financial Asset Securitization Investment Trust (FASIT) within the meaning of section 860D(a) or section 860L, respectively, of the Code.

[5] Since the granting of these three exemptions on October 17, 1989, the Department had granted several other Underwriter Exemptions that included Fitch Inc. as an acceptable rating agency.

[6] The final paragraph of section III.B of these exemptions was also amended to include Fitch Inc. as an acceptable rating agency.

[7] On November 15, 2006, the Co-Applicants informed the Department that on October 31, 2006, The Bond Market Association and the Securities Industry Association merged into a new entity, SIFMA. SIFMA is a Delaware nonstock corporation that was incorporated in June 2006 for purposes of the merger. Its members are approximately 650 securities firms, banks and asset managers. Its mission is to promote policies and practices that expand and perfect markets, foster the development of new products and services and create efficiencies for member firms, while preserving and enhancing the public's trust and confidence in the markets and the industry. The Bond Market Association no longer exists, having merged into SIFMA. The ASF is now a forum of SIFMA, and it is still a joint applicant.

[8] The term ''party in interest'' also includes, where applicable, a ''disqualified person'' within the meaning of section 4975(e)(2) of the Code.

by a wide variety of rating agencies subject to a significant amount of competition.

5. The Co-Applicants believe that the proposed amendment would be administratively feasible because the proposed requirements generally mirror those deemed administratively feasible in the asset-backed and mortgage-backed securities (ABS and MBS, respectively) exemptions previously issued by the Department. The transactions may be audited easily by a Plan fiduciary and all the records necessary to review these transactions will be kept for six years. The Co-Applicants state that no further action would be required by the Department. The Co-Applicants consider that the requested amendment would be in the interest of the Plans and its participants and beneficiaries because it increases the number of available investment options, enhances diversification and liquidity and promotes a greater ability to assess credit risk and the rating process. The Co-Applicants state that the amendment would be protective of the rights of the Plans since the sale of the securities will be conducted under all of the safeguards contained in the existing Underwriter Exemptions for the sale of asset and mortgage-backed pass-through securities. Additionally, the Co-Applicants believe that expanding the number of rating agencies with experience in rating the type of obligations covered under the Underwriter Exemptions would significantly benefit the Plans. The number of NRSROs that had been included within the definition of Rating Agency under the Underwriter Exemptions as of 1990 has been reduced from four to three since Duff & Phelps Inc. (D & P) and Fitch Inc. merged in 2000 and became FitchRatings, Inc. (Fitch). There may be additional mergers in the future. The Co-Applicants believe that this could make the number of Rating Agencies available to rate Underwriter Exemption-eligible MBS and ABS even fewer; resulting in fewer and less liquid securities available for Plans to purchase. The Co-Applicants further note that, when the Department considered First Boston Corporation's original application for its Underwriter Exemption in the proposed exemption to PTE 89–90 at 53 FR 52851 (December 29, 1988), First Boston requested that any certificate receiving a rating in the three highest rating categories from any NRSRO receive exemptive relief. According to the Applicants, while the Department recognized that rating agencies other than Standard & Poor's Corporation (currently, Standard & Poor's Rating Services, a division of The McGraw Hill Companies, Inc. (S & P)), Moody's Investor Services, Inc. (Moody's) and D&P qualified as NRSROs, it decided that only those three should qualify as Rating Agencies under the Underwriter Exemptions, based on their respective experience in rating certain types of MBS/ABS.[9] Fitch Inc. was later specifically named as an additional Rating Agency for purposes of the Underwriter Exemptions beginning in 1989. The Co-Applicants believe that if the Department were to add DBRS Limited and DBRS, Inc. to the group of Rating Agencies permitted to rate Underwriter Exemption-eligible securities, it would benefit Plan investors in several ways, including: (a) Investors would have access to additional information and additional opinions about the creditworthiness of issuers and securities; (b) competition among rating agencies would result in improved accuracy and timeliness of ratings, thereby allowing investors to assess risk with greater certainty; and (c) competition among rating agencies would encourage different methods of analyzing credit risk.

6. The Co-Applicants assert that DBRS has extensive experience in rating every type of obligation that is eligible for exemptive relief under the Underwriter Exemptions and listed under the definition of an ''Issuer'' in section III.B of the Underwriter Exemptions; and, therefore, meets a major criterion for recognition as a Rating Agency for purposes of the Underwriter Exemptions. In reviewing the information submitted to the Department by S&P and Fitch Inc. at that time, the Department was given information regarding how these agencies rated securities and the credentials of the senior management of their securitization groups. In this regard, DBRS has reviewed the description of the rating process in both the D&P submission and the proposed exemption for PTE 2000–58 and feels that its rating process is comparable to these. The Co-Applicants submitted the biographies of senior management for the DBRS Limited and DBRS, Inc. Structured Finance Departments to the Department with their Application.

7. In order for the SEC to recognize DBRS Limited as an NRSRO in 2003, DBRS Limited had to satisfy certain established criteria. The single most important criterion was that DBRS Limited be widely accepted in the U.S. as an issuer of credible and reliable ratings by the predominant users of securities ratings. In addition, the following aspects of DBRS Limited's operational capability and reliability were reviewed: (i) Its organizational structure, (ii) its financial resources, to determine, among other things, whether it is able to operate independently of economic pressures or control from the companies its rates, (iii) the size and experience and training of its staff to determine if it is capable of thoroughly and competently evaluating an issuer's credit, (iv) its independence from the entities it rates, (v) its rating procedures to determine whether it has systematic procedures designed to produce credible and accurate ratings and (vi) whether it has internal procedures to prevent the misuse of non-public information and whether those procedures are followed. On April 5, 2006, the Co-Applicants provided the following update of the statistics set forth in the SEC's no action letter dated February 24, 2003 regarding DBRS's business. DBRS now has a total staff of 175, 110 of which are analysts. Of those analysts, 51 rate securitization transactions. The Co-Applicants also provided biographical information about the senior management team for that latter group. As of the application date, the principal amount of asset-backed securities (ABS), residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS) transactions that DBRS has rated and that are currently outstanding are: Can. $128.3 billion of ABS for Canadian issuers (representing 158 transactions); U.S. $192.1 billion of RMBS and ABS for U.S. issuers (representing 207 transactions); and U.S. $20.5 billion of CMBS for U.S. issuers (representing 14 transactions). DBRS's Structured Finance Department has also written over 95 industry reports and 442 rating reports.

8. The Co-Applicants state that DBRS Limited is a Canadian rating agency that has been in existence for almost 30 years, having been incorporated in 1976 under the Ontario Business Corporations Act. DBRS Limited was originally founded and owned by Walter Schroeder, who remains its President. DBRS Limited operates primarily through its Toronto office and DBRS Limited's U.S. affiliate, DBRS, Inc., which has offices in New York and Chicago.[10] On February 24, 2003 when the SEC issued its no action letter

[9] 53 FR 52851 at p. 52857, footnote 7 (December 29, 1988). There are currently five entities which were recognized by the SEC through the no-action letter process as NRSROs: S&P, Moody's, Fitch, DBRS and A.M. Best Company, Inc.

[10] DBRS also recently opened offices in London, Paris and Frankfurt through another affiliate, DBRS (Europe) Limited.

identifying DBRS Limited as an NRSRO, DBRS Limited conducted all of its credit rating activities from its Toronto Ontario headquarters and rated issuers and securities both in Canada and in the United States. Subsequently, DBRS Limited decided to establish a physical presence in the United States. The New York and Chicago offices were incorporated as DBRS, Inc. on August 21, 2003. The U.S. operations were organized for tax reasons as a separate Delaware affiliate corporation instead of as a branch of the Canadian company. The Co-Applicants assert that, although technically it is principally DBRS, Inc. that rates U.S. issuers and securities and DBRS Limited that rates Canadian issuers and securities, the ratings activities of Dominion Bond Rating Service worldwide are conducted in a seamless fashion and both DBRS Limited and DBRS, Inc. are considered to be covered by the SEC's NRSRO no-action letter. The Co-Applicants add that DBRS, Inc. employs the same rating process that DBRS Limited uses; its ratings are approved by the same rating committees that approve DBRS Limited's ratings; its staff are subject to the same code of conduct that applies to DBRS Limited's staff; all ratings are ''DBRS'' ratings without attribution to one corporate entity or the other, DBRS Limited stands behind the ratings issued by DBRS, Inc. and the officers of DBRS Limited supervise the ratings process conducted by DBRS, Inc. In this regard, the Co-Applicants submitted a letter dated November 1, 2005 from Mari-Anne Pisarri, Esq. of Pickard and Djinis, LLP, counsel to DBRS Limited to Mr. Michael A. Macchiaroli, Associate Director, Division of Market Regulation at the SEC discussing the NRSRO status of the ratings activities of DBRS, Inc.

9. On September 29, 2006, the President signed into law S. 3850, the Credit Rating Agency Reform Act of 2006 (CRARA). CRARA was introduced as a bill to improve ratings quality for the protection of investors and in the public interest by fostering accountability, transparency, and competition in the credit rating agency industry. The law will restructure the existing regulation of credit rating agencies by the SEC. Under CRARA, a credit rating agency can obtain the NRSRO designation through an application process unless the SEC determines that the agency lacks adequate financial and managerial resources to consistently produce credit ratings with integrity and to comply with its stated methodologies and procedures (CRARA subsection 4(a)(2)(C)). The Securities Exchange Act of 1934 is amended at section 3(a) and by the addition of new section 15E. Registration of Nationally Recognized Statistical Rating Organizations. Section 3(a) is amended by adding certain new definitions relevant to this proposed amendment (CRARA section 3):

(60) CREDIT RATING—The term 'credit rating' means an assessment of the creditworthiness of an obligor as an entity or with respect to specific securities or money market instruments.

(61) CREDIT RATING AGENCY—The term 'credit rating agency' means any person—

(A) Engaged in the business of issuing credit ratings on the Internet or through another readily accessible means, for free or for a reasonable fee, but does not include a commercial credit reporting company;

(B) Employing either a quantitative or qualitative model, or both, to determine credit ratings; and

(C) Receiving fees from either issuers, investors, or other market participants, or a combination thereof.

(62) NATIONALLY RECOGNIZED STATISTICAL RATING ORGANIZATION—The term 'nationally recognized statistical rating organization' means a credit rating agency that—

(A) Has been in business as a credit rating agency for at least the 3 consecutive years immediately preceding the date of its application for registration under section 15E;

(B) Issues credit ratings certified by qualified institutional buyers, in accordance with section 15E(a)(1)(B)(ix), with respect to—

(i) Financial institutions, brokers, or dealers;

(ii) Insurance companies;

(iii) Corporate issuers;

(iv) Issuers of asset-backed securities (as that term is defined in section 1101(c) of part 229 of title 17, Code of Federal Regulations, as in effect on the date of enactment of this paragraph);

(v) Issuers of government securities, municipal securities, or securities issued by a foreign government; or

(vi) A combination of one or more categories of obligors described in any of clauses (i) through (v); and

(C) Is registered under section 15E.

CRARA establishes a registration and oversight scheme for NRSROs under the Securities Exchange Act of 1934 (Exchange Act). This regime replaces the SEC's current no-action letter process for designating NRSROs and removes NRSROs from the jurisdiction of the Investment Advisers Act of 1940 (Advisers Act). The new regulatory regime takes effect when the SEC promulgates the rules necessary to implement CRARA, or in 270 days after CRARA's enactment date, whichever is sooner. Thus, the new registration requirements will apply by June 26, 2007. However, because the SEC has 90 days to consider an NRSRO application (or longer, if the applicant consents), the first NRSRO registration may not occur until the end of September 2007. Although the NRSRO no-action letters will be void after the effective date of the new law, the 5 existing NRSROs will be allowed to function as NRSROs while the SEC considers their applications.

10. The Co-Applicants represent that DBRS Limited and DBRS, Inc. each: (a) Will qualify as a ''Nationally Recognized Statistical Rating Organization'' within the meaning of new section 3(a)(62) of the Exchange Act as amended by the legislation, as each will be in business for at least three years prior to its applying for registration under the new statutory procedures, (b) rate the specified types of securities listed under such section, and (c) intend to register at the first date DBRS is able to register under new section 15E of the legislation and the applicable regulations and procedures to be promulgated by the SEC. The Co-Applicants state that DBRS Limited and DBRS, Inc. will each be able to supply the information and meet the implied substantive criteria set forth in the legislation in new section 15E(a)(1)(B) of the Exchange Act as demonstrated in the chart below, provided by the Co-Applicants, that compares the requirements for NRSRO registration under the legislation to existing requirements and the Co-Applicants confirm that each rating agency would comply. The Co-Applicants assert that the criteria for registration under the new law are not substantively different from what DBRS and the other current NRSROs already comply with. DBRS has also adopted and adheres to the International Organization of Securities Commissions' (IOSCO) Code of Conduct Fundamentals for Credit Rating Agencies issued in December 2004 (IOSCO Code of Conduct). Additionally, the Co-Applicants have provided the Department with copies of the DBRS Code of Conduct, the Report of Compliance to the DBRS Code of Conduct and the DBRS Corporate Default Study 1977–2005, which are pertinent to this analysis.

CRA Reform Act requirement	Existing requirement	DBRS complies?
Under Exchange Act § 15E (a) (1)(B), NRSRO applications must include:		

CRA Reform Act requirement	Existing requirement	DBRS complies?
(i) Applicant's credit rating performance measurement statistics.	IOSCO Code §§ 1.2, 3.8	Yes. Corporate Default Study shows performance 1977–2004.
(ii) Procedures & methodologies Applicant uses in determining credit ratings.	Required as part of NRSRO no-action letter designation process; IOSCO Code, §§ 1.A, 3.2, 3.5, 3.10.	Yes.
(iii) Policies and procedures to prevent the misuse of inside information.	Advisers Act, § 204A IOSCO Code, § 3.B	Yes.
(iv) The organizational structure of the Applicant	Required as part of NRSRO no-action letter designation process; information on organization required on Form ADV; IOSCO Code, §§ 2.5, 2.10, 2.11, 2.12.	Yes.
(v) Whether or not Applicant has a code of ethics, and if not, why not.	Advisers Act Rule 204A–1 requires a Code of Ethics; IOSCO Code, §§ 1.C, 2, 4.1.	Yes.
(vi) Any conflict of interest relating to the Applicant's issuance of credit ratings; § 15E(h) also requires NRSROs to maintain written policies and procedures to address and manage any conflicts of interest.	Advisers Act Rule 204A–1 requires advisers' codes of ethics to address conflicts; IOSCO Code, § 2.B.	Yes.
(ix) Written certifications from Qualified Institutional Buyers (QIBs) who use Applicant's ratings.	Does not apply to current NRSROs. However, DBRS already supplied this type of information to the SEC to prove its ''national recognition'' under the no-action letter designation process.	N/A.
Exchange Act § 15E(j) requires NRSROs to designate an individual responsible for administering its compliance policies and procedures.	Advisers Act Rule 206(4)–7 requires the appointment of a Chief Compliance Officer; IOSCO Code § 1.15 requires that a person be specified as responsible for overseeing compliance with applicable laws and regulations.	Yes.
Exchange Act § 15E(i) directs the SEC to adopt rules prohibiting unfair business practices by NRSROs.	Advisers Act Rule 204A–1; IOSCO Code §§ 1.C, 2.3, 2.4, 2.5, 2.11, 2.12, 2.15.	Yes.

11. The Co-Applicants assert that under the new legislation, there would be no period of time when DBRS would not maintain its status as an NRSRO. They note that under new section 15E(l)(2)(A) of the Exchange Act, a rating agency is entitled to rely on its no-action letter from the SEC to be treated as an NRSRO and act as an NRSRO while the SEC is considering its registration application pursuant to the new procedures and thereafter on and after its application is approved. The no-action letters that the SEC has issued to date to the five rating agencies including DBRS will become void under section 15E(1)(2)(B) upon the earlier of (i) 270 days following the date of enactment of the legislation (September 29, 2006) or (ii) the date the regulations are issued by the SEC in final form. This theoretically means that if the SEC fails to issue the regulations on a timely basis, all five rating agencies would lose their NRSRO status. However, if this were to occur, it would also affect Moody's, Standard & Poor's, Fitch and A.M. Best Company, Inc. in the same manner as DBRS, and this would have disastrous results in the capital markets. Presumably this issue would have to be addressed by an amendment to the legislation.

12. The Co-Applicants request that the Department grant DBRS Rating Agency status under the Underwriter Exemptions at this time and that it not wait until the SEC issues a final rule. Waiting until the SEC issues a final rule could take a substantial period of time which can only be disadvantageous for Plan investors. The Co-Applicants represent that DBRS Limited and DBRS, Inc. are already fully recognized together as an NRSRO and also meet the new proposed requirements. Accordingly, the Co-Applicants believe that there is no reason to wait for the SEC to issue the regulations and procedures for registration under CRARA as it will not affect DBRS's status. The Co-Applicants believe that although CRARA provides that any no-action letter previously granted by the SEC would be revoked, DBRS's NRSRO status would be quickly reinstated as it would meet all of the qualifications under the new registration requirements. The Co-Applicants assert that DBRS also complies with the substantive standards that the Department has previously established under the Underwriter Exemptions. Second, CRARA also will affect S&P, Moody's and Fitch, which have already been granted status as Rating Agencies under the Underwriter Exemptions, in exactly the same way as it would affect DBRS if the Department were to grant this application. All four rating agencies would have their NRSRO status revoked and replaced with a new form of NRSRO registration. Accordingly, the Department would still be required to make its own determinations as to whether it considers a rating agency eligible to be covered under a particular type of exemption.

13. The Co-Applicants believe that the Department also intended to look to the SEC's proposed definition of NRSROs as published in Part 240 of its General Rules and Regulations under the Exchange Act for guidance in determining who should qualify as a ''Rating Agency'' for purposes of the broad exemptive relief that has been previously granted by the Department. Prior to the enactment of CRARA, the Department had indicated that it would consider DBRS' status as a Rating Agency under the Underwriter Exemptions based on the criteria set forth in the SEC's proposed rule regarding the definition of an NRSRO published in the **Federal Register** on April 25, 2005 (70 FR 21306). In proposing the new definition, the SEC indicated that it believes that the five rating agencies to which it has already issued NRSRO no-action letters, including DBRS, would meet the proposed definition. The Co-Applicants assert that DBRS would meet the proposed definition of an NRSRO as set forth in the SEC's proposed rule that the entity: (a) Issues publicly available credit ratings that are current assessments of the credit worthiness of obligors with respect to specific securities or money market instruments; (b) is generally accepted in the financial markets as an issuer of credible and reliable ratings, including ratings for a particular industry or geographic segment by the predominant users of securities ratings; and (c) uses

systematic procedures designed to ensure credible and reliable ratings, manage potential conflicts of interest and prevent the misuse of nonpublic information, and has sufficient financial resources to ensure compliance with those procedures.

The Co-Applicants submitted the following review of the standards the SEC discussed in its proposal to demonstrate DBRS' status as an NRSRO prior to CRARA.

a. Publicly Available Credit Ratings: DBRS makes its credit ratings available on its Web site at *http://www.dbrs.com*. The basic rationale behind the ratings is also available to the public through press releases. Both types of information are available at no charge.

b. Issue-Specific Credit Opinions: DBRS rates specific securities, as well as issuers.

c. Current Credit Opinions: DBRS issues ratings that represent current assessments of the securities ratings, as it has procedures in place to have at least two analysts be familiar with, and responsible for, all current and recent events relating to an issuer after DBRS issues its initial rating of the securities. A rating is fully reviewed and a meeting arranged with each sponsor's [11] senior management on at least an annual basis. Follow up meetings occur where there have been material changes to the sponsor associated with the issuer or amendments to the initial program parameters and/or the program structure. In addition, if events occur that materially affect the credit performance of the issuer, a rating will be changed on a more frequent basis. A rating may also be placed ''Under Review'' if a significant event which impacts credit quality occurs and DBRS is unable to provide an objective forward looking opinion. In order to maintain the currency and accuracy of structured debt ratings, DBRS has several surveillance departments located in offices both in the United States and Canada. The analysts working in these departments are responsible for the collection, entry, analysis, and reporting related to the monitoring of structured finance transactions. Analysts are expected to analyze the data being reported by issuers and sponsors, identify transactions that require remediation or additional follow-up, and work with other analysts to determine the most appropriate course of action.

d. General Acceptance in the Financial Markets: DBRS credibility and reasonable reliance of the marketplace have already been established by the SEC's grant of DBRS Limited's February 24, 2003 no-action letter, as this is the most important criterion cited by the SEC in such a grant.

e. Limited Coverage NRSROs: DBRS Limited received a no-action letter with respect to its ability to rate all securities and issuers with no limitations. The Co-Applicants believe this letter also applies to DBRS, Inc. as discussed above.

f. Analyst Experience and Training: DBRS requires that its analysts have the requisite experience and training to rate issuers and securities competently. The SEC in previously making this determination for its no-action letter, mentioned that generally, all of DBRS' analysts have degrees in business administration or accounting and many have professional designations such as MBAs, JDs and CFAs.

g. Number of Ratings per Analyst: DBRS maintains reasonable workloads for its analysts so that their analytical abilities to rate securities remain high, while not overloading them so that their work suffers in quality. The statistics of the number of ABS/RMBS/CMBS transactions and the number of securitization analysts have been given herein. In general, DBRS analysts work within groups, with each group containing approximately two to six analysts who cover issuers from industries that are as related as possible. Each issuer is normally covered directly by two analysts, who work together on the rating, arrange for and attend meetings with the sponsor's senior management, and make a recommendation with regard to the rating action for the entity. The ''primary analyst'' is responsible for preparing and for conducting the interview with the sponsor's management, for writing the initial draft rating report, and for making the presentation to the rating committee. The ''secondary'' or backup analyst is responsible for supporting the primary analyst with these duties. Other analysts from the group can be available to provide additional support prior to the rating committee recommendations. The group head will review the report prior to the rating committee. Thus, there are generally at least two analysts that are familiar with, and responsible for, all current and recent events for that issuer. Since each issuer and sponsor is under continuous surveillance, all ratings are current.

h. Information Sources Used in the Ratings Process: DBRS has procedures in place to verify financial information it receives from any given sponsor with respect to itself and the issuer. In many cases, DBRS will also require third party reports on the sponsor and with respect to the issuer as well as comparisons that have been done for comparable sponsors and issuers. All opinions expressed at the sponsor's senior management level during meetings are scrutinized to deal with any inherent biases that may have affected sponsor's perceptions of their relative strengths and weaknesses in absolute terms or in comparison to their competition. For both initial ratings and subsequent maintenance of such ratings, DBRS obtains a wide variety of information from third party sources. Public documents include regulatory filings, newspaper subscriptions, electronic news from services such as Reuters and Bloomberg, equity research from investment banks, and a wide variety of industry, sponsor and issuer specific news from the internet. DBRS also subscribes to publications such as Forbes, the Wall Street Journal, the Financial Post, Value Line, Business Week and the Economist. Most groups at DBRS have additional subscriptions related to their own specific area of interest. The general market intelligence that each analyst gains from conferences, DBRS sponsored seminars and luncheons, industry contacts, other independent reading and speeches are additional sources of information that assist in DBRS's analysis.

i. Contacts: As discussed above, DBRS meets with senior management of the sponsors related to the issuers of securities it rates.

j. Organizational Structure: DBRS Limited, DBRS, Inc. and DBRS (Europe) Limited are not affiliated with any other organizations or engaged in any other businesses that could create conflicts of interest or cause the misuse of nonpublic information.

k. Conflicts of Interest: (i) Reliance on Issuer Fees—DBRS does not have any one sponsor accounting for a meaningful percentage of its overall revenues, so no one sponsor can exert untoward pressure on DBRS's rating activities. (ii) Internal Policies—DBRS encourages analysts to strive for good long-term relationships with its sponsor clients, while at the same time being mindful of maintaining objectivity. For example, when dealing with sponsors, DBRS expects analysts to be familiar with the *CFA Institute Standards of Practice Handbook* (the Handbook), which sets forth rules of ethics and professional responsibility for certified financial analysts, and to comply with

[11] The Co-Applicants note that the term ''sponsor'' is used in their Application in the same way as the term ''sponsor'' is defined in the Underwriter Exemptions under Section III.D. ''Sponsor'' may also be deemed to refer to an originator of loans, if deemed necessary and/or appropriate by DBRS for its ratings analyses with respect to securities issued by a specific issuer.

its Code of Ethics, regardless of analysts' CFA status. As mandated by the Code of Ethics, analysts are warned to always be conscious about accepting gifts from a sponsor that could be considered significant enough to impair objectivity. Analysts are also prohibited from soliciting money, gifts, cash or favors from anyone with whom DBRS does business. As stated above, DBRS has adopted and adheres to the IOSCO Code of Conduct and has published a DBRS Code of Conduct that summarizes how its extensive range of policies, procedures and internal controls meet the IOSCO Code of Conduct. (iii) Consulting or Advisory Fees from Issuers—DBRS does not engage in a separate consulting or advisory for fee services business. (iv) Preferential Access to Information—DBRS does not allow subscribers to be given access to potential DBRS rating actions before they become public or to any nonpublic information. (v) Proprietary Associations with Rated Issuers: DBRS does not allow any employee, analyst or consultant to invest in any company or subsidiary that DBRS rates or benchmarks except for ''grandfathered securities.'' [12] DBRS also requires employees, analysts and consultants to report their investment activities to the Compliance Department each calendar quarter (i) by completing a signed transaction report or forwarding copies of brokerage statements if they have ''reportable securities transactions;'' (ii) by completing a signed statement indicating that they have reportable securities but did not engage in any ''reportable securities transactions;'' (iii) by email if they hold only ''excluded securities;'' and (iv) by email if they hold no investments. Excluded securities are mutual funds, GIC's, CD's, etc.; reportable securities include all securities that are not specifically excluded.

l. Misuse of Information: DBRS prohibits employees from discussing nonpublic information with anyone other than the sponsor being rated or other DBRS employees. In addition, DBRS staff and consultants must annually review and sign an ''Annual Statement of Understanding'' concerning DBRS's Code of Ethics which among other areas contains sections on confidentiality and nonpublic information.

m. Financial Resources: DBRS has sufficient financial resources to maintain appropriate staffing levels to continuously monitor the sponsors and the issuers whose securities it rates. As mentioned above, it believes that conflicts of interests with sponsors and subscribers are minimized as none alone provide a significant source of business for it.

n. Standardized Rating Symbols: DBRS uses the same generic substantive rating categories as the other four existing NRSROs and the SEC is not proposing to change the ''sub-symbols'' (i.e., ''plus'' or ''minus'' versus ''high'' or ''low'').

o. Statistical Models: Statistical models are only one of the methods used by DBRS to rate issuers or securities.

14. The Plans affected by the requested amendment are those Plans that will participate in a trust established under a pooling and servicing agreement. One or more Plans may invest in the securities to be issued with respect to a given issuer. Every Plan which intends to invest in an issuer will be able to review the form of the pooling and servicing agreement prior to acquiring a security. Each Plan will be an ''accredited investor'' as defined in Rule 501(a)(1) of Regulation D under the Securities Act of 1933, as amended. The proposed amendment involves a class of prospective transactions with Plans. In its capacity as a rating agency, DBRS has no Plan clients or potential Plan clients.[13] Therefore, the Co-Applicants request that the publication of this proposed exemption in the **Federal Register** serve as the Notice to Interested Persons for purposes of this request.

15. The Co-Applicants request that the relief, if granted, be made retroactive to the date that they originally filed their request on April 5, 2006. DBRS had originally been prepared to file its application prior to April 5th; however, the SEC issued its proposed rules defining an NRSRO and this caused a delay in filing the application. The application was further delayed by the submission of additional information in response to the enactment of CRARA on September 29, 2006. Retroactive relief is requested to cover those transactions that have occurred or will occur over the next few months where DBRS was or is the only rating agency that gave or will give an investment-grade rating to certificates. If the relief is granted retroactively, Plans would be able to purchase certificates in the secondary market relying upon the Underwriter Exemptions once exemptive relief is granted, even if the transactions originally closed or will close prior to the date the final exemption, if granted by the Department, is published in the **Federal Register**.

General Information

The attention of interested persons is directed to the following:

1. The fact that a transaction is the subject of an exemption under section 408(a) of the Act and section 4975(c)(2) of the Code does not relieve a fiduciary or other party in interest or disqualified person from certain other provisions of the Act and the Code, including any prohibited transaction provisions to which the exemption does not apply and the general fiduciary responsibility provisions of section 404 of the Act, which require, among other things, a fiduciary to discharge his or her duties respecting the plan solely in the interest of the participants and beneficiaries of the plan and in a prudent fashion in accordance with section 404(a)(1)(B) of the Act; nor does it affect the requirements of section 401(a) of the Code that the plan operate for the exclusive benefit of the employees of the employer maintaining the plan and their beneficiaries;

2. Before an exemption can be granted under section 408(a) of the Act and section 4975(c)(2) of the Code, the Department must find that the exemption is administratively feasible, in the interest of the plans and of their participants and beneficiaries and protective of the rights of participants and beneficiaries of the plans; and

3. The proposed amendment, if granted, will be supplemental to, and not in derogation of, any other provisions of the Act and/or the Code, including statutory or administrative exemptions and transitional rules. Furthermore, the fact that a transaction is subject to an administrative or statutory exemption is not dispositive of whether the transaction is in fact a prohibited transaction.

Written Comments and Hearing Requests

All interested persons are invited to submit written comments or requests for a hearing on the pending amendment to the address above, within the time frame set forth above, after the publication of this proposed amendment in the **Federal Register**. All comments will be made a part of the record. Comments received will be available for public inspection with the

[12] ''Grandfathered securities'' are securities of companies that DBRS rates or benchmarks but that a staff member already owns at the time they become newly employed by DBRS and those securities that a staff member held prior to DBRS undertaking the company as a rated or benchmarked entity. Grandfathered securities must not be sold unless and until written permission is obtained from the Chief Compliance Officer.

[13] Although not relevant to this application, some Plans subscribe to DBRS's subscription service.

Application at the address set forth above.

Proposed Exemption

Based on the facts and representations set forth in the application, under the authority of section 408(a) of the Act and section 4975(c)(2) of the Code and in accordance with the procedures set forth in 29 CFR part 2570, subpart B (55 FR 32836, August 10, 1990), the Department proposes to modify the following individual Prohibited Transaction Exemptions (PTEs), as set forth below: PTE 89–88, 54 FR 42582 (October 17, 1989); PTE 89–89, 54 FR 42569 (October 17, 1989); PTE 89–90, 54 FR 42597 (October 17, 1989); PTE 90–22, 55 FR 20542 (May 17, 1990); PTE 90–24, 55 FR 20548 (May 17, 1990); PTE 90–28, 55 FR 21456 (May 24, 1990); PTE 90–29, 55 FR 21459 (May 24, 1990); PTE 90–30, 55 FR 21461 (May 24, 1990); PTE 90–32, 55 FR 23147 (June 6, 1990); PTE 90–36, 55 FR 25903 (June 25, 1990); PTE 90–39, 55 FR 27713 (July 5, 1990); PTE 90–59, 55 FR 36724 (September 6, 1990); PTE 90–83, 55 FR 50250 (December 5, 1990); PTE 90–84, 55 FR 50252 (December 5, 1990); PTE 90–88, 55 FR 52899 (December 24, 1990); PTE 91–14, 55 FR 48178 (February 22, 1991); PTE 91–22, 56 FR 03277 (April 18, 1991); PTE 91–23, 56 FR 15936 (April 18, 1991); PTE 91–30, 56 FR 22452 (May 15, 1991); PTE 91–62, 56 FR 51406 (October 11, 1991); PTE 93–31, 58 FR 28620 (May 5, 1993); PTE 93–32, 58 FR 28623 (May 14, 1993); PTE 94–29, 59 FR 14675 (March 29, 1994); PTE 94–64, 59 FR 42312 (August 17, 1994); PTE 94–70, 59 FR 50014 (September 30, 1994); PTE 94–73, 59 FR 51213 (October 7, 1994); PTE 94–84, 59 FR 65400 (December 19, 1994); PTE 95–26, 60 FR 17586 (April 6, 1995); PTE 95–59, 60 FR 35938 (July 12, 1995); PTE 95–89, 60 FR 49011 (September 21, 1995); PTE 96–22, 61 FR 14828 (April 3, 1996); PTE 96–84, 61 FR 58234 (November 13, 1996); PTE 96–92, 61 FR 66334 (December 17, 1996); PTE 96–94, 61 FR 68787 (December 30, 1996); PTE 97–05, 62 FR 1926 (January 14, 1997); PTE 97–28, 62 FR 28515 (May 23, 1997); PTE 98–08, 63 FR 8498 (February 19, 1998); PTE 99–11, 64 FR 11046 (March 8, 1999); PTE 2000–19, 65 FR 25950 (May 4, 2000); PTE 2000–33, 65 FR 37171 (June 13, 2000); PTE 2000–41, 65 FR 51039 (August 22, 2000); PTE 2000–55, 65 FR 37171 (November 13, 2000); PTE 2002–19, 67 FR 14979 (March 28, 2002); PTE 2003–31, 68 FR 59202 (October 14, 2003); and PTE 2006–07, 71 FR 32134 (June 2, 2006), each as subsequently amended by PTE 97–34, 62 FR 39021 (July 21, 1997) and PTE 2000–58, 65 FR 67765 (November 13, 2000) and for certain of the exemptions, amended by PTE 2002–41, 67 FR 54487 (August 22, 2002).

In addition, the Department notes that it is also proposing individual exemptive relief for: Deutsche Bank A.G., New York Branch and Deutsche Morgan Grenfell/C.J. Lawrence Inc., Final Authorization Number (FAN) 97–03E (December 9, 1996); Credit Lyonnais Securities (USA) Inc., FAN 97–21E (September 10, 1997); ABN AMRO Inc., FAN 98–08E (April 27, 1998); Ironwood Capital Partners Ltd., FAN 99–31E (December 20, 1999) (supersedes FAN 97–02E (November 25, 1996)); William J. Mayer Securities LLC, FAN 01–25E (October 15, 2001); Raymond James & Associates Inc. & Raymond James Financial Inc., FAN 03–07E (June 14, 2003); WAMU Capital Corporation, FAN 03–14E (August 24, 2003); and Terwin Capital LLC, FAN 04–16E (August 18, 2004); which received the approval of the Department to engage in transactions substantially similar to the transactions described in the Underwriter Exemptions pursuant to PTE 96–62, 61 FR 39988 (July 31, 1996).

The definition of ''Rating Agency'' under section III.X. of the Underwriter Exemptions is amended to read:

''Rating Agency'' means Standard & Poor's Ratings Services, a division of The McGraw-Hill Companies, Inc.; Moody's Investors Service, Inc.; FitchRatings, Inc.; Dominion Bond Rating Service Limited, or Dominion Bond Rating Service, Inc.; or any successors thereto.

If granted, the amendment would be effective for transactions occurring on or after April 5, 2006.

The availability of this amendment, if granted, is subject to the express condition that the material facts and representations contained in the Application are true and complete and accurately describe all material terms of the transactions. In the case of continuing transactions, if any of the material facts or representations described in the Application change, the amendment will cease to apply as of the date of such change. In the event of any such change, an application for a new amendment must be made to the Department.

Signed at Washington, DC, this 17th day of January, 2007.

Ivan L. Strasfeld,

Director of Exemption Determinations, Employee Benefits Security Administration, U.S. Department of Labor.

[FR Doc. E7–969 Filed 1–23–07; 8:45 am]

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DEPARTMENT OF LABOR

Employee Benefits Security Administration

[Exemption Application No. D–11183]

Prohibited Transaction Exemption 2007–01; Grant of Individual Exemptions Involving; The Plumbers and Pipefitters National Pension Fund (the Fund)

AGENCY: Employee Benefits Security Administration, Labor.

ACTION: Grant of Individual Exemptions.

SUMMARY: This document contains exemptions issued by the Department of Labor (the Department) from certain of the prohibited transaction restrictions of the Employee Retirement Income Security Act of 1974 (ERISA or the Act) and/or the Internal Revenue Code of 1986 (the Code).

A notice was published in the **Federal Register** of the pendency before the Department of a proposal to grant such exemption. The notice set forth a summary of facts and representations contained in the application for exemption and referred interested persons to the application for a complete statement of the facts and representations. The application has been available for public inspection at the Department in Washington, DC. The notice also invited interested persons to submit comments on the requested exemption to the Department. In addition the notice stated that any interested person might submit a written request that a public hearing be held (where appropriate). The applicant has represented that it has complied with the requirements of the notification to interested persons. No requests for a hearing were received by the Department. Public comments were received by the Department as described in the granted exemption.

The notice of proposed exemption was issued and the exemption is being granted solely by the Department because, effective December 31, 1978, section 102 of Reorganization Plan No. 4 of 1978, 5 U.S.C. App. 1 (1996), transferred the authority of the Secretary of the Treasury to issue exemptions of the type proposed to the Secretary of Labor.

Statutory Findings

In accordance with section 408(a) of the Act and/or section 4975(c)(2) of the Code and the procedures set forth in 29 CFR part 2570, subpart B (55 FR 32836, 32847, August 10, 1990) and based upon the entire record, the Department makes the following findings:

(a) The exemption is administratively feasible;

(b) The exemption is in the interests of the plan and its participants and beneficiaries; and

(c) The exemption is protective of the rights of the participants and beneficiaries of the plan.

The Plumbers & Pipefitters National Pension Fund (the Fund) Located in Alexandria, VA

[Prohibited Transaction Exemption (PTE) 2007–01; Exemption Application No. D–11183]

Exemption

The restrictions of sections 406(a)(1)(A) through (D) and 406(b)(1) and (b)(2) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1)(A) through (E) of the Code, shall not apply, effective June 5, 2001, to the transactions described below involving the receipt by Diplomat Properties, Limited Partnership (DPLP or the Partnership) of certain services and products from the hotel management company, Westin Management Company East (after January 12, 2006, Westin Hotel Management, L.P.) (referred to collectively with its parent company, Starwood Hotels & Resorts Worldwide, Inc., as Starwood) and certain related entities (Related Companies), retained to operate the Partnership's principal asset, the Westin Diplomat Resort & Spa and the Diplomat Country Club and Spa (collectively, the Resort), provided that there is adherence to the material facts and representations contained in the Application and satisfaction of the applicable requirements described in Parts II and III below.

I. Exemption Transactions

(a) The provision of Centralized Services or Additional Services (collectively, the Proposed Services) to the Resort by Starwood or a Related Company;

(b) The purchase of goods from Starwood or a Related Company in connection with the provision of Centralized Services or Additional Services (Purchase of Goods); and

(c) The participation of the Resort in the Associate Room Discount Program (ARD Program),

II. General Conditions

(a) LaSalle Investment Management, Inc., Capital Hotel Management, LLC or a successor independent qualified professional asset manager (QPAM) for the Partnership, will represent the interests of the Partnership for all purposes with respect to the Proposed Services and the Purchase of Goods for the duration of the arrangement. The QPAM, on behalf of the Partnership, through negotiation and execution of the Operating Agreements and periodic monitoring of the Proposed Services and the Purchase of Goods, determines that:

(1) Starwood's provision of Centralized Services and Additional Services to the Resort is in the best interests and protective of the participants and beneficiaries of the Plumbers & Pipefitters National Pension Fund (the Fund).

(2) The terms under which the provision of Centralized Services and Additional Services are provided by Starwood to the Resort are at least as favorable to the Resort as those which the Partnership could obtain in arm's length transactions with unrelated parties in the relevant market;

(3) The overall cost of services and products charged by Starwood to the Resort on a centralized basis is consistent with the amounts charged by other potential branded operators; and

(4) The Centralized Services and Additional Services made available by Starwood and its affiliates are provided at prices and on terms at least as favorable to the Partnership as are available in the relevant market from unrelated parties and reflect the same prices and terms as are offered by Starwood and its affiliates to other properties managed by Starwood and its affiliates in the ordinary course of business.

(b) Under the Operating Agreements, at all times that the Partnership is using Centralized Services and Additional Services, Starwood has acknowledged in writing:

(1) Starwood's fiduciary status under section 3(21) (A) of the Act, with respect to the Resort; and

(2) Starwood's indemnification of the Partnership with respect to any claims, demands, actions, penalties, suits and liabilities arising from Starwood's breach of fiduciary duty or violation of the Act.

(c) On an annual basis, the QPAM, on behalf of the Partnership, approves the participation of the Resort in Centralized Services and Additional Services as part of its approval of the Resort's Annual Operating Plan.

(d) During any year, subject to exceptions for certain Variable Expenses or Uncontrollable Expenses, Starwood does not, without the approval of the QPAM, incur any cost or expense or make any expenditure with respect to Centralized Services or Additional Services that would: (i) Cause the total expenditures for any line item in the Annual Operating Plan that includes payment of fees for Centralized Service or Additional Services to exceed the budgeted expense for that line item by more than 10%; (ii) cause total expenditures for any department of the Resort that pays fees for Centralized Service or Additional Services to exceed the budgeted expenses for that department by more than 5%; or (iii) cause the actual aggregate expenditures for operating expenses or capital expenditures to exceed the budget by more than 2%.

(e) All purchases of products and services by Starwood from (i) itself, (ii) any person or entity directly or indirectly controlling, or controlled by, or under common control with Starwood, or (iii) any entity in which Starwood or its affiliates have any ownership, investment or management interest or responsibility are first approved by the QPAM (as part of the approval of the Annual Operating Plan or otherwise), except in cases of purchases of not more than $50,000 per annum where the price paid or charged for each such purchase and the terms thereof are lower than those that could be obtained from unrelated third parties in the applicable location.

(f) The QPAM approves (as part of the approval of the Annual Operating Plan or otherwise) all contracts for Additional Services (and, to the extent applicable, Centralized Services) that provide for aggregate annual expenditure or revenue of more than $50,000 or have a term of more than one year.

(g) The fees charged to the Resort for Centralized Services can be increased only on a system-wide basis (i.e., not just for the Resort).

(h) The fees for Centralized Services are not greater than the lowest of: (i) The fees initially agreed upon by the parties in the Operating Agreement; (ii) Starwood's prevailing fee for the services or products as generally charged by Starwood or its affiliates to other properties managed by it; (iii) Starwood's cost, with no profit or mark-up (although it may include overhead); or (iv) 5% of gross revenues (exclusive of certain occupancy-related charges, such as third-party reservations fees and frequent guest program charges) of the hotel or country club, as applicable.

(i) Starwood does not, with respect to any Centralized Service or Additional Service, solicit bids for the product or service in a manner that could result in a ''right of first refusal'' or other bidding advantage for the benefit of Starwood or its affiliates.

(j) The QPAM, on behalf of the Partnership, has the right to opt out of

any Centralized Services and to elect not to receive any Additional Services.

(k) The QPAM, on behalf of the Partnership, retains the right to conduct audits of transactions entered into by Starwood with respect to Centralized Services and Additional Services, and, in the event that an audit uncovers a discrepancy related to any payment to Starwood or its affiliates, it must be corrected within ten days of notice being provided.

(l) As part of its monitoring responsibilities, the QPAM, on behalf of the Partnership, has the right to meet with representatives of Starwood no less frequently than monthly (and otherwise at the request of the Partnership) for the purposes of reviewing each Annual Operating Plan, preparing, reviewing and updating rolling three-month forecasts for the Resort, and analyzing Starwood's actual performance against the Annual Operating Plan and the performance of the Resort relative to an applicable competitive set of resorts.

(m) The QPAM, on behalf of the Partnership, retains the right to receive monthly interim and annual accounting reports that include a comparison of actual to budgeted expenses, and to have such reports audited by an independent accounting firm not more than once in any fiscal year.

III. ARD Program Conditions

(a)(1) Rooms are not made available to employees or associates of Starwood or a Related Company pursuant to the Associate Room Discount Program if the rooms could otherwise be sold to the public at a higher rate; and

(2) In each case, the discounted rates fully cover the variable cost to the Resort for the use of the room and the cost to the Resort of the food, beverage and amenities.

(b) Participation in the Associate Room Discount Program is offered by Starwood at all of its owned properties and properties that it manages.

(c) The QPAM, acting on behalf of the Partnership, monitors the Resort's participation in the Associate Room Discount Program and retains the right to opt out of the Associate Room Discount Program.

IV. Definitions

(a) The term ''Partnership'' means Diplomat Properties, Limited Partnership whose principle asset is the Resort. The Plumbers & Pipefitters National Pension Fund (the Fund) is the sole member of Diplomat Properties, LLC, the General Partner of the Partnership. The QPAM is a non-member manager of the General Partner.

(b) The term ''QPAM'' means LaSalle Investment Management, Inc. (LaSalle), Capital Hotel Management, LLC (CHM) or a successor qualified professional asset manager (as defined in section V(a) of Prohibited Transaction Class Exemption 84–14 at 49 FR 9494, March 13, 1984), as amended at 71 FR 5887 (February 3, 2006) or such other entity that is permitted by a U.S. Department of Labor individual exemption to function with powers similar to that of a qualified professional asset manager, that is exercising discretionary authority on behalf of the Fund with respect the activities of the Partnership and the Resort.

(c) The term ''affiliate'' means:

(1) Any person directly or indirectly through one or more intermediaries, controlling, controlled by, or under common control with the person;

(2) Any officer, director, employee, relative, or partner of any such person; and

(3) Any corporation or partnership of which such person is an officer, director, partner, or employee.

(d) The term ''control'' means the power to exercise a controlling influence over the management or policies of a person other than an individual.

(e) The term ''Related Company'' means wholly or partially owned affiliates of Starwood (including, without limitation, affiliates of Starwood that are parties in interest by virtue of section 3(14)(G), (H) or (I) of the Act or disqualified persons by virtue of sections 4975(e)(2)(G), (H), or (I) of the Code) or affiliates or other entities in which Starwood has an ownership or other contractual interest.

(f) The term ''Additional Services'' means any service or product other than Centralized Services: (1) Which is provided to the Resort by Starwood or a Related Company and is typically provided by Starwood or a Related Company on a property by property basis to properties operated by Starwood or an affiliate; and (2) for which Starwood or a Related Company receives a fee for providing such service or product that is based on the level of usage by the Resort.

(g) The term ''Annual Operating Plan'' means the annual written operating plan submitted by Starwood to the Partnership no later than 90 days before the commencement of each fiscal year, which plan shall include monthly estimates and cover the operating budget (including departmental revenue and expenses, taxes, insurance and reserves), the capital budget, the marketing plan, the advertising program, working capital requirements, litigation and any other matter reasonably deemed appropriate by the QPAM, on behalf of the Partnership.

(h) The term ''Associate Room Discount Program'' means the program maintained by Starwood with the approval of the QPAM pursuant to which discounted room rates and discounted food, beverage and other amenities at participating hotels are provided for Starwood associates or associates of participating Starwood franchise hotels worldwide and their immediate family.

(i) The term ''Centralized Services'' means any service or product, including (without limitation) certain advertising, marketing and promotional activities (including frequent guest programs), reservations and distribution systems and networks, training and similar items, provided that: (i) The service or product is provided to the Resort by Starwood or a Related Company and is typically provided by Starwood or a Related Company on a central, regional, chain or brand basis, rather than specifically at an individual property; and (ii) Starwood or a Related Company receives a fee for providing the service or product that is based on the level of usage by the Resort.

(j) The term ''Operating Agreements'' means, collectively, the parallel operating agreements, executed on June 5, 2001, between LaSalle and Starwood, as amended, and executed on May 1, 2006, between CHM and Starwood, as amended, to brand and operate the Resort's convention hotel as the ''Westin Diplomat Resort and Spa,'' and to brand and operate the country club as ''The Diplomat Country Club and Spa,'' as part of Starwood's Luxury Collection, and any successor operating agreements that may be in effect between the parties or successor parties from time to time.

(k) The term ''Variable Expense,'' as set forth in the Operating Agreements, means operating expenses covered by the then-current Annual Operating Plan that reasonably fluctuate as a direct result of business volumes, including food and beverage expenses, other merchandise expenses, operating supply expenses, and energy costs.

(l) The term ''Uncontrollable Expenses,'' as set forth in the Operating Agreements, means certain expenses the amount of which cannot be controlled by Starwood, which expenses include, without limitation, real estate taxes, utilities, insurance premiums, license and permit fees and charges provided in contracts entered into pursuant to the Operating Agreement, provided, that Starwood agrees to use commercially reasonable efforts to mitigate the expenses under such contracts; and the

QPAM, on behalf of the Partnership, agrees that Starwood shall have the right to pay all Uncontrollable Expenses without reference to the amounts provided for in respect thereof in the approved Annual Operating Plan.

For a more complete statement of the facts and representations supporting the Department's decision to grant this exemption, refer to the notice of proposed exemption.

SUPPLEMENTARY INFORMATION: On August 21, 2006, the Department published a notice in the **Federal Register** (71 FR 48768) of a proposed individual exemption (the Proposed Exemption). The application for this Proposed Exemption (Application) was submitted by LaSalle Investment Management, Inc. (LaSalle), as qualified professional asset manager (QPAM) for, and on behalf of, the Fund (Applicant). By letter dated April 25, 2006, LaSalle informed the Department that as of April 30, 2006, LaSalle was replaced by Capital Hotel Management, LLC (CHM) as the QPAM for the Fund. Independent Fiduciary Services, Inc. (IFS) is the independent named fiduciary of the Fund's account that holds the interests in the Partnership, the General Partner and other assets of the Fund invested in, or awaiting investment in, the Resort (the Diplomat Account). The Fund is funded solely by employer contributions negotiated under collective bargaining agreements with the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada, AFL–CIO (the Union). The Fund is administered by the Board of Trustees of the Fund, which has six individual members, three of whom are appointed by the Union and three of whom are appointed by contributing employers. The Applicant requested that the restrictions of sections 406(a)(1)(A) through (D) and 406(b)(1) and (b)(2) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1)(A) through (E) of the Code, not apply, effective June 5, 2001, to certain transactions involving the receipt by Diplomat Properties, Limited Partnership (DPLP or the Partnership) of certain services and products from the hotel management company, Westin Management Company East (after January 12, 2006, Westin Hotel Management, L.P.) (referred to collectively with its parent company, Starwood Hotels & Resorts Worldwide, Inc., as Starwood) and certain related entities (Related Companies), retained to operate the Partnership's principal asset, the Westin Diplomat Resort & Spa and the Diplomat Country Club and Spa (collectively, the Resort).

Discussion and Comments Received

Four comment letters from interested persons and one comment from Capital Hotel Management, LLC (CHM) as the QPAM for the Fund were received by the Department. The CHM comment provided further information on the proposed exemption and is discussed below. By letter dated November 20, 2006, CHM responded to the questions raised in the four comments received from interested persons. CHM noted that several commenters raised issues or asked questions regarding the propriety of the initial purchase of the Resort and the Applicant's development of it. The comments included statements alleging that members of the Board of Trustees of the Fund and contractors engaged in the Resort's development and operation received improper benefits. CHM stated that the Proposed Exemption in no way relates to the initial purchase of the Resort or the subsequent investment of the Fund's assets to develop and stabilize it. CHM explained that the exemption was requested because the QPAM concluded that Starwood's provision of Centralized Services, Additional Services and the Associate Room Discount Program will result in improved operating performance beyond that which can be provided by an operator of a single hotel or smaller group of hotels that does not provide those services and products. In addition, the QPAM concluded that (a) by centralizing the sourcing function, Starwood is also able to capture economies of scale designed to reduce the cost of the procurement function in the Resort and (b) the Resort's participation in these programs should result in increased efficiencies and lower operating costs. CHM asserts that none of the commenters has disputed any of these conclusions.

CHM noted that one commenter stated that ''not one of the UA Members of the UA PPNPF receive a discount on anything pertaining to the Diplomat Propertys [sic], why should someone else who are not owners of the Deplomat [sic] receive a discount''. CHM responded that, while the precise meaning of this comment is unclear, to the extent that the commenter is questioning the purpose of the Associate Room Discount Program, the QPAM concluded that it constitutes a relatively cheap employee benefit for employees of the Resort. CHM stated that, because this arrangement is typically offered by Starwood and all other international branded hotel and resort operators, denying this benefit to Resort employees would place the Resort at a distinct disadvantage vis-à-vis other competing hotels in its area with respect to hiring and retaining employees.

Another comment questioned whether the Resort can make a profit and stated that the Partnership should sell the Resort immediately to the highest bidder. CHM responded that the purpose of this Application is not to determine whether a sale of the Resort is in the best interest of the Partnership or the Applicant, but to allow the Partnership to enter into arrangements with Starwood, the Resort's operator (through Westin Hotel Management, L.P.), to enhance the operation of the Resort while the Applicant (through the Partnership) owns it.

Another comment stated that the Partnership does not need ''additional managers to manage the 'Westin Group' '' and that the ''Westin Group'' should be replaced by managers that can manage the Resort properly and with a profit, such as the ''Sheraton Group'' or the ''Hilton Group.'' CHM responds that, as an initial matter, Sheraton hotels and Westin hotels are sister brands within the Starwood group of brand hotels. The Applicant submits that this comment is not relevant to the Proposed Exemption because the Application does not seek an exemption to permit the retention of CHM, the current investment manager and qualified professional asset manager for the Applicant's investment in the Resort. The retention of CHM as an investment manager is specifically contemplated by ERISA and does not constitute a prohibited transaction. Rather, it is CHM's involvement in the budget process and general oversight of Starwood as the Resort operator, which limits Starwood's discretion and will prevent abuse of the arrangement for Centralized Services, Additional Services and the Associate Room Discount Program. CHM notes that, in correspondence supplementing the Application, CHM confirmed to the Department that it is responsible for performing the actions ascribed to the QPAM as they relate to both the specific and general limitations on Starwood's activities described in Section II.F of the Application. In addition, CHM confirmed that, as described in Section III.A of the Application, changes to services and products or fees (as limited by the Operating Agreements) must be presented to and approved, if applicable, by CHM in connection with the annual budget process.

CHM states that another commenter asked various questions regarding the retention of Starwood. The commenter asked the additional costs of another management company being involved,

who owns Starwood, whether any pension officials or board members are associated in any way with Starwood or its affiliates, how the Proposed Exemption is going to help pension plan and union members and retirees, and who is the Starwood affiliate presently managing the Resort. CHM responded that, as described in the Application and subsequent correspondence from the QPAM, the hotel is currently managed by Westin Hotel Management, L.P.; a Delaware limited partnership and a wholly-owned subsidiary of Starwood Hotels & Resorts Worldwide, Inc., which is a public company. CHM asserts that no member of the Board of Trustees of the Fund is a director, officer or employee of Starwood or any Starwood ERISA Affiliate. CHM also states that the determination to retain Starwood was made not by the Board of Trustees but by LaSalle, CHM's predecessor as qualified professional asset manager. In addition, La Salle was, and CHM is, overseen by IFS, the Applicant's independent named fiduciary for the Diplomat Account. Starwood was selected after LaSalle, monitored by IFS, engaged in a comprehensive review of all relevant issues that included extensive due diligence, a competitive bidding process (which attracted many of the larger international hotel operating companies, including several well-known brands) and several interviews and on-site visits. The Applicant notes that the purpose of this Application is not to determine whether the retention of Starwood was appropriate or whether the overall fee arrangement with Starwood is reasonable, but rather whether Starwood, as operator of the Resort, will be permitted to engage in certain transactions that the QPAM has determined will inure to the financial benefit of the Partnership (and, therefore, the Fund). Accordingly, the Applicant believes that the overall cost of a management company being involved is immaterial to this Proposed Exemption. CHM states that of more significance is that the QPAM has, after careful consideration, concluded that Centralized Services and Additional Services are likely to result in benefits to the Resort that are both financial (i.e., utilizing these services and products will result in cost savings through aggregation of Starwood's purchasing and organizational power, and there are specific provisions in the Operator Agreements to assure that the Resort will benefit financially from such arrangements) and operational (i.e., value will be achieved through enhancements in quality and service resulting from the economies of scale and joint participation in these arrangements). Thus, the QPAM expects that Starwood's services and purchasing program, as well as its Associate Room Discount Program, will enhance the value of the Resort, resulting in a benefit to participants and beneficiaries of the Fund.

Another comment inquired as to why certain individuals did not receive notice of the Proposed Exemption. CHM explains that the notice to interested persons, along with the supplemental statement required by Department Regulation 2570.43(b)(2) was sent to each member of the Board of Trustees of the Applicant and to anyone who commented with respect to PTE 99–46, PTE Application D–10960 or D–10971. CHM notes that, with respect to Applications D–10960 and 10971, the Department concluded that, in part due to the burden and expense of a wider distribution, it was reasonable and adequate under the circumstances to provide the notice to interested persons and supplemental statement only to persons who commented on PTE 99–46, the first exemption issued with respect to the Fund and the Diplomat Account. CHM believes that the Proposed Exemption is more technical and less sweeping than either of the prior exemptions the Department has granted regarding the Diplomat Account. It is unlikely that individuals, other than the Board of Trustees and those who commented on PTE 99–46, D–10960 or D–10971 would be concerned with the technical issues regarding the provision of the Centralized Services, Additional Services and Associate Room Discount Program to the Partnership by Starwood (or a Related Company). CHM concludes that the reasonableness of this assumption is reflected in the absence of comments from those who did receive notice that go to the substance of any of those issues.

One commenter requested information concerning any ''current or future hearings'' before the Department on the Proposed Exemption. Regarding a public hearing, the Department does not believe that there are material factual issues relating to this exemption that were raised by the commenters which would require the convening of a hearing on the Proposed Exemption. Thus, the Department has determined not to hold a hearing.

As previously noted in the Proposed Exemption, in considering exemptive relief for the transactions described herein, the Department placed a great deal of emphasis on the significant involvement of IFS, as named fiduciary, and LaSalle and CHM, as investment managers (the Independent Fiduciaries) and their considered and objective evaluation of the subject transactions. These Independent Fiduciaries have represented for the record that the retention of Starwood was in the interests of the Partnership and that the written agreement and the limitations contained therein permit the Independent Fiduciaries to effectively monitor and scrutinize the actions undertaken by Starwood. The initial and continued involvement of the Independent Fiduciaries on behalf of the Fund with respect to the transactions that are the subject of this exemption is a critical factor in the Department's determination to grant exemptive relief. In addition, as the Department has previously stated in PTE 2001–39, the fact that a transaction is the subject of an exemption under section 408(a) of the Act does not relieve a fiduciary from the general fiduciary responsibility provisions of section 404 of the Act. IFS' appointment of an investment manager and QPAM to manage the Diplomat Account and its ongoing determination to continue to retain LaSalle and CHM with respect to the management of the Diplomat Account are subject to section 404 of the Act. Both LaSalle and CHM, as investment managers for the Diplomat Account, retain fiduciary responsibility for the activities undertaken by Starwood on behalf of the Resort. In this regard, section 404(a)(1)(A) and (B) of ERISA requires that a fiduciary discharge his duties to a plan solely in the interests of the participants and beneficiaries, for the exclusive purpose of providing benefits to participants and beneficiaries and defraying reasonable administrative expenses, and in a prudent manner. Accordingly, it is the responsibility of the Fund's fiduciaries to operate the Resort in a manner designed to maximize the Fund's rate of return, consistent with their fiduciary duties under section 404 of the Act. The fiduciary obligation to act prudently requires, at a minimum, that the Independent fiduciaries conduct an ongoing objective, thorough and analytical critique of the management of the Diplomat Account. If the transactions that are the subject of this exemption result in activity that is not ''prudent,'' and not ''solely in the interest'' of the participants and beneficiaries of the Fund, the responsible fiduciaries of the Fund would be liable for any losses resulting from such a breach of fiduciary responsibility, even if the transactions involved do not constitute prohibited

transactions under section 406 of ERISA.

FOR FURTHER INFORMATION CONTACT: Wendy McColough of the Department, telephone (202) 693–8540. (This is not a toll-free number.)

American Maritime Officers Safety & Education Plan (S&E Plan); American Maritime Officers Pension Plan; American Maritime Officers Vacation Plan; American Maritime Officers Medical Plan; and American Maritime Officers 401(k) Plan; (Collectively the AMO Plan(s)) Located in Dania Beach, Florida and Toledo, Ohio

[Prohibited Transaction Exemption No. 2007–02; Application Nos. L–11148; D11149; L–11150; L–11151; D–11152; and D–11153]

Exemption

Section I

The restrictions of sections 406(a) and 406(b)(1) and (b)(2) of the Act shall not apply to: (1) The S&E Plan entering into an arrangement with the American Maritime Officers (the Union), which is a party in interest with respect to the AMO Plans, for the Union to pay the S&E Plan, where appropriate and at the rate established by the independent fiduciary (the I/F), for the portion of the Union trustees' food and lodging provided by the S&E Plan that is attributable to attendance at certain Union meetings at the Dania Beach, Florida and Toledo, Ohio facilities (collectively, the Facilities); (2) the S&E Plan entering into an arrangement with the Union and certain contributing employers, who are parties in interest with respect to the AMO Plans, to pay the S&E Plan at a rate established by the I/F, for food and lodging provided by the S&E Plan at the Facilities for the representatives of the Union and the respective contributing employers that is attributable to attendance at various conferences; and (3) the S&E Plan entering into an arrangement with the governing bodies of the American Maritime Officers Joint Employment Committee, and the American Maritime Officers Service, who are parties in interest with respect to the AMO Plans, to pay the S&E Plan at a rate established by the I/F, for food and lodging provided by the S&E Plan at the Facilities.

Section II

The restrictions of sections 406(a) and 406(b)(1) and 406(b)(2) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1)(A) through (E) of the Code, shall not apply to: (1) The AMO Plans sharing expenses based on an internal expense allocation model (the Allocation Model) for the provision of food and lodging by the S&E Plan at the Facilities to the AMO Plans' trustees (the Trustees); and (2) The AMO Plans, the JEC and AMOS sharing expenses based on the Allocation Model for the provision of food and lodging by the S&E Plan at the Facilities.

Section III

The restrictions of sections 406(a) and 406(b)(1) and (b)(2) of the Act shall not apply to: (1) Contributing employers contracting with the S&E Plan to provide one of its regular courses at a special time; and (2) The S&E Plan designing training programs or undertaking special research or modeling that is tailored to the needs of a particular contributing employer or its vessels.

Conditions

This exemption is subject to the following conditions:

(a) Each AMO Plan will pay its appropriate share of expenses based on the Allocation Model;

(b) The I/F retained by the AMO Plans will:

(1) Make a determination of whether the proposed transactions (the Transaction(s)) are prudent and in the best interest of the relevant AMO Plan(s);

(2) Establish the terms for each of the Transactions, including:

(i) The price to be charged for the services provided pursuant to the Transactions; and

(ii) The terms and conditions ensuring that the Transactions are fair to the involved AMO Plans;

(3) Develop policies and guidelines for the implementation of the Transactions;

(4) Monitor the Transactions on an on-going basis, including periodic reviews of the Transactions, to ensure compliance with the I/F policies and guidelines;

(5) On a periodic basis, review the terms of each of the Transactions, including the fair market value of the services provided; and

(6) Prepare an annual report, summarizing the Transactions for that year;

(c) The costs associated with recordkeeping and all forms of independent oversight will be included in the daily rate established by the I/F for food and lodging provided by the S&E Plan at the Facilities;

(d) An independent auditor will perform annual audits of all the AMO Plans to identify and reconcile any discrepancies regarding the recordkeeping involving the Transactions and provide an annual evaluation of all allocation models and produce approval letters explicitly affirming that the models are satisfactory;

(e) The Room Master Software System will create an invoice for lodging and food service accounting functions and related services at the Facilities;

(f) The AMO Plans' fiduciaries maintain or cause to be maintained, for a period of six years from the date of the covered transactions, such records as are necessary to enable the persons described in paragraph (g) to determine whether the conditions of this exemption were met, except that:

(1) If the records necessary to enable the persons described in paragraph (g) to determine whether the conditions of the exemption have been met are lost or destroyed, due to circumstances beyond the control of the AMO Plans' fiduciaries, then no prohibited transaction will be considered to have occurred solely on the basis of the unavailability of those records; and

(2) No party in interest, other than the AMO Plans' fiduciaries responsible for recordkeeping, shall be subject to the civil penalty that may be assessed under section 502(i) of the Act or to the taxes imposed by section 4975(a) and (b) of the Code if the records are not maintained or are not available for examination as required by paragraph (g) below;

(g)(1) Except as provided below in paragraph (g)(2) and notwithstanding the provisions of section (a)(2) and (b) of section 504 of the Act, the records referred to above in paragraph (f) are unconditionally available for examination during normal business hours at their customary location by the following persons or an authorized representative thereof:

(i) any duly authorized employee or representative of the Department or the Internal Revenue Service;

(ii) any fiduciary of the AMO Plans or any duly authorized employee or representative of such fiduciary; or

(iii) any contributing employer and any employee organization whose members are covered by the AMO Plans, or any authorized employee or representative of these entities; or

(iv) any participant or beneficiary of the AMO Plans or the duly authorized employee or representative of such participant or beneficiary.

(2) None of the persons described in paragraphs (ii), (iii) and (iv) of paragraph (g)(1) shall be authorized to examine trade secrets or commercial or

financial information which is privileged or confidential.

For a more complete statement of the facts and representations supporting the Department's decision to grant this exemption, refer to the Notice of Proposed Exemption (the Notice) published on July 21, 2006 at 71 FR 41478.

Written Comments

The Department received three written comments from interested persons in response to the Notice. The Department forwarded copies of the comments to the applicant and requested that the applicant and the I/F address, in writing the various concerns raised by the commentators. The principal concern expressed by all three commentators is that the exemption would allow pension assets to be used for purposes other than retirement benefits for plan participants. Two of the commentators link this concern to the investigation of the AMO Plans by the U.S. Department of Justice.

The applicant represents that one of the commentators' concerns that the exemption would allow pension plan assets to be used for a variety of inappropriate uses reflects a misunderstanding of the purpose of the exemption and the conditions under which it has been proposed. The applicant represents that the proposed exemption would allow the Plans' trustee meetings, union meetings, and other meetings or conferences involving the Union, employers who contribute to the Plans, the Joint Employment Committee, the American Maritime Officers Service, and professionals servicing the Plans to be held at the training and meeting facilities in Dania Beach, Florida, which is leased by the S&E Plan, and another facility owned by the S&E Plan in Toledo, Ohio. Under the proposed exemption, meeting participants or the groups they represent are required to pay their proportional share of lodging, catering and meeting costs—the costs would not fall on the facilities or the S&E Plan. Notably, the costs associated with these meetings are substantially less when lodging, food and meeting space are provided at the facilities than if provided by hotels or other conference facilities. Without the requested exemption, there would be legal constraints on the ability of the S&E Plan to contract with the other Plans to provide the necessary services and functions that would have to be scheduled at independent meeting facilities at a higher cost.

In addition, the applicant represents that, as a condition contained in the Notice, the Plans have retained an independent fiduciary to ensure that the interests of the Plans and their participants are protected. Among other things, the independent fiduciary will monitor all transactions and activities permitted under the proposed exemption to ensure compliance with the conditions set out by the Department. The duties of the I/F will also include ensuring that the parties using the facilities pursuant to the proposed exemption pay a fair price for the services they receive.

Two of the commentators suggest that the exemption should not be granted because of a Department of Justice investigation of the Plans. One of the two requested a hearing on this basis. The applicant represents that contrary to the concern expressed, the application is part of an effort to ensure ERISA compliance and the protection of plan assets. In response to the investigation, the AMO Plans formed a Special Committee, which retained Special Counsel to undertake an independent investigation and to make reports and recommendations for remedial action to the Special Committee. The Special Committee authorized Special Counsel to apply for the exemption on behalf of the AMO Plans as part of an ERISA compliance process.

The I/F has reviewed the comments and represents that proper implementation and compliance with the conditions of the proposed exemption will be protective of the beneficiaries of the AMO Plans because (i) the use of the facilities by parties in interest will be monitored and linked to specific meeting schedules; (ii) costs associated with the use of the facilities by the parties in interest will be properly charged, with the AMO Plans being appropriately compensated for services provided; (iii) costs savings can inure to the beneficiaries as a result of the efficiency of having the multiple meetings associated with the Plans in a single lower cost environment; and (iv) the parties in interest will only be allowed to use the facilities if there is excess capacity so that beneficiaries who require training cannot be displaced. Furthermore, the I/F represents that the I/F's research and analysis results in the belief that usage of the facilities by parties in interest can be effectively monitored, costs can be properly allocated and efficiencies in the scheduling of the meetings can be attained which will result in cost savings to the beneficiaries.

The Department has considered the entire record and has determined to grant the exemption as proposed. Further, the Department does not believe that there are material factual issues relating to the exemption that were raised by commentators which would require the convening of a hearing. Thus, the Department has determined not to hold a hearing on these matters.

FOR FURTHER INFORMATION CONTACT: Khalif I. Ford of the Department, telephone (202) 693–8540. (This is not a toll-free number.)

General Information

The attention of interested persons is directed to the following:

(1) The fact that a transaction is the subject of an exemption under section 408(a) of the Act and/or section 4975(c)(2) of the Code does not relieve a fiduciary or other party in interest or disqualified person from certain other provisions to which the exemption does not apply and the general fiduciary responsibility provisions of section 404 of the Act, which among other things require a fiduciary to discharge his duties respecting the plan solely in the interest of the participants and beneficiaries of the plan and in a prudent fashion in accordance with section 404(a)(1)(B) of the Act; nor does it affect the requirement of section 401(a) of the Code that the plan must operate for the exclusive benefit of the employees of the employer maintaining the plan and their beneficiaries;

(2) This exemption is supplemental to and not in derogation of, any other provisions of the Act and/or the Code, including statutory or administrative exemptions and transactional rules. Furthermore, the fact that a transaction is subject to an administrative or statutory exemption is not dispositive of whether the transaction is in fact a prohibited transaction; and

(3) The availability of this exemption is subject to the express condition that the material facts and representations contained in the application accurately describes all material terms of the transaction which is the subject of the exemption.

Signed at Washington, DC, this 17th day of January, 2007.

Ivan Strasfeld,

Director of Exemption Determinations, Employee Benefits Security Administration, U.S. Department of Labor.

[FR Doc. E7–970 Filed 1–23–07; 8:45 am]

BILLING CODE 4510–29–P

DEPARTMENT OF LABOR

Occupational Safety And Health Administration

[Docket No. ACCSH 2007–1]

Advisory Committee on Construction Safety and Health (ACCSH); Request for Nominations

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

ACTION: Request for nominations to serve on ACCSH.

SUMMARY: The Assistant Secretary of Labor for Occupational Safety and Health invites interested parties to submit nominations for membership on ACCSH.

DATES: Nominations for ACCSH must be submitted (postmarked, sent or received) by February 23, 2007.

ADDRESSES: You may submit nominations for ACCSH, identified by OSHA Docket No, ACCSH 2007–1, by any of the following methods:

Electronically: You may submit nominations electronically at *http://www.regulations.gov,* which is the Federal eRulemaking Portal. Follow the instructions on-line for submitting comments.

Facsimile: If your nomination, including attachments, is not longer than 10 pages, you may fax it to the OSHA Docket Office at (202) 693–1648.

Mail, express delivery, hand delivery, messenger or courier service: Submit three copies of your nominations to the OSHA Docket Office, Room N–2625, U.S. Department of Labor, 200 Constitution Ave., NW., Washington, DC 20210; telephone (202) 693–2350 (OSHA's TTY number is (877) 889–5627). Deliveries (hand, express mail, messenger and courier service) are accepted during the Department of Labor's and Docket Office's normal business hours, 8:15 a.m.–4:45 p.m., e.t.

Instructions: All nominations for ACCSH must include the Agency name and docket number for this **Federal Register** notice (Docket No. ACCSH 2007–1). All submissions in response to this **Federal Register** notice, including personal information provided, will be posted without change at *http://www.regulations.gov.* Because of security-related procedures, submitting nominations by regular mail may result in a significant delay in their receipt. Please contact the OSHA Docket Office (at the address above) for information about security procedures for submitting nominations by hand delivery, express delivery, and messenger or courier service. For additional information on submitting nominations, see the **SUPPLEMENTARY INFORMATION** section below.

Docket: To read or download submissions, go to *http://www.regulations.gov.* All documents in the docket are listed in the *http://www.regulations.gov* index. Although listed in the index, some information (e.g., copyrighted material) is not publicly available to read or download through *http://www.regulations.gov.* All submissions, including copyrighted material, are available for inspection and copying at the OSHA Docket Office at the address above.

FOR FURTHER INFORMATION CONTACT: Mr. Michael M.X. Buchet, OSHA, Directorate of Construction—Office of Construction Services, Room N–3468, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone 202–693–2020; e-mail address *buchet.michael@dol.gov.*

SUPPLEMENTARY INFORMATION: The Assistant Secretary of Labor for Occupational Safety and Health invites interested parties to submit nominations for membership on ACCSH. ACCSH is authorized under the authority granted by section 7 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 656), and section 107 of the Contract Work Hours and Safety Standards Act (Construction Safety Act) (40 U.S.C. 3701 et seq.). The function of ACCSH is to advise the Assistant Secretary on occupational safety and health standards and policy affecting the construction industry. ACCSH is a continuing advisory body and operates in compliance with the provisions of the Construction Safety Act, section 7 of the OSH Act, and the Federal Advisory Committee Act (5 U.S.C. App. 2), and regulations issued pursuant to those statutes (29 CFR part 1912, 41 CFR part 101–6 and 102–3). ACCSH meets two to four times per year for one or two days per meeting.

ACCSH is composed of 15 members appointed by the Assistant Secretary to serve staggered two-year terms. The composition of ACCSH and the number of new members to be appointed at this time are as follows:

- Five members who are qualified by experience and affiliation to present the viewpoint of employers in the construction industry. Three employer representatives will be appointed;
- Five members who are similarly qualified to present the viewpoint of employees in the construction industry. Two employee representatives will be appointed;
- Two representatives of State safety and health agencies. Two representatives will be appointed;
- Two representatives qualified by knowledge and experience to make a useful contribution to the work of ACCSH, such as those who have professional or technical experience and competence with occupational safety and health in the construction industry. One public representative will be appointed; and
- One representative designated by the Department of Health and Human Services, National Institute of Occupational Safety and Health (NIOSH).

As mentioned, ACCSH members serve for a period of two years, unless the member becomes unable to serve, resigns or ceases to be qualified to serve, or is removed by the Secretary [29 CFR 1912.3(e)]. The NIOSH representative does not have a fixed term length. Qualified ACCSH members whose terms have expired may continue to serve until a successor is appointed and may serve successive terms. Any member absent from two consecutive meetings may be removed or replaced.

The Department of Labor is committed to equal opportunity in the workplace and seeks broad-based and diverse ACCSH membership. Nominations for a specific category of ACCSH membership should come from groups or people within the category. Others are invited and encouraged to submit endorsements in support of particular nominees. Nominations must include the following information:

(1) Nominee's resume or curriculum vitae, including prior membership on ACCSH or other relevant organizations or associations;

(2) Categories of membership for which the nominee can serve;

(3) A summary of background, experience and qualifications that makes the nominee well-suited for each of those particular categories of membership;

(4) Articles or other documents the nominee has authored that indicate his or her knowledge, experience and expertise in occupational safety and health, particularly as it pertains to the construction industry;

(5) The nominee's contact information (address, phone, e-mail); and

(6) A written commitment from the nominee of his or her willingness to attend meetings regularly and participate in good faith, and attesting that the nominee has no apparent conflicts of interest that would preclude unbiased service on ACCSH.

In addition to other relevant sources of information, the information received

through the nomination process will assist the Assistant Secretary in making appointments to ACCSH. In selecting ACCSH members, the Assistant Secretary will consider individuals nominated in response to this **Federal Register** notice, as well as other qualified individuals. OSHA will publish the new ACCSH membership list in the **Federal Register**.

Public Participation—Submission of Nominations and Access to Docket

You may submit nominations (1) electronically at *http://www.regulations.gov,* which is the Federal eRulemaking Portal; (2) by facsimile (FAX); or (3) by hard copy. All comments, attachments and other material must identify the Agency name and the OSHA docket number (OSHA Docket No. ACCSH 2007–1). You may supplement electronic nominations by uploading document files electronically. If, instead, you wish to mail additional materials in reference to an electronic or fax submission, you must submit three copies to the OSHA Docket Office (see **ADDRESSES** section). The additional materials must clearly identify your electronic nomination by name, date, and docket number so OSHA can attach them to your nomination.

Because of security-related procedures, the use of regular mail may cause a significant delay in the receipt of nominations. For information about security procedures concerning the delivery of materials by hand, express delivery, messenger or courier service, please contact the OSHA Docket Office at (202) 693–2350 (TTY (877) 889–5627).

Submissions are posted without change at *http://www.regulations.gov.* Therefore, OSHA cautions interested parties about submitting personal information such as social security numbers and date of birth. Although all submissions are listed in the *http://www.regulations.gov* index, some information (e.g., copyrighted material) is not publicly available to read or download through *http://www.regulations.gov.* All submissions, including copyrighted material, are available for inspection and copying at the OSHA Docket Office. Information on using the *http://www.regulations.gov* Web site to submit nominations and access the docket is available at the Web site's User Tips link. Contact the OSHA Docket Office for information about materials not available through the Web site and for assistance in using the internet to locate docket submissions.

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

Authority and Signature

Edwin G. Foulke, Jr., Assistant Secretary of Labor for Occupational Safety and Health, directed the preparation of this notice under the authority granted by section 7 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 656), section 107 of the Contract Work Hours and Safety Standards Act (Construction Safety Act) (40 U.S.C. 3701 *et seq.*), and Secretary of Labor's Order No. 5–2002 (67 FR 65008).

Signed at Washington, DC this 19th day of January, 2007.

Edwin G. Foulke, Jr.,

Assistant Secretary of Labor.

[FR Doc. E7–1013 Filed 1–23–07; 8:45 am]

BILLING CODE 4510–26–P

NATIONAL COUNCIL ON DISABILITY

Sunshine Act Meetings

TYPE: Quarterly Meeting.

DATE AND TIME: January 29–31, 2007, 9 a.m.–5 p.m.

LOCATION: Town and Country Resort and Convention Center, 500 Hotel Circle North, San Diego, California.

STATUS: January 29, 2007, 9 a.m.–3:45 p.m.—Open.

January 29, 2007, 3:45 p.m–4:30 p.m.—Closed.

January 30–31, 2007, 9 a.m.–5 p.m.—Open.

AGENDA: Public Comments; Department of Defense, Computer/Electronic Accommodations Program Presentation; Veterans' Panel Presentation and Discussion; Livable Communities Panel Presentation; Foster Care Panel Presentation; Reports from the Chairperson and the Acting Co-Executive Directors; Team Reports; Unfinished Business; New Business; Announcements; Adjournment

SUNSHINE ACT MEETING CONTACT: Mark S. Quigley, Director of Communications, NCD, 1331 F Street, NW., Suite 850, Washington, DC 20004; 202–272–2004 (voice), 202–272–2074 (TTY), 202–272–2022 (fax).

AGENCY MISSION: NCD is an independent Federal agency making recommendations to the President and Congress to enhance the quality of life for all Americans with disabilities and their families. NCD is composed of 15 members appointed by the President and confirmed by the U.S. Senate.

ACCOMMODATIONS: Those needing reasonable accommodations should notify NCD immediately.

LANGUAGE TRANSLATION: In accordance with E.O. 13166, Improving Access to Services for Persons with Limited English Proficiency, those people with disabilities who are limited English proficient and seek translation services for these meetings should notify NCD immediately.

Dated: January 18, 2007.

Mark S. Quigley,

Acting Co-Executive Director.

[FR Doc. 07–324 Filed 1–22–07; 2:21 pm]

BILLING CODE 6820–MA–P

NATIONAL SCIENCE FOUNDATION

Agency Information Collection Activities: Proposed Collection, Comment Request

AGENCY: National Science Foundation.

ACTION: Notice.

SUMMARY: The National Science Foundation (NSF) is announcing plans to request clearance for this collection. In accordance with the requirement of Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, we are providing opportunity for public comment on this action. After obtaining and considering public comment, NSF will prepare the submission requesting OMB clearance of this collection for no longer than three years.

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 on respondents, including through the use of automated collection techniques or other forms of information technology; and (d) ways to minimize the burden of the collection of information of respondents, including through the use of automated collection techniques or other forms of information technology.

DATES: Written comments should be received by March 26, 2007, to be assured of consideration. Comments received after that date will be considered to the extent practicable.

ADDRESSES: Written comments regarding the information collection and requests for copies of the proposed information collection request should be addressed to Suzanne Plimpton, Reports Clearance Officer, National Science

Foundation, 4201 Wilson Boulevard, Room 295, Arlington, VA 22230, or by e-mail to *splimpton@nsf.gov.*

FOR FURTHER INFORMATION: Suzanne Plimpton on (703) 292–7556 or send e-mail to *splimpton@nsf.gov.* Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8 a.m. and 8 p.m., Eastern time, Monday through Friday.

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 cannot 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 cannot 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 mins. each respondent).

Dated: January 19, 2007.

Suzanne H. Plimpton,

Reports Clearance Officer, National Science Foundation.

[FR Doc. E7–960 Filed 1–23–07; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–255]

Nuclear Management Company, LLC; Palisades Nuclear Plant; Notice of Issuance of Renewed Facility Operating License No. DPR–20 for an Additional 20-Year Period; Record of Decision

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Renewed Facility Operating License No. DPR–20 to Nuclear Management Company, LLC (licensee), the operator of the Palisades Nuclear Plant (PNP). Renewed Facility Operating License No. DPR–20 authorizes operation of PNP by the licensee at reactor core power levels not in excess of 2565.4 megawatts thermal in accordance with the provisions of the PNP renewed license and its Technical Specifications.

The notice also serves as the record of decision for the renewal of Facility Operating License No. DPR–20, consistent with 10 CFR 51.103 of the Commission's regulations. The factors considered in the Record of Decision can be found in the Supplemental Environmental Impact Statement (FSEIS) for PNP.

The PNP plant is a Pressurized Water Reactor located in Van Buren County, MI.

The application for the renewed license complied with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. As required by the Act and the Commission's regulations in 10 CFR Chapter I, the Commission has made appropriate findings, which are set forth in the license. Prior public notice of the action involving the proposed issuance of the renewed license and of an opportunity for a hearing regarding the proposed issuance of the new license was published in the **Federal Register** on June 8, 2005 (70 FR 33533). For further details with respect to this action, see:

(1) Nuclear Management Company, LLC's license renewal application for Palisades Nuclear Plant, dated March 22, 2005, as supplemented by letters dated through July 5, 2006; (2) the Commission's safety evaluation report (NUREG–1871), dated December 2006; (3) the licensee's updated safety analysis report; and (4) the Commission's final environmental impact statement (NUREG–1437, Supplement 27, for the Palisades Nuclear Plant, dated October 12, 2006). These documents are available at the NRC's Public Document Room, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852, and can be viewed from the NRC Public Electronic Reading Room at *http://www.nrc.gov/reading-rm/adams.html.*

Copies of Renewed Facility Operating License No. DPR–20, may be obtained by writing to the U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Director, Division of License Renewal. Copies of the Palisades Nuclear Plant Safety Evaluation Report (NUREG–1871) and the final environmental impact statement (NUREG–1437, Supplement 27) may be purchased from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161 (*http://www.ntis.gov*), (703) 605–6000, or from the U.S. Government Printing Office, Attention: Superintendent of Documents, P.O. Box 37082, Washington, DC 20402–9328 (*http://www.gpoaccess.gov*), (202) 512–1800. All orders should clearly identify the NRC publication number and the requestor's Government Printing Office deposit account number or VISA or MasterCard number and expiration date.

Dated at Rockville, Maryland, this 17th day of January, 2007.

For the Nuclear Regulatory Commission.

Pao-Tsin Kuo,

Acting Division Director, Division of License Renewal, Office of Nuclear Reactor Regulation.

[FR Doc. E7–972 Filed 1–23–07; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–387–LR and 50–388–LR; ASLBP No. 07–851–01–LR–BD01]

PPL Susquehanna LLC; Establishment of Atomic Safety and Licensing Board

Pursuant to delegation by the Commission dated December 29,1972, published in the **Federal Register**, 37 FR 28,710 (1972), and the Commission's regulations, *see* 10 CFR 2.104, 2.300, 2.303, 2.309, 2.311, 2.318, and 2.321, notice is hereby given that an Atomic Safety and Licensing Board is being

established to preside over the following proceeding:

PPL Susquehanna LLC

(Susquehanna Steam Electric Station, Units 1 and 2)

A Licensing Board is being established pursuant to a November 2, 2006 notice of opportunity for hearing (71 FR 64,566) regarding the September 13, 2006 application for renewal of Operating License Nos. NPF–14 and NFP–22, which authorize PPL Susquehanna LLC (PPL) to operate the Susquehanna Steam Electric Station (SSES), Units 1 and 2, at 3489 megawatts thermal. The PPL renewal application seeks to extend the current operating licenses—which expire on July 17, 2022, and March 23, 2024, for Units 1 and 2 respectively—for an additional twenty years. This proceeding concerns the January 2, 2007 request for hearing/petition to intervene filed by Mr. Eric Joseph Epstein.

The Board is comprised of the following administrative judges:

Ann Marshall Young, Chair, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

Dr. Kaye D. Lathrop, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

Dr. William W. Sager, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

All correspondence, documents, and other materials shall be filed with the administrative judges in accordance with 10 CFR 2.302.

Issued at Rockville, Maryland, this 18th day of January 2007.

E. Roy Hawkens,

Chief Administrative Judge, Atomic Safety and Licensing Board Panel.

[FR Doc. E7–975 Filed 1–23–07; 8:45 am]

BILLING CODE 7590–01–P

OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE

Request for Comments From the Public on Haiti's Eligibility for Benefits Under the Haitian Hemispheric Opportunity Through Partnership Encouragement Act of 2006

AGENCY: Office of the United States Trade Representative.

ACTION: Notice and request for comments.

SUMMARY: The Haitian Hemispheric Opportunity Through Partnership Encouragement Act Implementation Subcommittee of the Trade Policy Staff Committee (the ''Subcommittee'') is requesting that the public provide written comments on whether Haiti meets the eligibility requirements set out in 5002(d) of the Haitian Hemispheric Opportunity Through Partnership Encouragement Act (HOPE). The Subcommittee will consider these comments in developing a recommendation to the President on Haiti's eligibility under HOPE. The President is required to make this determination no later than March 20, 2007.

DATES: Public Comments are due at the Office of the U.S. Trade Representative (USTR) by noon, Tuesday, February 13, 2007.

ADDRESSES: Submit comments by electronic mail (e-mail) to: *FR0504@USTR.EOP.GOV*. For assistance or if unable to submit comments by e-mail, contact Gloria Blue, Executive Secretary, Trade Policy Staff Committee, at (202) 395–6143.

FOR FURTHER INFORMATION CONTACT: For procedural questions, please contact Gloria Blue, Office of the U.S. Trade Representative, 600 17th Street, NW., Room F516, Washington, DC 20508, at (202) 395–3475. All other questions should be directed to Viondette Lopez, Director of Caribbean Affairs, Office of the U.S. Trade Representative, at (202) 395–6117.

SUPPLEMENTARY INFORMATION: The Caribbean Basin Economic Recovery Act (CBERA) (Pub. L. 98–67) (19 U.S.C. 2701 *et seq.*), as amended by HOPE, authorizes the President to designate Haiti as a beneficiary country eligible for duty-free treatment for certain apparel articles as well as certain wire harness automotive components, if he determines that Haiti meets the eligibility criteria set forth in: (1) Section 213a of the CBERA (section 5002(d) of HOPE) and (2) section 502 of the 1974 Act. Application of preferential treatment, however, is also conditioned on Haiti meeting conditions set out in section 5002(e) of HOPE. Written comments are requested on whether Haiti meets the eligibility requirements set out below.

Eligibility Requirements Under Section 5002(d)

(1) IN GENERAL—Haiti shall be eligible for preferential treatment under this section if the President determines and certifies to Congress that Haiti—

(A) has established, or is making continual progress toward establishing—

(i) a market-based economy that protects private property rights, incorporates an open rules-based trading system, and minimizes government interference in the economy through measures such as price controls, subsidies, and government ownership of economic assets;

(ii) the rule of law, political pluralism, and the right to due process, a fair trial, and equal protection under the law;

(iii) the elimination of barriers to United States trade and investment, including by—

(I) the provision of national treatment and measures to create an environment conducive to domestic and foreign investment;

(II) the protection of intellectual property; and

(III) the resolution of bilateral trade and investment disputes;

(iv) economic policies to reduce poverty, increase the availability of health care and educational opportunities, expand physical infrastructure, promote the development of private enterprise, and encourage the formation of capital markets through microcredit or other programs;

(v) a system to combat corruption and bribery, such as signing and implementing the Convention on Combating Bribery of Foreign Public Officials in International Business Transactions; and

(vi) protection of internationally recognized worker rights, including the right of association, the right to organize and bargain collectively, a prohibition on the use of any form of forced or compulsory labor, a minimum age for the employment of children, and acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health;

(B) does not engage in activities that undermine United States national security or foreign policy interests; and

(C) does not engage in gross violations of internationally recognized human rights or provide support for acts of international terrorism and cooperates in international efforts to eliminate human rights violations and terrorist activities.

Requirements for Submissions: In order to facilitate the prompt processing of submissions, USTR requires electronic e-mail submissions in response to this notice. Hand-delivered submissions will not be accepted. Submissions should be single-copy transmissions in English with the total submission not to exceed 10 single-spaced standard letter-size pages. The e-mail transmission should use the following subject line: ''Haiti Eligibility

for Benefits under HOPE''. Documents must be submitted as MSWord (''.doc''), WordPerfect (''.wpd''), ADOBE (''.pdf''), or text (''.txt'') files. Spreadsheets submitted as supporting documentation are acceptable as Quattro Pro or Excel files, pre-formatted for printing only on 8½ × 11 inch paper. To the extent possible, any data attachments to the submission should be included in the same file as the submission itself, and not as separate files. Submissions in response to this notice will be subject to public inspection by appointment with the staff of the USTR Public Reading Room except for information granted ''business confidential'' status pursuant to 15 CFR 2003.6.

If the submission contains business confidential information, a non-confidential version of the submission must also be submitted that indicates where confidential information was redacted by inserting asterisks where material was deleted. In addition, the confidential version must be clearly marked ''BUSINESS CONFIDENTIAL'' at the top and bottom of each page of the document. The non-confidential version must be clearly marked ''PUBLIC'' or ''NON-CONFIDENTIAL'' at the top and bottom of each page. Documents that are submitted without any marking might not be accepted or will be considered public documents.

For any document containing business confidential information submitted as an electronic attached file to an e-mail transmission, the file name of the business confidential version should begin with the characters ''BC-'', and the file name of the public version should begin with the character ''P-''. The ''BC-'' or ''P-'' should be followed by the name of the party (government, company, union, association, etc.) which is submitting the comments.

E-mail submissions should not include separate cover letters or messages in the message area of the e-mail; information that might appear in any cover letter should be included directly in the attached file containing the submission itself, including the sender's identifying information with telephone number, fax number, and e-mail address. The email address for these submissions is *FR0504@USTR.EOP.GOV*. Documents not submitted in accordance with these instructions might not be considered in this review. If unable to provide submissions by e-mail, please contact Gloria Blue, Executive Secretary, Trade Policy Staff Committee, at (202) 395–6143 to arrange for an alternative method of transmission.

Public versions of all documents relating to this review will be available for public review approximately three weeks after the due date by appointment in the USTR Public Reading Room, 1724 F Street NW., Washington, DC. Availability of documents may be ascertained, and appointments may be made from 9:30 a.m. to noon and 1 p.m. to 4 p.m., Monday through Friday, by calling 202–395–6186.

Carmen Suro-Bredie,

Chairman, Trade Policy Staff Committee.

[FR Doc. E7–1121 Filed 1–23–07; 8:45 am]

BILLING CODE 3190–W7–P

OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE

Special Provincial Review of Intellectual Property Rights Protection in China: Request for Further Public Comment

AGENCY: Office of the United States Trade Representative.

ACTION: Request for written submissions from the public.

SUMMARY: On June 16, 2006, USTR requested public comments concerning the locations and issues that should be the focus of a special provincial review (SPR) of intellectual property rights protection in China. In preparation for concluding this review, USTR now requests written comments from the public concerning the adequacy and effectiveness of IPR protection and enforcement at the provincial level in China.

DATES: Submissions must be received on or before 5 p.m. on Monday, February 26, 2007.

ADDRESSES: All comments should be addressed to Sybia Harrison, Special Assistant to the Section 301 Committee, and sent (i) electronically, to the following e-mail address: *FR0606@ustr.eop.gov*, with ''China Special Provincial Review'' in the subject line, or (ii) by fax, to (202) 395–9458, with a confirmation copy sent electronically to the e-mail address above.

FOR FURTHER INFORMATION CONTACT: Stanford K. McCoy, Office of Intellectual Property, at (202) 395–4510.

SUPPLEMENTARY INFORMATION: On April 28, 2006, USTR released its annual Special 301 report pursuant to Section 182 of the Trade Act of 1974, as amended by the Omnibus Trade and Competitiveness Act of 1988 and the Uruguay Round Agreements Act (enacted in 1994). In that report, USTR announced that the United States would conduct a special provincial review in the coming year to examine the adequacy and effectiveness of China's IPR protection and enforcement at the provincial level. The goal of this review is to spotlight strengths, weaknesses, and inconsistencies in and among specific jurisdictions, and to inform the Special 301 review of China as a whole.

On June 16, 2006, USTR requested initial public comments concerning the provinces and other provincial-level jurisdictions and issues that should be the focus of a special provincial review (SPR) of intellectual property rights protection in China. For purposes of this review, jurisdictions at the provincial level might include, in addition to China's provinces (sheng), the four municipalities (shi) of Beijing, Chongqing, Shanghai, and Tianjin, as well as China's five autonomous regions (zizhiqu).

Locations and Issues: Based on the comments received, USTR concluded that locations of particular interest for U.S. right holders include Beijing City, Fujian Province, Guangdong Province, Jiangsu Province, Shanghai City, and Zhejiang Province. USTR concluded that issues of particular interest involve local enforcement of IPR, including trademarks and copyrights.

Request for Further Comments: In the June 16 request for comments, USTR indicated that it would seek more detailed public comments before concluding the SPR. USTR now requests comments from the public concerning the adequacy and effectiveness of IPR protection and enforcement at the provincial level in China. USTR encourages submitters to give particular attention to the locations and issues identified above. However, USTR will accept information on other locations and issues.

Submitters should bear in mind that the goals of the SPR include highlighting strengths, as well as weaknesses and inconsistencies, in and among specific jurisdictions. Strengths could include, for example, taking *ex officio* action on behalf of, and providing fair treatment for, foreign right holders, or local measures that facilitate IPR enforcement.

Requirements for Comments: Comments should respond to the request in this notice.

Comments must be in English. No submissions will be accepted via postal service mail. Documents should be submitted as WordPerfect, MS Word, PDF, or text (.TXT) files. Supporting documentation submitted as spreadsheets is acceptable as Quattro Pro or Excel files. A submitter requesting that information contained in a comment be treated as confidential business information must certify that

such information is business confidential and would not customarily be released to the public by the submitter. A non-confidential version of the comment must also be provided. For any document containing business confidential information, the file name of the business confidential version should begin with the characters ''BC-'', and the file name of the public version should begin with the character ''P-''. The ''P-'' or ''BC-'' should be followed by the name of the submitter. Submissions should not include separate cover letters; information that might appear in a cover letter should be included in the submission itself. To the extent possible, any attachments to the submission should be included in the same file as the submission itself, and not as separate files.

All comments should be addressed to Sybia Harrison, Special Assistant to the Section 301 Committee, and sent (i) electronically, to the following e-mail address: *FR0606@ustr.eop.gov*, with ''China Special Provincial Review'' in the subject line, or (ii) by fax, to (202) 395–9458, with a confirmation copy sent electronically to the e-mail address above.

Public Inspection of Submissions: Within one business day of receipt, non-confidential submissions will be placed in a public file, open for inspection at the USTR reading room, Office of the United States Trade Representative, Annex Building, 1724 F Street, NW., Room 1, Washington, DC. An appointment to review the file must be scheduled at least 48 hours in advance and may be made by calling Jacqueline Caldwell at (202) 395–6186. The USTR reading room is open to the public from 10 a.m. to 12 noon and from 1 p.m. to 4 p.m., Monday through Friday.

Victoria A. Espinel,

Assistant USTR for Intellectual Property and Innovation.

[FR Doc. E7–1022 Filed 1–23–07; 8:45 am]

BILLING CODE 3190–W7–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55110; File No. SR–Amex–2006–86]

Self-Regulatory Organizations; American Stock Exchange LLC; Notice of Filing of a Proposed Rule Change and Amendment Nos. 1, 2, and 3 Thereto Relating to the Listing and Trading of Shares of the PowerShares DB U.S. Dollar Index Bullish Fund and the PowerShares DB U.S. Dollar Index Bearish Fund

January 16, 2007.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'' or ''Exchange Act'')[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on September 13, 2006, the American Stock Exchange LLC (''Amex'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been prepared substantially by Amex. On November 17, 2006, Amex filed Amendment No. 1 to the proposed rule change. On December 19, 2006, Amex filed Amendment No. 2 to the proposed rule change. On January 12, 2007, Amex filed Amendment No. 3 to the proposed rule change. The Commission is publishing this notice to solicit comments on the proposed rule change, as amended, from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

Pursuant to Commentary .07 to Amex Rule 1202, which permits the listing and trading of shares of trust-issued receipts (''TIRs'') that invest in shares or securities (the ''Investment Shares'') issued by a trust, partnership, commodity pool, or other similar entity that holds investments comprising, or otherwise based on, any combination of securities, futures contracts, swaps, forward contracts, options on futures contracts, commodities, or portfolios of investments, the Exchange seeks to list and trade shares of the PowerShares DB U.S. Dollar Index Bullish Fund (the ''Bullish Fund'') and the PowerShares DB U.S. Dollar Index Bearish Fund (the ''Bearish Fund,'' and together with the Bullish Fund, collectively, the ''Funds'').

The text of the proposal is available at Amex, at the Commission's Public Reference Room, and on Amex's Web site at *http://www.amex.com*.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, Amex 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, and the most significant aspects of such statements are set forth in Sections A, B, and C below.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

Pursuant to Commentary .07 to Amex Rule 1202, the Exchange may approve for listing and trading TIRs investing in Investment Shares that hold investments in any combination of securities, futures contracts, options on futures contracts, swaps, forward contracts, commodities, or portfolios of investments. Amex proposes to list for trading the shares of the Bullish Fund and the Bearish Fund (the ''Shares''), which represent beneficial ownership interests in the corresponding common units of beneficial interests of the DB U.S. Dollar Index Master Bullish Fund (the ''Master Bullish Fund'') and the DB U.S. Dollar Index Master Bearish Fund (the ''Master Bearish Fund,'' and together with the Master Bullish Fund, collectively, the ''Master Funds''), respectively.

The PowerShares DB U.S. Dollar Index Trust (the ''Trust'') is organized as a Delaware statutory trust with each of the Funds representing a series of the Trust. The DB U.S. Dollar Index Master Trust (the ''Master Trust'') is also organized as a Delaware statutory trust with each of the Master Funds representing a series of the Master Trust.

The overall investment objective of each of the Funds and the Master Funds is to reflect the performance of their respective benchmark index, *less* expenses, *plus* the excess, if any, of the corresponding Master Fund's interest income from its holdings of U.S. Treasury and other high-credit-quality, short-term fixed income securities over its expenses. The Bullish Fund will seek to track the ''Long Index'' by investing in long positions in futures contracts (''DX Contracts'') on the U.S. Dollar Index® (USDX®). The Bearish Fund will seek to track the ''Short Index'' by investing in short positions in DX Contracts on the USDX®.

Both the Long and Short Indexes (collectively, the ''Indexes'') are designed to reflect the performance of the nearest expiration month DX Contract on the USDX®. The Long Index is created by taking a long position in a DX Contract. As a result, the Long Index will reflect the performance of the DX Contract, *i.e.*, the percentage gain or loss sustained by the DX Contract. Conversely, the Short Index is created by taking a short position in a DX Contract. The Short Index will reflect the inverse of the performance of the DX Contract, *i.e.*, the inverse of the percentage gain or loss sustained by the DX Contract. The Master Bullish Fund will invest in long positions in DX Contracts, while the Master Bearish Fund will invest in short positions in DX Contracts. Each of the Funds and each of the Master Funds are commodity pools operated by DB Commodity Services LLC (the ''Managing Owner''). The Managing Owner is registered as a commodity pool operator (''CPO'') and commodity trading advisor (''CTA'') with the Commodity Futures Trading Commission (''CFTC'') and a member of the National Futures Association (''NFA'').

The Master Funds will include U.S. Treasury securities for margin purposes and other high-credit-quality, short-term fixed income securities. The Exchange states that the Master Funds are not ''actively managed,'' which typically means effecting changes in the composition of a portfolio on the basis of judgment relating to economic, financial, and market considerations with a view to obtaining positive results under all market conditions. Rather, the Master Funds seek to track the performance of their respective Indexes. The Exchange submits that Commentary .07 to Amex Rule 1202 accommodates the listing and trading of the Shares.

Introduction

In January 2006, the Commission approved Commentary .07 to Amex Rule 1202, which expanded the ability of the Exchange to list and trade TIRs based on a portfolio of underlying investments.[3] The Exchange recently commenced the trading of shares of both the PowerShares DB Commodity Index Tracking Fund [4] and the PowerShares DB G10 Currency Harvest Fund (formerly known as the DB Currency Index Value Fund) [5] pursuant to this Commentary .07 to Amex Rule 1202. The Exchange notes that the Commission has permitted Amex to list and trade other products linked to the performance of underlying currencies and commodities.[6] In the instant proposal, the Exchange proposes to list and trade the Shares pursuant to such rule.

Under Commentary .07(c) to Amex Rule 1202, the Exchange may list and trade TIRs investing in Investment Shares such as the Shares. The Shares will conform to the initial and continued listing criteria under Commentary .07(d) to Amex Rule 1202. Each of the Funds will be formed as a separate series of a Delaware statutory trust pursuant to a Certificate of Trust and a Declaration of Trust and Trust Agreement among Wilmington Trust Company, as trustee, the Managing Owner, and the holders of the Shares.[7]

Description of the Indexes

Both the Long Index and Short Index are designed to reflect the return from investing in the first-to-expire (*i.e.*, nearest-expiration-month) DX Contract, whose performance is tied to the USDX®. The first-to-expire DX Contract is the futures contract that expires in March, June, September, or December. DX Contracts are traded through the FINEX currency markets of the New York Board of Trade (''NYBOT'').[8]

The Long Index is created by taking a long position in a DX Contract. As a result, the Long Index will reflect the performance of the DX Contract, *i.e.,* the percentage gain or loss sustained by the DX Contract. The use of long positions in DX Contracts in the construction of the Long Index will cause the Long Index level to rise as a result of any upward price movement in the DX Contracts. This would reflect any rise of the U.S Dollar (''USD'') versus the underlying basket of Index Currencies (as defined herein). An example of the Long Index methodology is as follows: Assume that the USDX® index level is 100, and the price of the DX Contract is currently $2. The notional DX Contract amount (or number of DX contracts bought for the Long Index) would be 50. The DX Contract value would be 50 *multiplied by* $2 and equal to the USDX® level. In the case of the Long Index, 50 DX Contracts would be purchased in order to be fully invested. The Long Index would accordingly be adjusted to account for the long position in the additional DX Contracts. The calculation of the Long Index level each trading day would be as follows: Long Index level = Number of DX Contracts$_{t-1}$ × (DX Contract Price$_t$ − DX Contract Price$_{t-1}$) + Long Index level$_{t-1}$. For purposes of the example, the Long Index level would be calculated to be 125, where the number of DX Contracts$_{t-1}$ is 50 (Long Index level$_{t-1}$/DX Contract Price$_{t-1}$), the DX Contract Price$_t$ is 2.5, the DX Contract Price$_{t-1}$ is 2, and the Long Index level$_{t-1}$ is 100.[9]

Conversely, the Short Index is created by taking a short position in a DX Contract. The Short Index will reflect the inverse of the performance of the DX Contract, *i.e.,* the inverse of the percentage gain or loss sustained by the DX Contract. The use of short positions in DX Contracts in the construction of the Short Index causes the Short Index level to rise as a result of any downward price movement in the DX Contracts. This would reflect any fall of the USD versus the underlying basket of Index Currencies. Using the example above, 50 DX Contracts would be sold to maintain

[3] *See* Securities Exchange Act Release No. 53105 (January 11, 2006), 71 FR 3129 (January 19, 2006).

[4] *See id.* (approving the listing and trading of the DB Commodity Index Tracking Fund).

[5] *See* Securities Exchange Act Release No. 54450 (September 14, 2006), 71 FR 55230 (September 21, 2006) (approving the listing and trading of shares of the PowerShares DB G10 Currency Harvest Fund, formerly known as the DB Currency Index Value Fund).

[6] *See, e.g.,* Securities Exchange Act Release Nos. 53582 (March 31, 2006), 71 FR 17510 (April 6, 2006) (approving the listing and trading of shares of the United States Oil Fund, LP); 53521 (March 20, 2006), 71 FR 14967 (March 24, 2006) (approving the listing and trading of shares of the iShares Silver Trust); 53059 (January 5, 2006), 71 FR 2072 (January 12, 2006) (approving the listing and trading of shares of the Euro Currency Trust); 51058 (January 19, 2005), 70 FR 3749 (January 26, 2005) (approving the listing and trading of shares of the iShares COMEX Gold Trust); and 50603 (October 28, 2004), 69 FR 64614 (November 5, 2004) (approving the listing and trading of shares of the streetTRACKS Gold Shares).

[7] The Trust and the Funds will not be subject to registration and regulation under the Investment Company Act of 1940 (the ''1940 Act'').

[8] The DX Contract is a futures contract tied to the USDX® that is traded on NYBOT. The DX Contracts have been trading on NYBOT since 1985. The contract calls for the receipt/delivery of the underlying six component currencies, or ''Index Currencies'' (as defined herein), of the USDX®. The trading session for the DX Contract on NYBOT is from 8:05 a.m. to 3 p.m. Eastern time (''ET''). Futures contracts on the USDX® are also traded in Dublin, Ireland, through the FINEX Europe market from 7 p.m to 10 p.m. ET and from 2 a.m. to 8:05 a.m. ET. Liquidity of the DX Contract is derived from the underlying foreign exchange market with respect to each Index Currency. The daily average volume of the foreign currency exchange market as calculated by the Bank for International Settlements (BIS) is approximately $1.2 trillion (for the three-year period from 1999–2001). The Index Currencies account for approximately 94.5% of that daily volume. The minimum price movement of a DX Contract is .01 of an USDX® point, or $10.00 per DX Contract. The settlement value of the underlying USDX® is computed using a trade-weighted geometric average of the six component currencies (as described in more detail herein). The Exchange states that NYBOT's Web site contains additional information regarding the DX Contracts at *http://www.nybot.com.*

[9] The Exchange notes that the example applies if $_{t-1}$ is an Index Roll Day (as defined herein). For all other days the number of DX Contracts held is equal to the number of contracts held on the previous business day.

the appropriate short position in the DX Contract. The calculation of the Short Index level each trading day would similarly be as follows: Short Index level = Number of DX Contracts$_{t-1}$ × (DX Contract Price$_t$ − DX Contract Price$_{t-1}$) +/ − Short Index level$_{t-1}$. The only difference in the case of the Short Index is that the DX Contract value would be negative due to the short position in the DX Contract. For purposes of the example, the Short Index level would be calculated to be 75, where the number of DX Contracts$_{t-1}$ is −50 (Short Index level$_{t-1}$/DX Contract Price$_{t-1}$), the DX Contract Pricet is 2.5, the DX Contract Price$_{t-1}$ is 2, and the Short Index level$_{t-1}$ is 100.[10] Due to the ''rolling'' characteristic of the Long and Short Indexes (as described in more detail herein), the potential returns will be compounded, unlike a traditional futures contract, which would expire at the end of its term.

The performance of the DX Contracts is related to the six underlying currencies (the ''Index Currencies'') of the USDX®. The Index Currencies are the Euro, Japanese Yen, British Pound, Canadian Dollar, Swedish Krona, and Swiss Franc. These currencies represent the currencies of the major trading partners of the United States. The USDX® is composed of notional amounts of each Index Currency reflecting a geometric average of the change in the Index Currencies' exchange rates against the USD relative to those as of March 1973.[11] The USDX® provides a general indication of the international value of the USD by averaging the exchange rates between the USD and the Index Currencies. The USDX® is calculated 24 hours a day based on exchange rates supplied to Reuters by 500 banks worldwide.

The sponsor of the Indexes is Deutsche Bank AG London (the ''Index Sponsor''). The Indexes are calculated by the Index Sponsor during the trading day on the basis of the most recently reported trade price for the DX Contract.[12] The market value of the Indexes during the trading day will be equal to the number of DX Contracts represented in the Indexes, *multiplied* by the real-time DX Contract price. As described below, the Index levels will be calculated and disseminated at least every 15 seconds.[13] The closing level of the Indexes is calculated by the Index Sponsor on the basis of the closing price for the DX Contract and applying such price to the relevant notional amount. The Indexes include provisions for the replacement of expiring DX Contracts. The DX Contracts will be rolled quarterly on the Index Roll Day, which is defined as the Wednesday prior to the applicable IMM Date.[14] The procedure for replacing expiring DX Contracts occurs as follows: (1) The DX Contract that expires on the next IMM Date is sold, and (2) a position in the DX Contract that expires on the IMM Date following the next IMM Date is purchased.

The following table reflects the base weights for each Index Currency as of March 1973 with respect to the USDX®:

Index currency	Base weight (%)
Euro	57.60
Japanese Yen	13.60
British Pound	11.90
Canadian Dollar	9.10
Swedish Krona	4.20
Swiss Franc	3.60

If prices for the DX Contract are not available, the Index Sponsor will typically use the prior day's DX Contract price. In exceptional cases (such as when a daily price limit is reached), the Index Sponsor may employ a ''fair value'' price (*i.e.,* the price for unwinding the futures position by over-the-counter or ''OTC'' dealers). This is similar to the case of index options whose prices are unavailable or unreliable.[15]

The Managing Owner represents that it will seek to arrange to have each Index calculated and disseminated at least every 15 seconds on a daily basis through a third party if the Index Sponsor ceases to calculate and disseminate an Index. If, however, the Managing Owner is unable to arrange the calculation and dissemination of any Index value, the Exchange will undertake to delist the Shares related to such Index.

Structure of the Funds

Funds. The Bullish and Bearish Funds are separate series of a statutory trust formed pursuant to the Delaware Statutory Trust Act and will issue units of beneficial interests or shares that represent units of fractional undivided beneficial interests in and ownership of the respective Fund. Unless terminated earlier, each of the Funds is of a perpetual duration. The investment objective of each of the Bullish and Bearish Funds is to reflect the performance of the corresponding Long Index and Short Index, respectively, *less* the expenses of the operations of such Fund and the related Master Fund. Each of the Funds will pursue its investment objective by investing substantially all of its assets in the respective Master Funds. Each of the Shares will correlate with a corresponding Master Fund unit issued by the relevant Master Fund and held by the respective Funds.

Master Funds. Each of the Master Funds is a separate series of a statutory trust formed pursuant to the Delaware Statutory Trust Act and will issue units of beneficial interests or shares that represent units of fractional undivided beneficial interests in and ownership of the respective Master Fund. Unless terminated earlier, each of the Master Funds is of a perpetual duration. The investment objective of each of the Bullish and Bearish Master Funds is to reflect the performance of the corresponding Long Index and Short Index, respectively, *less* the expenses of the operations of the relevant Fund and Master Fund. Each of the Master Funds will pursue its investment objective by investing primarily in DX Contracts. In addition, the Master Funds will also hold cash and U.S. Treasury securities for deposit with futures commission merchants (''FCM'') as margin and other high-credit-quality, short-term fixed income securities.

Trustee. Wilmington Trust Company is the trustee (the ''Trustee'') of the Trust and the Master Trust. The Trustee

[10] *Id.*

[11] The Exchange states that March 1973 was chosen as the base period of the USDX® because it represents a significant milestone in foreign exchange history when the world's major trading nations allowed their currencies to float freely against each other.

[12] The Index Sponsor has in place procedures to prevent the improper sharing of information between different affiliates and departments. Specifically, an information barrier exists between the personnel of the Index Sponsor that calculate and reconstitute the Indexes and other personnel of the Index Sponsor, including, without limitation, the Managing Owner, employees involved in sales and trading activities, external or internal fund managers, and bank personnel who are involved in hedging the bank's exposure to instruments linked to the Indexes, in order to prevent the improper sharing of information relating to the composition and calculation of the Indexes.

[13] While the Indexes are calculated and disseminated by the Index Sponsor, an affiliate of a registered broker-dealer, a number of independent sources verify both the intraday and closing Index values, and the Index Sponsor uses independent feeds from Reuters to verify all NYBOT pricing information used to calculate the Indexes.

[14] The third Wednesday of each month of March, June, September, and December are the traditional settlement dates in the International Money Market (''IMM Dates''). Due to the ''rolling'' characteristic of the Long and Short Indexes, the potential returns will be compounded, unlike a traditional futures contract, which would expire at the end of its term.

[15] The Exchange represents that The Options Clearing Corporation (''OCC''), pursuant to Article XVII, Section 4 of its By-Laws, is permitted to use the prior day's closing price to fix an index options exercise settlement value. In addition, the Exchange submits that OCC may also use the next day's opening price, a price or value at such other time as determined by OCC, or an average of prices or values as determined by OCC.

has delegated to the Managing Owner the power and authority to manage and operate the day-to-day affairs of each of the Funds and the Master Funds.

Managing Owner. The Managing Owner is a Delaware limited liability company which is registered with the CFTC as a CPO and CTA and is wholly-owned by the Index Sponsor. The Managing Owner will serve as the CPO and CTA of each Fund and each Master Fund and will manage and control all aspects of the business of the Funds. The Exchange states that the Managing Owner, as a registered CPO and CTA, is required to comply with various regulatory requirements under the Commodity Exchange Act and the rules and regulations of the CFTC and the NFA, including investor protection requirements, anti-fraud prohibitions, disclosure requirements, and reporting and recordkeeping requirements, and is subject to periodic inspections and audits by the CFTC and NFA.

Commodity Broker or Clearing Broker. Deutsche Bank Securities Inc. (the ''Commodity Broker'' or the ''Clearing Broker'') is an affiliate of the Managing Owner and is registered with the CFTC as a FCM. The Clearing Broker will execute and clear each Master Fund's futures contract transactions and will perform certain administrative services for each Master Fund.

Administrator. The Bank of New York is the administrator for all of the Funds and the Master Funds (the ''Administrator''). The Administrator will perform or supervise the performance of services necessary for the operation and administration of each Fund and each Master Fund. These services include, but are not limited to, receiving and processing orders from Authorized Participants (as defined herein) to create and redeem Baskets (as defined herein), accounting, net asset value (''NAV'')[16] calculations, and other fund administrative services.

Distributor. ALPS Distributors, Inc. is the distributor for both the Funds and the Master Funds (the ''Distributor''). The Distributor will assist the Managing Owner and the Administrator with certain functions and duties relating to distribution of the funds, including reviewing and filing marketing materials with NASD, fielding investor calls, and distributing prospectuses.

[16] NAV is the total assets of each Master Fund, *less* total liabilities of such Master Fund, determined on the basis of generally accepted accounting principles. NAV per Master Fund share is the NAV of the relevant Master Fund, *divided* by the number of outstanding Master Fund units. This will be the same for the Shares because of the one-to-one correlation between the Shares and the units of the corresponding Master Fund.

Product Description

A. Creation and Redemption of Shares

Issuances of the Shares will be made only in one or more blocks of 200,000 Shares (each such block, a ''Basket''). Each of the Funds will issue and redeem Shares on a continuous basis, by or through participants that have entered into participant agreements (each, an ''Authorized Participant'')[17] with the Managing Owner at the NAV per Share next determined after an order to purchase the Shares in a Basket is received in proper form. Following issuance, the Shares will be traded on the Exchange similar to other equity securities. The Shares will be registered in book entry form through DTC.

Baskets will be issued in exchange for a cash amount equal to the NAV per Share times 200,000 Shares (the ''Basket Amount''). The Basket Amount will be determined on each business day by the Administrator. Authorized Participants that wish to purchase a Basket must transfer the Basket Amount to the Administrator (the ''Cash Deposit Amount''). Authorized Participants that wish to redeem a Basket will receive cash in exchange for each Basket surrendered in an amount equal to the NAV per Basket (the ''Cash Redemption Amount''). The Commodity Broker will be the custodian for the Master Funds and responsible for safekeeping the Master Funds' assets.

All purchase orders received by the Administrator prior to 1 p.m. ET will be settled by depositing with the Commodity Broker the Cash Deposit Amount disseminated by the Administrator shortly after 10 a.m. ET on the next business day. The Basket will be issued at noon on such business day (T+1) at the NAV as of the later of the closing time on the Exchange or the last to close futures exchange on which a Master Fund's assets are traded.[18] The Basket Amount necessary for the creation of a Basket will change from day to day. On each day that the Exchange is open for regular trading, the Administrator will adjust the Cash Deposit Amount as appropriate to reflect the prior day's NAV and accrued expenses. The Administrator will determine the Cash Deposit Amount for a given business day by multiplying the NAV for each Share by the number of Shares in each Basket (200,000).

Likewise, all redemption orders received by the Administrator prior to 1 p.m. ET will be settled by the Commodity Broker's payment of the Cash Redemption Amount shortly after 10 a.m. ET on the next business day. The Shares will not be individually redeemable, but will be redeemable only in Baskets. To redeem, an Authorized Participant will be required to accumulate enough Shares to constitute a Basket (*i.e.*, 200,000 shares). Upon the surrender of the Shares and payment of applicable redemption transaction fees, taxes, or charges, the Administrator will deliver to the redeeming Authorized Participant the Cash Redemption Amount.

On each business day, the Administrator will make available immediately prior to the opening of trading on Amex via the facilities of the Consolidated Tape (''CT''), the most recent Basket Amount for the creation of a Basket. The Exchange will disseminate at least every 15 seconds throughout the trading day, via the CT, an amount representing on a per-Share basis, the current value of the Basket Amount. It is anticipated that the deposit of the Cash Deposit Amount in exchange for a Basket will be made primarily by institutional investors, arbitrageurs, and the Exchange specialist. Baskets are then separable upon issuance into identical Shares that will be listed and traded on the Exchange.[19] The Exchange states that the Shares are expected to be traded on the Exchange by professionals, as well as institutional and retail investors. Thus, the Shares may be acquired in two ways: (1) Through a deposit of the Cash Deposit Amount with the Administrator during normal business hours by Authorized Participants, or (2) through a purchase on the Exchange by investors. Trading in the Shares on the Exchange will be effected until 4:15 p.m. ET each business day. The minimum trading increment for such shares will be $0.01.

Deutsche Bank Securities Inc., as the initial purchaser (the ''Initial Purchaser''), will initially purchase and take delivery of 200,000 Shares of each Fund, which comprises the initial Basket of each Fund, at a purchase price of $25 per share ($5 million per Basket) pursuant to an Initial Purchaser

[17] An ''Authorized Participant'' is a person, who at the time of submitting to the trustee an order to create or redeem one or more Baskets, (1) is a registered broker-dealer, (2) is a Depository Trust Company (''DTC'') participant or an indirect participant, and (3) has in effect a valid participant agreement.

[18] Each Master Fund is permitted to invest its assets in those futures contracts (DX Contracts) traded on futures exchanges that either have a comprehensive surveillance sharing agreement with the Exchange or are members of the Intermarket Surveillance Group (''ISG'').

[19] The Shares are separate and distinct from the shares of the Master Funds consisting primarily of DX Contracts. The Exchange expects that the number of outstanding Shares will increase and decrease as a result of creations and redemptions of Baskets.

Agreement. The Exchange states that the Initial Purchaser proposes to offer to the public these Shares at a per-share offering price that will vary depending on, among other factors, the respective trading price of the Shares on Amex, the NAV per Share, and the supply of and demand for the Shares at the time of the offer. Shares offered by the Initial Purchaser at different times may have different offering prices. The Initial Purchaser will not receive from any Fund, the Managing Owner, or any of their affiliates, any fee or other compensation in connection with the sale of these Shares to the public. The Initial Purchaser may charge a customary brokerage commission.

The Managing Owner has agreed to indemnify certain parties against certain liabilities, including liabilities under the Securities Act of 1933, and to contribute to payments that such parties may be required to make in respect thereof. The Exchange believes that the anticipated minimum number of Shares of each of the Funds outstanding at the start of trading is sufficient to provide adequate market liquidity and to further the objectives of the respective Funds.

B. Net Asset Value (NAV)

Shortly after 4 p.m. ET each business day, the Administrator will determine the NAV for each of the Funds, utilizing the current settlement value of the long positions in the DX Contracts, in the case of the Bullish Funds, and short positions in the DX Contracts, in the case of the Bearish Funds. At or about 4 p.m. ET each business day, the Administrator will determine the Basket Amounts for orders placed by Authorized Participants received before 1 p.m. ET that day. Thus, although Authorized Participants may place valid orders to purchase Shares throughout the trading day until 1 p.m. ET, the actual Basket Amounts are determined at 4 p.m. ET or shortly thereafter.

Shortly after 4 p.m. ET each business day, the Administrator, Amex, and the Managing Owner will disseminate the NAV per Share and the Basket Amounts (for orders placed during the day). The Basket Amounts and the NAV are communicated by the Administrator to all Authorized Participants via facsimile or electronic mail message and will be available on the Index Sponsor's Web site at *http://www.index.db.com.*[20] Amex will also disclose the NAV and Basket Amounts on its own Web site at *http://www.amex.com.*

[20] If the NAV is not disseminated to all market participants at the same time, the Exchange will halt trading in the Shares of a Fund.

In calculating the NAV, the Administrator will value all futures contracts (*e.g.*, the DX Contracts) based on that day's settlement price. However, if a futures contract on a trading day cannot be liquidated due to the operation of daily limits or other rules of an exchange upon which such futures contract is traded,[21] the settlement price on the most recent trading day on which such futures contract could have been liquidated will be used in determining each Master Fund's NAV. Accordingly, the Administrator will typically use that day's futures settlement price for determining NAV. When calculating NAV for each of the Funds and each of the Master Funds, the Administrator will value the DX Contracts held by each Master Fund on the basis of their then current market value.

The NAV for the Funds is total assets of the corresponding Master Fund, less total liabilities of such Master Fund. The NAV is calculated by including any unrealized profit or loss on futures contracts and any other credit or debit accruing to such Master Fund but unpaid or not received by the Master Fund. The NAV is then used to compute all fees (including the management and administrative fees) that are calculated from the value of such Master Fund's assets. The Administrator will calculate the NAV per share by dividing the NAV by the corresponding number of Shares outstanding.

The Exchange believes that none of the Shares will trade at a material discount or premium to the Shares of the corresponding Master Fund held by the corresponding Fund based on potential arbitrage opportunities. Because Shares can be created and redeemed only in Basket Amounts at the relevant NAV, the Exchange submits that arbitrage opportunities should provide a mechanism to mitigate the effect of any premiums or discounts that may exist from time to time. The value of a Share may be influenced by non-concurrent trading hours between Amex and the various futures exchanges on which the Index Currencies are traded. As a result, during periods when Amex is open and the futures exchanges on which the Index Currencies are traded are closed, trading spreads and the resulting premium or discount on the Shares may widen, and, therefore, increase the difference between the price of the Shares and the corresponding NAV.

[21] *See supra* note 18.

Dissemination of the Indexes and Underlying DX Contract Information

The values of the Long Index and Short Index will be disseminated at least every 15 seconds through CT/CQ High Speed Lines, Reuters, and/or Bloomberg, and on the Managing Owner's Web site at *http://www.dbfunds.db.com.* The Index Sponsor will similarly provide intra-day levels and the related closing levels for the Indexes at its Web site at *http://www.index.db.com.* The disseminated value of the Indexes will not reflect changes to the prices of the Index Currencies between the close of trading of the DX Contract on NYBOT at 3 p.m. ET and close of trading at Amex at 4:15 p.m. ET. In addition, the Index Sponsor[22] and the Exchange on their respective Web sites will also provide any adjustments or changes to any of the Indexes.

The daily settlement prices of the DX Contracts held by each of the Master Funds are publicly available on NYBOT's Web site (*http://www.nybot.com*). In addition, various data vendors and news publications publish futures prices and data. The Exchange represents that futures quotes and last sale information for the DX Contracts are widely disseminated through a variety of major market data vendors worldwide, including Bloomberg and Reuters. In addition, the Exchange further represents that complete real-time data for such futures is available by subscription from Reuters and Bloomberg. NYBOT also provides delayed futures information on current and past trading sessions and market news free of charge on its Web site. The specific contract specifications for the DX Contracts are also available from NYBOT on its Web site, as well as other financial informational sources.

Availability of Information Regarding the Shares

The Web site for each of the Funds (*http://www.dbfunds.db.com*) and/or the Exchange, which are publicly accessible at no charge, will contain the following information: (1) the current NAV per Share daily, the prior business day's NAV, and the reported closing price; (2) the mid-point of the bid-ask price[23] in relation to the NAV as of the time the NAV is calculated (the ''Bid-Ask Price''); (3) the calculation of the premium or discount of such price against such NAV; (4) data in chart form displaying the frequency distribution of

[22] *See supra* note 12.

[23] The bid-ask price of the Shares is determined by using the highest bid and lowest offer as of the time of calculation of the NAV.

discounts and premiums of the Bid-Ask Price against the NAV, within appropriate ranges for each of the four previous calendar quarters; (5) the prospectus; and (6) other applicable quantitative information.

The respective NAV per Share for the Funds will be calculated and disseminated daily by the Administrator. Amex also intends to disseminate for each of the Funds on a daily basis by means of CT/CQ High Speed Lines information with respect to the corresponding Indicative Fund Value (as discussed below), recent NAV, and Shares outstanding. The Exchange will also make available on its Web site daily trading volume of each of the Shares, closing prices of such Shares, and the corresponding NAV. The closing price and settlement prices of the DX Contracts held by the Master Funds are also readily available from NYBOT, automated quotation systems, published or other public sources, or on-line information services such as Bloomberg or Reuters. In addition, the Exchange will provide a hyperlink on its Web site at *http://www.amex.com* to the Index Sponsor's Web site at *http://www.index.db.com*.

Dissemination of Indicative Fund Value

As noted above, the Administrator calculates the NAV of each of the Funds once each trading day and disseminates such NAV to market participants. The Exchange represents that it will obtain a representation prior to the listing of the Funds from the Trust that the NAV per Share for each of the Funds will be made available to all market participants at the same time. In addition, the Administrator causes to be made available on a daily basis the corresponding Cash Deposit Amounts to be deposited in connection with the issuance of the respective Shares in Baskets. Moreover, other investors can request such information directly from the Administrator.

In order to provide updated information relating to each of the Funds for use by investors, professionals, and persons wishing to create or redeem the Shares, the Exchange will disseminate through the facilities of CT, an updated Indicative Fund Value (the ''Indicative Fund Value'') for each of the Funds. The respective Indicative Fund Values will be disseminated on a per-Share basis at least every 15 seconds during regular Amex trading hours of 9:30 a.m. to 4:15 p.m. ET. The Indicative Fund Value will be calculated based on the cash required for creations and redemptions (*i.e.*, NAV per Share × 200,000 Shares) for each Fund, adjusted to reflect the price changes of the DX Contracts and the holdings of U.S. Treasury securities and other high-credit-quality, short-term fixed income securities.

The Indicative Fund Value will not reflect price changes to the DX Contracts between the close of trading on NYBOT at 3 p.m. ET and the close of trading on Amex at 4:15 p.m. ET. The value of a Share may accordingly be influenced by non-concurrent trading hours between Amex and NYBOT.

While NYBOT is open for trading of DX Contracts, the respective Indicative Fund Values can be expected to closely approximate the value per Share of the corresponding Basket Amount. However, during Amex trading hours, when the DX Contracts have ceased trading, spreads and resulting premiums or discounts may widen, and therefore, increase the difference between the price of the Shares and the NAV of such Shares. Any Indicative Fund Value on a per Share basis disseminated during Amex trading hours should not be viewed as a real-time update of its corresponding NAV, which is calculated only once a day.

The Exchange believes that dissemination of the Indicative Fund Value based on the cash amount required for its corresponding Baskets provides additional information that is not otherwise available to the public and is useful to professionals and investors in connection with the related Shares trading on the Exchange or the creation or redemption of such Shares.

Termination Events

A Fund would be terminated if any of the following circumstances occur: (1) The filing of a certificate of dissolution or revocation of the Managing Owner's charter (subject to a 90-day notice period) or upon the withdrawal, removal, adjudication, or admission of bankruptcy or insolvency of the Managing Owner, or an event of withdrawal, subject to exceptions; (2) the occurrence of any event which would make unlawful the continued existence of the Trust or any Fund, as the case may be; (3) the event of the suspension, revocation, or termination of the Managing Owner's registration as a CPO, or membership as a CPO with the NFA, subject to certain conditions; (4) the Trust or any Fund, as the case may be, becomes insolvent or bankrupt; (5) shareholders holding Shares representing at least 50% of the NAV (excluding the Shares of the Managing Owner) notify the Managing Owner that they wish to dissolve the Trust; (6) the determination of the Managing Owner that the aggregate net assets of a Fund in relation to the operating expenses of such Fund make it unreasonable or imprudent to continue the business of such Fund, or, in the exercise of its reasonable discretion, the determination by the Managing Owner to dissolve the Trust because the aggregate NAV of the Trust as of the close of business on any business day declines below $10 million; (7) the Trust or any Fund becomes required to register as an investment company under the 1940 Act; or (8) DTC is unable or unwilling to continue to perform its functions, and a compatible replacement is unavailable.

If not terminated earlier, each Fund will endure perpetually. Upon termination of any Fund, holders of the relevant Shares will surrender their Shares and receive from the Administrator, in cash, their portion of the value of such Fund.

Listing and Trading Rules

Each of the Funds will be subject to the criteria in Commentary .07(d) of Amex Rule 1202 for initial and continued listing of their respective Shares. The Exchange represents that, for purposes of the initial and continued listing of the Shares, the Shares must be in compliance with Section 803 of the Amex *Company Guide* and Rule 10A–3 under the Act.[24] The Amex original listing fee applicable to the listing of the Shares of the Funds is $5,000 per Fund. In addition, the annual listing fee applicable under Section 141 of the Amex *Company Guide* will be based upon the year-end aggregate number of Shares in all the Funds outstanding at the end of each calendar year.

The Shares are equity securities subject to Amex rules governing the trading of equity securities, including, among others, rules governing priority, parity, and precedence of orders, specialist responsibilities and account opening, and customer suitability (Amex Rule 411). Initial equity margin requirements of 50% will apply to transactions in the Shares. Shares will trade on Amex until 4:15 p.m. ET each business day and will trade in a minimum price variation of $0.01 pursuant to Amex Rule 127. Trading rules pertaining to odd-lot trading in Amex equities (Amex Rule 205) will also apply.

Amex Rule 154, Commentary .04(c), provides that stop and stop limit orders to buy or sell a security (other than an option, which is covered by Amex Rule 950(f) and Commentary thereto), the price of which is derivatively priced based upon another security or index of securities, may with the prior approval

[24] 17 CFR 240.10A–3.

of a floor official, be elected by a quotation, as set forth in Commentary .04(c)(i–v). The Exchange has designated the Shares as eligible for this treatment.[25]

The Shares will be deemed to be ''Eligible Securities,'' as defined in Amex Rule 230,[26] for purposes of the Intermarket Trading System (''ITS'') Plan and therefore will be subject to the trade-through provisions of Amex Rule 236, which requires that Amex members avoid initiating traded through for ITS securities.

Specialist transactions of the Shares made in connection with the creation and redemption of Shares will not be subject to the prohibitions of Amex Rule 190.[27] The Shares will not be subject to the short sale rule pursuant to no-action relief granted in petition to Rule 10a–1 under the Act.[28] The Shares will generally be subject to the Exchange's stabilization rule, Amex Rule 170, except that specialists may buy on ''plus ticks'' and sell on ''minus ticks,'' in order to bring the Shares into parity with the underlying commodity or commodities and/or futures contract price. Commentary .07(f) to Amex Rule 1202 sets forth this limited exception to Amex Rule 170. In addition, the trading of the Shares will be subject to certain conflict-of-interest provisions set forth in Commentary .07(e) to Amex Rule 1202.

Suitability

The Information Circular (as described below) will inform members and member organizations of the characteristics of the Funds and of applicable Exchange rules, as well as of the requirements of Amex Rule 411 (Duty to Know and Approve Customers). The Exchange notes that, pursuant to Amex Rule 411, members and member organizations are required in connection with recommending transactions in the Shares to have a reasonable basis to believe that a customer is suitable for the particular investment given reasonable inquiry concerning the customer's investment objectives, financial situation, needs, and any other information known by such member.

Information Circular

Amex will distribute an Information Circular to its members in connection with the trading of the Shares. The Circular will discuss the special characteristics and risks of trading this type of security, such as currency fluctuation risks. Specifically, the Circular, among other things, will discuss what the Shares are, how a Basket is created and redeemed, applicable Amex rules, dissemination information, and trading information. The Circular will also explain that the Funds are subject to various fees and expenses described in the registration statement. The Circular will also reference the fact that the CFTC has regulatory jurisdiction over the trading of futures contracts.

Moreover, the Information Circular will inform members and member organizations, prior to commencement of trading, of the prospectus delivery requirements applicable to the Funds. The Exchange notes that investors purchasing Shares directly from the respective Funds (by delivery of the corresponding Cash Deposit Amounts) will receive a prospectus. Amex members purchasing Shares from the corresponding Funds for resale to investors will deliver a prospectus to such investors.

In addition, the Information Circular will inform Exchange members and member organizations that the procedures for purchases and redemptions of Shares in Basket aggregations are described in the prospectus and that Shares are not individually redeemable, but are redeemable only in Basket aggregations or multiples thereof. The Circular also will advise members of their suitability obligations with respect to recommended transactions to customers in the Shares. The Circular will discuss any relief, if granted, by the Commission or its staff from any rules under the Act.

Finally, the Circular will disclose that the trading hours of the Shares of the Funds will be from 9:30 a.m. to 4:15 p.m. ET, and that the NAV for the Shares of the Funds will be calculated shortly after 4 p.m. ET each trading day. Information about the Shares of each Fund and the corresponding Indexes will be publicly available on Amex's Web site and each Fund's Web site (*http://www.dbfunds.db.com*).

Surveillance

The Exchange represents that its surveillance procedures are adequate to properly monitor the trading of the Shares and to deter and detect violations of applicable rules. Specifically, the Exchange will rely on its existing surveillance procedures applicable to TIRs, Portfolio Depository Receipts, and Index Fund Shares and will incorporate and rely upon existing Amex surveillance procedures governing options and equities. The Exchange currently has in place an information sharing agreement with NYBOT for the purpose of providing information in connection with trading in or related to futures contracts traded on their respective exchanges comprising the Indexes. The Exchange also notes that NYBOT is a member of ISG. As a result, the Exchange asserts that market surveillance information is available from NYBOT, if necessary, due to regulatory concerns that may arise in connection with the DX Contracts.

2. Statutory Basis

The proposed rule change is consistent with Section 6 of the Act,[29] in general, and furthers the objectives of Section 6(b)(5),[30] in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, and to remove impediments to and perfect the mechanism of a free and open market and a national market system.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change would 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 did not receive any written comments on the proposed rule change.

[25] *See* Securities Exchange Act Release No. 29063 (April 10, 1991), 56 FR 15652 (April 17, 1991) (SR–Amex–90–31) at note 9 (noting the Exchange's designation of equity derivative securities as eligible for such treatment under Amex Rule 154, Commentary .04(c)).

[26] The term ''Eligible Security'' means any security admitted to dealings on a participating market center which has been designated as eligible to be traded through the intermarket communications system. *See* Amex Rule 230.

[27] *See* Commentary .05 to Amex Rule 190.

[28] *See* Letter in Response to Request for No-Action from Racquel Russell, Branch Chief, Office of Trading Practices and Processing, Division, Commission, to George T. Simon, Esq., Foley & Lardner LLP, dated June 21, 2006 (''Simon Letter'') (indicating that the staff of the Division will no longer respond to requests for relief from Rule 10a–1 under the Act relating to other similar commodity-based investment vehicles, unless they present novel or unusual issues). The Exchange submits that the Shares qualify for the relief set forth in the Simon Letter.

[29] 15 U.S.C. 78f.

[30] 15 U.S.C. 78f(b)(5).

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which Amex consents, the Commission will:

(A) By order approve such proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

Amex has requested accelerated approval of this proposed rule change prior to the 30th day after the date of publication of the notice of the filing thereof. The Commission has determined that a 15-day comment period is appropriate in this case.

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 (*www.sec.gov/rules/sro.shtml*); or

• Send an e-mail to *rule-comments@sec.gov*. Please include File Number SR–Amex–2006–86 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–Amex–2006–86. 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 also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–Amex–2006–86 and should be submitted on or before February 8, 2007.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[31]

Nancy M. Morris,

Secretary.

[FR Doc. E7–954 Filed 1–23–07; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55119; File No. SR–NASDAQ–2006–059]

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Regarding Application of Membership Fees

January 18, 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 December 19, 2006, The NASDAQ Stock Market LLC (''Nasdaq'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items, I, II, and III below, which Items have been substantially prepared by Nasdaq. Nasdaq has filed the proposal pursuant to Section 19(b)(3)(A) of the Act [3] and Rule 19b–4(f)(2) thereunder,[4] which renders the proposal effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

Nasdaq proposes to clarify the application of periodic membership fees under Rule 7001. Nasdaq proposes to implement the proposed rule change immediately. The text of the proposed rule change is available at Nasdaq, the Commission's Public Reference Room, and *http://www.nasdaq.com.*

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, Nasdaq 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. Nasdaq 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

Nasdaq is adding text to Rule 7001 to clarify the application of its membership fees. To simplify the administration of these fees, Nasdaq imposes the fees on all persons that are members as of a date determined by Nasdaq: In December of each year, in the case of the annual membership fee, and a date in the course of the month, in the case of the trading rights fee. Persons that become Nasdaq members after the date on which the fee for a particular period is assessed are not required to pay the fee for that period. Thus, for example, the annual fee for 2007 will be assessed on December 21, 2006; persons that become Nasdaq members after that date would not pay an annual fee for 2007, but would pay the annual fee for 2008 if they continue to be Nasdaq members on the fee assessment date in December 2007. The fees are non-refundable. Thus, if a firm ceased to be a Nasdaq member during the course of 2007, it would not receive a refund of all or any portion of the annual fee. This process is consistent with the long-standing procedures of NASD with respect to its periodic membership fees that have also been adopted by Nasdaq in its transition from NASD subsidiary to independent exchange.

2. Statutory Basis

Nasdaq believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,[5] in general, and with Sections 6(b)(4) of the

[31] 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)(2).

[5] 15 U.S.C. 78f.

Act,[6] in particular, in that the proposal provides for the equitable allocation of reasonable dues, fees, and other charges among its members and issuers and other persons using any facility or system which Nasdaq operates or controls.

B. Self-Regulatory Organization's Statement on Burden on Competition

Nasdaq 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

The foregoing proposed rule change is subject to Section 19(b)(3)(A)(ii) of the Act[7] and subparagraph (f)(2) of Rule 19b–4 thereunder[8] because it establishes or changes a due, fee, or other charge applicable only to a member imposed by the self-regulatory organization. Accordingly, the proposal is effective upon Commission receipt of the filing. At any time within 60 days of the filing of the proposed rule change, the Commission may summarily abrogate such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

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–NASDAQ–2006–059 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–NASDAQ–2006–059. 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 also will be available for inspection and copying at the principal office of Nasdaq. 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–NASDAQ–2006–059 and should be submitted on or before February 14, 2007.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[9]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. 07–284 Filed 1–23–07; 8:45 am]

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[6] 15 U.S.C. 78f(b)(4).

[7] 15 U.S.C. 78s(b)(3)(A)(ii).

[8] 17 CFR 240.19b–4(f)(2).

[9] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55113; File No. SR–NYSE–2006–101]

Self-Regulatory Organizations; New York Stock Exchange LLC; Notice of Filing and Order Granting Accelerated Approval of a Proposed Rule Change as Modified by Amendments No. 1 and 2 Thereto Adopting Generic Listing Standards for Exchange-Traded Funds Based on International or Global Indexes or Indexes Previously Approved by the Commission as Underlying Benchmarks for Derivative Securities

January 17, 2007.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Exchange Act'')[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on November 21, 2006, the New York Stock Exchange LLC (''NYSE'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I and II below, which Items have been substantially prepared by the Exchange. On January 11, 2007, the Exchange filed Amendment No. 1 to the proposal. On January 16, 2007, the Exchange filed Amendment No. 2 to the proposal. This order provides notice of the proposed rule change as amended and approves the proposed rule change as amended on an accelerated basis.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The text of the proposed rule change is available at the Exchange, from the Commission's Public Reference Room, and on NYSE's Web site (*http://www.nyse.com*).

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item III below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to revise Section 703.16 of the NYSE Listed Company Manual (''Manual'') to include generic listing standards for series of Investment Company Units (''ICUs'') (which are also referred to herein as ''exchange-traded funds'' or ''ETFs'') that are based on international or global indexes, or on indexes described in rules previously approved by the Commission under Section 19(b)(2) of the Exchange Act [3] for the trading of ETFs, options, or other index-based securities. This proposal would enable the Exchange to list and trade ETFs pursuant to Rule 19b–4(e) under the Exchange Act [4] if each of the conditions set forth in Section 703.16 of the Manual is satisfied. Rule 19b–4(e) provides that the listing and trading of a new derivative securities product by a self-regulatory organization (''SRO'') shall not be deemed a proposed rule change, pursuant to paragraph (c)(1) of Rule 19b–4, if the Commission has approved, pursuant to Section 19(b) of the Exchange Act, the SRO's trading rules, procedures, and listing standards for the product class that would include the new derivatives securities product, and the SRO has a surveillance program for the product class.[5]

Exchange-Traded Funds

NYSE Rule 1100 and Section 703.16 of the Manual provide standards for listing ICUs, which are securities issued by a unit investment trust, an open-end management investment company (*i.e.*, an open-end mutual fund), or similar entity based on a portfolio of stocks or fixed income securities that seeks to provide investment results that correspond generally to the price and yield performance of a specified foreign or domestic stock index or fixed income securities index. Pursuant to Section 703.16 of the Manual, an ICU eligible for listing on the Exchange must be issued in a specified aggregate number in return for a deposit of specified securities and/or a cash amount, with a value equal to the next determined net asset value (''NAV''). When aggregated in the same specified minimum number, the ICU must be redeemable by the issuer for the securities and/or cash, with a value equal to the next determined NAV. The NAV is calculated once a day after the close of the regular trading day.

To meet the investment objective of providing investment returns that correspond to the price and the dividend and yield performance of the underlying index, an ETF may use a ''replication'' strategy or a ''representative sampling'' strategy with respect to the ETF portfolio.[6] An ETF using a replication strategy will invest in each stock of the underlying index in about the same proportion as that stock is represented in the index itself. An ETF using a representative sampling strategy will generally invest in a significant number but not all of the component securities of the underlying index, and will hold stocks that, in the aggregate, are intended to approximate the full index in terms of key characteristics, such as price/earnings ratio, earnings growth, and dividend yield.

In addition, an ETF portfolio may be adjusted in accordance with changes in the composition of the underlying index or to maintain compliance with requirements applicable to a regulated investment company under the Internal Revenue Code (''IRC'').[7]

Generic Listing Standards for Exchange-Traded Funds

The Commission has previously approved generic listing standards for ETFs based on indexes that consist of stocks listed on U.S. exchanges.[8] In general, the proposed criteria for the underlying component securities in the international and global indexes are similar to those for the domestic indexes, but with modifications as appropriate for the issues and risks associated with non-U.S. securities.

In addition, the Commission has previously approved rules governing the listing and trading of ETFs based on international indexes—those based on non-U.S. component stocks—as well as global indexes—those based on non-U.S. and U.S. component stocks.[9]

The Commission also has approved rules of other exchanges that permit the listing pursuant to Rule 19b–4(e) of index-based derivatives where the Commission had previously approved rules contemplating the trading of specified index-based derivatives on the same index, on the condition that all of the standards set forth in those orders, in particular with respect to surveillance sharing agreements, continued to be satisfied.[10]

In approving ETFs for Exchange trading, the Commission thoroughly considered the structure of the ETFs, their usefulness to investors and to the markets, and NYSE rules that govern their trading. The Exchange believes that adopting additional generic listing standards for these securities and applying Rule 19b–4(e) should fulfill the intended objective of that rule by allowing those ETFs that satisfy the proposed generic listing standards to commence trading, without the need for the public comment period and Commission approval. The proposed rules have the potential to reduce the time frame for bringing ETFs to market, thereby reducing the burdens on issuers and other market participants. The failure of a particular index to comply with the proposed generic listing standards under Rule 19b–4(e) would

[3] 15 U.S.C. 78s(b)(2).

[4] 17 CFR 240.19b–4(e).

[5] When relying on Rule 19b–4(e), the SRO must submit Form 19b–4(e) to the Commission within five business days after the exchange begins trading the new derivative securities products. *See* 17 CFR 240.19b–4(e)(2)(ii).

[6] In either case, an ETF, by its terms, may be considered invested in the securities of the underlying index to the extent the ETF invests in sponsored American Depository Receipts (''ADRs''), Global Depository Receipts (''GDRs''), or European Depository Receipts (''EDRs'') that trade on exchanges with last-sale reporting representing securities in the underlying index.

[7] For an ETF to qualify for tax treatment as a regulated investment company, it must meet several requirements under the IRC. Among these is the requirement that, at the close of each quarter of the ETF's taxable year, (1) at least 50% of the market value of the ETF's total assets must be represented by cash items, U.S. government securities, securities of other regulated investment companies, and other securities, with such other securities limited for purposes of this calculation in respect of any one issuer to an amount not greater than 5% of the value of the ETF's assets and not greater than 10% of the outstanding voting securities of such issuer; and (2) not more than 25% of the value of its total assets may be invested in the securities of any one issuer, or two or more issuers that are controlled by the ETF (within the meaning of Section 851(b)(4)(B) of the IRC) and that are engaged in the same or similar trades or businesses or related trades or businesses (other than U.S. government securities or the securities of other regulated investment companies).

[8] In 1996, the Commission approved Section 703.16 of the Listed Company Manual, which sets forth the rules related to the listing of ICUs. *See* Securities Exchange Act Release No. 36923 (March 5, 1996), 61 FR 10410 (March 13, 1996) (SR–NYSE–95–23). In 2000, the Commission approved the Exchange's generic listing standards for the listing and trading, or the trading pursuant to unlisted trading privileges, of ICUs under Section 703.16 of the Manual and Exchange Rule 1100. *See* Securities Exchange Act Release No. 43679 (December 5, 2000), 65 FR 77949 (December 13, 2000) (SR–NYSE–00–46).

[9] *See, e.g.*, Securities Exchange Act Release No. 52178 (July 29, 2005), 70 FR 46244 (August 9, 2005) (SR–NYSE–2005–41) (approving listing of iShares MSCI EAFE Growth Fund and iShares MSCI EAFE Value Fund); Securities Exchange Act Release No. 54458 (September 15, 2006), 71 FR 55248 (September 21, 2006) (SR–NYSE–2006–60) (approving listing of iShares S&P Global Index Funds).

[10] *See, e.g.*, Securities Exchange Act Release No. 51563 (April 15, 2005), 70 FR 21257 (April 25, 2005) (SR–Amex–2005–001); Securities Exchange Act Release No. 52204 (August 3, 2005), 70 FR 46559 (August 10, 2005) (SR–PCX–2005–63).

not, however, preclude the Exchange from submitting a separate filing pursuant to Section 19(b)(2) requesting Commission approval to list and trade a particular ETF.

Requirements for Listing and Trading ETFs Based on International and Global Indexes

Exchange-traded funds listed pursuant to these generic listing standards would be traded, in all other respects, under the Exchange's existing trading rules and procedures that apply to ETFs and would be covered under the Exchange's surveillance program for ETFs.[11]

To list an ETF pursuant to the proposed generic listing standards for international and global indexes, the index underlying an ETF must satisfy all the conditions contained in proposed Section 703.16(C)(2)(b) of the Manual. As with the existing generic standards for ETFs based on domestic indexes, these generic listing standards are intended to ensure that stocks with substantial market capitalization and trading volume account for a substantial portion of the weight of an index or portfolio. While the standards in this proposal are based on the standards contained in the current generic listing standards for ETFs based on domestic indexes, they have been adapted as appropriate to apply to international and global indexes.

As proposed, Section 703.16(B) of the Manual would be amended to include definitions of U.S. Component Stock and Non-U.S. Component Stock. These new definitions would provide the basis for the standards for indexes with either domestic or international stocks, or a combination of both. A ''Non-U.S. Component Stock'' would mean an equity security that is not registered under Section 12(b) or 12(g) of the Exchange Act,[12] and that is issued by an entity that (1) is not organized, domiciled, or incorporated in the United States, and (2) is an operating company (including a real estate investment trust (REIT) or income trust, but excluding an investment trust, unit trust, mutual fund, or derivative). This definition is designed to create a category of component stocks that are issued by companies that are not based in the United States, are not subject to oversight through Commission registration, and would include sponsored GDRs and EDRs. A ''U.S. Component Stock'' would mean an equity security that is registered under Section 12(b) or 12(g) of the Exchange Act or an ADR the underlying equity security of which is registered under Section 12(b) or 12(g) of the Exchange Act. An ADR with an underlying equity security that is registered pursuant to the Exchange Act is considered a U.S. Component Stock because the issuer of that security is subject to Commission jurisdiction and must comply with Commission rules.

The Exchange proposes that, to list an ICU based on an international or global index or portfolio pursuant to the generic listing standards, such index or portfolio must meet the following criteria:

- Component stocks that in the aggregate account for at least 90% of the weight of the index or portfolio each must have a minimum market value of at least $100 million (Section 703.16(C)(2)(b)(i));
- Component stocks representing at least 90% of the weight of the index or portfolio each must have a minimum worldwide monthly trading volume during each of the last six months of at least 250,000 shares (Section 703.16(C)(2)(b)(ii));
- The most heavily weighted component stock may not exceed 25% of the weight of the index or portfolio and the five most heavily weighted component stocks may not exceed 60% of the weight of the index or portfolio (Section 703.16(C)(2)(b)(iii));
- The index or portfolio shall include a minimum of 20 component stocks (Section 703.16(C)(2)(b)(iv)); and
- Each U.S. Component Stock must be listed on a national securities exchange and an NMS stock as defined in Rule 600 of Regulation NMS under the Exchange Act, and each Non-U.S. Component Stock must be listed on an exchange that has last-sale reporting (Section 703.16(C)(2)(b)(v)).

The Exchange believes that the proposed standards are reasonable for international and global indexes, and, when applied in conjunction with the other listing requirements, would result in the listing and trading on the Exchange of ETFs that are sufficiently broad-based in scope and not readily susceptible to manipulation. The Exchange also believes that the proposed standards would result in ETFs that are adequately diversified in weighting for any single security or small group of securities to significantly reduce concerns that trading in an ETF based on an international or global index could become a surrogate for trading in unregistered securities.

The Exchange further notes that, while these standards are similar to those for indexes that include only U.S. Component Stocks, they differ in certain important respects and are generally more restrictive, reflecting greater concerns over portfolio diversification with respect to ETFs investing in components that are not individually registered with the Commission. First, in the proposed standards, component stocks that in the aggregate account for at least 90% of the weight of the index or portfolio each shall have a minimum market value of at least $100 million, compared to a minimum market value of at least $75 million for indexes with only U.S. Component Stocks. (Market value is calculated by multiplying the total shares outstanding by the price per share of the component stock.) Second, in the proposed standards, the most heavily weighted component stock cannot exceed 25% of the weight of the index or portfolio, in contrast to a 30% standard for an index or portfolio comprised of only U.S. Component Stocks. Third, in the proposed standards, the five most heavily weighted component stocks shall not exceed 60% of the weight of the index or portfolio, compared to a 65% standard for indexes comprised of only U.S. Component Stocks. Fourth, the minimum number of stocks in the proposed standards is 20, in contrast to a minimum of 13 in the standards for an index or portfolio with only U.S. Component Stocks. Finally, the proposed standards require that each Non-U.S. Component Stock included in the index or portfolio be listed and traded on an exchange that has last-sale reporting.

The Exchange also proposes to modify Section 703.16(C)(3) to require that the index value for an ETF listed pursuant to the proposed standards for international and global indexes be widely disseminated by one or more major market data vendors at least every 60 seconds during the time when the ETF shares trade on the Exchange. If the index value does not change during some or all of the period when trading is occurring on the Exchange, the last official calculated index value must remain available throughout Exchange trading hours. In contrast, the index value for an ETF listed pursuant to the existing standards for domestic indexes must be disseminated at least every 15 seconds during the trading day. This modification reflects limitations, in some instances, on the frequency of intra-day trading information with respect to Non-U.S. Component Stocks and that, in many cases, trading hours for overseas markets overlap only in part, or not at all, with Exchange trading hours.

In addition, Section 703.16(C)(3) would be modified to define the term

[11] *See e.g.*, NYSE Rule 1100.

[12] 15 U.S.C. 78l(b) or (g).

''Intraday Indicative Value'' (''IIV'') as the estimate, updated at least every 15 seconds, of the value of a share of each ETF, for ease of reference. The Exchange also proposes to clarify in Section 703.16(C)(3) that the IIV would be updated during the hours the ETF shares trade on the Exchange to reflect changes in the exchange rate between the U.S. dollar and the currency in which any component stock is denominated.

The Exchange is also proposing to add a Section 703.16(C)(6) regarding the creation and redemption process for ETFs and compliance with federal securities laws for, in particular, ETFs listed pursuant to the new generic listing standards. This new subsection would apply to ICUs listed pursuant to Section 703.16(C)(2)(b) or (c). It would require that the statutory prospectus or the application for exemption from provisions of the Investment Company Act of 1940 [13] for the ETF being listed pursuant to these new standards must state that the ETF must comply with the federal securities laws in accepting securities for deposits and satisfying redemptions with redemption securities, including that the securities accepted for deposits and the securities used to satisfy redemption requests are sold in transactions that would be exempt from registration under the Securities Act of 1933.[14]

The Commission has approved generic standards providing for the listing pursuant to Rule 19b–4(e) of other derivative products based on indexes described in rules previously approved by the Commission under Section 19(b)(2) of the Exchange Act. The Exchange proposes to include in the generic standards for the listing of ICUs indexes that have been approved by the Commission in connection with the listing of options, ICUs, Index-Linked Exchangeable Notes, or Index-Linked Securities. The Exchange believes that the application of that standard to ETFs is appropriate because the underlying index would have been subject to detailed and specific Commission review in the context of the approval of listing of those other derivatives.[15]

This new generic standard would be limited to stock indexes and would require that each component stock be either: (1) a U.S. Component Stock that is listed on a national securities exchange and is an NMS stock as defined in Rule 600 of Regulation NMS; or (2) a Non-U.S. Component Stock that is listed and traded on an exchange that has last-sale reporting.

The Exchange is also proposing to include additional continued listing standards relating to ETFs. The Exchange would commence delisting proceedings if the value of the index or portfolio of securities on which the ETF is based is no longer calculated or disseminated.

The Exchange proposes to modify the Original Unit Listing Standards in Section 703.16(A) of the Manual to formalize in the rules existing best practices for providing equal access to material information about the value of ETFs. Pursuant to proposed Section 703.16(A)(6), prior to approving an ETF for listing, the Exchange would obtain a representation from the ETF issuer that the NAV per share would be calculated daily and made available to all market participants at the same time.

Proposed Rule 1100(f) sets out the trading halt parameters for ETFs. In particular, proposed Rule 1100(f)(1) sets out that, where the Exchange is the listing market for an ICU, if the IIV or the index value applicable to that series of ICUs is not being disseminated as required, the Exchange may halt trading during the day in which the interruption to the dissemination of the IIV or the index value occurs. If the interruption to the dissemination of the IIV or the index value persists past the trading day in which it occurred, the Exchange would halt trading no later than the beginning of the trading day following the interruption.

Proposed Rule 1100(f)(2) provides that, for series of ICUs admitted to dealings by the Exchange on the basis of unlisted trading privileges (''UTP''), during the hours for trading of ICUs on the Exchange, if a temporary interruption occurs in the calculation or wide dissemination of the applicable IIV or value of the underlying index by a major market data vendor and the listing market halts trading in a series of ICUs, the Exchange, upon notification by the listing market of such halt due to such temporary interruption, also shall immediately halt trading in the series of ICUs on the Exchange. If the IIV or the value of the underlying index continues not to be calculated or widely available as of the commencement of trading on the Exchange on the next business day, the Exchange shall not commence trading of the series of ICUs that day. If an interruption in the calculation or wide dissemination of the IIV or the value of the underlying index continues, the Exchange may resume trading in the series of ICUs only if calculation and wide dissemination of the IIV or the value of the underlying index resumes or trading in such series resumes in the listing market.

The Exchange is proposing other minor and clarifying changes to Section 703.16. Section 703.16(C)(2)(a)(v) has been modified to reflect the adoption of Regulation NMS. Proposed Section 703.16(C)(4)(c) has been added to make sure that an entity that advises index providers or calculators and related entities has in place procedures designed to prevent the use and dissemination of material non-public information regarding the index underlying the ETF.

The Exchange represents that its surveillance procedures are adequate to properly monitor the trading of ICUs listed pursuant to the proposed new listing standards or traded pursuant to UTP. In addition, the Exchange has a general policy prohibiting the dissemination of material, non-public information by its employees.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6 of the Exchange Act [16] in general and furthers the objectives of Section 6(b)(5) [17] in particular in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, and to remove impediments to and perfect the mechanism of a free and open market and a national market system.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change would impose any burden on competition.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

The Exchange did not receive any written comments on the proposed rule change.

III. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing,

[13] 15 U.S.C. 80a *et seq.*

[14] 15 U.S.C. 77a *et seq.*

[15] For example, rules of the American Stock Exchange LLC (''Amex'') and NYSE Arca, Inc. provide that one element of the standards for listing Index-Linked Securities pursuant to Rule 19b–4(e) is the previous review and approval for trading of options or other derivatives by the Commission under Section 19(b)(2) of the Exchange Act and rules thereunder. *See supra* note 10.

[16] 15 U.S.C. 78f.

[17] 15 U.S.C. 78f(b)(5).

including whether the proposed rule change is consistent with the Exchange 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–2006–101 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–2006–101. 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 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–2006–101 and should be submitted on or before February 14, 2007.

IV. Commission's Findings and Order Granting Accelerated Approval of the Proposed Rule Change

After careful review, the Commission finds that the proposed rule change, as amended, is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to a national securities exchange.[18] In particular, the Commission finds that the proposal is consistent with Section 6(b)(5) of the Exchange Act[19] in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

Currently, the Exchange must file a proposed rule change with the Commission pursuant to Section 19(b)(1) of the Exchange Act[20] and Rule 19b–4 thereunder[21] to list and trade any ETF based on an index comprised of foreign securities. The Exchange also must file a proposed rule change to list and trade ETFs based on indexes or portfolios previously approved by the Commission as underlying benchmarks for derivative securities. However, Rule 19b–4(e) provides that the listing and trading of a new derivative securities product by an SRO will not be deemed a proposed rule change pursuant to Rule 19b–4(c)(1) if the Commission has approved, pursuant to Section 19(b) of the Exchange Act, the SRO's trading rules, procedures, and listing standards for the product class that would include the new derivative securities product, and the SRO has a surveillance program for the product class. The Exchange's proposed rules for the listing and trading of ETFs pursuant to Rule 19b–4(e) based on (1) certain indexes with components that include foreign securities or (2) indexes or portfolios previously approved by the Commission as underlying benchmarks for derivative securities fulfill these requirements. Use of Rule 19b–4(e) by NYSE to list and trade such ETFs should promote competition, reduce burdens on issuers and other market participants, and make such ETFs available to investors more quickly.[22]

The Commission previously has approved generic listing standards for another exchange, Amex, that are substantially similar to those proposed here by NYSE.[23] This proposal does not appear to raise any novel regulatory issues. Therefore, the Commission finds that NYSE's proposal is consistent with the Exchange Act on the same basis that it approved Amex's generic listing standards for ETFs based on international or global indexes or on indexes or portfolios previously approved by the Commission as underlying benchmarks for derivative securities.

Proposed Section 703.16(C)(2)(b) of the Manual establishes standards for the composition of an index or portfolio underlying an ETF. These requirements are designed, among other things, to require that components of an index or portfolio underlying the ETF are adequately capitalized and sufficiently liquid, and that no one security dominates the index. The Commission believes that, taken together, these standards are reasonably designed to ensure that securities with substantial market capitalization and trading volume account for a substantial portion of any underlying index or portfolio, and that when applied in conjunction with the other applicable listing requirements, will permit the listing and trading only of ETFs that are sufficiently broad-based in scope to minimize potential manipulation. The Commission further believes that the proposed listing standards are reasonably designed to preclude NYSE from listing and trading ETFs that might be used as surrogate for trading in unregistered securities. The requirement that each component security underlying an ETF be an NMS stock (in the case of a U.S. Component Stock) or listed on an exchange and subject to last-sale reporting (in the case of a Non-U.S. Component Stock) should contribute to the transparency of the market for these ETFs.

The proposed generic listing standards also will permit NYSE to list and trade an ETF if the Commission has previously approved an SRO rule change that contemplates listing and trading a derivative product based on the same underlying index. NYSE would be able to rely on that earlier approval order, provided that (1) the securities comprising the underlying index consist of U.S. Component Stocks or Non-U.S. Component Stocks as set

[18] In approving this rule change, the Commission notes that it has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[19] 15 U.S.C. 78f(b)(5).

[20] 15 U.S.C. 78s(b)(1).

[21] 17 CFR 240.19b–4.

[22] The Commission notes, however, that the failure of a particular ETF to meet these generic listing standards would not preclude the Exchange from submitting a separate proposed rule change to list and trade the ETF.

[23] *See* Securities Exchange Act Release No. 54739 (November 9, 2006), 71 FR 66993 (November 17, 2006) (SR–Amex–2006–78) (approving generic listing standards for series of portfolio depositary receipts and index fund shares based on international or global indexes); Securities Exchange Act Release No. 55018 (December 28, 2006), 72 FR 1040 (January 9, 2007) (SR–Amex–2006–109) (making clarifying changes to the generic listing standards set forth in SR–Amex–2006–78).

forth in Section 703.16(B) of the Manual and (2) NYSE complies with the commitments undertaken by the other SRO set forth in the prior order, including any surveillance-sharing arrangements with a foreign market.

The Commission believes that NYSE's proposal is consistent with Section 11A(a)(1)(C)(iii) of the Exchange Act,[24] which sets forth Congress' finding that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities. The Exchange's proposal also requires the value of the index or portfolio underlying an ETF based on a global or international index to be disseminated at least once every 60 seconds during Exchange trading hours.[25] In addition, an IIV, which represents an estimate of the value of a share of each ETF, must be updated and disseminated at least once every 15 seconds during the time an ETF trades on the Exchange.[26] The IIV will be updated to reflect changes in the exchange rate between the U.S. dollar and the currency in which any index or portfolio component stock is denominated. In the event that an underlying index or portfolio value is no longer calculated or disseminated, the Exchange has represented that it would commence delisting proceedings for the associated ETF. Furthermore, the issuer of an ETF listed under the proposed rules will be required to represent that it will calculate the NAV and make it available daily to all market participants at the same time.[27]

The Exchange's trading halt rules are reasonably designed to prevent trading in an ETF when transparency cannot be assured. Proposed NYSE Rule 1100(f)(1) provides that, when the Exchange is the listing market, if the IIV or index value applicable to an ETF is not disseminated as required, the Exchange may halt trading during the day in which the interruption occurs. If the interruption continues, then the Exchange will halt trading no later than the beginning of the next trading day. In addition, proposed NYSE Rule 1100(f)(2) sets forth trading halt procedures when the Exchange trades the ETF pursuant to UTP. This proposed rule is substantially similar to that recently adopted by another exchange, NYSEArca.[28]

In approving this proposal, the Commission relied on NYSE's representation that its surveillance procedures are adequate to properly monitor the trading of ICUs listed pursuant to the proposed new listing standards or traded pursuant to unlisted trading privileges. This approval is conditioned on the continuing accuracy of that representation.

Acceleration

The Commission finds good cause for approving the proposed rule change, as amended, prior to the 30th day after the date of publication of the notice of filing thereof in the **Federal Register**. The Commission notes that NYSE's proposal is substantially similar to an Amex proposal that has been approved by the Commission.[29] The Commission does not believe that NYSE's proposal raises any novel regulatory issues and, therefore, that good cause exists for approving the filing before the conclusion of a notice-and-comment period. Accelerated approval of the proposal will expedite the listing and trading of additional ETFs by the Exchange, subject to consistent and reasonable standards. Therefore, the Commission finds good cause, consistent with Section 19(b)(2) of the Exchange Act,[30] to approve the proposed rule change, as amended, on an accelerated basis.

V. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Exchange Act,[31] that the proposed rule change (SR–NYSE–2006–101), as amended, be, and it hereby is, approved on an accelerated basis.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[32]

Nancy M. Morris,

Secretary.

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[24] 15 U.S.C. 78k–1(a)(1)(C)(iii).

[25] *See* proposed Section 703.16(C)(3) of the Manual. If an index or portfolio value does not change for some of the time that the ETF trades on the Exchange, the last official calculated value must remain available throughout Exchange trading hours.

[26] *See id.*

[27] *See* proposed Section 703.16(A)(6) of the Manual.

[28] *See* Securities Exchange Act Release No. 54997 (December 21, 2006), 71 FR 78501 (December 29, 2006) (SR–NYSEArca–2006–77).

[29] *See supra* note 23.

[30] 15 U.S.C. 78s(b)(2).

[31] *Id.*

[32] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55120; File No. SR–NYSE–2006–110]

Self-Regulatory Organizations; New York Stock Exchange LLC; Order Approving a Proposed Rule Change Relating to Its Linkage Order Fee

January 18, 2007.

On December 6, 2006, 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'' or ''Exchange Act'') [1] and Rule 19b–4 thereunder,[2] a proposal to retroactively apply an increase in the fee (''Linkage Order Fee'') it charges its member organizations in connection with orders in equities executed in another market pursuant to the Plan for the Purpose of Creating and Operating an Intermarket Communications Linkage (''Linkage Plan''). The proposal was published for comment in the **Federal Register** on December 15, 2006.[3] The Commission received no comments on the proposal. This order approves the proposed rule change.

The Exchange proposes to retroactively apply, as of December 1, 2006, an increase from $0.00025 to $0.000275 per share in the Linkage Order Fee it charges its member organizations in connection with orders in equities executed in another market pursuant to the Linkage Plan. This increase in the Linkage Order Fee became effective on Monday, December 4, 2006, pursuant to a previous rule change submitted by the Exchange.[4] The Linkage Order Fee was increased to $0.000275 to set it at the same level as the regular equity transaction fee, which was increased to that level as of December 1, 2006.[5] The current filing simply applies the revised Linkage Order Fee to transactions that occurred on December 1, 2006, which is the only business day with respect to which the Linkage Order Fee and the regular equity transaction fee were not harmonized by the previous filing. The Exchange wishes to harmonize the Linkage Order Fee payable on

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] See Securities Exchange Act Release No. 54912 (December 11, 2006), 71 FR 75601.

[4] See Securities Exchange Act Release No. 54911 (December 11, 2006), 71 FR 75603 (December 15, 2006) (notice of filing and immediate effectiveness of SR–NYSE–2006–108).

[5] See Exchange Act Release No. 54856 (December 1, 2006); 71 FR 71215 (December 8, 2006) (SR–NYSE–2006–106).

transactions executed through the Linkage on December 1, 2006, with the regular equity transaction fee payable on that day because the difference in the amount payable by customers would be immaterial, but the Exchange would incur significant costs in identifying those transactions which should be charged the lower fee rate.[6]

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[7] and, in particular, the requirements of Section 6(b) of the Act[8] and the rules and regulations thereunder. Specifically, the Commission finds that the proposal to retroactively apply the increase in the Linkage Order Fee is consistent with Section 6(b)(4) of the Act,[9] which requires the equitable allocation of reasonable dues, fees, and other charges among Exchange members and other persons using Exchange facilities.

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[10] that the proposed rule change (File No. SR–NYSE–2006–110) be, and it hereby is, approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[11]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–974 Filed 1–23–07; 8:45 am]

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[6] The Exchange estimates that the difference in the amount of Linkage Order Fees payable under the old rate as compared to the proposed revised rate by customers for trades executed on December 1, 2006, would be less than $2,000.00. Telephone conversation between John Carey, Assistant General Counsel, NYSE, and Nathan Saunders, Special Counsel, Division of Market Regulation, Commission, December 7, 2006.

[7] In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

[8] 15 U.S.C. 78f(b).

[9] 15 U.S.C. 78f(b)(4).

[10] Id.

[11] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55114; File No. SR–Phlx–2006–81]

Self-Regulatory Organizations; Philadelphia Stock Exchange, Inc.; Order Granting Approval to Proposed Rule Change Relating to the Establishment of a Maximum Number of Quoting Participants Permitted in a Particular Option on the Exchange

January 17, 2007.

I. Introduction

On December 5, 2006, the Philadelphia Stock Exchange, Inc. (''Phlx'' 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 proposed rule change to amend Phlx Rule 507, which governs the assignment of options to Streaming Quote Traders (''SQTs'')[3] and Remote Streaming Quote Traders (''RSQRs''),[4] by adding commentary to the rule establishing a maximum number of quoting participants that may be assigned to a particular equity option at any one time. The proposed rule change was published for comment in the **Federal Register** on December 18, 2006.[5] The Commission received no comments regarding the proposal. This order approves the proposed rule change.

II. Description of the Proposal

The purpose of the proposed rule change is to enable the Exchange to manage its quotation traffic and bandwidth capacity by limiting the number of streaming quote market participants that may be assigned to a particular option at a given point in time. The proposed amendments to Phlx Rule 507 would establish: (i) A maximum number of quoters (''MNQ'') in equity options based on each option's monthly trading volume; (ii) a process for recalculating the MNQ based upon changes in an option's monthly trading volume; (iii) an increase to the MNQ due to exceptional circumstances; (iv) the process by which the Exchange will notify market participants of changes to the MNQ; and (v) additional criteria relating to the process by which the Exchange will assign SQT and/or RSQT applicants in options in the event that there are more applicants for assignment in a particular option than there are positions.

The Exchange proposes to limit the number of participants that may be assigned to a particular equity option at any one time based upon each option's monthly national volume. Proposed Commentary .02 to Phlx Rule 507 sets forth tiered MNQ levels providing for 20 participants for the top 5% most actively traded options; 15 participants for next 10% most actively traded options, and 10 market participants for all other options.[6] The ranking is based upon the preceding month's national volumes. The MNQ would be recalculated within the first five days of each month based on the previous month's trading volume (''new MNQ''). The Exchange would inform market participants of changes to the MNQ via Exchange circular.

The Exchange's Options Allocation, Evaluation and Securities Committee (''OAESC'')[7] would be able to increase the MNQ in exceptional circumstances. Proposed Commentary .04 to Phlx Rule 507 describes the events that may be considered ''exceptional,'' including substantial trading volume (whether actual or expected), a major news event, or corporate event. The Exchange would also be permitted to reduce the MNQ following the cessation of the exceptional circumstances, but would be required to follow the same procedures applicable for decreases to the MNQ due to a change in volume.[8] When relying on this provision, the Exchange would submit a rule filing to the Commission pursuant to Section 19(b)(3)(A) of the Act.[9]

The Exchange is also proposing to amend Phlx Rule 507 by adding criteria for the OAESC to consider when determining whether to assign an option to a member in the situation where there are more applicants for assignment in a particular option than there are positions available. Specifically, proposed paragraph (b)(iii) of Phlx Rule 507 would require the OAESC to consider: (i) The financial and technical resources available to the applicant; (ii)

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Phlx Rule 1014(b)(ii)(A).

[4] *See* Phlx Rule 1014(b)(ii)(B).

[5] *See* Securities Exchange Act Release No. 54914 (December 11, 2006), 71 FR 75798.

[6] The Exchange may increase the MNQ levels by submitting to the Commission a rule filing pursuant to Section 19(b)(3)(A) of the Act and may decrease the MNQ levels upon Commission approval of a rule filing submitted pursuant to 19(b)(2) of the Act. *See* proposed Commentary .05 to Phlx Rule 507.

[7] *See* Phlx By-Law Article X, Section 10–7. The OAESC has jurisdiction over, among other things: The appointment of specialists on the options and foreign currency options trading floors; allocation, retention and transfer of privileges to deal in options on the trading floors; and administration of the 500 series of Phlx rules.

[8] *See* proposed Commentary .03 to Phlx Rule 507.

[9] 15 U.S.C. 78s(b)(3)(A).

the applicant's experience and expertise in market making or options trading; and (iii) the applicant's prior performance as a specialist, SQT or RSQT, based on evaluations conducted pursuant to Phlx Rule 510, which includes quantified measures of performance.

Finally, the Exchange represents that members assigned in a particular option as of the date of Commission approval of this proposed rule change will be guaranteed a position as a quoting participant in the particular option.

III. Discussion

After careful review of the proposal, 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] In particular, the Commission finds that the proposal is consistent with Section 6(b)(5) of the Act,[11] which requires, among other things, that the rules of an exchange be 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.

The Commission believes that the Exchange's proposal, to establish a maximum number of quoting participants that may be assigned to a particular equity option at any one time based on the trading volume of that option should enhance the Exchange's ability to manage its quotation traffic and bandwidth capacity.

The Commission further believes that, in the event that there are more applicants for assignment in a particular option than there are available positions, the financial and technical capacity of SQTs and RSQTs, as well as prior performance, are appropriate factors to consider and should assist the OAESC in allocating the option on an equitable basis to the benefit of the Exchange and the public.

IV. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[12] that the proposed rule change (SR–Phlx–2006–81), be, and hereby is, approved.

[10] In approving this proposed rule change, the Commission notes that it has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[11] 15 U.S.C. 78f(b)(5).

[12] 15 U.S.C. 78s(b)(2).

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[13]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–957 Filed 1–23–07; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55121; File No. SR–Phlx–2006–31]

Self-Regulatory Organizations; Philadelphia Stock Exchange, Inc.; Notice of Filing of Proposed Rule Change and Amendment Nos. 1 and 2 Thereto, Relating to Limit Orders Submitted by Streaming Quote Traders

January 18, 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 May 5, 2006, the Philadelphia Stock Exchange, Inc. (''Phlx'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been substantially prepared by the Phlx. On December 8, 2006, the Exchange filed Amendment No. 1 to the proposed rule change. On January 11, 2007, the Exchange filed Amendment No. 2 to the proposed rule change. The Commission is publishing this notice to solicit comments on the proposed rule change, as amended, from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Phlx proposes to amend Phlx Rule 1080(b)(i)(B) and Commentary .04 thereto to permit Streaming Quote Traders (''SQTs'') [3] and Remote Streaming Quote Traders (''RSQTs'') [4] to enter Immediate or Cancel (''IOC'') [5] orders for their own account(s) through an electronic interface with AUTOM; [6] to permit non-SQT ROTs [7] and specialists to place proprietary limit orders with a size of 10 contracts or greater onto the limit order book; to expand the type of order that non-SQT ROTs and specialists may enter to include IOC; and to permit non-SQT ROTs and specialists to submit proprietary limit orders with a size of less than 10 contracts as IOC only. The Exchange further proposes to amend Commentary .02 and .03 of Phlx Rule 1082 to reduce the one-second ''counting period'' to ¼ of one second during which SQTs, RSQTs and/or specialists may eliminate the locked or crossed markets caused by their electronic quotations.[8] The text of the proposed rule change is available at Phlx, the Commission's Public Reference Room, and *http://www.phlx.com.*

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Phlx included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Phlx has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

[13] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] An SQT is a Registered Options Trader (''ROT'') who has received permission from the Exchange to generate and submit option quotations electronically through AUTOM in eligible options in which such SQT is assigned. An SQT may only submit such quotations while such SQT is physically present on the floor of the Exchange. *See* Phlx Rule 1014(b)(ii)(A).

[4] An RSQT is a ROT that is a member or member organization with no physical trading floor presence who has received permission from the Exchange to generate and submit option quotations electronically through AUTOM in eligible options to which such RSQT has been assigned. An RSQT may only submit such quotations electronically from off the floor of the Exchange. *See* Phlx Rule 1014(b)(ii)(B).

[5] An immediate-or-cancel order is an order that is to be executed in whole or in part as soon as such order is submitted. Any portion not so executed is to be treated as cancelled.

[6] AUTOM is the Exchange's electronic order delivery, routing, execution and reporting system, which provides for the automatic entry and routing of equity option and index option orders to the Exchange trading floor. Orders delivered through AUTOM may be executed manually, or certain orders are eligible for AUTOM's automatic execution features, AUTO-X, Book Sweep and Book Match. Equity option and index option specialists are required by the Exchange to participate in AUTOM and its features and enhancements. Option orders entered by Exchange members into AUTOM are routed to the appropriate specialist unit on the Exchange trading floor. AUTOM is now commonly referred to as Phlx XL. *See* Phlx Rule 1080.

[7] A ROT is an on-floor options participant of the Exchange who has received permission from the Exchange to trade in options for his own account in eligible options in which such ROT is assigned. *See* Phlx Rule 1014(b)(i).

[8] Any unresolved locked or crossed markets remaining after the counting period are automatically executed.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to offer an additional mechanism for participants on the Exchange's electronic trading platform for options, Phlx XL,[9] to trade against orders and electronic quotations. Currently, only non-SQT ROTs and specialists may enter limit orders, and such limit orders may only be submitted with a minimum size of 10 contracts as Good-Till-Cancelled, day limit and simple cancel orders. Under the proposal, the Exchange would expand limit order entry to SQTs and RSQTs, who would be permitted to enter IOC orders with no size limitation.

The proposal would include limitations on the eligible order type and permissible order size, depending on the status of the participant submitting the order. Specifically, non-SQT ROTs and specialists would be permitted to submit limit orders with a size of 10 contracts or greater as Good-Till-Cancelled, day limit, IOC or simple cancel order types. Orders for less than 10 contracts submitted by non-SQT ROTs and specialists would be required to be submitted as IOC only.[10]

SQTs and RSQTs would be permitted to submit limit orders of any size,[11] provided that all limit orders submitted must be IOC. Thus, limit orders submitted by SQTs and RSQTs would not be eligible to rest on the limit order book, and would be cancelled if not executed immediately. If only a part of such an order is executed immediately, the remaining unexecuted contracts in such an order would be cancelled.

Under the proposal, specialists and non-SQT ROTs that submit limit orders with a size of less than 10 contracts must submit such orders as IOC only. According to the Exchange, this is to ensure that limit orders with a size of less than 10 contracts are not placed on the limit order book. The Exchange believes that this provision should encourage liquidity on the Exchange and limit orders on the limit order book that represent the Exchange's best bid or offer and would thus result in a disseminated size of at least 10 contracts on the Exchange.

The purpose of the proposed change to Commentary .02 and .03 of Phlx Rule 1082 is to improve the speed by which the Exchange's systems can automatically execute locked or crossed quotations against one another and eliminate the locked or crossed market situation,[12] which should, in turn, facilitate compliance with firm quote obligations.[13]

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,[14] in general, and furthers the objectives of Section 6(b)(5) of the Act,[15] in particular, in that the proposal is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest by increasing the efficiency of options trading on the Exchange by allowing on-floor participants to electronically enter an additional type of order, which should increase the number of automatic executions. The Exchange believes that this new functionality should increase order interaction between market participants on the Exchange and the electronic limit order book. The Exchange also believes that reducing the counting period during which market participants may resolve locked and crossed markets should improve market efficiency by eliminating locked and crossed markets in a more timely fashion.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which Phlx consents, the Commission will:

(A) By order approve such proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an e-mail to *rule-comments@sec.gov*. Please include File Number SR–Phlx–2006–31 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–Phlx–2006–31. 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

[9] *See* Securities Exchange Act Release No. 50100 (July 27, 2004), 69 FR 46612 (August 3, 2004) (SR–Phlx–2003–59).

[10] Currently, the IOC order type is not eligible for submission by non-SQT ROTs and specialists, and all orders must be for a minimum size of 10 contracts. The proposal would permit orders with a size of less than 10 contracts, provided that such orders must be submitted as IOC only. Orders submitted by non-SQT ROTs and specialists with a size of 10 contracts or greater would be eligible to be placed on the limit order book.

[11] Currently, the Exchange permits SQTs to submit electronic quotations only. The proposal would permit SQTs to submit IOC limit orders in addition to electronic quotations. The quoting obligations applicable to SQTs contained in Exchange Rule 1014(b)(ii)(D) would be unchanged.

[12] Any unresolved locked or crossed markets remaining after the counting period are automatically executed.

[13] *See* Phlx Rule 1082.

[14] 15 U.S.C. 78f(b).

[15] 15 U.S.C. 78f(b)(5).

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 also will be available for inspection and copying at the principal office of the Phlx. 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–Phlx–2006–31 and should be submitted on or before February 14, 2007.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[16]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–977 Filed 1–23–07; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–55111; File No. SR–Phlx–2006–59]

Self-Regulatory Organizations; Philadelphia Stock Exchange, Inc.; Order Granting Approval of Proposed Rule Change as Modified by Amendments No. 1 and 2 Thereto Relating to an Amendment to a Philadelphia Board of Trade Market Data Distribution Network Fee

January 16, 2007.

I. Introduction

On September 26, 2006, the Philadelphia Stock Exchange, Inc. (''Phlx'' 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 increase a fee assessed by the Exchange's wholly owned subsidiary, the Philadelphia Board of Trade (''PBOT''), on market data vendors for certain index values that subscribers receive over PBOT's Market Data Distribution Network (''MDDN''). The Phlx filed Amendment No. 1 to the proposed rule change on November 1, 2006 and filed Amendment No. 2 on December 6, 2006. The proposed rule change, as amended, was published for comment in the **Federal Register** on December 13, 2006.[3] The Commission received no comments regarding the proposal. This order approves the proposed rule change, as amended.

II. Description of the Proposal

The Phlx proposes to amend one of the fees charged by the PBOT for certain market data disseminated over the MDDN.[4] The Phlx has licensed the current and closing index values underlying most of the Phlx's proprietary indexes to PBOT for the purpose of selling, reproducing, and distributing the index values over PBOT's MDDN. On each trading day, the Exchange or its third party designee calculates and makes available to PBOT a real-time index value every 15 seconds and a closing index value at the end of the day. In exchange for subscriber fees paid to PBOT, market data vendors are allowed to widely disseminate this market data for all the values of Phlx's proprietary indexes to their subscribers.[5]

As approved by the Commission, the market data fees charged by PBOT included a $.00025 per request fee for ''snapshot data,'' which is essentially market data that is refreshed no more frequently than once every 60 seconds.[6] The Exchange is now proposing to increase that fee from $.00025 to $.0025 per request for snapshot data.[7]

III. Discussion

After careful consideration, the Commission finds that the proposed rule change, as amended, is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange[8] and, in particular, the requirements of Section 6 of the Act.[9] Specifically, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act,[10] which requires, among other things, that the rules of a national securities exchange be 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.

The Commission continues to believe that Phlx's proposal is consistent with Rule 603 under the Act.[11] In this regard, the Commission notes that the Exchange represented that PBOT's proposed fee increase reflects a more accurate valuation of the value of snapshot data to investors than the original snapshot data fee did, consistent with Rule 603 under the Act.[12] The Commission believes that the proposal is consistent with Section 6(b)(4) of the Act,[13] in that the proposed rule change provides for the equitable allocation of reasonable dues, fees, and other charges among the Exchange's members and issuers and other persons using its facilities.

IV. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,[14] that the proposed rule change (SR–Phlx–2006–59), as amended, is hereby approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[15]

Florence E. Harmon,

Deputy Secretary.

[FR Doc. E7–958 Filed 1–23–07; 8:45 am]

BILLING CODE 8011–01–P

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[16] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 54890 (December 7, 2006), 71 FR 74975.

[4] The MDDN is an internet protocol multicast network developed by PBOT and SAVVIS Communications.

[5] Approximately 65 vendors, including for example Bloomberg L.P., Telekurs Financial Information Ltd. and Thomson Financial, have already entered into such market data agreements with PBOT. The PBOT has contracted with one or more major Market Data Vendors to receive real-time and closing index values over the MDDN and promptly redistribute such values. At least three of the vendors have elected to offer only the continuous real-time market data and will not offer snapshot or delayed data. The fees described in this proposed rule change cover values of all the indexes disseminated over the MDDN.

[6] *See* Securities Exchange Act Release No. 53790 (May 11, 2006), 71 FR 28738 (May 17, 2006) (''Original Approval Order''). The subscriber fees are set out in agreements that PBOT executed with various market data vendors for the right to receive, store, and retransmit the current and closing index values transmitted over the MDDN. In its original proposal, the Exchange stated that, under these vendor agreements PBOT may change any of the fees enumerated in the agreement by giving the vendor or subvendor advance written notice of such changes. The Commission conditioned any such fee change on the submission by Phlx of a proposed rule change under Section 19(b) of the Act, and approval of such proposal. See 71 FR at 28740.

[7] The Commission notes that all market data vendors which provide market data to 200,000 or more Devices in any month qualify for a 15% Administrative Fee credit for that month, to be deducted from the monthly Subscriber Fees that they collect and are obligated to pay PBOT under the Vendor/Subvendor Agreement.

[8] 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).

[9] 15 U.S.C. 78f.

[10] 15 U.S.C. 78f(b)(5).

[11] 17 CFR 242.603. *See* Original Approval Order, 71 FR at 28739, *supra* note 6, noting that the subscriber fees were consistent with Rule 603 under the Act.

[12] 17 CFR 242.603.

[13] 15 U.S.C. 78f(b)(4).

[14] 15 U.S.C. 78s(b)(2).

[15] 17 CFR 200.30–3(a)(12).

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration # 10785 and # 10786]

Texas Disaster # TX–00226

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a notice of an Administrative declaration of a disaster for the State of Texas dated 1/16/2007.

Incident: Severe Storms and Flooding.

Incident Period: 10/15/2006 and continuing.

Effective Date: 1/16/2007.

Physical Loan Application Deadline Date: 3/19/2007.

Economic Injury (EIDL) Loan Application Deadline Date: 10/16/2007.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street, SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the Administrator's disaster declaration, applications for disaster loans may be filed at the address listed above or other locally announced locations.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties: Hardin, Newton.

Contiguous Counties:

Texas

Jasper, Jefferson, Liberty, Orange, Polk, Sabine, Tyler

Louisiana:

Beauregard, Calcasieu, Sabine, Vernon

The Interest Rates are:

	Percent
Homeowners With Credit Available Elsewhere:	6.250.
Homeowners Without Credit Available Elsewhere:	3.125.
Businesses With Credit Available Elsewhere:	7.934.
Businesses & Small Agricultural Cooperatives Without Credit Available Elsewhere:	4.000.
Other (Including Non-Profit Organizations) With Credit Available Elsewhere:	5.000.
Businesses and Non-Profit Organizations Without Credit Available Elsewhere:	4.000.

The number assigned to this disaster for physical damage is 10785 B and for economic injury is 10786 0.

The States which received an EIDL Declaration # are Texas, Louisiana.

(Catalog of Federal Domestic Assistance Numbers 59002 and 59008)

Dated: January 16, 2007.

Steven C. Preston,

Administrator.

[FR Doc. E7–962 Filed 1–23–07; 8:45 am]

BILLING CODE 8025–01–P

DEPARTMENT OF STATE

[Public Notice 5676]

Culturally Significant Objects Imported for Exhibition; Determinations: ''Encompassing the Globe: Portugal and the World in the 16th and 17th Centuries''

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.*; 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236 of October 19, 1999, as amended, and Delegation of Authority No. 257 of April 15, 2003 [68 FR 19875], I hereby determine that the objects to be included in the exhibition ''Encompassing the Globe: Portugal and the World in the 16th and 17th Centuries'', imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Arthur M. Sackler Gallery, Washington, DC, and the National Museum of African Art, Washington, DC, from on or about June 23, 2007, until on or about September 16, 2007, and at possible additional venues yet to be determined, are in the national interest. Public Notice of these Determinations is ordered to be published in the **Federal Register**

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the exhibit objects, contact Wolodymyr Sulzynsky, Attorney-Adviser, Office of the Legal Adviser, U.S. Department of State (*telephone:* (202) 453–8050). The address is U.S. Department of State, SA–44, 301 4th Street, SW., Room 700, Washington, DC 20547–0001.

Dated: January 16, 2007.

C. Miller Crouch,

Principal Deputy Assistant Secretary for Educational and Cultural Affairs, Department of State.

[FR Doc. E7–1005 Filed 1–23–07; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice 5677]

Culturally Significant Objects Imported for Exhibition; Determinations: ''Glass, Gilding, and Grand Design: Art of Sasanian Iran (224–642)''

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.*; 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236 of October 19, 1999, as amended, and Delegation of Authority No. 257 of April 15, 2003 [68 FR 19875], I hereby determine that the objects to be included in the exhibition ''Glass, Gilding, and Grand Design: Art of Sasanian Iran (224–642)'', imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Asia Society, New York, New York, from on or about February 12, 2007, until on or about May 27, 2007, and at possible additional venues yet to be determined, is in the national interest. Public Notice of these Determinations is ordered to be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the exhibit objects, contact Wolodymyr Sulzynsky, Attorney-Adviser, Office of the Legal Adviser, U.S. Department of State (telephone: (202) 453–8050). The address is U.S. Department of State, SA–44, 301 4th Street, SW., Room 700, Washington, DC 20547–0001.

Dated: January 16, 2007.

C. Miller Crouch,

Principal Deputy Assistant Secretary for Educational and Cultural Affairs, Department of State.

[FR Doc. E7–1002 Filed 1–23–07; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice 5668]

Shipping Coordinating Committee; Notice of Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 1 p.m. on Thursday, March 1, 2007, in Room 6319 of the United States Coast Guard Headquarters Building, 2100 2nd Street SW., Washington, DC 20593–0001. The primary purpose of the meeting is to continue preparations for the 50th Session of the International Maritime Organization (IMO) Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety to be held at the International Coffee Organization in London, England from April 30 to May 4, 2007.

The primary matters to be considered include:

—Development of explanatory notes for harmonized SOLAS Chapter II–1;
—Revision of the Intact Stability Code;
—Passenger ship safety / Time dependent survivability;
—Guidance on the impact of open watertight doors on survivability;
—Safety of small fishing vessels;
—Development of options to improve effect on ship design and safety of the 1969 TM Convention;
—Guidelines for uniform operating limitations on high-speed craft;
—Review of the Special Purpose Ships (SPS) Code.

Members of the public may attend this meeting up to the seating capacity of the room. Interested persons may seek information by writing to Mr. Paul Cojeen, Commandant (CG–3PSE–2), U.S. Coast Guard Headquarters, 2100 Second Street, SW., Room 1308, Washington, DC 20593–0001 or by calling (202) 372–1372.

Dated: January 18, 2007.

Michael E. Tousley,

Executive Secretary, Shipping Coordinating Committee, Department of State.

[FR Doc. E7–997 Filed 1–23–07; 8:45 am]

BILLING CODE 4710–09–P

DEPARTMENT OF STATE

[Public Notice 5667]

Shipping Coordinating Committee Facilitation Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 9:30 a.m. on Tuesday, March 6, 2007, in Room 1303 of the United States Coast Guard Headquarters building, 2100 Second Street SW., Washington, DC 20593–0001. The primary purpose of the meeting is to prepare for the thirty-fourth session of the Facilitation Committee (FAL 34) of the International Maritime Organization (IMO), to be held from March 26 to 30, 2007, at the International Coffee Organization Headquarters in London, England.

The primary matters for discussion for FAL 34 will include the following:

- General review and implementation of the Convention on Facilitation of International Maritime Traffic.
- Adoption of proposed amendments to the Annex to the Convention.
- Electronic means for the clearance of ships.
- Prevention and suppression of unlawful acts in port.
- Prevention and suppression of illicit trade, including drugs, WMD and people.
- Formalities connected with the arrival, stay and departure of persons.
- Facilitation aspects of other IMO forms and certificates.
- Securing and facilitation international trade.
- Ship/port interface.
- Technical co-operation sub-programme for facilitation.
- Application of the Committee's Guidelines.

Please note that hard copies of documents associated with FAL 34 will not be available at this meeting. Documents will be available in Adobe Acrobat format on CD–ROM. To request documents, please contact Mr. David Du Pont via e-mail at *David.A.DuPont@uscg.mil* or write to the address provided below.

Members of the public may attend this meeting up to the seating capacity of the room. Interested persons may seek information by writing to Mr. David Du Pont, Commandant (CG–3PSR), U.S. Coast Guard Headquarters, 2100 Second Street SW., Room 1400, Washington, DC 20593–0001 or by calling (202) 372–1497.

Dated: January 18, 2007.

Michael E. Tousley,

Executive Secretary, Shipping Coordinating Committee, Department of State.

[FR Doc. E7–998 Filed 1–23–07; 8:45 am]

BILLING CODE 4710–09–P

DEPARTMENT OF STATE

[Public Notice 5669]

Shipping Coordinating Committee; Notice of Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 9:30 a.m. on Thursday, February 15, 2007, in Room 6319 of the United States Coast Guard Headquarters Building, 2100 Second Street SW., Washington, DC, 20593–0001. The primary purpose of the meeting is to prepare for the 50th session of the Sub-Committee on Ship Design and Equipment (DE) to be held at the International Maritime Organization (IMO) Headquarters in London, England from March 5 to March 9, 2007.

The primary matters to be considered include:

— Amendments to resolution A.744(18) regarding longitudinal strength of tankers;
—Measures to prevent accidents with lifeboats;
—Compatibility with life-saving appliances;
—Test standards for extended service intervals of inflatable liferafts;
—Amendments to the Guidelines for ships operating in Arctic ice-covered waters;
—Revision of resolution A.760(18) regarding symbols related to life-saving appliances and arrangements;
—Guidelines for uniform operating limitations of high-speed craft;
—Consideration of IACS unified interpretations;
—Inspection and survey requirements for accommodation ladders;
—Revision of the Guidelines for systems for handling oily wastes in machinery spaces of ships (MEPC/Circ.235);
—Development of provisions for gas-fuelled ships;
—Performance standards for protective coatings;
—Guidelines for maintenance and repair of protective coatings;
—Requirements and standard for corrosion protection of permanent means of access arrangements;
—Performance standards for recovery systems;
—Guidelines for approval of novel-life-saving appliances;
—Mandatory emergency towing systems in ships other than tankers greater than 20,000 dwt;
—Review of the Special Purpose Ships (SPS) Code;
—Revision of the Code on Alarms and Indicators (resolution A.830(19));
—Amendments to the MODU Code;
—Review of MEPC.1/Circ.511 and relevant MARPOL Annex I and Annex VI requirements.

Hard copies of documents associated with the 50th session of DE will be available at this meeting. To request further copies of documents please write to the address provided below.

Members of the public may attend this meeting up to the seating capacity

of the room. Interested persons may seek information by writing to Mr. Wayne Lundy, Commandant (CG–3PSE–3), U.S. Coast Guard Headquarters, 2100 Second Street SW., Room 1300, Washington, DC 20593–0001 or by calling (202) 372–1379.

Dated: January 18, 2007.

Michael E. Tousley,

Executive Secretary, Shipping Coordinating Committee, Department of State.

[FR Doc. E7–1007 Filed 1–23–07; 8:45 am]

BILLING CODE 4710–09–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Agency Information Collection Activity Seeking OMB Approval

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice.

SUMMARY: The FAA invites public comments about our intention to request the Office of Management and Budget's (OMB) revision of a current information collection. The **Federal Register** Notice with a 60-day comment period soliciting comments on the following collection of information was published on November 17, 2006, vol. 71, no. 222, pages 67006–67007. The FAA uses this information for determining program compliance or non-compliance of regulated aviation employers, oversight planning, determining who must provide annual MIS testing information, and communicating with entities subject to the program regulations.

DATES: Please submit comments by February 23, 2007.

FOR FURTHER INFORMATION CONTACT: Carla Mauney at *Carla.Mauney@faa.gov.*

SUPPLEMENTARY INFORMATION:

Federal Aviation Administration (FAA)

Title: FAA Antidrug And Alcohol Misuse Prevention Programs.

Type of Request: Revision of a currently approved collection.

OMB Control Number: 2120–0535.

Form(s): There are no FAA forms associated with this collection.

Affected Public: An estimated 7,000 Respondents.

Frequency: This information is collected on occasion.

Estimated Average Burden per Response: Approximately 5 minutes per response.

Estimated Annual Burden Hours: An estimated 22,902 hours annually.

Abstract: The FAA uses this information for determining program compliance or non-complinace of regulated aviation employers, oversight planning, determining who must provide annual MIS testing information, and communicating with entities subject to the program regulations. In addition, the information is used to ensure that appropriate action is taken in regard to crew members and other safety-sensitive employees who have tested positive for drugs or alcohol, or have refused to submit to testing.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to Nathan Lesser, Desk Officer, Department of Transportation/FAA, and sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

Comments are invited on: Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; the accuracy of the Department's estimates of the burden of the proposed information collection; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

Issued in Washington, DC, on January 17, 2007.

Carla Mauney,

FAA Information Collection Clearance Officer, Strategy and Investment Analysis Division, AIO–20.

[FR Doc. 07–295 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Receipt of Noise Compatibility Program and Request for Review for Flagstaff Pulliam Airport, Flagstaff, AZ

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice.

SUMMARY: The Federal Aviation Administration (FAA) announces that it is reviewing a proposed noise compatibility program that was submitted for (name of airport) under the provisions of 49 U.S.C. 47501 et seq. (the aviation Safety and Noise Abatement Act, hereinafter referred to as ''the Act'') and 14 CFR part 150 by (City of Flagstaff). This program was submitted subsequent to a determination by FAA that associated noise exposure maps submitted under 14 CFR part 150 for (Flagstaff Pulliam Airport) were in compliance with applicable requirements, effective April 7, 2006—FR 70 20617–20618. The proposed noise compatibility program will be approved or disapproved on or before July 11, 2007.

DATES: *Effective Date:* The effective date of the start of FAA's review of the noise compatibility program is January 12, 2007. The public comment period ends March 13, 2007.

FOR FURTHER INFORMATION CONTACT: Michelle Simmons, Environmental Protection Specialist, Los Angeles Airports District Office LAX–600.2, Federal Aviation Administration, Western-Pacific Region, Mailing Address: P.O. Box 92007, Los Angeles, California 90009–2007; Telephone 310/725–3614. Comments on the proposed noise compatibility program should also be submitted to the above office.

SUPPLEMENTARY INFORMATION: This notice announces that the FAA is reviewing a proposed noise compatibility program for Flagstaff Pulliam Airport, which will be approved or disapproved on or before July 11, 2007. This notice also announces the availability of this program for public review and comment.

An airport operator who has submitted noise exposure maps that are found by FAA to be in compliance with the requirements of Federal Aviation Regulations (FAR) Part 150, promulgated pursuant to the Act, may submit a noise compatibility program for FAA approval which sets forth the measures the operator has taken or proposes to reduce existing non-compatible uses and prevent the introduction of additional non-compatible uses.

The FAA has formally received the noise compatibility program for Flagstaff Pulliam Airport, effective on March 13, 2006. The airport operator has requested that the FAA review this material and that the noise mitigation measures, to be implemented jointly by the airport and surrounding communities, be approved as a noise compatibility program under section 47504 of the Act. Preliminary review of the submitted material indicates that it conforms to FAR Part 150 requirements for the submittal of noise compatibility programs, but that further review will be necessary prior to approval or disapproval of the program. The formal review period, limited by law to a

maximum of 180 days, will be completed on or before July 11, 2007.

The FAA's detailed evaluation will be conducted under the provisions of 14 CFR part 150, section 150.33. The primary considerations in the evaluation process are whether the proposed measures may reduce the level of aviation safety or create an undue burden on interstate or foreign commerce, and whether they are reasonably consistent with obtaining the goal of reducing existing non-compatible land uses and preventing the introduction of additional non-compatible land uses.

Interested persons are invited to comment on the proposed program with specific reference to these factors. All comments relating to these factors, other than those properly addressed to local land use authorities, will be considered by the FAA to the extent practicable. Copies of the noise exposure maps and the proposed noise compatibility program are available for examination at the following locations:

Federal Aviation Administration, Western-Pacific Region, Los Angeles Airports District Office, 15000 Aviation Boulevard, Room 3012, Hawthorne, CA 90261.

Michael Covalt, Airport Manager, City of Flagstaff, Flagstaff Pulliam Airport, 6200 South Pulliam Drive, Flagstaff, Arizona 86001.

Questions may be directed to the individual named above under the heading, **FOR FURTHER INFORMATION CONTACT**.

Issued in Hawthorne, California, on January 12, 2007.

Mark A. McClardy,

Manager, Airports Division, AWP–600, Western-Pacific Region.

[FR Doc. 07–300 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. PE–2007–01]

Petitions for Exemption; Summary of Petitions Received

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of petitions for exemption received.

SUMMARY: Pursuant to FAA's rulemaking provisions governing the application, processing, and disposition of petitions for exemption part 11 of Title 14, Code of Federal Regulations (14 CFR), this notice contains a summary of certain petitions seeking relief from specified requirements of 14 CFR. The purpose of this notice is to improve the public's awareness of, and participation in, this aspect of FAA's regulatory activities. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of any petition or its final disposition.

DATES: Comments on petitions received must identify the petition docket number involved and must be received on or before February 13, 2007.

ADDRESSES: You may submit comments [identified by DOT DMS Docket Number FAA–2006–26407] by any of the following methods:

- *Web Site: http://dms.dot.gov.* Follow the instructions for submitting comments on the DOT electronic docket site.
- *Fax:* 1–202–493–2251.
- *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.

Docket: For access to the docket to read background documents or comments received, go to *http://dms.dot.gov* at any time or to 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.

FOR FURTHER INFORMATION CONTACT: Tim Adams (202) 267–8033, Tyneka Thomas (202) 267–7625, or Frances Shaver (202) 267–9681, Office of Rulemaking (ARM–1), Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591. This notice is published pursuant to 14 CFR 11.85 and 11.91.

Issued in Washington, DC, on January 16, 2007.

Pamela Hamilton-Powell,

Director, Office of Rulemaking.

Petitions for Exemption

Docket No.: FAA–2006–26407.

Petitioner: North Central Texas Services d.b.a. CareFlite.

Section of 14 CFR Affected:

14 CFR 135.213(a) and (b), 135.219, and 135.225(a)(1), (a)(2), (f), and (g).

Description of Relief Sought:

To allow North Central Texas Services d.b.a. CareFlite to conduct instrument flight rules (IFR) departures and IFR instrument approach procedures at airports and heliports that do not have an approved weather reporting source.

[FR Doc. E7–999 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. PE–2006–46]

Petitions for Exemption; Summary of Petitions Received

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of petitions for exemption received.

SUMMARY: Pursuant to FAA's rulemaking provisions governing the application, processing, and disposition of petitions for exemption part 11 of Title 14, Code of Federal Regulations (14 CFR), this notice contains a summary of certain petitions seeking relief from specified requirements of 14 CFR. The purpose of this notice is to improve the public's awareness of, and participation in, this aspect of FAA's regulatory activities. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of any petition or its final disposition.

DATES: Comments on petitions received must identify the petition docket number involved and must be received on or before February 13, 2007.

ADDRESSES: You may submit comments [identified by DOT DMS Docket Number FAA–2006–26669] by any of the following methods:

- *Web Site: http://dms.dot.gov.* Follow the instructions for submitting comments on the DOT electronic docket site.
- *Fax:* 1–202–493–2251.
- *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.

Docket: For access to the docket to read background documents or comments received, go to *http://dms.dot.gov* at any time or to 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.

FOR FURTHER INFORMATION CONTACT: Tyneka Thomas (202) 267–7626, Tim Adams (202) 267–8033, Sandy Buchanan-Sumter (202) 267–7271, Office of Rulemaking (ARM–1), Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591. This notice is published pursuant to 14 CFR 11.85 and 11.91.

Issued in Washington, DC, on January 17, 2007.

Pamela Hamilton-Powell,

Director, Office of Rulemaking.

Petitions for Exemption

Docket No.: FAA–2006–26669.
Petitioner: Ronson Aviation.
Section of 14 CFR Affected: 14 CFR 135.175(a).
Description of Relief Sought: To permit Ronson Aviation to conduct flights with certain large transport category aircraft in passenger-carrying operations with an EX–500 Multi-Function Display, an unapproved airborne weather radar, installed.

[FR Doc. E7–1006 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Sixth Meeting: Special Committee 209, EUROCAE WG–49 Joint Plenary Session ATCRBS/Mode S Transponder

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of RTCA Special Committee 209, EUROCAE WG–49 Joint Plenary Session ATCRBS/Mode S Transponder.

SUMMARY: The FAA is issuing this notice to advise the public of a meeting of RTCA Special Committee 209, EUROCAE WG–49 Joint Plenary Session ATCRBS/Mode S Transponder.

DATES: The meeting will be held January 29–February 2, 2007 from 9 a.m.–2 p.m.

ADDRESSES: Crowne Plaza Melbourne Oceanside, Melbourne, FL 32093.

FOR FURTHER INFORMATION CONTACT: Host Contact: Hal Moses; telephone (202) 833–9339, e-mail *hmoses@rtca.org,* (2) Secretary Contact: Gary Furr; telephone (609) 485–4254, e-mail *gary.ctr.furr@faa.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463, 5 U.S.C., Appendix 2), notice is hereby given for a Special Committee 209 meeting. The agenda will include: January 29–February 2:

- Host/Co-Chairs Welcome, Introductions and Remarks.
- Review and Approval of the Agenda (WP06–01).
- Review and Approval of the Minutes from SC–209 Meting #5 (WP06–02)—(RTCA Paper No. 003–07/SC209–010).
- Discussion of the draft of DO–181D.
- Discussion of the draft of ED–73C.
- Discussion on ELS and EHS Requirements and test procedures.
- Status of the ED–73B/DO–181C Requirements Comparison database.
- Review of Status of SC–209 Action Items.
- Closing Plenary Session (Other Business, Discussion of Agenda for Next Meeting, Date, Place and Time of Future Meeting, Adjourn).

Attendance is open to the interested public but limited to space availability. With the approval of the chairmen, members of the public may present oral statements at the meeting. Persons wishing to present statements or obtain information should contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Members of the public may present a written statement to the committee at any time.

Issued in Washington, DC, January 17, 2007.

Francisco Estrada C.,

RTCA Advisory Committee.

[FR Doc. 07–296 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

Office of Hazardous Materials Safety, Notice of Delays in Processing of Special Permit Applications

AGENCY: Pipeline and Hazardous Materials Safety Administration, DOT.

ACTION: List of applications delayed more than 180 days.

SUMMARY: In accordance with the requirements of 49 U.S.C. 5117(c), PHMSA is publishing the following list of special permit applications that have been in process for 180 days or more. The reason(s) for delay and the expected completion date for action on each application is provided in association with each identified application.

FOR FURTHER INFORMATION CONTACT: Ann Mazzullo, Office of Hazardous Materials Special Permits and Approvals, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590–0001, (202) 366–4535.

Key to ''Reason for Delay.''

1. Awaiting additional information from applicant.
2. Extensive public comment under review.
3. Application is technically complex and is of significant impact or precedent-setting and requires extensive analysis.
4. Staff review delayed by other priority issues or volume of special permit applications.

Meaning of Application Number Suffixes.

N—New application.
M—Modification request.
X—Renewal.
PM—Party to application with modification request.

Issued in Washington, DC, on January 18, 2007.

Delmer F. Billings,

Director, Office of Hazardous Materials Safety, Special Permits & Approvals.

Application No.	Applicant	Reason for delay	Estimated date of completion
	New Special Permit Applications		
14277–N	Ascus Technologies, Ltd., Cleveland, OH	3, 4	02–28–2007
14316–N	VOTG North America, Inc., West Chester, PA	3, 4	04–30–2007
14314–N	North American Automotive Hazmat Action Committee	1	07–31–2007
14343–N	Valero St. Charles, Norco, LA	4	02–28–2007
14337–N	NKCF Co., Ltd., Jisa-Dong, Kangseo-Gu Busan	4	01–31–2007
14385–N	Kansas City Southern Railway Company, Kansas City, MO	4	02–28–2007
14398–N	Lyondell Chemical Company, Houston, TX	4	02–28–2007
14330–N	Chemical & Metal Industries, Inc., Hudson, CO	4	03–31–2007

Application No.	Applicant	Reason for delay	Estimated date of completion
	Modification to Special Permits		
10481–M	M–1 Engineering Limited, Bradford, West Yorkshire	4	03–31–2007
13598–M	Jadoo, Folsom, CA	4	03–31–2007
11447–M	SAES Pure Gas, Inc., San Louis Obispo, CA	4	02–28–2007

[FR Doc. 07–289 Filed 1–23–07; 8:45 am]

BILLING CODE 4910–60–M

DEPARTMENT OF THE TREASURY

Alcohol and Tobacco Tax and Trade Bureau

Proposed Information Collections; Comment Request

AGENCY: Alcohol and Tobacco Tax and Trade Bureau, Treasury.

ACTION: Notice and request for comments.

SUMMARY: As part of our continuing effort to reduce paperwork and respondent burden, and as required by the Paperwork Reduction Act of 1995, we invite comments on the proposed or continuing information collections listed below in this notice.

DATES: We must receive your written comments on or before March 26, 2007.

ADDRESSES: You may send comments to Mary A. Wood, Alcohol and Tobacco Tax and Trade Bureau, at any of these addresses:

- P.O. Box 14412, Washington, DC 20044–4412;
- 202–927–8525 (facsimile); or
- *formcomments@ttb.gov* (e-mail).

Please send separate comments for each specific information collection listed below. You must reference the information collection's title, form or recordkeeping requirement number, and OMB number (if any) in your comment. If you submit your comment via facsimile, send no more than five 8.5 x 11 inch pages in order to ensure electronic access to our equipment.

FOR FURTHER INFORMATION CONTACT: To obtain additional information, copies of an information collection and its instructions, or copies of any comments received, contact Mary A. Wood, Alcohol and Tobacco Tax and Trade Bureau, P.O. Box 14412, Washington, DC 20044–4412; or telephone 202–927–8210.

SUPPLEMENTARY INFORMATION:

Request for Comments

The Department of the Treasury and its Alcohol and Tobacco Tax and Trade Bureau (TTB), as part of their continuing effort to reduce paperwork and respondent burden, invite the general public and other Federal agencies to comment on the proposed or continuing information collections listed below in this notice, as required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

Comments submitted in response to this notice will be included or summarized in our request for Office of Management and Budget (OMB) approval of the relevant information collection. All comments are part of the public record and subject to disclosure. Please not do include any confidential or inappropriate material in your comments.

We invite comments on: (a) Whether this information collection is necessary for the proper performance of the agency's functions, including whether the information has practical utility; (b) the accuracy of the agency's estimate of the information collection's burden; (c) ways to enhance the quality, utility, and clarity of the information collected; (d) ways to minimize the information collection's burden on respondents, including through the use of automated collection techniques or other forms of information technology; and (e) estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide the requested information.

Information Collections Open for Comment

Currently, we are seeking comments on the following records and questionnaires:

Title: Letterhead Applications and Notices Filed by Brewers.

OMB Number: 1513–0005.

TTB Form Numbers: 5130.10.

TTB Recordkeeping Requirement Number: 5130/2.

Abstract: The Internal Revenue Code requires brewers to file a notice of intent to operate a brewery. TTB Form 5130.10 is similar to a permit and, when approved by TTB, is a brewer's authorization to operate. Letterhead applications and notices are necessary to identify brewery activities so that TTB may ensure that proposed operations do not jeopardize Federal revenues.

Current Actions: There are changes to TTB F 5130.10. We are adding new text to Item 12, a space for the EIN and Brewery Registry Number at the top of page 2, and new Items 13 (Brewer's Business Day) and 15 (Controlled Group question). Also, we are deleting Controlled Group questions from Items 16 and 20, as well as the reference to Special Occupational Tax from Item 19. To the instructions we are adding Limited Liability Corporation (LLC) and Limited Partnership (LP) to Item 3 and a new Item 15 to explain what information must be provided for Controlled (Brewery) Groups. The form is being re-numbered to accommodate the changes.

Type of Review: Revision of a currently approved collection.

Affected Public: Business or other for-profit.

Estimated Number of Respondents: 1,632.

Estimated Total Annual Burden Hours: 8,976.

Title: Principal Place of Business on Beer Labels.

OMB Number: 1513–0085.

TTB Recordkeeping Requirement Number: 5130/5.

Abstract: TTB regulations permit domestic brewers who operate more than one brewery to show as their address on labels and kegs of beer, their ''principal place of business'' address. This label option may be used in lieu of showing the actual place of production or of listing all of the brewer's locations on the label.

Current Actions: We are increasing the number of respondents; however, the burden hours remain at one (1). We are submitting this collection as an extension of an existing collection.

Type of Review: Extension of a currently approved collection.

Affected Public: Business or other for-profit.

Estimated Number of Respondents: 1,632.

Estimated Total Annual Burden Hours: One (1).

Title: Marks on Equipment and Structures and Marks and Labels on Containers of Beer.

OMB Number: 1513–0086.

TTB Recordkeeping Requirement Numbers: 5230/3 and 5130/4.

Abstract: Marks, signs, and calibrations are necessary on equipment and structures for identifying major equipment for accurate determination of tank contents, and for the segregation of taxpaid and nontaxpaid beer. Marks and labels on containers of beer are necessary to inform consumers of container contents and to identify the brewer and place of production.

Current Actions: We have increased the number of respondents; however, the burden hours remain at one (1). We are submitting this collection as an extension of an existing collection.

Type of Review: Extension of a currently approved collection.

Affected Public: Business or other for-profit.

Estimated Number of Respondents: 1,632.

Estimated Total Annual Burden Hours: One (1).

Title: Pay.gov User Agreement.

OMB Number: 1513–0117.

TTB Form Number: 5000.31.

Abstract: The Pay.gov User Agreement will be used to identify, validate, approve, and register qualified users to allow for submission of electronic forms via the Pay.gov system.

Current Actions: There are no changes to this information collection, and it is being submitted for extension purposes only.

Type of Review: Extension of a currently approved collection.

Affected Public: Business or other for-profit.

Estimated Number of Respondents: 5,800.

Estimated Total Annual Burden Hours: 483.

Dated: January 18, 2007.

Francis W. Foote,

Director, Regulations and Rulings Division.

[FR Doc. E7–981 Filed 1–23–07; 8:45 am]

BILLING CODE 4810–31–P

DEPARTMENT OF THE TREASURY

United States Mint

Notification of United States Mint Coin Product Price Adjustments

Summary: The United States Mint is adjusting the prices of 14 of its coin products for 2007.

Some of the United States Mint's annual sets have price increases to reflect the inclusion, beginning in 2007, of the Presidential $1 Coins. Some other products have price decreases to reflect lower costs attributable to manufacturing efficiencies and other factors. Effective January 19, 2007, the United States Mint will commence selling the following products at the prices indicated below:

Product	2006 price	New 2007 price
2007 14-Coin Clad Proof Set (10-Coin—2006)	$22.95	$26.95
2007 14-Coin Silver Proof Set (10-Coin—2006)	37.95	44.95
2007 50 State Quarters Silver Proof Set (5-Coin)	23.95	25.95
2007 28-Coin Uncirculated Set (20-Coin—2006)	16.95	22.95
Golden Dollar roll	35.50	35.95
50 State Quarters 1,000-coin bag	300.00	309.95
50 State Quarters two-roll set	32.00	32.95
50 State Quarters Clad Proof Set (5-Coin)	15.95	13.95
Kennedy Half Dollar bag	135.00	130.95
Kennedy Half Dollar rolls	35.50	32.95
Golden Dollar bag	347.00	319.95
50 State Quarters 100-coin bag	35.50	32.95
50 State Quarters FDCC	19.95	14.95
Education Set	14.50	11.95

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: January 19, 2007.

Edmund C. Moy,

Director, United States Mint.

[FR Doc. E7–982 Filed 1–23–07; 8:45 am]

BILLING CODE 4810–02–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0262]

Proposed Information Collection Activity: Proposed Collection; Comment Request

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Benefits Administration (VBA), Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension of a currently approved collection, and allow 60 days for public comment in response to the notice. This notice solicits comments for information needed to identify individuals authorized to certify reports on behalf of an educational institution or job training establishment.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before March 26, 2007.

ADDRESSES: Submit written comments on the collection of information through *www.Regulations.gov;* or to Nancy J. Kessinger, Veterans Benefits Administration (20M35), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420 or e-mail: *irmnkess@vba.va.gov*. Please refer to ''OMB Control No. 2900–0262'' in any correspondence. During the comment period, comments may be viewed online through the Federal Docket Management System (FDMS) at *www.Regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Nancy J. Kessinger at (202) 273–7079 or FAX (202) 275–5947.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Pub. L. 104–13; 44 U.S.C. 3501–3521), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VBA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VBA's functions, including whether the information will have practical utility; (2) the accuracy of VBA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Title: Designation of Certifying Official(s), VA Form 22–8794.

OMB Control Number: 2900–0262.

Type of Review: Extension of a currently approved collection.

Abstract: Educational institutions and job training establishments complete VA Form 22–8794 to provide the name of individuals authorized to certify reports on student enrollment and hours worked on behalf of the school or training facility. VA will use the data collected to ensure that education benefits are not awarded based on reports from someone other than the designated certifying official.

Affected Public: State, Local or Tribal Government, Business or other for-profit, and Not for-profit institutions.

Estimated Annual Burden: 533 hours.

Estimated Average Burden Per Respondent: 10 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 3,200.

Dated: January 12, 2007.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E7–963 Filed 1–23–07; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0091]

Proposed Information Collection Activity: Proposed Collection; Comment Request

AGENCY: Veterans Health Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Health Administration (VHA) is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension, without change, of a currently approved collection, and allow 60 days for public comment in response to the notice. This notice solicits comments on the information needed to enroll veterans into the VA health care system and to update an existing enrollee's personal data.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before March 26, 2007.

ADDRESSES: Submit written comments on the collection of information through *www.Regulations.gov;* or to Mary Stout, Veterans Health Administration (193E1), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420 or e-mail *mary.stout@va.gov.* Please refer to ''OMB Control No. 2900–0091'' in any correspondence. During the comment period, comments may be viewed online through the Federal Docket Management System (FDMS) at *www.Regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Mary Stout at (202) 273–8664.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Pub. L. 104–13; 44 U.S.C. 3501–3521), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VHA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VHA's functions, including whether the information will have practical utility; (2) the accuracy of VHA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) way to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Titles:

a. Application for Health Benefits, VA Form 10–10EZ.

b. Health Benefits Renewal Form, VA Form 10–10EZR.

OMB Control Number: 2900–0091.

Type of Review: Extension, without change, of a currently approved collection.

Abstract:

a. Veterans complete VA Form 10–10EZ to enroll in VA health care system. VA will use the information collected to determine the veteran's eligibility for medical benefits.

b. Veterans currently enrolled in VA health care system complete VA Form 10–10EZR to update their personal information such as martial status, address, health insurance and financial information.

Affected Public: Individuals or households.

Estimated Annual Burden: 1,008,180 hours.

a. VA Form 10–10EZ—527,580 hours.

b. VA Form 10–10EZR—480,600.

Estimated Average Burden Per Respondent:

a. VA Form 10–10EZ—45 minutes.

b. VA Form 10–10EZR—24 minutes.

Frequency of Response: Annually.

Estimated Number of Respondents: 1,904,940.

a. VA Form 10–10EZ—703,440.

b. VA Form 10–10EZR—1,201,500.

Dated: January 12, 2007.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E7–964 Filed 1–23–07; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0379]

Proposed Information Collection Activity: Proposed Collection; Comment Request

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: The Veterans Benefits Administration (VBA), Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension of a currently approved collection, and allow 60 days for public comment in response to the notice. This notice solicits comments on the information needed to verify the actual

number of hours worked by a work-study claimant.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before March 26, 2007.

ADDRESSES: Submit written comments on the collection of information through *www.Regulations.gov;* or to Nancy J. Kessinger, Veterans Benefits Administration (20M35), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420 or e-mail: *irmnkess@vba.va.gov.* Please refer to ''OMB Control No. 2900–0379'' in any correspondence. During the comment period, comments may be viewed online through the Federal Docket Management System (FDMS) at *www.Regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Nancy J. Kessinger at (202) 273–7079 or FAX (202) 275–5947.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995 (Pub. L. 104–13; 44 U.S.C. 3501–21), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, VBA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of VBA's functions, including whether the information will have practical utility; (2) the accuracy of VBA's estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Title: Time Record (Work-Study Program), VA Form 22–8690.

OMB Control Number: 2900–0379.

Type of Review: Extension of a currently approved collection.

Abstract: Training establishments complete VA Form 22–8690 to report the number of work-study hours a claimant has completed. When a claimant elects to receive an advance payment, VA will advance payment for 50 hours, but will withhold benefits (to recoup the advance payment) until the claimant completes 50 hours of service. If the claimant elects not to receive an advance payment, benefits are payable when the claimant completes 50 hours of service. VA uses the data collected to ensure that the amount of benefits payable to a claimant who is pursuing work-study is correct.

Affected Public: State, Local or Tribal Governments, Individuals or households, Business or other for-profit, Not-for-profit institutions, and Federal Government.

Estimated Annual Burden: 9,168 hours.

Estimated Average Burden Per Respondent: 5 minutes.

Frequency of Response: On occasion.

Estimated Annual Responses: 110,010.

Estimated Number of Respondents: 31,612.

Dated: January 12, 2007.

By direction of the Secretary.

Denise McLamb,

Program Analyst, Records Management Service.

[FR Doc. E7–965 Filed 1–23–07; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

Advisory Committee on Former Prisoners of War; Notice of Availability of Report

In compliance with section 13 of Public Law 92–463 (Federal Advisory Committee Act) notice is hereby given that a report of the Department of Veterans Affairs (VA) Advisory Committee on Former Prisoners of War has been issued. The report summarizes activities and recommendations of the Committee on matters relative to VA programs and policies affecting former prisoners of war veterans. It is available for public inspection at two locations.

Mr. Richard Yarnall, Federal Advisory Committee Desk, Library of Congress, Anglo-American Acquisition Division, Government Documents Section, Room LM–B42, 101 Independence Avenue, SE., Washington DC 20540–4172;

and

Department of Veterans Affairs, Compensation of Pension Service, Room 645F (21), 1800 G Street, NW., Washington DC 20006.

Dated: January 17, 2007.

By Direction of the Secretary.

E. Philip Riggin,

Committee Management Officer.

[FR Doc. 07–278 Filed 1–23–07; 8:45 am]

BILLING CODE 8320–01–M

Federal Register

Wednesday,

January 24, 2007

Part II

Environmental Protection Agency

40 CFR Part 86

Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines—Heavy-Duty Vehicle and Engine Standards; Onboard Diagnostic Requirements; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 86

[OAR–2005–0047; FRL–8256–9]

RIN 2060–AL92

Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines; Regulations Requiring Onboard Diagnostic Systems on 2010 and Later Heavy-Duty Engines Used in Highway Applications Over 14,000 Pounds; Revisions to Onboard Diagnostic Requirements for Diesel Highway Heavy-Duty Vehicles Under 14,000 Pounds

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of proposed rulemaking.

SUMMARY: In 2001, EPA finalized a new, major program for highway heavy-duty engines. That program, the Clean Diesel Trucks and Buses program, will result in the introduction of advanced emissions control systems such as catalyzed diesel particulate filters (DPF) and catalysts capable of reducing harmful nitrogen oxide (NO_X) emissions. This proposal would require that these advanced emissions control systems be monitored for malfunctions via an onboard diagnostic system (OBD), similar to those systems that have been required on passenger cars since the mid-1990s. This proposal would require manufacturers to install OBD systems that monitor the functioning of emission control components and alert the vehicle operator to any detected need for emission related repair. This proposal would also require that manufacturers make available to the service and repair industry information necessary to perform repair and maintenance service on OBD systems and other emission related engine components. Lastly, this proposal would revise certain existing OBD requirements for diesel engines used in heavy-duty vehicles under 14,000 pounds.

DATES: If we do not receive a request for a public hearing, written comments are due March 26, 2007. Requests for a public hearing must be received by February 8, 2007. If we do receive a request for a public hearing, we will publish a notice in the **Federal Register** and on the Web at *http://www.epa.gov/obd/regtech/heavy.htm* containing details regarding the location, date, and time of the public hearing. In that case, the public comment period would close 30 days after the public hearing. Under the Paperwork Reduction Act, comments on the information collection provisions must be received by OMB on or before February 23, 2007.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2005–0047, by one of the following methods:

• *http://www.regulations.gov:* Follow the on-line instructions for submitting comments.

• *Mail:* Onboard Diagnostic (OBD) Systems on 2010 and Later Heavy-Duty Highway Vehicles and Engines, Environmental Protection Agency, Mailcode: 6102T, 1200 Pennsylvania Ave., NW., Washington, DC, 20460, Attention Docket ID No. EPA–HQ–OAR–2005–0047. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th St. NW., Washington, DC 20503.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OAR–2005–0047. 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.

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 Air 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 Air Docket is (202) 566–1742.

Note: The EPA Docket Center suffered damage due to flooding during the last week of June 2006. The Docket Center is continuing to operate. However, during the cleanup, there will be temporary changes to Docket Center telephone numbers, addresses, and hours of operation for people who wish to make hand deliveries or visit the Public Reading Room to view documents. Consult EPA's **Federal Register** notice at 71 FR 38147 (July 5, 2006) or the EPA Web site at *http://www.epa.gov/epahome/dockets.htm* for current information on docket operations, locations and telephone numbers. The Docket Center's mailing address for U.S. mail and the procedure for submitting comments to *www.regulations.gov* are not affected by the flooding and will remain the same.

FOR FURTHER INFORMATION CONTACT: U.S. EPA, National Vehicle and Fuel Emissions Laboratory, Assessment and Standards Division, 2000 Traverwood Drive, Ann Arbor, MI 48105; telephone (734) 214–4405, fax (734) 214–4816, email *sherwood.todd@epa.gov.*

SUPPLEMENTARY INFORMATION:

Regulated Entities

This action will affect you if you produce or import new heavy-duty engines which are intended for use in highway vehicles such as trucks and buses, or produce or import such highway vehicles, or convert heavy-duty vehicles or heavy-duty engines used in highway vehicles to use alternative fuels.

The following table gives some examples of entities that may have to follow the regulations. But because these are only examples, you should carefully examine the regulations in 40 CFR part 86. If you have questions, call the person listed in the **FOR FURTHER INFORMATION CONTACT** section of this preamble:

Category	NAICS Codes[a]	SIC Codes[b]	Examples of potentially regulated entities
Industry	336111 336112 336120	3711	Motor Vehicle Manufacturers; Engine and Truck Manufacturers.
Industry	811112 811198 541514	7533 7549 8742	Commercial Importers of Vehicles and Vehicle Components.
Industry	336111 336312 422720 454312 811198 541514 541690	3592 3714 5172 5984 7549 8742 8931	Alternative fuel vehicle converters.

[a]North American Industry Classification Systems (NAICS).
[b]Standard Industrial Classification (SIC) system code.

What Should I Consider as I Prepare My Comments for EPA?

Submitting CBI. Do not submit this information to EPA through *www.regulations.gov* or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI). In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

Tips for Preparing Your Comments. When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Follow directions—The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

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I. Overview

A. Background

Section 202(m) of the CAA, 42 U.S.C. 7521(m), directs EPA to promulgate regulations requiring 1994 and later model year light-duty vehicles (LDVs) and light-duty trucks (LDTs) to contain an OBD system that monitors emission-related components for malfunctions or deterioration ''which could cause or result in failure of the vehicles to comply with emission standards established'' for such vehicles. Section 202(m) also states that, ''The Administrator may, in the Administrator's discretion, promulgate regulations requiring manufacturers to install such onboard diagnostic systems on heavy-duty vehicles and engines.''

On February 19, 1993, we published a final rule requiring manufacturers of light-duty applications to install such OBD systems on their vehicles beginning with the 1994 model year (58 FR 9468). The OBD systems must monitor emission control components for any malfunction or deterioration that could cause exceedance of certain emission thresholds. The regulation also required that the driver be notified of any need for repair via a dashboard light, or malfunction indicator light (MIL), when the diagnostic system detected a problem. We also allowed optional compliance with California's second phase OBD requirements, referred to as OBDII (13 CCR 1968.1), for purposes of satisfying the EPA OBD requirements. Since publishing the 1993 OBD final rule, EPA has made several revisions to the OBD requirements, most of which served to align the EPA OBD requirements with revisions to the California OBDII requirements (13 CCR 1968.2).

On August 9, 1995, EPA published a final rulemaking that set forth service information regulations for light-duty vehicles and light-duty trucks (60 FR 40474). These regulations, in part, required each Original Equipment Manufacturer (OEM) to do the following: (1) List all of its emission-related service and repair information on a Web site called FedWorld (including the cost of each item and where it could be purchased); (2) either provide enhanced information to equipment and tool companies or make its OEM-specific diagnostic tool available for purchase by aftermarket technicians, and (3) make reprogramming capability available to independent service and repair professionals if its franchised dealerships had such capability. These requirements are intended to ensure that aftermarket service and repair facilities

have access to the same emission-related service information, in the same or similar manner, as that provided by OEMs to their franchised dealerships. These service information availability requirements have been revised since that first final rule in response to changing technology among other reasons. (68 FR 38428)

In October of 2000, we published a final rule requiring OBD systems on heavy-duty vehicles and engines up to 14,000 pounds GVWR (65 FR 59896). In that rule, we expressed our intention of developing OBD requirements in a future rule for vehicles and engines used in vehicles over 14,000 pounds. We expressed this same intention in our 2007HD highway final rule (66 FR 5002) which established new heavy-duty highway emissions standards for 2007 and later model year engines. In June of 2003, we published a final rule extending service information availability requirements to heavy-duty vehicles and engines weighing up to 14,000 pounds GVWR. We declined extending these requirements to engines above 14,000 pounds GVWR at least until such engines are subject to OBD requirements.

On January 18, 2001, EPA established a comprehensive national control program—the Clean Diesel Truck and Bus program—that regulates the heavy-duty vehicle and its fuel as a single system. (66 FR 5002) As part of this program, new emission standards will begin to take effect in model year 2007 and will apply to heavy-duty highway engines and vehicles. These standards are based on the use of high-efficiency catalytic exhaust emission control devices or comparably effective advanced technologies. Because these devices are damaged by sulfur, the regulation also requires the level of sulfur in highway diesel fuel be reduced by 97 percent.[1]

Today's action proposes new OBD requirements for highway engines used in vehicles greater than 14,000 pounds. Today's action also proposes new availability requirements for emission-related service information that will make this information more widely available to the industry servicing vehicles over 14,000 pounds.

In addition to these proposed requirements and changes, we are seeking comment on possible future regulations that would require OBD systems on heavy-duty diesel engines used in nonroad equipment. Diesel engines used in nonroad equipment are, like highway engines, a major source of NO_X and particulate matter (PM) emissions, and the diesel engines used in nonroad equipment are essentially the same as those used in heavy-duty highway trucks. Further, new regulations applicable to nonroad diesel engines will result in the introduction of advanced emissions control systems like those expected for highway diesel engines. (69 FR 38958) Therefore, having OBD systems and OBD regulations for nonroad engines seems to be a natural progression from the proposed requirements for heavy-duty highway engines. We discuss this issue in greater detail in section I of this preamble with the goal of soliciting public comment regarding how we should proceed with respect to nonroad OBD.

B. What Is EPA Proposing?

1. OBD Requirements for Engines Used in Highway Vehicles Over 14,000 Pounds GVWR

We believe that OBD requirements should be extended to include over 14,000 pound heavy-duty vehicles and engines for many reasons. In the past, heavy-duty diesel engines have relied primarily on in-cylinder modifications to meet emission standards. For example, emission standards have been met through changes in fuel timing, piston design, combustion chamber design, charge air cooling, use of four valves per cylinder rather than two valves, and piston ring pack design and location improvements. In contrast, the 2004 and 2007 emission standards represent a different sort of technological challenge that are being met with the addition of exhaust gas recirculation (EGR) systems and the addition of exhaust aftertreatment devices such as diesel particulate filters (DPF), sometimes called PM traps, and NO_X catalysts. Such ''add on'' devices can experience deterioration and malfunction that, unlike the engine design elements listed earlier, may go unnoticed by the driver. Because deterioration and malfunction of these devices can go unnoticed by the driver, and because their primary purpose is emissions control, and because the level of emission control is on the order of 50 to 99 percent, some form of diagnosis and malfunction detection is crucial. We believe that such detection can be effectively achieved by employing a well designed OBD system.

The same is true for gasoline heavy-duty vehicles and engines. While emission control is managed with both engine design elements and aftertreatment devices, the catalytic converter is the primary emission control feature accounting for over 95 percent of the emission control. We believe that monitoring the emission control system for proper operation is critical to ensure that new vehicles and engines certified to the very low emission standards set in recent years continue to meet those standards throughout their full useful life.

Further, the industry trend is clearly toward increasing use of computer and electronic controls for both engine and powertrain management, and for emission control. In fact, the heavy-duty industry has already gone a long way, absent any government regulation, to standardize computer communication protocols.[2] Computer and electronic control systems, as opposed to mechanical systems, provide improvements in many areas including, but not limited to, improved precision and control, reduced weight, and lower cost. However, electronic and computer controls also create increased difficulty in diagnosing and repairing the malfunctions that inevitably occur in any engine or powertrain system. Today's proposed OBD requirements would build on the efforts already undertaken by the industry to ensure that key emissions related components will be monitored in future heavy-duty vehicles and engines and that the diagnosis and repair of those components will be as efficient and cost effective as possible.

Lastly, heavy-duty engines and, in particular, diesel engines tend to have very long useful lives. With age comes deterioration and a tendency toward increasing emissions. With the OBD systems proposed today, we expect that these engines will continue to be properly maintained and therefore will continue to emit at low emissions levels even after accumulating hundreds of thousands and even a million miles.

For the reasons laid out above, most manufacturers of vehicles, trucks, and engines have incorporated some type of OBD system into their products that are capable of identifying when certain types of malfunctions occur, and in what systems. In the heavy-duty industry, those OBD systems traditionally have been geared toward

[1] Note that the 2007HD highway rule contained new emissions standards for gasoline engines as well as diesel engines.

[2] See ''On-Board Diagnostics, A Heavy-Duty Perspective,'' SAE 951947; ''Recommended Practice for a Serial Control and Communications Vehicle Network,'' SAE J1939 which may be obtained from Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA, 15096–0001; and ''Road Vehicles-Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems,'' ISO 15765–4:2001 which may be obtained from the International Organization for Standardization, Case Postale 56, CH–1211 Geneva 20, Switzerland.

detecting malfunctions causing drivability and/or fuel economy related problems. Without specific requirements for manufacturers to include OBD mechanisms to detect emission-related problems, those types of malfunctions that could result in high emissions without a corresponding adverse drivability or fuel economy impact could go unnoticed by both the driver and the repair technician. The resulting increase in emissions and detrimental impact on air quality could be avoided by incorporating an OBD system capable of detecting emission control system malfunctions.

2. Requirements That Service Information Be Made Available

We are proposing that makers of engines that go into vehicles over 14,000 pounds make available to any person engaged in repair or service all information necessary to make use of the OBD systems and for making emission-related repairs, including any emissions-related information that is provided by the OEM to franchised dealers. This information includes, but is not limited to, manuals, technical service bulletins (TSBs), a general description of the operation of each OBD monitor, etc. We discuss the proposed requirements further in section IV of this preamble.

The proposed requirements are similar to those required currently for all 1996 and newer light-duty vehicles and light-duty trucks and 2005 and newer heavy-duty applications up to 14,000 pounds. While EPA understands that there may be some differences between aftermarket service for the under 14,000 pound and over 14,000 pound applications, we believe that any such differences would not substantially affect the implementation of such requirements and that, therefore, it is reasonable to use EPA's existing service information regulations as a basis for proposing service information requirements for the over 14,000 pound arena. See section IV for a complete discussion of the service information provisions being proposed for the availability of over 14,000 pound service information.

Note that information for making emission-related repairs does not include information used to design and manufacture parts, but it may include OEM changes to internal calibrations and other indirect information, as discussed in section IV.

3. OBD Requirements for Diesel Heavy-Duty Vehicles and Engines Used in Vehicles Under 14,000 Pounds

We are also proposing some changes to the existing diesel OBD requirements for heavy-duty applications under 14,000 pounds (i.e., 8,500 to 14,000 pounds). Some of these changes are being proposed for the 2007 and later model years (i.e., for immediate implementation) because we believe that some of the requirements that we currently have in place for 8,500 to 14,000 pound applications cannot be met by diesels without granting widespread deficiencies to industry. Other changes are being proposed for the 2010 and later model years since they represent an increase in the stringency of our current OBD requirements and, therefore, some leadtime is necessary for manufacturers to comply. All of the changes being proposed for 8,500 to 14,000 pound diesel applications would result in OBD emissions thresholds identical, for all practical purposes, to the OBD thresholds being proposed for over 14,000 pound applications.

C. Why Is EPA Making This Proposal?

1. Highway Engines and Vehicles Contribute to Serious Air Pollution Problems

The pollution emitted by heavy-duty highway engines contributes greatly to our nation's continuing air quality problems. Our 2007HD highway rule was designed to address these serious air quality problems. These problems include premature mortality, aggravation of respiratory and cardiovascular disease, aggravation of existing asthma, acute respiratory symptoms, chronic bronchitis, and decreased lung function. Numerous studies also link diesel exhaust to increased incidence of lung cancer. We believe that diesel exhaust is likely to be carcinogenic to humans by inhalation and that this cancer hazard exists for occupational and environmental levels of exposure.

Our 2007HD highway rule will regulate the heavy-duty vehicle and its fuel as a single system. As part of this program, new emission standards will begin to take effect in model year 2007 and phase-in through model year 2010, and will apply to heavy-duty highway engines and vehicles. These standards are based on the use of high-efficiency catalytic exhaust emission control devices or comparably effective advanced technologies and a cap on the allowable sulfur content in both diesel fuel and gasoline.

In the 2007HD highway final rule, we estimated that, by 2007, heavy-duty trucks and buses would account for about 28 percent of nitrogen oxides emissions and 20 percent of particulate matter emissions from mobile sources. In some urban areas, the contribution is even greater. The 2007HD highway program will reduce particulate matter and oxides of nitrogen emissions from heavy-duty engines by 90 percent and 95 percent below current standard levels, respectively. In order to meet these more stringent standards for diesel engines, the program calls for a 97 percent reduction in the sulfur content of diesel fuel. As a result, diesel vehicles will achieve gasoline-like exhaust emission levels. We have also established more stringent standards for heavy-duty gasoline vehicles, based in part on the use of the low sulfur gasoline that will be available when the standards go into effect.

2. Emissions Control of Highway Engines and Vehicles Depends on Properly Operating Emissions Control Systems

The emissions reductions and resulting health and welfare benefits of the 2007HD highway program will be dramatic when fully implemented. By 2030, the program will reduce annual emissions of nitrogen oxides, nonmethane hydrocarbons, and particulate matter by a projected 2.6 million, 115,000 and 109,000 tons, respectively. However, to realize those large emission reductions and health benefits, the emission control systems on heavy-duty highway engines and vehicles must continue to provide the 90 to 95 percent emission control effectiveness throughout their operating life. Today's proposed OBD requirements will help to ensure that emission control systems continue to operate properly by detecting when those systems malfunction, by then notifying the driver that a problem exists that requires service and, lastly, by informing the service technician what the problem is so that it can be properly repaired.

3. Basis for Action Under the Clean Air Act

Section 202(m) of the CAA, 42 U.S.C. 7521(m), directs EPA to promulgate regulations requiring 1994 and later model year light-duty vehicles (LDVs) and light-duty trucks (LDTs) to contain an OBD system that monitors emission-related components for malfunctions or deterioration ''which could cause or result in failure of the vehicles to comply with emission standards established'' for such vehicles. Section

202(m) also states that, ''The Administrator may, in the Administrator's discretion, promulgate regulations requiring manufacturers to install such onboard diagnostic systems on heavy-duty vehicles and engines.''

Section 202(m)(5) of the CAA states that the Administrator shall require manufacturers to, ''provide promptly to any person engaged in the repairing or servicing of motor vehicles or motor vehicle engines * * * with any and all information needed to make use of the emission control diagnostics system prescribed under this subsection and such other information including instructions for making emission related diagnosis and repairs.''

D. How Has EPA Chosen the Level of the Proposed Emissions Thresholds?

The OBD emissions thresholds that we are proposing are summarized in Tables II.B–1, II.C–1, II.H–1 and II.H–2. These tables show the actual threshold levels and how they relate to current emissions standards. Here, we wish to summarize how we chose those proposed thresholds. First, it is important to note that OBD is more than emissions thresholds. In fact, most OBD monitors are not actually tied to an emissions threshold. Instead, they monitor the performance of a given component or system and evaluate that performance based on electrical information (e.g., voltage within proper range) or temperature information (e.g., temperature within range), etc. Such monitors often detect malfunctions well before emissions are seriously compromised. Nonetheless, emissions thresholds are a critical element to OBD requirements since some components and systems, most notably any aftertreatment devices, cannot be monitored in simple electrical or temperature related terms. Instead, their operating characteristics can be measured and correlated to an emissions impact. This way, when those operating characteristics are detected, an unacceptable emissions increase can be inferred and a malfunction can be noted to the driver.

Part of the challenge in establishing OBD requirements is determining the point—the OBD threshold—at which an unacceptable emissions increase has occurred that is detectable by the best available OBD technology. Two factors have gone into our determination of the emissions thresholds we are proposing: technological feasibility; and the costs and emissions reductions associated with repairs initiated as a result of malfunctions found by OBD systems. The first of these factors is discussed in more detail in section III where we present our case for the technological feasibility of the thresholds. In summary, we believe that the thresholds we are proposing are, while challenging, technologically feasible in the 2010 and later timeframe. We have carefully considered monitoring system capability, sensor capability, emissions measurement capability, test-to-test variability and, perhaps most importantly, the manufacturers' engineering and test cell resources and have arrived at thresholds we believe can be met on one engine family per manufacturer in the 2010 model year and on all engine families by the 2013 model year.

We believe that the proposed thresholds strike the proper balance between environmental protection, OBD and various sensor capabilities, and avoidance of repairs whose costs could be high compared to their emission control results. One must keep in mind that increasingly stringent OBD thresholds (i.e., OBD detection at lower emissions levels) may lead to more durable emission controls due to a manufacturer's desire to avoid the negative impression given their product upon an OBD detection. Such an outcome would result in lower fleetwide emissions while increasing costs to manufacturers. However, increasingly stringent OBD thresholds may also lead to more OBD detections and more OBD induced repairs and, perhaps, many OBD induced repairs for malfunctions having little impact on emissions. Such an outcome would result in lower fleetwide emissions while increasing costs to both manufacturers and truck owners.

E. World Wide Harmonized OBD (WWH–OBD)

Within the United Nations (UN), the World Forum for Harmonization of Vehicle Regulations (WP.29) administers the 1958 Geneva Agreement (1958 Agreement) to facilitate the adoption of uniform conditions of approval and reciprocal recognition of approval for motor vehicle equipment and parts. As a result, WP.29 has responsibility for vehicle regulations within Europe and, indirectly, many countries outside of Europe that have voluntarily adopted the WP.29 regulations. The United States was never a party to the 1958 Agreement, but EPA has monitored the WP.29 regulations developed under the 1958 Agreement and we have benefited from a reciprocal consultative relationship with our European counterparts. More recently, WP.29 took on the responsibility of administering the 1998 Global Agreement that established a process to permit all regions of the world to jointly develop global technical regulations without required mutual recognition of approvals or designated compliance and enforcement. The United States is a signatory of the 1998 Global Agreement (1998 Agreement), and EPA has responsibility for representing the U.S. with respect to environmental issues within WP.29 as they pertain to the 1998 Agreement.

During the one-hundred-and-twenty-sixth session of WP.29 of March 2002, the Executive Committee (AC.3) of the 1998 Global Agreement (1998 Agreement) adopted a Programme of Work, which includes the development of a Global Technical Regulation (GTR) concerning onboard diagnostic systems for heavy-duty vehicles and engines. An informal working group—the WWH–OBD working group—was established to develop the GTR. The working group was instructed that the OBD system should detect failures from the engine itself, as well as from the exhaust aftertreatment systems fitted downstream of the engine, and from the package of information exchanged between the engine electronic control unit(s) and the rest of vehicle and/or powertrain. The working group was also instructed to base the OBD requirements on the technologies expected to be industrially available at the time the GTR would be enforced, and to take into account both the expected state of electronics in the years 2005–2008 and the expected newest engine and aftertreatment technologies.

In November 2003, AC.3 further directed the working group to structure the GTR in such a manner as to enable its future extension to other functions of the vehicle. In so doing, AC.3 did not revise the scope of the task given to the working group (i.e., the scope remained emissions-related heavy-duty OBD). As a result, the GTR is structured such that OBD monitoring and communications could be extended to other systems such as vehicle safety systems. This has been achieved by dividing the GTR into a set of generic OBD requirements to be followed by specific OBD requirements concerning any future desired OBD systems. The generic OBD requirements contain definitions and other OBD regulatory elements that are meant to be applicable throughout the GTR and all of its modules, annexes, and appendices. This generic section is followed by the first specific OBD section—emission-related OBD—which contains definitions and OBD regulatory elements specific to emissions-related OBD.

EPA has been active in the WWH–OBD working group for more than three

years. Because that group has been developing a regulation at the same time that we have been developing the requirements in this proposal, our proposed OBD requirements are consistent, for the most part, with the current efforts of the WWH–OBD group.

The WWH–OBD working group submitted a draft GTR as a formal document in March of 2006. During the months immediately following, the WWH–OBD working group has made final revisions to the GTR and will submit it to WP.29 for consideration. If approved by WP.29 and adopted as a formal global technical regulation, we would intend to propose any revisions to our OBD regulations that might be necessary to make them consistent with WWH–OBD.[3]

The latest version of the draft WWH–OBD GTR has been placed in the docket for this rule.[4] While it is not yet a final document, we are nonetheless interested in comments regarding the current version. More specifically, we are interested in comments regarding any possible inconsistencies between the requirements of the draft GTR and the requirements being proposed today. We believe that if such inconsistencies exist, they are minor. WWH–OBD provides a framework for nations to establish a heavy-duty OBD program. It has the potential to result in similar OBD systems, but the WWH–OBD GTR must fit into the context of any country's existing heavy-duty emissions regulations. For example, at this time, the draft GTR does not specify emissions threshold levels, implementation dates, or phase-in schedules. As such, our proposal today is much more detailed than the draft WWH–OBD GTR, but we believe there exist no major inconsistencies between the two regulations.

F. Onboard Diagnostics for Diesel Engines Used in Nonroad Land-Based Equipment

We are also considering regulations—although we are not making any proposals today—that would require OBD systems on heavy-duty diesel engines used in nonroad land-based equipment. The pollution emitted by diesel nonroad engines contributes greatly to our nation's continuing air quality problems. Our recent Nonroad Tier 4 rulemaking was designed to address these serious air quality problems from land-based diesel engines. (69 FR 38958) Like with diesel highway emissions, these problems include premature mortality, aggravation of respiratory and cardiovascular disease, aggravation of existing asthma, acute respiratory symptoms, chronic bronchitis, and decreased lung function. And, as noted above, we believe that diesel exhaust is likely to be carcinogenic to humans by inhalation and that this cancer hazard exists for occupational and environmental levels of exposure.

In our preamble to the Nonroad Tier 4 final rule, we estimated that, absent the nonroad Tier 4 standards, by 2020, land based nonroad diesel engines would account for as much as 70 percent of the diesel mobile source PM inventory. As part of our nonroad Tier 4 program, new emission standards will begin to take effect in calendar year 2011 that are based on the use of high-efficiency catalytic exhaust emission control devices or comparably effective advanced technologies. As with our 2007HD highway program, a cap is also included on the allowable sulfur content in nonroad diesel fuel.

The diesel engines used in nonroad land-based equipment are, in certain horsepower ranges, often essentially the same as those used in heavy-duty highway trucks. In other horsepower ranges—e.g., very large nonroad machines with engines having more than 1,500 horsepower—the engine is quite different. Such differences can include the addition of cylinders and turbo chargers among other things. Notably, the new nonroad Tier 4 regulations will result in the introduction of advanced emissions control systems on nonroad land-based equipment; those advanced emissions control systems will be the same type of systems as those expected for highway diesel engines.

Therefore, having OBD systems and OBD regulations for nonroad diesel engines seems to be a natural progression from the proposed requirements for heavy-duty highway engines. Nonetheless, we believe that there are differences between nonroad equipment and highway applications, and differences between the nonroad market and the highway market such that proposing the same OBD requirements for nonroad as for highway may not be appropriate. Therefore, we are providing advance notice to the public with the goal of soliciting public comment regarding how we should proceed with respect to nonroad OBD. This section presents issues we have identified and solicits comment. We also welcome comment with respect to other issues we have not addressed here, such as service information availability.

1. What Is the Baseline Nonroad OBD System?

We know that highway diesel engines already use a sophisticated level of OBD system. For nonroad diesel engines in the 200 to 600 horsepower range—i.e., the typical range of highway engines—are the current OBD system identical to their highway counterparts? How would the proposed highway OBD requirements change this, if at all? Do diesel engines outside the range typical of highway engines use OBD?

2. What Is the Appropriate Level of OBD Monitoring for Nonroad Diesel Engines?

The proposed OBD requirements for highway engines are very comprehensive and would result in virtually every element of the emissions control system being monitored. Is this appropriate for nonroad diesel engines? And to what degree should such monitoring be required? The emissions thresholds proposed for highway engines will push OBD and sensor technology beyond where it is today because of their stringency. Is a similar level of stringency appropriate for nonroad engines? Should emissions thresholds analogous to those presented in Table II.B–1 of this preamble even be a part of any potential nonroad OBD requirements or should nonroad OBD rely more heavily on comprehensive component monitoring as discussed in section II.D.4 of this preamble? This latter question is particularly compelling given the incredibly broad range of operating characteristics for nonroad equipment. Similar to the issue of emissions thresholds, certain aspects of the proposed highway OBD requirements carry with them serious concerns given the range of use for heavy-duty highway trucks (line-haul trucks versus garbage trucks versus urban delivery trucks, etc.). As discussed in various places in section II of this preamble, this broad range of uses makes it difficult for manufacturers to design a single approach that would, for example, ensure frequent monitoring events on all possible applications. This difficulty could be even more pronounced in the nonroad industry given the greater number of possible applications.

[3] Note that, while the WWH–OBD GTR is consistent with many of the specific requirements we are proposing, it is not currently as comprehensive as our proposal (e.g., it does not contain the same level of detail with respect to certification requirements and enforcement provisions). For that reason, at this time, we do not believe that the GTR would fully replace what we are proposing today.

[4] ''Revised Proposal for New Draft Global Technical Regulation (gtr): Technical Requirements for On-Board Diagnostic Systems (OBD) for Road Vehicles;'' ECE/TRANS/WP.29/GRPE/2006/8/Rev.1; March 27, 2006, Docket ID# EPA–HQ–OAR–2005–0047–0004.

We request comment regarding what any potential nonroad OBD monitoring requirements should look like. More specifically, we request comment regarding the inclusion of emissions thresholds versus relying solely on comprehensive component monitoring. From commenters in favor of emissions thresholds, we request details regarding the appropriate level of emissions thresholds including data and strong engineering analyses for/against the suggested level. We request comment regarding the comprehensiveness of monitoring (i.e., the entire emissions control system, aftertreatement devices only, feedback control systems only, etc.).

3. What Should the OBD Standardization Features Be?

Should nonroad OBD include a requirement for a dedicated, OBD-only malfunction indicator light? Should nonroad OBD require specific communication protocols for communication of onboard information to offboard devices and scan tools? What should those protocols be? What are the needs of the nonroad service industry with respect to standardization of onboard to offboard communications?

4. What Are the Prospects and/or Desires for International Harmonization of Nonroad OBD?

Nonroad equipment is perhaps the most international of all mobile source equipment. Land based nonroad equipment, while not as much so as marine equipment, tends to be designed, produced, marketed, and sold to a world market to a greater extent than is highway equipment. Given that, is there a sense within the nonroad industry that international harmonization is important? Imperative? Is the proper avenue for putting into place nonroad OBD regulations the WWH–OBD process discussed above? If so, is industry prepared to play a role in developing a nonroad OBD element to the WWH–OBD document? Are other government representatives prepared to do so?

II. What Are the Proposed OBD Requirements and When Would They Be Implemented?

The following subsections describe our proposed OBD monitoring requirements and the timelines for their implementation. The requirements are indicative of our goal for the program which is a set of OBD monitors that provide robust diagnosis of the emission control system. Our intention is to provide industry sufficient time and experience with satisfying the demands of the proposed OBD program. While their engines already incorporate OBD systems, those systems are generally less comprehensive and do not monitor the emission control system in the ways we are proposing. Additionally, the proposed OBD requirements represent a new set of technological requirements and a new set of certification requirements for the industry in addition to the 2007HD highway program and its challenging emission standards for PM and NO_X and other pollutants. As a result, we believe the monitoring requirements and timelines outlined in this section appropriately weigh the need for OBD monitors on the emission control system and the need to gain experience with not only those monitors but also the newly or recently added emission control hardware.

We request comment on all aspects of the requirements laid out in this section and throughout this preamble. As discussed in Section IX, we are also interested in comments concerning state run HDOBD-based inspection and maintenance (I/M) programs, the level of interest in such programs, and comments concerning the suitability of today's proposed OBD requirements toward facilitating potential HDOBD I/M programs in the future.

A. General OBD System Requirements

1. The OBD System

We are proposing that the OBD system be designed to operate for the actual life of the engine in which it is installed. Further, the OBD system cannot be programmed or otherwise designed to deactivate based on age and/or mileage of the vehicle during the actual life of the engine. This requirement is not intended to alter existing law and enforcement practice regarding a manufacturer's liability for an engine beyond its regulatory useful life, except where an engine has been programmed or otherwise designed so that an OBD system deactivates based on age and/or mileage of the engine.

We are also proposing that computer coded engine operating parameters not be changeable without the use of specialized tools and procedures (e.g. soldered or potted computer components or sealed (or soldered) computer enclosures). Upon Administrator approval, certain product lines may be exempted from this requirement if those product lines can be shown to not need such protections. In making the approval decision, the Administrator will consider such things as the current availability of performance chips, performance capability of the engine, and sales volume.

2. Malfunction Indicator Light (MIL) and Diagnostic Trouble Codes (DTC)

Upon detecting a malfunction within the emission control system,[5] the OBD system must make some indication to the driver so that the driver can take action to get the problem repaired. The proposal would require that a dashboard malfunction indicator light (MIL) be illuminated to inform the driver that a problem exists that needs attention. Upon illumination of the MIL, the proposal would require that a diagnostic trouble code (DTC) be stored in the engine's computer that identifies the detected malfunction. This DTC would then be read by a service technician to assist in making the necessary repair.

Because the MIL is meant to inform the driver of a detected malfunction, we are proposing that the MIL be located on the driver's side instrument panel and be of sufficient illumination and location to be readily visible under all lighting conditions. We are proposing that the MIL be amber (yellow) in color when illuminated because yellow is synonymous with the notion of a ''cautionary warning''; the use of red for the MIL would be strictly prohibited because red signifies ''danger'' which is not the proper message for malfunctions detected according to today's proposal. Further, we are proposing that, when illuminated, the MIL display the International Standards Organization (ISO) engine symbol because this symbol has become accepted after 10 years of light-duty OBD as a communicator of engine and emissions system related problems. We are also proposing that there be only one MIL used to indicate all malfunctions detected by the OBD system on a single vehicle. We believe this is important to avoid confusion over multiple lights and, potentially, multiple interpretations of those lights. Nonetheless, we seek comment on this limitation to one dedicated MIL to communicate emissions-related malfunctions. We also seek comment on the requirement that the MIL be amber in color since some trucks may use liquid crystal display (LCD) panels to display dashboard information and some such panels are monochromic and unable to display color.

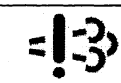
We are also interested in comments regarding the malfunction indicator light and the symbol displayed to

[5] What constitutes a ''malfunction'' for over 14,000 pound applications under today's proposal is covered in section II.B for diesel engines, section II.C for gasoline engines, and section II.D for all engines.

communicate that there is an engine and/or emission-related malfunction. As noted, we are proposing use of the ISO engine symbol as shown in Table II.A–1. The U.S. Department of Transportation has proposed use of an alternative ISO symbol to denote, specifically, an emission-related malfunction. (68 FR 55217) That symbol is also shown in Table II.A–1. While we are not proposing that this alternative symbol be used, comments are solicited regarding whether this alternative symbol provides a clearer message to the driver.

Generally, a manufacturer would be allowed sufficient time to be certain that a malfunction truly exists before illuminating the MIL. No one benefits if the MIL illuminates spuriously when a real malfunction does not exist. Thus, for most OBD monitoring strategies, manufacturers would not be required to illuminate the MIL until a malfunction clearly exists which will be considered to be the case when the same problem has occurred on two sequential driving cycles.[6]

Table II.A-1. ISO Warning Light Symbols

ISO Designation	Displayed Symbol	Comments
F01		Proposed for >14K OBD
F22		Proposed by U.S. DOT; Comments requested as possible MIL display for >14K OBD

To keep this clear in the onboard computer, we are proposing that the OBD system make certain distinctions between the problems it has detected, and that the system maintain a strict logic for diagnostic trouble code (DTC) storage/erasure and for MIL illumination/extinguishment. Whenever the enable criteria for a given monitor are met, we would expect that monitor to run. For continuous monitors, this would be during essentially all engine operation.[7] For non-continuous monitors, it would be during only a subset of engine operation.[8] In general, we are proposing that monitors make a diagnostic decision just once per drive cycle that contains operation satisfying the enable criteria for the given monitor.

When a problem is first detected, we are proposing that a ''pending'' DTC be stored. If, during the subsequent drive cycle that contains operation satisfying the enable criteria for the given monitor, a problem in the components/system is not again detected, the OBD system would declare that a malfunction does not exist and would, therefore, erase the pending DTC. However, if, during the subsequent drive cycle that contains operation satisfying the enable criteria for the given monitor, a problem in the component/system is again detected, a malfunction has been confirmed and, hence, a ''confirmed'' or ''MIL-on'' DTC would be stored.[9] Section II.F presents the requirements for standardization of OBD information and communications. Upon storage of a MIL-on DTC and, depending on the communication protocol used—ISO 15765–4 or SAE J1939—the pending DTC would either remain stored or be erased, respectively. Today's proposal neither stipulates which communication protocol nor which pending DTC logic be used. We are proposing to allow the use of either of the existing protocols as is discussed in more detail in section II.F. Upon storage of the MIL-on DTC, the MIL must be illuminated.[10] Also at this time, a ''permanent'' DTC would be stored (see section II.F.4 for more details regarding permanent DTCs and our rationale for proposing them).[11]

We are also proposing that, after three subsequent drive cycles that contain operation satisfying the enable criteria for the given monitor without any recurrence of the previously detected malfunction, the MIL should be extinguished (unless there are other MIL-on DTCs stored for which the MIL must also be illuminated), the permanent DTC should be erased, but a ''previous-MIL-on'' DTC should remain stored.[12] We are proposing that the previous MIL-on DTC remain stored for 40 engine warmup cycles after which time, provided the identified malfunction has not been detected again and the MIL is presently not illuminated for that malfunction, the previous-MIL-on DTC can be erased.[13] However, if an illuminated MIL is not extinguished, or if a MIL-on DTC is not erased, by the OBD system itself but is instead erased via scan tool or battery disconnect (which would erase all non-permanent, volatile memory), the permanent DTC must remain stored. This way, permanent DTCs can only be erased by the OBD system itself and cannot be erased through human interaction with the system.

We are proposing that the manufacturer be allowed, upon

[6] Generally, a ''driving cycle'' or ''drive cycle'' consists of engine startup and engine shutoff or consists of four hours of continuous engine operation.

[7] A ''continuous'' monitor—if used in the context of monitoring conditions for circuit continuity, lack of circuit continuity, circuit faults, and out-of-range values—means sampling at a rate no less than two samples per second. If a computer input component is sampled less frequently for engine control purposes, the signal of the component may instead be evaluated each time sampling occurs.

[8] A ''non-continuous'' monitor being a monitor that runs only when a limited set of operating conditions occurs.

[9] Different industry standards organizations—the Society of Automotive Engineers (SAE) and the International Standards Organization (ISO)—use different terminology to refer to a ''MIL-on'' DTC. For clarity, we use the term ''MIL-on'' DTC throughout this preamble to convey the concept and not any requirement that standard making bodies use the term in their standards.

[10] Throughout this proposal, we refer to MIL illumination to mean a steady, continuous illumination during engine operation unless stated otherwise. This contrasts with the MIL illumination logic used by many engine manufacturers today by which the MIL would illuminate upon detection of a malfunction but would remain illuminated only while the malfunction was actually occurring. Under this latter logic, an intermittent malfunction or one that occurs under only limited operating conditions may result in a MIL that illuminates, extinguishes, illuminates, etc., as operating conditions change.

[11] A permanent DTC must be stored in a manner such that electrical disconnections do not result in their erasure (i.e., they must be stored in non-volatile random access memory (NVRAM)).

[12] This general ''three trip'' condition for extinguishing the MIL is true for all but two diesel systems/monitors—the misfire monitor and the SCR system—and three gasoline systems/monitors—the fuel system, the misfire monitor, and the evaporative system—which have further conditions on extinguishing the MIL This is discussed in more detail in sections II.B and II.C.

[13] For simplicity, the discussion here refers to ''previous-MIL-on'' DTCs only. The ISO 15765 standard and the SAE J1939 standard use different terms to refer to the concept of a previous-MIL-on DTC. Our intent is to present the concept of our proposal in this preamble and not to specify the terminology used by these standard making bodies.

Administrator approval, to use alternative statistical MIL illumination and DTC storage protocols to those described above (i.e., alternatives to the ''first trip—pending DTC, second strip—MIL-on DTC logic). The Administrator would consider whether the manufacturer provided data and/or engineering evaluation adequately demonstrates that the alternative protocols can evaluate system performance and detect malfunctions in a manner that is equally effective and timely. Alternative strategies requiring, on average, more than six driving cycles for MIL illumination would probably not be accepted.

Upon storage of either a pending DTC and/or a MIL-on DTC, we are proposing that the computer store a set of ''freeze frame'' data. This freeze frame data would provide a snap shot of engine operating conditions present at the time the malfunction occurred and was detected. This information serves the repair technician in diagnosing the problem and conducting the proper repair. The freeze frame data should be stored upon storage of a pending DTC. If the pending DTC matures to a MIL-on DTC, the manufacturer can choose to update the freeze frame data or retain the freeze frame stored in conjunction with the pending DTC. Likewise, any freeze frame stored in conjunction with any pending or MIL-on DTC should be erased upon erasure of the DTC. Further information concerning the freeze frame requirement and the data required in the freeze frame is presented in section II.F.4, below.

We are also proposing that the OBD system illuminate the MIL and store a MIL-on DTC to inform the vehicle operator whenever the engine enters a mode of operation that can affect the performance of the OBD system. If such a mode of operation is recoverable (i.e., operation automatically returns to normal at the beginning of the following ignition cycle [14]), then in lieu of illuminating the MIL when the mode of operation is entered, the OBD system may wait to illuminate the MIL and store the MIL-on DTC if the mode of operation is again entered before the end of the next ignition cycle. We are proposing this because many operating strategies are designed such that they continue automatically through to the next key-off. Regardless, upon the next key-on, the engine control would start off in ''normal'' operating mode and would return to the ''abnormal'' operating mode only if the condition causing the abnormal mode was again encountered. In such cases, we are proposing to allow that the MIL be illuminated during the second consecutive drive cycle during which such an ''abnormal'' mode is engaged.[15]

Whether or not the ''abnormal'' mode of operation is recoverable, in this context, has nothing to do with whether the detected malfunction goes away or stays. Instead, it depends solely on whether or not the engine, by design, will stay in abnormal operating mode on the next key-on. We are proposing this MIL logic because often the diagnostic (i.e., monitor) that caused the engine to enter abnormal mode cannot run again once the engine is in the abnormal mode. So, if the MIL logic associated with abnormal mode activation was always a two-trip diagnostic, abnormal mode activation would set a pending DTC on the first trip and, since the system would then be stuck in that abnormal operating mode and would never be able to run the diagnostic again, the pending DTC could never mature to a MIL-on DTC nor illuminate the MIL. Hence, the MIL must illuminate upon the first entry into such an abnormal operating mode. If such a mode is recoverable, the engine will start at the next key-on in ''normal'' mode allowing the monitor to run again and, assuming another detection of the condition, the system would set a MIL-on DTC and illuminate the MIL.

The OBD system would not need to store a DTC nor illuminate the MIL upon abnormal mode operation if other telltale conditions would result in immediate action by the driver. Such telltale conditions would be, for example, an overt indication like a red engine shut-down warning light. The OBD system also need not store a DTC nor illuminate the MIL upon abnormal mode operation if the mode is indeed an auxiliary emission control device (AECD) approved by the Administrator.

There may be malfunctions of the MIL itself that would prevent it from illuminating. A repair technician—or possibly an I/M inspector—would still be able to determine the status of the MIL (i.e., commanded ''on'' or ''off'') by reading electronic information available through a scan tool, but there would be no indication to the driver of an emissions-related malfunction should one occur. Unidentified malfunctions may cause excess emissions to be emitted from the vehicle and may even cause subsequent deterioration or failure of other components or systems without the driver's knowledge. In order to prevent this, the manufacturer must ensure that the MIL is functioning properly. For this reason, we are proposing two requirements to check the functionality of the MIL itself. First, the MIL would be required to illuminate for a minimum of five seconds when the vehicle is in the key-on, engine-off position. This allows an interested party to check the MIL's functionality simply by turning the key to the key-on position. While the MIL would be physically illuminated during this functional check, the data stream value for the MIL command status would be required to indicate ''off'' during this check unless, of course, the MIL was currently being commanded ''on'' for a detected malfunction. This functional check of the MIL would not be required during vehicle operation in the key-on, engine-off position subsequent to the initial engine cranking of an ignition cycle (e.g., due to an engine stall or other non-commanded engine shutoff).

The second functional check requirement we are proposing requires the OBD system to perform a circuit continuity check of the electrical circuit that is used to illuminate the MIL to verify that the circuit is not shorted or open (e.g., a burned out bulb). While there would not be an ability to illuminate the MIL when such a malfunction is detected, the electronically readable MIL command status in the onboard computer would be changed from commanded ''off'' to ''on''. This would allow the truck owner or fleet maintenance staff to quickly determine whether an extinguished MIL means ''no malfunctions'' or ''broken MIL.'' It would also serve, should it become of interest in the future, complete automation of the I/M process by eliminating the need for inspectors to input manually the results of their visual inspections. Feedback from passenger car I/M programs indicates that the current visual bulb check performed by inspectors is subject to error and results in numerous vehicles being falsely failed or passed. By requiring monitoring of the circuit itself, the entire pass/fail criteria of an I/M program could be determined by the electronic information available through a scan tool, thus better facilitating quick

[14] ''Ignition Cycle'' means a drive cycle that begins with engine start and includes an engine speed that exceeds 50 to 150 rotations per minute (rpm) below the normal, warmed-up idle speed (as determined in the drive position for vehicles equipped with an automatic transmission) for at least two seconds plus or minus one second.

[15] Note that we use the term ''abnormal'' to refer to an operating mode that the engine is designed to enter upon determining that ''normal'' operation cannot be maintained. Therefore, the term ''abnormal'' is somewhat of a misnomer since the engine is doing what it has been designed to do. Nonetheless, the abnormal operating mode is clearly not the operating mode the manufacturer has intended for optimal operation. Such operating modes are sometimes referred to as ''default'' operating modes or ''limp-home'' operating modes.

and effective inspections and minimizing the chance for manually-entered errors.

At the manufacturer's option, the MIL may be used to indicate readiness status in a standardized format (see Section II.F) in the key-on, engine-off position. Readiness status is a term used in light-duty OBD that refers to a vehicle's readiness for I/M inspection. For a subset of monitors—those that are non-continuous monitors for which an emissions threshold exists (see sections II.B and II.C for more on emissions thresholds)—a readiness status indicator must be stored in memory to indicate whether or not that particular monitor has run enough times to make a diagnostic decision. Until the monitor has run sufficient times, the readiness status would indicate ''not ready''. Upon running sufficient times, the readiness status would indicate ''ready.'' This serves to protect against drivers disconnecting their battery just prior to the I/M inspection so as to erase any MIL-on DTCs. Such an action would simultaneously set all readiness status indicators to ''not ready'' resulting in a notice to return to the inspection site at a future date. Readiness indicators also help repair technicians because, after completing a repair, they can operate the vehicle until the readiness status indicates ''ready'' and, provided no DTCs are stored, know that the repair has been successful. We are proposing that HDOBD systems follow this same readiness status logic as used for years in light-duty OBD both to assist repair technicians and to facilitate potential future HDOBD I/M programs.

We are also proposing that the manufacturer, upon Administrator approval, be allowed to use the MIL to indicate which, if any, DTCs are currently stored (e.g., to ''blink'' the stored codes). The Administrator would approve the request if the manufacturer can demonstrate that the method used to indicate the DTCs will not be unintentionally activated during any inspection test or during routine driver operation.

3. Monitoring Conditions

a. Background

Given that the intent of the proposed OBD requirements is to monitor the emission control system for proper operation, it is logical that the OBD monitors be designed such that they monitor the emission control system during typical driving conditions. While many OBD monitors would be designed such that they are continuously making decisions about the operational status of the engine, many—and arguably the most critical—monitors are not so designed. For example, an OBD monitor whose function is to monitor the active fuel injection system of a NO_X adsorber or a DPF cannot be continuously monitoring that function since that function occurs on an infrequent basis. This OBD monitor presumably would be expected to ''run,'' or evaluate the active injection system, during an actual fuel injection event.

For this reason, manufacturers are allowed to determine the most appropriate times to run their non-continuous OBD monitors. This way, they are able to make an OBD evaluation either at the operating condition when an emission control system is active and its operational status can best be evaluated, and/or at the operating condition when the most accurate evaluation can be made (e.g., highly transient conditions or extreme conditions can make evaluation difficult). Importantly, manufacturers are prohibited from using a monitoring strategy that is so restrictive such that it rarely or never runs. To help protect against monitors that rarely run, we are proposing an ''in-use monitor performance ratio'' requirement which is detailed in section II.E.

The set of operating conditions that must be met so that an OBD monitor can run are called the ''enable criteria'' for that given monitor. These enable criteria are often different for different monitors and may well be different for different types of engines. A large diesel engine intended for use in a Class 8 truck would be expected to see long periods of relatively steady-state operation while a smaller engine intended for use in an urban delivery truck would be expected to see a lot of transient operation. Manufacturers will need to balance between a rather loose set of enable criteria for their engines and vehicles given the very broad range of operation HD highway engines see and a tight set of enable criteria given the desire for greater monitor accuracy.

b. General Monitoring Conditions

i. Monitoring Conditions for All Engines

As guidance to manufacturers, we are proposing the following criteria to assist manufacturers in developing their OBD enable criteria. These criteria would be used by the Agency during our OBD certification approval process to ensure that monitors run on a frequent basis during real world driving conditions. These criteria would be:

- The monitors should run during conditions that are technically necessary to ensure robust detection of malfunctions (e.g., to avoid false passes and false indications of malfunctions);
- The monitor enable criteria should ensure monitoring will occur during normal vehicle operation; and,
- Monitoring should occur during at least one test used by EPA for emissions verification '' either the HD Federal Test Procedure (FTP) transient cycle, or the Supplementary Emissions Test (SET).[16]

As discussed in more detail in sections II.B through II.D, we are proposing that manufacturers define the monitoring conditions, subject to Administrator approval, for detecting the malfunctions required by this proposal. The Administrator would determine if the monitoring conditions proposed by the manufacturer for each monitor abide by the above criteria.

In general, except as noted in sections II.B through II.D, the proposed regulation would require each monitor to run at least once per driving cycle in which the applicable monitoring conditions are met. The proposal would also require certain monitors to run continuously throughout the driving cycle. These include a few threshold monitors (e.g., fuel system monitor) and most circuit continuity monitors. While a basic definition of a driving cycle (e.g., from ignition key-on and engine startup to engine shutoff) has been sufficient for passenger cars, the driving habits of many types of vehicles in the heavy-duty industry dictate an alternate definition. Specifically, many heavy-duty operators will start the engine and leave it running for an entire day or, in some cases, even longer. As such, we are proposing that any period of continuous engine-on operation of four hours be considered a complete driving cycle. A new driving cycle would begin following such a four hour period, regardless of whether or not the engine had been shut down. Thus, the ''clock'' for monitors that are required to run once per driving cycle would be reset to run again (in the same key-on engine start or trip) once the engine has been operated beyond four hours continuously. This would avoid an unnecessary delay in detection of malfunctions simply because the heavy-duty vehicle operator has elected to leave the vehicle running continuously for an entire day or days at a time.

Manufacturers may request Administrator approval to define monitoring conditions that are not encountered during the FTP cycle. In evaluating the manufacturer's request, the Administrator will consider the degree to which the requirement to run

[16] See 40 CFR part 86, subpart N for details of EPA's test procedures.

during the FTP cycle restricts in-use monitoring, the technical necessity for defining monitoring conditions that are not encountered during the FTP cycle, data and/or an engineering evaluation submitted by the manufacturer which demonstrate that the component/system does not normally function, or monitoring is otherwise not feasible, during the FTP cycle, and, where applicable, the ability of the manufacturer to demonstrate that the monitoring conditions will satisfy the minimum acceptable in-use monitor performance ratio requirement as defined below.

ii. In-Use Performance Tracking Monitoring Conditions

In addition to the general monitoring conditions above, we are proposing that manufacturers be required to implement software algorithms in the OBD system to individually track and report in-use performance of the following monitors in the standardized format specified in section II.E:

- Diesel NMHC converting catalyst(s)
- Diesel NO_X converting catalyst(s)
- Gasoline catalyst(s)
- Exhaust gas sensor(s)
- Gasoline evaporative system
- Exhaust gas recirculation (EGR) system
- Variable valve timing (VVT) system
- Gasoline secondary air system
- Diesel particulate filter system
- Diesel boost pressure control system
- Diesel NO_X adsorber(s)

The OBD system is not required to track and report in-use performance for monitors other than those specifically identified above.

iii. In-Use Performance Ratio Requirement

We are also proposing that, for all 2013 and subsequent model year engines, manufacturers be required to define monitoring conditions that, in addition to meeting the general monitoring conditions, ensure that certain monitors yield an in-use performance ratio (which monitors and the details that define the performance ratio are defined in section II.E) that meets or exceeds the minimum acceptable in-use monitor performance ratio for in-use vehicles. We are proposing a minimum acceptable in-use monitor performance ratio of 0.100 for all monitors specifically required to track in-use performance. This means that the monitors listed in section II.A.3.ii above must run and make valid diagnostic decisions during 10 percent of the vehicle's trips. We intend to work with industry during the initial years of implementation to gather data on in-use performance ratios and may revise this ratio lower as appropriate depending on what we learn.

Note that manufacturers may not use the calculated ratio (or any element thereof), or any other indication of monitor frequency, as a monitoring condition for a monitor. For example, the manufacturer would not be allowed to use a low ratio to enable more frequent monitoring through diagnostic executive priority or modification of other monitoring conditions, or to use a high ratio to enable less frequent monitoring.

4. Determining the Proper OBD Malfunction Criteria

For determining the malfunction criteria for diesel engine monitors associated with an emissions threshold (see sections II.B and II.C for more on emissions thresholds), we are proposing that manufacturers be required to determine the appropriate emissions test cycle such that the most stringent monitor would result. In general, we believe that manufacturers can make this determination based on engineering judgement, but there may be situations where testing would be required to make the determination. We do not necessarily anticipate challenging a manufacturer's determination of which test cycle to use. Nonetheless, the manufacturer should be prepared, perhaps with test data, to justify their determination.

We are also proposing that, for engines equipped with emission controls that experience infrequent regeneration events (e.g., a DPF and/or a NO_X adsorber), a manufacturer must adjust the emission test results for monitors that are required to indicate a malfunction before emissions exceed a certain emission threshold.[17] For each such monitor, the manufacturer would have to adjust the emission result as done in accordance with the provisions of section 86.004–28(i) with the component for which the malfunction criteria are being established having been deteriorated to the malfunction threshold. As proposed, the adjusted emission value must be used for purposes of determining whether or not the applicable emission threshold is exceeded.

While we believe that this adjustment process for monitors of systems that experience infrequent regeneration events makes sense and would result in robust monitors, we also believe that it could prove to be overly burdensome for manufacturers. For example, a NO_X adsorber threshold being evaluated by running an FTP using a ''threshold'' part (i.e., a NO_X adsorber deteriorated such that tailpipe emissions are at the applicable thresholds) may be considered acceptable provided the NO_X adsorber does not regenerate during the test, but it may be considered unacceptable if the NO_X adsorber does happen to regenerate during the test. This could happen because emissions would be expected to increase slightly during the regeneration event thereby causing emissions to be slightly above the applicable threshold. This would require the manufacturer to recalibrate the NO_X adsorber monitor to detect at a lower level of deterioration to ensure that a regeneration event would not cause an exceedance of the threshold during an emissions test. After such a recalibration, the emissions occurring during the regeneration event would be lower than before because the new ''threshold'' NO_X adsorber would have a slightly higher conversion efficiency. We are concerned that manufacturers may find themselves in a difficult iterative process calibrating such monitors that, in the end, will not be correspondingly more effective.

For this reason, we request comment regarding the burden associated with the need to consider regeneration events in determining compliance with emissions thresholds. We also request comment on how to address any environmental concern versus the burden. Would it perhaps be best to simply use the emissions adjustments that are determined in accordance with section 86.004–28(i)? Is it necessary to even consider regeneration emissions when determining emission threshold compliance or is it perhaps best to ignore regeneration events in determining threshold calibrations?

B. Monitoring Requirements and Timelines for Diesel-Fueled/Compression-Ignition Engines

Table II.B–1 summarizes the proposed diesel fueled compression ignition emissions thresholds at which point a component or system has failed to the point of requiring an illuminated MIL and a stored DTC. More detail regarding the specific monitoring requirements, implementation schedules, and liabilities can be found in the sections that follow.

[17] See proposed § 86.010–18(f).

TABLE II.B–1.—PROPOSED EMISSIONS THRESHOLDS FOR DIESEL FUELED CI ENGINES OVER 14,000 POUNDS

Component/monitor	MY	NMHC	CO	NO_X	PM
NMHC catalyst system	2010–2012	2.5x	.....	.....	.....
	2013+	2x	.....	.....	.....
NO_X catalyst system	2010+	.....	.....	+0.3	.....
DPF system	2010–2012	2.5x	.....	.....	0.05/+0.04
	2013+	2x	.....	.....	0.05/+0.04
Air-fuel ratio sensors upstream	2010–2012	2.5x	2.5x	+0.3	0.03/+0.02
	2013+	2x	2x	+0.3	0.03/+0.02
Air-fuel ratio sensors downstream	2010–2012	2.5x	.....	+0.3	0.05/+0.04
	2013+	2x	.....	+0.3	0.05/+0.04
NO_X sensors	2010+	.....	.....	+0.3	0.05/+0.04
"Other monitors" with emissions thresholds (see section II.B)	2010–2012	2.5x	2.5x	+0.3	0.03/+0.02
	2013+	2x	2x	+0.3	0.03/+0.02

Notes: MY=Model Year; 2.5x means a multiple of 2.5 times the applicable emissions standard or family emissions limit (FEL); +0.3 means the standard or FEL plus 0.3; 0.05/+0.04 means an absolute level of 0.05 or an additive level of the standard or FEL plus 0.04, whichever level is higher; not all proposed monitors have emissions thresholds but instead rely on functionality and rationality checks as described in section II.D.4.

There are exceptions to the emissions thresholds shown in Table II.B–1 whereby a manufacturer can demonstrate that emissions do not exceed the threshold even when the component or system is non-functional at which point a functional check would be allowed.

Note that, in general, the monitoring strategies designed to meet the requirements discussed below should not involve the alteration of the engine control system or the emissions control system such that tailpipe emissions would increase. We do not want emissions to increase, even for short durations, for the sole purpose of monitoring the systems intended to control emissions. The Administrator would consider such monitoring strategies on a case-by-case basis taking into consideration the emissions impact and duration of the monitoring event. However, much effort has been expended in recent years to minimize engine operation that results in increased emissions and we encourage manufacturers to develop monitoring strategies that do not require alteration of the basic control system.

1. Fuel System Monitoring

a. Background

The fuel system of a diesel engine is an essential component of the engine's emissions control system. Proper delivery of fuel—quantity, pressure, and timing—can play a crucial role in maintaining low engine-out emissions. The performance of the fuel system is also critical for aftertreatment device control strategies. As such, thorough monitoring of the fuel system is an essential element in an OBD system. The fuel system is primarily comprised of a fuel pump, fuel pressure control device, and fuel injectors. Additionally, the fuel system generally has sophisticated control strategies that utilize one or more feedback sensors to ensure the proper amount of fuel is being delivered to the cylinders. While gasoline engines have undergone relatively minor hardware changes (but substantial fine-tuning in the control strategy and feedback inputs), diesel engines have more recently undergone substantial changes to the fuel system hardware and now incorporate more refined control strategies and feedback inputs.

For diesel engines, a substantial change has occurred in recent years as manufacturers have transitioned to new high-pressure fuel systems. One of the most widely used is a high-pressure common-rail fuel injection system, which is generally comprised of a high-pressure fuel pump, a fuel rail pressure sensor, a common fuel rail that feeds all injectors, individual fuel injectors that directly control fuel injection quantity and timing for each cylinder, and a closed-loop feedback system that uses the fuel rail pressure sensor to achieve the commanded fuel rail pressure. Unlike older style fuel systems where fuel pressure was mechanically linked to engine speed (and thus, varied from low to high as engine speed increased), common-rail systems are capable of controlling fuel pressure independent of engine speed. This increase in fuel pressure control allows greater flexibility in optimizing the performance and emission characteristics of the engine. The ability of the system to generate high pressure independent of engine speed also improves fuel delivery at low engine speeds.

Precise control of the fuel injection timing is crucial for optimal engine and emission performance. As injection timing is advanced (i.e., fuel injection occurs earlier), hydrocarbon (HC) emissions and fuel consumption are decreased but oxides of nitrogen (NO_X) emissions are increased. As injection timing is retarded (i.e., fuel injection occurs later), NO_X emissions can be reduced but HC emissions, particulate matter (PM) emissions, and fuel consumption increase. Most modern diesel fuel systems even provide engine manufacturers with the ability to separate a single fuel injection event into discrete events such as pilot (or pre) injection, main injection, and post injection.

Given the important role that modern diesel fuel systems play in emissions control, malfunctions or deterioration that would affect the fuel pressure control, injection timing, pilot/main/post injection timing or quantity, or ability to accurately perform rate-shaping could lead to substantial increases in emissions (primarily NO_X or PM), often times with an associated change in fuel consumption.

b. Fuel System Monitoring Requirements

We are proposing that the OBD system monitor the fuel delivery system to verify that it is functioning properly. The fuel system monitor would be required to monitor for malfunctions in the injection pressure control, injection quantity, injection timing, and feedback control (if equipped). The individual electronic components (e.g., actuators, valves, sensors, pumps) that are used in the fuel system and not specifically addressed in this section shall be monitored in accordance with the comprehensive component requirements in section II.D.4.

i. Fuel System Pressure Control

We are proposing that the OBD system continuously monitor the fuel system's ability to control to the desired fuel pressure. The OBD system would have to detect a malfunction of the fuel system's pressure control system when

the pressure control system is unable to maintain an engine's emissions at or below the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the fuel system pressure control could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would be required to detect a malfunction when the system has reached its control limits such that the commanded fuel system pressure cannot be delivered.

ii. Fuel System Injection Quantity

We are proposing that the OBD system detect a malfunction of the fuel injection system when the system is unable to deliver the commanded quantity of fuel necessary to maintain an engine's emissions at or below the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the fuel injection quantity could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would be required to detect a malfunction when the system has reached its control limits such that the commanded fuel quantity cannot be delivered.

iii. Fuel System Injection Timing

We are proposing that the OBD system detect a malfunction of the fuel injection system when the system is unable to deliver fuel at the proper crank angle/timing (e.g., injection timing too advanced or too retarded) necessary to maintain an engine's emissions at or below the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the fuel injection timing could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would be required to detect a malfunction when the system has reached its control limits such that the commanded fuel injection timing cannot be achieved.

iv. Fuel System Feedback Control

If the engine is equipped with feedback control of the fuel system (e.g., feedback control of pressure or pilot injection quantity), we are proposing that the OBD system detect a malfunction when and if:

- The system fails to begin feedback control within a manufacturer specified time interval;
- A failure or deterioration causes open loop or default operation; or
- Feedback control has used up all of the adjustment allowed by the manufacturer.

A manufacturer may temporarily disable monitoring for malfunctions where the feedback control has used up all of the adjustment allowed by the manufacturer during conditions that the monitor cannot distinguish robustly between a malfunctioning system and a properly operating system. To do so, the manufacturer would be required to submit data and/or engineering analyses demonstrating that the control system, when operating as designed on an engine with all emission controls working properly, routinely operates during these conditions with all of the adjustment allowed by the manufacturer used up. In lieu of detecting, with a fuel system specific monitor, when the system fails to begin feedback control within a manufacturer specified time interval and/or when a failure or deterioration causes open loop or default operation, the OBD system may monitor the individual parameters or components that are used as inputs for fuel system feedback control provided that the monitors detect all malfunctions related to feedback control.

c. Fuel System Monitoring Conditions

The OBD system would be required to monitor continuously for malfunctions of the fuel pressure control and feedback control. Manufacturers would be required to define the monitoring conditions for malfunctions of the injection quantity and injection timing such that the minimum performance ratio requirements discussed in section II.E would be met.

d. Fuel System MIL Illumination and DTC Storage

We are proposing the general MIL illumination and DTC storage requirements as discussed in section II.A.2.

2. Engine Misfire Monitoring

a. Background

Misfire, the lack of combustion in the cylinder, causes increased engine-out hydrocarbon emissions. On gasoline engines, misfire results from the absence of spark, poor fuel metering, and poor compression. Further, misfire can be intermittent on gasoline engines (e.g., the misfire only occurs under certain engine speeds or loads). Consequently, our existing under 14,000 pound OBD regulation requires continuous monitoring for misfire malfunctions on gasoline engines.

In contrast, manufacturers have historically maintained that a diesel engine with traditional diesel technology misfires only due to poor compression (e.g., worn valves or piston rings, improper injector or glow plug seating). They have also maintained that, when poor compression results in a misfiring cylinder, the cylinder will misfire under all operating conditions rather than only some operating conditions. For that reason, our existing under 14,000 pound OBD regulation has not required continuous monitoring for misfire malfunctions on diesel engines.

However, with the increased use of EGR and its use to varying degrees at different speeds and load, and with emerging technologies such as homogeneous charge compression ignition (HCCI), we believe that the conventional wisdom regarding diesel engines and misfires no longer holds true. These newer technologies may indeed result in misfires that are intermittent, spread out among various cylinders, and that only happen at certain speeds and loads.

b. Misfire Monitoring Requirements

We are proposing that the OBD system monitor the engine for misfire causing excess emissions. The OBD system must be capable of detecting misfire occurring in one or more cylinders. To the extent possible without adding hardware for this specific purpose, the OBD system must also identify the specific misfiring cylinder. If more than one cylinder is continuously misfiring, a separate DTC must be stored indicating that multiple cylinders are misfiring. When identifying multiple cylinder misfire, the OBD system is not required to also identify each of the continuously misfiring cylinders individually through separate DTCs.

For 2013 and subsequent model year engines, we are proposing a more stringent requirement that the OBD system detect a misfire malfunction causing emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. This requirement to detect engine misfire prior to exceeding an emissions threshold would apply only to those engines equipped with sensors capable of detecting combustion or combustion quality (e.g., cylinder pressure sensors used in homogeneous charge compression ignition (HCCI) control systems). Engines without such sensors would have to detect only when one or more cylinders are continually misfiring.

To determine what level of misfire would cause emissions to exceed the applicable emissions thresholds, we are proposing that manufacturers determine

the percentage of misfire evaluated in 1000 revolution increments that would cause emissions from an emission durability demonstration engine to exceed the emissions thresholds if the percentage of misfire were present from the beginning of the test. To establish this percentage of misfire, the manufacturer would utilize misfire events occurring at equally spaced, complete engine cycle intervals, across randomly selected cylinders throughout each 1000-revolution increment. If this percentage of misfire is determined to be lower than one percent, the manufacturer may set the malfunction criteria at one percent. Any malfunction should be detected if the percentage of misfire established via this testing is exceeded regardless of the pattern of misfire events (e.g., random, equally spaced, continuous).

The manufacturer may employ other revolution increments besides the 1000 revolution increment being proposed. To do so, the manufacturer would need to demonstrate that the strategy would be equally effective and timely in detecting misfire.

c. Engine Misfire Monitoring Conditions

For engines without combustion sensors, we are proposing that the OBD system monitor for misfire during engine idle conditions at least once per drive cycle in which the monitoring conditions for misfire are met. The manufacturer would be required to define monitoring conditions, supported by manufacturer-submitted data and/or engineering analyses, that demonstrate that the monitoring conditions: are technically necessary to ensure robust detection of malfunctions (e.g., avoid false passes and false detection of malfunctions); require no more than 1000 cumulative engine revolutions; and, do not require any single continuous idle operation of more than 15 seconds to make a determination that a malfunction is present (e.g., a decision can be made with data gathered during several idle operations of 15 seconds or less).

For 2013 and subsequent model year engines with combustion sensors, we are proposing that the OBD system continuously monitor for misfire under all positive torque engine speeds and load conditions. If a monitoring system cannot detect all misfire patterns under all positive torque engine speeds and load conditions, the manufacturer may request that the Administrator approve the monitoring system nonetheless. In evaluating the manufacturer's request, the Administrator would consider the following factors: the magnitude of the region(s) in which misfire detection is limited; the degree to which misfire detection is limited in the region(s) (i.e., the probability of detection of misfire events); the frequency with which said region(s) are expected to be encountered in-use; the type of misfire patterns for which misfire detection is troublesome; and demonstration that the monitoring technology employed is not inherently incapable of detecting misfire under required conditions (i.e., compliance can be achieved on other engines). The evaluation would be based on the following misfire patterns: equally spaced misfire occurring on randomly selected cylinders; single cylinder continuous misfire; and, paired cylinder (cylinders firing at the same crank angle) continuous misfire.

d. Engine Misfire MIL Illumination and DTC Storage

For engines without combustion sensors, we are proposing the general MIL illumination and DTC storage requirements as discussed in section II.A.2.

For 2013 and subsequent model year engines with combustion sensors, we are proposing that, after four detections of the percentage of misfire that would cause emissions to exceed the applicable emissions thresholds during a single driving cycle, a pending DTC would be stored. If a pending DTC is stored, the OBD system would be required to illuminate the MIL and store a MIL—on DTC if the percentage of misfire is again exceeded four times during either: the driving cycle immediately following the storage of the pending DTC, regardless of the conditions encountered during the driving cycle; or, the next driving cycle in which similar conditions are encountered to the engine conditions that occurred when the pending DTC was stored.[18] For erasure of the pending DTC, we are proposing if, by the end of the next driving cycle in which similar conditions have been encountered to the engine conditions that occurred when the pending DTC was stored without an exceedance of the specified percentage of misfire, the pending DTC may be erased. The pending DTC may also be erased if similar conditions are not encountered during the next 80 driving cycles immediately following initial detection of the malfunction.

[18] ''Similar conditions,'' as used in conjunction with misfire and fuel system monitoring, means engine conditions having an engine speed within 375 rpm, load conditions within 20 percent, and the same warm up status (i.e., cold or hot) as existing during the applicable previous problem detection. The Administrator may approve other definitions of similar conditions based on comparable timeliness and reliability in detecting similar engine operation.

We are proposing some specific items with respect to freeze frame storage associated with engine misfire. The OBD system shall store and erase freeze frame conditions either in conjunction with storing and erasing a pending DTC or in conjunction with storing a MIL—on DTC and erasing a MIL—on DTC. In addition to those proposed requirements discussed in section II.A.2, we are proposing that, if freeze frame conditions are stored for a malfunction other than a misfire malfunction when a DTC is stored, the previously stored freeze frame information shall be replaced with freeze frame information regarding the misfire malfunction (i.e., the misfire's freeze frame information should take precedence over freeze frames for other malfunctions). Further, we are proposing that, upon detection of misfire, the OBD system store the following engine conditions: engine speed, load, and warm up status of the first misfire event that resulted in the storage of the pending DTC.

Lastly, we are proposing that the MIL may be extinguished after three sequential driving cycles in which similar conditions have been encountered without an exceedance of the specified percentage of misfire.

3. Exhaust Gas Recirculation (EGR) System Monitoring

a. Background

Exhaust gas recirculation (EGR) systems are currently being used by many heavy-duty engine manufacturers to meet the 2.5 g/bhp-hr NO_X+NMHC standard for 2004 and later model year engines. (65 FR 59896) EGR reduces NO_X emissions in several ways. First, the recirculated exhaust gases dilute the intake air—i.e., oxygen in the fresh air is displaced with relatively non-reactive exhaust gases—which, in turn, results in less oxygen to form NO_X. Second, EGR absorbs heat from the combustion process which reduces combustion chamber temperatures which, in turn, reduces NO_X formation. The amount of heat absorbed from the combustion process is a function of EGR flow rate and recirculated gas temperature, both of which are controlled to minimize NO_X emissions. An EGR cooler can be added to the EGR system to lower the recirculated gas temperature which further enhances NO_X control. We fully expect that 2007 and later model year engines will continue to make use of cooled EGR systems.

While in theory the EGR system simply routes some exhaust gas back to the intake, production systems can be complex and involve many components to ensure accurate control of EGR flow

to maintain acceptable PM and NO_X emissions while minimizing effects on fuel economy. To control EGR flow rates, EGR systems normally use the following components: an EGR valve, valve position sensor, boost pressure sensor, intake temperature sensor, intake (fresh) airflow sensor, and tubing or piping to connect the various components of the system. EGR temperature sensors and exhaust backpressure sensors can also be used. Additionally, some systems use a variable geometry turbocharger to provide the backpressure necessary to drive the EGR flow. Therefore, EGR is not a stand alone emission control device. Rather, it is carefully integrated with the air handling system (turbocharging and intake cooling) to control NO_X while not adversely affecting PM emissions and fuel economy.

b. EGR System Monitoring Requirements

We are proposing that the OBD system monitor the EGR system on engines so equipped for low EGR flow rate, high EGR flow rate, and slow EGR flow response malfunctions. For engines so equipped, we are proposing that the EGR feedback control be monitored. Also, for engines equipped with EGR coolers (e.g., heat exchangers), the OBD system would have to monitor the cooler for malfunctions associated with insufficient EGR cooling. The individual electronic components (e.g., actuators, valves, sensors) that are used in the EGR system would be monitored in accordance with the comprehensive component requirements presented in section II.D.4.

i. EGR Low Flow Malfunctions

We are proposing that the OBD system detect a malfunction prior to a decrease from the manufacturer's specified EGR flow rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the EGR system that causes a decrease in flow could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when the system has reached its control limits such that it cannot increase EGR flow to achieve the commanded flow rate.

ii. EGR High Flow Malfunctions

We are proposing that the OBD system detect a malfunction of the EGR system, including a leaking EGR valve—i.e., exhaust gas flowing through the valve when the valve is commanded closed—prior to an increase from the manufacturer's specified EGR flow rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the EGR system that causes an increase in flow could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when the system has reached its control limits such that it cannot reduce EGR flow to achieve the commanded flow rate.

iii. EGR Slow Response Malfunctions

We are proposing that the OBD system detect a malfunction of the EGR system prior to any failure or deterioration in the capability of the EGR system to achieve the commanded flow rate within a manufacturer-specified time that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. The OBD system would have to monitor both the capability of the EGR system to respond to a commanded increase in flow and the capability of the EGR system to respond to a commanded decrease in flow.

iv. EGR Feedback Control

We are proposing that the OBD system on any engine equipped with feedback control of the EGR system (e.g., feedback control of flow, valve position, pressure differential across the valve via intake throttle or exhaust backpressure), detect a malfunction when and if:

- The system fails to begin feedback control within a manufacturer specified time interval;
- A failure or deterioration causes open loop or default operation; or
- Feedback control has used up all of the adjustment allowed by the manufacturer.

v. EGR Cooler Performance

We are proposing that the OBD system detect a malfunction of the EGR cooler prior to a reduction from the manufacturer's specified cooling performance that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the EGR cooler could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when the system has no detectable amount of EGR cooling.

c. EGR System Monitoring Conditions

We are proposing that the OBD system monitor continuously for low EGR flow, high EGR flow, and feedback control malfunctions. Manufacturers would be required to define the monitoring conditions for EGR slow response malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met with the exception that monitoring must occur every time the monitoring conditions are met during the driving cycle in lieu of once per driving cycle as required for most monitors. For purposes of tracking and reporting as required in section II.E, all monitors used to detect EGR slow response malfunctions must be tracked separately but reported as a single set of values as specified in section II.E.[19]

Manufacturersmay temporarily disable the EGR system check under specific conditions (e.g., when freezing may affect performance of the system). To do so, the manufacturer would be required to submit data and/or engineering analyses that demonstrate that a reliable check cannot be made when these specific conditions exist.

d. EGR System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

4. Turbo Boost Control System Monitoring

a. Background

Turbochargers are used on internal combustion engines to enhance performance by increasing the density of the intake air. Some of the benefits of turbocharging include increased horsepower, improved fuel economy, and decreased exhaust smoke. Most modern diesel engines take advantage of these benefits and are equipped with turbocharging systems. Moreover, smaller turbocharged diesel engines can be used in place of larger non-turbocharged engines to achieve the desired engine performance characteristics.

[19] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

Exhaust gases passing through the turbine cause it to spin which, in turn, causes an adjacent centrifugal pump on the same rotating shaft to spin. The spinning pump serves to compress the intake air thereby increasing its density. Typically, a boost pressure sensor is located in the intake manifold to provide a feedback signal of the current intake manifold pressure. As turbo speed (boost) increases, the pressure in the intake manifold also increases.

Proper boost control is essential to optimize emission levels. Even short periods of over-or under-boost can result in undesired air-fuel ratio excursions and corresponding emission increases. Additionally, the boost control system directly affects exhaust and intake manifold pressures. Another critical emission control system, EGR, is very dependent on these two pressures and generally uses the differential between them to force exhaust gas into the intake manifold. If the boost control system is not operating correctly, the exhaust or intake pressures may not be as expected and the EGR system may not function as designed. In high-pressure EGR systems, higher exhaust pressures will generate more EGR flow and, conversely, lower pressures will reduce EGR flow. A malfunction that causes excessive exhaust pressures (e.g., wastegate stuck closed at high engine speed) can produce higher EGR flowrates at high load conditions and have a negative impact on emissions.

Manufacturers commonly use charge air coolers to maximize the benefits of turbocharging and to control NO_X emissions. As the turbocharger compresses the intake air, the temperature of that intake air increases. This increasing air temperature causes the air to expand, which conflicts with one of the goals of turbocharging which is to increase charge air density. Charge air coolers are used to exchange heat between the compressed air and ambient air (or coolant) and cool the compressed air. Accordingly, a decrease in charge air cooler performance can affect emissions by causing higher intake air temperatures that can lead to higher combustion temperatures and higher NO_X emissions.

One drawback of turbocharging is known as turbo lag. Turbo lag occurs when the driver attempts to accelerate quickly from a low engine speed. Since the turbocharger is a mechanical device, a delay exists from the driver demand for more boost until the exhaust flow can physically speed up the turbocharger enough to deliver that boost. In addition to a negative effect on driveability and performance, improper fueling (e.g., over-fueling) during this lag can cause emission increases (typically PM).

To decrease the effects of turbo lag, manufacturers design turbos that spool up quickly at low engine speeds and low exhaust flowrates. However, designing a turbo that will accelerate quickly from a low engine speed but will not result in an over-speed/over-boost condition at higher engine speeds is challenging. That is, as the engine speed and exhaust flowrates near their maximum, the turbo speed increases to levels that cause excessive boost pressures and heat that could lead to engine or turbo damage. To prevent excessive turbine speeds and boost pressures at higher engine speeds, a wastegate is often used to bypass part of the exhaust stream around the turbocharger. The wastegate valve is typically closed at lower engine speeds so that all exhaust is directed through the turbocharger, thus providing quick response from the turbocharger when the driver accelerates quickly from low engine speeds. The wastegate is then opened at higher engine speeds to prevent engine or turbo damage from an over-speed condition.

An alternative to a wastegate is the variable geometry turborcharger (VGT). To prevent over-boost conditions and to decrease turbo lag, VGTs are designed such that the geometry of the turbocharger changes with engine speed. While various physical mechanisms are used to achieve the variable geometry, the overall result is essentially the same. At low engine speeds, the exhaust gas into the turbo is restricted in a manner that maximizes the use of the available energy to spin the turbo. This allows the turbo to spool up quickly and provide good acceleration response. At higher engine speeds, the turbo geometry changes such that exhaust gas flow into the turbo is not as restricted. In this configuration, more exhaust can flow through the turbocharger without causing an over-speed condition. The advantage that VGTs offer compared to a waste-gated turbocharger is that all exhaust flow is directed through the turbocharger under all operating conditions. This can be viewed as maximizing the use of the available exhaust energy.

b. Turbo Boost Control System Monitoring Requirements

We are proposing that the OBD system monitor the boost pressure control system on engines so equipped for under and over boost malfunctions. For engines equipped with variable geometry turbochargers (VGT), the OBD system would have to monitor the VGT system for slow response malfunctions. For engines equipped with charge air cooler systems, the OBD system would have to monitor the charge air cooler system for cooling system performance malfunctions. The individual electronic components (e.g., actuators, valves, sensors) that are used in the boost pressure control system shall be monitored in accordance with the comprehensive component requirements in section II.D.4.

i. Turbo Underboost Malfunctions

We are proposing that the OBD system detect a malfunction of the boost pressure control system prior to a decrease from the manufacturer's commanded boost pressure that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the boost pressure control system that causes a decrease in boost could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that it cannot increase boost to achieve the commanded boost pressure.

ii. Turbo Overboost Malfunctions

We are proposing that the OBD system detect a malfunction of the boost pressure control system prior to an increase from the manufacturer's commanded boost pressure that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the boost pressure control system that causes an increase in boost could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that it cannot decrease boost to achieve the commanded boost pressure.

iii. VGT Slow Response Malfunctions

We are proposing that the OBD system detect a malfunction prior to any failure or deterioration in the capability of the VGT system to achieve the commanded turbocharger geometry within a manufacturer-specified time that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the VGT system response could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction of the VGT system when proper functional response

of the system to computer commands does not occur.

iv. Turbo Boost Feedback Control Malfunctions

We are proposing that, for engines equipped with feedback control of the boost pressure system—e.g., control of VGT position, turbine speed, manifold pressure—the OBD system shall detect a malfunction when and if:

- The system fails to begin feedback control within a manufacturer specified time interval;
- A failure or deterioration causes open loop or default operation; or
- Feedback control has used up all of the adjustment allowed by the manufacturer.

v. Charge Air Undercooling Malfunctions

We are proposing that the OBD system detect a malfunction of the charge air cooling system prior to a decrease from the manufacturer's specified cooling rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1. For engines in which no failure or deterioration of the charge air cooling system that causes a decrease in cooling performance could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has no detectable amount of charge air cooling.

c. Turbo Boost Control System Monitoring Conditions

We are proposing that the OBD system monitor continuously for underboost and overboost malfunctions and for boost feedback control malfunctions. Manufacturers would be required to define the monitoring conditions for VGT slow response malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met with the exception that monitoring must occur every time the monitoring conditions are met during the driving cycle in lieu of once per driving cycle as required for most monitors. For purposes of tracking and reporting as required in section II.E, all monitors used to detect VGT slow response malfunctions malfunctions must be tracked separately but reported as a single set of values as discussed in section II.E.[20]

d. Turbo Boost MIL Illumination and DTC Storage

We are proposing the general MIL illumination and DTC storage requirements as discussed in section II.A.2.

5. Non-Methane Hydrocarbon (NMHC) Converting Catalyst Monitoring

a. Background

Diesel oxidation catalysts (DOCs) have been used on some nonroad diesel engines since the 1960s and on some diesel trucks and buses in the U.S. since the early 1990s. DOCs are generally used for converting HC and carbon monoxide (CO) emissions to water and CO_2 via an oxidation process. Current DOCs can also be used to convert PM emissions. DOCs may also be used in conjunction with other aftertreatment emission controls—such as NO_X adsorber systems, selective catalytic reduction (SCR) systems, and PM filters—to improve their performance and/or clean up certain reducing agents that might slip through the system (e.g., the urea used in urea SCR systems).

b. NMHC Converting Catalyst Monitoring Requirements

We are proposing that the OBD system monitor the NMHC converting catalyst(s) for proper NMHC conversion capability. We are also proposing that each catalyst that converts NMHC be monitored either individually or in combination with others. For engines equipped with catalyzed diesel particulate filters (CDPFs) that convert NMHC emissions, the catalyst function of the CDPF must be monitored in accordance with the CDPF monitoring requirements in section II.B.8.

i. NMHC Converting Catalyst Conversion Efficiency

We are proposing that the OBD system detect an NMHC catalyst malfunction when the catalyst conversion capability decreases to the point that NMHC emissions exceed the emissions thresholds for ''NMHC catalysts'' as shown in Table II.B–1. If no failure or deterioration of the catalyst NMHC conversion capability could result in an engine's NMHC emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when the catalyst has no detectable amount of NMHC conversion capability.

ii. Other Aftertreatment Assistance Functions

For catalysts used to generate an exotherm to assist CDPF regeneration, we are proposing that the OBD system detect a malfunction when the catalyst is unable to generate a sufficient exotherm to achieve that regeneration. For catalysts used to generate a feedgas constituency to assist SCR systems (e.g., to increase NO_2 concentration upstream of an SCR system), the OBD system would have to detect a malfunction when the catalyst is unable to generate the necessary feedgas constituents for proper SCR system operation. For catalysts located downstream of a CDPF and used to convert NMHC emissions during a CDPF regeneration event, the OBD system would be required to detect a malfunction when the catalyst has no detectable amount of NMHC conversion capability.

c. NMHC Converting Catalyst Monitoring Conditions

Manufacturers would be required to define the monitoring conditions for NMHC converting catalyst malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as discussed in section II.E, all monitors used to detect NMHC converting catalyst malfunctions must be tracked separately but reported as a single set of values as discussed in section II.E.[21]

d. NMHC Converting Catalyst MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage discussed in section II.A.2. Note that the monitoring method for the catalyst(s) must be capable of detecting all instances, except diagnostic self-clearing, when a catalyst DTC has been cleared but the catalyst has not been replaced (e.g., catalyst over temperature histogram approaches are not acceptable).[22]

[20] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

[21] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

[22] For gasoline catalyst monitoring, manufacturers generally use what is called an exponentially

Continued

6. Selective Catalytic Reduction (SCR) and Lean NO_X Catalyst Monitoring

a. Background

Selective Catalytic Reduction (SCR) catalysts that use ammonia as a NO_X reductant have been used for stationary source NO_X control for a number of years. Frequently, urea is used as the source of ammonia for SCR catalysts, and such systems are commonly referred to as Urea SCR systems. In recent years, considerable effort has been invested in developing urea SCR systems that could be applied to heavy-duty diesel vehicles with low sulfur diesel fuel. We now expect that urea SCR systems will be introduced in Europe to comply with the EURO IV heavy-duty diesel emission standards. Such systems have been introduced in the past year by some heavy-duty diesel engine manufacturers both in Europe and in Japan.

SCR catalyst systems require an accurate urea control system to inject precise amounts of reductant. An injection rate that is too low may result in lower NO_X conversions while an injection that is too high may release unwanted ammonia emissions—referred to as ammonia slip—to the atmosphere. In general, ammonia to NO_X ratios of around 1:1 are used to provide the highest NO_X conversion rates with minimal ammonia slip. Therefore, injecting just the right amount of ammonia appropriate for the amount of NO_X in the exhaust is very important. This can be challenging in a highway application because on-road diesel engines operate over a variety of speeds and loads. This makes the use of closed-loop feedback systems for reductant metering very attractive. This can be achieved, for example, with a dedicated NO_X sensor in the exhaust so that the NO_X concentration can be accurately known. With an accurate fast response NO_X sensor, closed-loop control of the ammonia injection can be used to achieve and maintain the desired ammonia/NO_X ratios in the SCR catalyst for the high NO_X conversion efficiencies necessary to achieve the 2010 emission standards under various engine operating conditions.

Some have estimated that achieving the 2010 NO_X emission standards with SCR systems will require NO_X sensors that can measure NO_X levels accurately in the 20 to 40 ppm range with little cross sensitivity to ammonia. Some in industry have even stated a desire for accuracy in the two to three ppm range. Suppliers have been developing NO_X sensors capable of measuring NO_X in the 0 to 100 ppm range with $+/-5$ ppm accuracy which we believe will be available by 2010.[23] Regarding cross-sensitivity to ammonia, work has been done that indicates ammonia and NO_X measurements can be independently measured by conditioning the output signal.[24] This signal conditioning method resulted in a linear output for both ammonia and NO_X from the NO_X sensor downstream of the catalyst.

For SCR systems, closed-loop control of the reductant injection may require the use of two NO_X sensors. The first NO_X sensor would be located upstream of the catalyst and the reductant injection point would be used for measuring the engine-out NO_X emissions and determining the amount of reductant injection needed to reduce emissions. The second NO_X sensor located downstream of the catalyst would be used for measuring the amount of ammonia and NO_X emissions exiting the catalyst and providing feedback to the reductant injection control system. If the downstream NO_X sensor detects too much NO_X emissions exiting the catalyst, the control system can inject higher quantities of reductant. Conversely, if the downstream NO_X sensor detects too much ammonia slip exiting the catalyst, the control system can decrease the amount of reductant injection.

In addition to exhaust NO_X levels, another important parameter for achieving high NO_X conversion rates with minimum ammonia slip is catalyst temperature. SCR catalysts have a defined temperature range where they are most effective. For example, platinum catalysts are effective between 175 and 250 degrees Celsius, vanadium catalysts are effective between 300 and 450 degrees Celsius, and zeolite catalysts are most effective between 350 and 600 degrees Celsius. To determine exhaust catalyst temperature for reductant control purposes, manufacturers are likely to use temperature sensors placed in the exhaust system. We project that only one temperature sensor positioned just downstream of the SCR system will be utilized for reductant injection control purposes.

Production SCR catalyst systems may also contain auxiliary catalysts to improve the overall emissions control capability of the system. An oxidation catalyst is often positioned downstream of the SCR catalyst to help control ammonia slip on systems without closed-loop control of ammonia injection. The use of a ''guard'' catalyst could allow higher ammonia injection levels, thereby increasing the NO_X conversion efficiency without releasing un-reacted ammonia into the exhaust. The guard catalyst can also reduce HC and CO emission levels and diesel odors. However, increased N2O emissions may occur and NO_X emission levels may actually increase if too much ammonia is oxidized in the catalyst. Some SCR systems may also include an oxidation catalyst upstream of the SCR catalyst and urea injection point to generate NO2 for lowering the effective operating temperature and/or volume of the SCR catalyst. Studies have indicated that increasing the NO2 content in the exhaust stream can reduce the SCR temperature requirements by about 100 degrees Celsius.[25] This ''pre-oxidation'' catalyst also has the added benefit of reducing HC emissions.

b. SCR and Lean NO_X Catalyst Monitoring Requirements

We are proposing that the OBD system monitor SCR catalysts and lean NO_X catalysts for proper conversion capability. We are also proposing that each catalyst that converts NO_X be monitored either individually or in combination with others. For engines equipped with SCR systems or other catalyst systems that utilize an active/intrusive reductant injection (e.g., active lean NO_X catalysts utilizing diesel fuel

weighted moving average (EWMA) approach to making decisions about the catalyst's pass/fail status. This approach monitors the catalyst and ''saves'' that information. The next time it monitors the catalyst, it saves that information along with the previous information, placing a higher weighting on the most recent information. This is done every time the OBD system monitors the catalyst and the EWMA saves six or seven monitoring events before making a decision. Importantly, once there exists six or seven pieces of information, every monitoring event can result in a decision because the EWMA is always using the previous six or seven events. Unfortunately, if a service technician clears the data with a scan tool, it is going to take six or seven monitoring events before the catalyst monitor can make a decision on the pass/fail status of the catalyst. So, we want to be sure that, in addition to the EWMA aspect of the catalyst monitor, there exists a way of determining quickly that someone has cleared the data but perhaps did not actually repair the catalyst. This is required to help prevent against DTC clearing without fixing a failed catalyst as a means of passing an inspection & maintenance test.

[23] Draft Technical Support Document, HDOBD NPRM, EPA420–D–06–006, Docket ID# EPA–HQ–OAR–2005–0047–0008.

[24] Schaer, C. M., Onder, C. H., Geering, H. P., and Elsener, M., ''Control of a Urea SCR Catalytic Converter System for a Mobile Heavy-Duty Diesel Engine,'' SAE Paper 2003–01–0776 which may be obtained from Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA, 15096–0001.

[25] Walker, A. P., Chandler, G. R., Cooper, B. J., et al., ''An Integrated SCR and Continuously Regenerating Trap System to Meet Future NO_X and PM Legislation,'' SAE Paper 2000–01–0188 which may be obtained from Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA, 15096–0001.

injection), the OBD system would be required to monitor the active/intrusive reductant injection system for proper performance. The individual electronic components (e.g., actuators, valves, sensors, heaters, pumps) in the active/intrusive reductant injection system must be monitored in accordance with the comprehensive component requirements in section II.D.4.

i. Catalyst Conversion Efficiency Malfunctions

We are proposing that the OBD system detect a catalyst malfunction when the catalyst conversion capability decreases to the point that would cause an engine's NO_X emissions to exceed any of the applicable emissions thresholds for ''NO_X Catalyst Systems'' as shown in Table II.B–1. If no failure or deterioration of the catalyst NO_X conversion capability could result in an engine's NO_X emissions exceeding any of the applicable emissions thresholds, the OBD system would have to detect a malfunction when the catalyst has no detectable amount of NO_X conversion capability.

ii. Active/Intrusive Reductant Injection System Malfunctions

Specific to SCR and other active/intrusive reductant injection system performance, we are proposing that the OBD system detect a malfunction prior to any failure or deterioration of the system to regulate reductant delivery properly (e.g., urea injection, separate injector fuel injection, post injection of fuel, air assisted injection/mixing) that would cause an engine's NO_X emissions to exceed any of the applicable emissions thresholds for ''NO_X Catalyst Systems'' as shown in Table II.B–1. As above, if no failure or deterioration of the reductant delivery system could result in an engine's NO_X emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when the system has reached its control limits such that it is no longer able to deliver the desired quantity of reductant.

If the system uses a reductant other than the fuel used for the engine or uses a reservoir/tank for the reductant that is separate from the fuel tank used for the engine, the OBD system must detect a malfunction when there is no longer sufficient reductant available (e.g., the reductant tank is empty). If the system uses a reservoir/tank for the reductant that is separate from the fuel tank used for the engine, the OBD system must detect a malfunction when an improper reductant is used in the reductant reservoir/tank (e.g., the reductant tank is filled with something other than the proper reductant).

iii. SCR and Lean NO_X Catalyst Feedback Control System Malfunctions

If the engine is equipped with feedback control of the reductant injection, we are proposing that the OBD system detect a malfunction when and if:

- The system fails to begin feedback control within a manufacturer specified time interval;
- A failure or deterioration causes open loop or default operation; or
- Feedback control has used up all of the adjustment allowed by the manufacturer.

c. SCR and Lean NO_X Catalyst Monitoring Conditions

Manufacturers would be required to define the monitoring conditions for catalyst conversion efficiency malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as required in section II.E, all monitors used to detect catalyst conversion efficiency malfunctions must be tracked separately but reported as a single set of values as specified in section II.E.[26] We are also proposing that the OBD system monitor continuously for active/intrusive reductant injection system malfunctions. Manufacturers would be required to monitor continuously the active/intrusive reductant delivery system.

d. SCR and Lean NO_X Catalyst MIL Illumination and DTC Storage

We are proposing the general MIL illumination and DTC storage requirements presented in section II.A.2 with the exception of active/intrusive reductant injection related malfunctions. If the OBD system is capable of discerning that a system malfunction is being caused by an empty reductant tank, the manufacturer may delay illumination of the MIL if the vehicle is equipped with an alternative indicator for notifying the vehicle operator of the malfunction. The manufacturer would be required to demonstrate that: The alternative indicator is of sufficient illumination and location to be readily visible to the operator under all lighting conditions; and the alternative indicator provides equivalent assurance that a vehicle operator will be promptly notified; and, that corrective action would be undertaken. If the vehicle is not equipped with an alternative indicator and the MIL illuminates, the MIL may be immediately extinguished and the corresponding DTC erased once the OBD system has verified that the reductant tank has been properly refilled and the MIL has not been illuminated for any other type of malfunction. The Administrator may approve other strategies that provide equivalent assurance that a vehicle operator will be promptly notified and that corrective action will be undertaken.

The monitoring method for the catalyst(s) would have to be capable of detecting all instances, except diagnostic self-clearing, when a catalyst DTC has been cleared but the catalyst has not been replaced (e.g., catalyst over temperature histogram approaches are not acceptable).

7. NO_X Adsorber System Monitoring

a. Background

NO_X adsorbers, or lean NO_X traps (LNT), work to control NO_X emissions by storing NO_X on the surface of the catalyst during the lean engine operation typical of diesel engines and then by undergoing subsequent brief rich regeneration events where the NO_X is released and reduced across a precious metal catalyst.

NO_X adsorber systems generally consist of a conventional three-way catalyst function (e.g., platinum) with NO_X storage components (i.e., adsorbents) incorporated into the washcoat. Three-way catalysts convert NO_X emissions as well as HC and CO emissions (hence the name three-way) by promoting oxidation of HC and CO to H_2O and CO_2 using the oxidation potential of the NO_X pollutant and, in the process, reducing the NO_X emissions to nitrogen, N_2. Said another way, three-way catalysts work with exhaust conditions where the net oxidizing and reducing chemistry of the exhaust is approximately equal, allowing the catalyst to promote complete oxidation/reduction reactions to the desired exhaust components of CO_2, H_2O, and N_2. The oxidizing potential in the exhaust comes from NO_X emissions and any feedgas oxygen (O_2) not consumed during combustion. The reducing potential in the exhaust

[26] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

comes from HC and CO emissions, which represent products of incomplete combustion. Operation of the engine to ensure that the oxidizing and reducing potential of the combustion and exhaust conditions is precisely balanced is referred to as stoichiometric engine operation.

Because diesel engines run lean of stoichiometric operation, the NO_X emissions are stored, or absorbed—via chemical reaction with alkaline earth metals such as barium nitrate in the washcoat—and then released during rich operation for conversion to N_2. This NO_X release during rich operation is referred to as a regeneration event. The rich operating conditions required for NO_X regeneration, which generally last for several seconds, are typically achieved using a combination of intake air throttling (to reduce the amount of intake air), exhaust gas recirculation, and post-combustion fuel injection.

NO_X adsorber systems have demonstrated NO_X reduction efficiencies from 50 percent to in excess of 90 percent. This efficiency has been found to be highly dependent on the fuel sulfur content because NO_X adsorbers are extremely sensitive to sulfur. The NO_X adsorption material has an even greater affinity for sulfur compounds than NO_X. Thus, sulfur compounds can saturate the adsorber and limit the number of active sites for NO_X adsorption, thereby lowering the NO_X reduction efficiency. Accordingly, low sulfur fuel is required to achieve the greatest NO_X reduction efficiencies. Although new adsorber washcoat materials are being developed with a higher resistance to sulfur poisoning and ultra-low sulfur fuel will be the norm by 2010, NO_X adsorber systems will still need to purge the stored sulfur from the storage bed by a process referred to as desulfation. Because the desulfation process takes longer (e.g., several minutes) and requires more fuel and heat than the NO_X regeneration step, permanent thermal degradation of the NO_X adsorber and fuel economy penalties may result from desulfation events happening with excessive frequency. However, if desulfation is not done frequently enough, NO_X storage capacity would be compromised and fuel economy penalties would be incurred from excessive attempts at NO_X regeneration.

In order to achieve and maintain high NO_X conversion efficiencies while limiting negative impacts on fuel economy and driveability, vehicles with NO_X adsorber systems will require precise air/fuel control in the engine and in the exhaust stream. Diesel manufacturers are expected to utilize NO_X sensors and temperature sensors to provide the most precise closed-loop control for the NO_X adsorber system. If NO_X sensors are not used to control the NO_X adsorber system, manufacturers could use wide-range air-fuel (A/F) sensors located upstream and downstream of the adsorber as a substitute. However, A/F sensors cannot provide an instantaneous indication of tailpipe NO_X levels, which would allow the control system to precisely determine when the adsorber system is filled to capacity and regeneration should be initiated. If A/F sensors are used in lieu of NO_X sensors, an estimation of engine-out NO_X emissions and their subsequent storage in the NO_X adsorber can be achieved indirectly through modeling.

b. NO_X Adsorber System Monitoring Requirements

We are proposing that the OBD system monitor the NO_X adsorber on engines so equipped for proper performance. For engines equipped with active/intrusive injection (e.g., in-exhaust fuel and/or air injection) to achieve NO_X regeneration, the OBD system would have to monitor the active/intrusive injection system for proper performance. The individual electronic components (e.g., injectors, valves, sensors) that are used in the active/intrusive injection system would have to be monitored in accordance with the comprehensive component requirements in section II.D.4.

i. NO_X Adsorber Capability Malfunctions

We are proposing that the OBD system detect a NO_X adsorber malfunction when its capability—i.e., its combined adsorption and conversion capability—decreases to the point that would cause an engine's NO_X emissions to exceed the applicable emissions thresholds for ''NO_X Catalyst Systems'' as shown in Table II.B–1. If no failure or deterioration of the NO_X adsorber capability could result in an engine's NO_X emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when the system has no detectable amount of NO_X adsorber capability.

ii. Active/Intrusive Reductant Injection System Malfunctions

For NO_X adsorber systems that use active/intrusive injection (e.g., in-cylinder post fuel injection, in-exhaust air-assisted fuel injection) to achieve desorption of the NO_X adsorber, the OBD system would have to detect a malfunction if any failure or deterioration of the injection system's ability to properly regulate injection causes the system to be unable to achieve desorption of the NO_X adsorber.

iii. NO_X Adsorber Feedback Control System Malfunctions

If the engine is equipped with feedback control of the reductant injection (e.g., feedback control of injection quantity, time), we are proposing that the OBD system detect a malfunction when and if:

- The system fails to begin feedback control within a manufacturer specified time interval;
- A failure or deterioration causes open loop or default operation; or
- Feedback control has used up all of the adjustment allowed by the manufacturer.

c. NO_X Adsorber System Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for NO_X adsorber capability malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as required in section II.E, all monitors used to detect NO_X adsorber capability malfunctions must be tracked separately but reported as a single set of values as specified in section II.E.[27] We are also proposing that the OBD system monitor continuously for active/intrusive reductant injection and feedback control system malfunctions.

d. NO_X Adsorber System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage discussed in section II.A.2.

8. Diesel Particulate Filter (DPF) System Monitoring

a. Background

Diesel particulate filters control diesel PM by capturing the soot (solid carbon) portion of PM in a filter media, typically a ceramic wall flow substrate, and then by oxidizing (burning) it in the oxygen-rich atmosphere of diesel exhaust.[28] In aggregate over a driving cycle, the PM must be burned at a rate equal to or

[27] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

greater than its accumulation rate, or the DPF will clog. Given low sulfur diesel fuel (diesel fuel with a sulfur content of 15 ppm or lower), highly active catalytic metals (e.g., platinum) can be used to promote soot oxidation. This method of PM filter regeneration, called passive regeneration, is the primary means of soot oxidation that we project industry will use in 2007/2010.

The DPF technology has proven itself in tens of thousands of retrofit applications where low sulfur diesel fuel is already available. More than a million light-duty passenger cars in Europe now have diesel particulate filters. DPFs are considered the most effective control technology for the reduction of particulate emissions and can typically achieve PM reductions in excess of 90 percent.

In order to maintain the performance of the DPF and the engine, the trapped PM must be periodically removed before too much particulate is accumulated and exhaust backpressure reaches unacceptable levels. The process of periodically removing accumulated PM from the DPF is known as ''regeneration'' and is very important for maintaining low PM emission levels. DPF regeneration can be passive (i.e., occur continuously during regular operation of the filter), active (i.e., occur on a controlled, periodic basis after a predetermined quantity of particulates have been accumulated), or a combination of the two. With passive regeneration, the oxidizing catalyst material on the DPF substrate serves to lower the temperature for oxidizing PM. This allows the DPF to continuously oxidize trapped PM material during normal driving. In contrast, active systems utilize an external heat source—such as an electric heater or fuel burner—to facilitate DPF regeneration. We are projecting that virtually all DPF systems will have some sort of active regeneration mechanism as a backup mechanism should operating conditions not be conducive for passive regeneration.

One of the key considerations for a DPF regeneration control system is the amount of soot quantity that is stored in the DPF (often called soot loading). If too much soot is stored when regeneration is activated, the soot can burn uncontrollably and DPF substrate could be damaged via melting or cracking. Conversely, activating regeneration when there is too little trapped soot will not ensure good combustion propagation which would effectively waste the energy (fuel) used to initiate the regeneration. Another important consideration in the control system design is the fuel economy penalty involved with DPF regeneration. Prolonged operation with high backpressures in the exhaust and regenerations occurring too frequently are both detrimental to fuel economy and DPF durability. Therefore, DPF system designers will need to carefully balance the regeneration frequency with various conflicting factors. To optimize the trap regeneration for these design factors, the DPF regeneration control system is projected to incorporate both pressure sensors and temperature sensors to model soot loading and other phenomena.[29] Through the information provided by these sensors, designers can optimize the DPF for high effectiveness and maximum durability while minimizing fuel economy and performance penalties.

b. DPF System Monitoring Requirements

We are proposing that the OBD system monitor the DPF on engines so-equipped for proper performance.[30] For engines equipped with active regeneration systems that utilize an active/intrusive injection (e.g., in-exhaust fuel injection, in-exhaust fuel/air burner), the OBD system would have to monitor the active/intrusive injection system for proper performance. The individual electronic components (e.g., injectors, valves, sensors) that are used in the active/intrusive injection system must be monitored in accordance with the comprehensive component requirements in section II.D.4.

i. PM Filtering Performance

We are proposing that the OBD system detect a malfunction prior to a decrease in the filtering capability of the DPF (e.g., cracking, melting, etc.) that would cause an engine's PM emissions to exceed the applicable emissions thresholds for ''DPF Systems'' as shown in Table II.B–1. If no failure or deterioration of the PM filtering performance could result in an engine's PM emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when no detectable amount of PM filtering occurs.

ii. DPF Regeneration Frequency Malfunctions—Too Frequent

We are proposing that the OBD system detect a malfunction when the DPF regeneration frequency increases from—i.e., occurs more often than—the manufacturer's specified regeneration frequency to a level such that it would cause an engine's NMHC emissions to exceed the applicable emissions threshold for ''DPF Systems'' as shown in Table II.B–1. If no such regeneration frequency exists that could cause NMHC emissions to exceed the applicable emission threshold, the OBD system would have to detect a malfunction when the PM filter regeneration frequency exceeds the manufacturer's specified design limits for allowable regeneration frequency.

iii. DPF Incomplete Regeneration Malfunctions

We are proposing that the OBD system detect a regeneration malfunction when the DPF does not properly regenerate under manufacturer-defined conditions where regeneration is designed to occur.

iv. DPF NMHC Conversion Efficiency Malfunctions

We are proposing that, for any DPF that serves to convert NMHC emissions, the OBD system must monitor the NMHC converting function of the DPF and detect a malfunction when the NMHC conversion capability decreases to the point that NMHC emissions exceed the NMHC threshold for ''DPF Systems'' as shown in Table II.B–1. If no failure or deterioration of the NMHC conversion capability could result in NMHC emissions exceeding the applicable NMHC threshold, the OBD system would have to detect a malfunction when the system has no detectable amount of NMHC conversion capability.

v. DPF Missing Substrate Malfunctions

We are proposing that the OBD system detect a malfunction if either the DPF substrate is completely destroyed, removed, or missing, or if the DPF assembly has been replaced with a muffler or straight pipe.

vi. DPF Active/Intrusive Injection System Malfunctions

We are proposing that, for systems that utilize active/intrusive injection (e.g., in-cylinder post fuel injection, in-exhaust air-assisted fuel injection) to achieve DPF regeneration, the OBD system detect a malfunction if any

[28] See ''Regulatory Impact Analysis: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements;'' EPA420–R–00–026; December 2000 at Chapter III for a more complete description of DPFs.

[29] Salvat, O., Marez, P., and Belot, G., ''Passenger Car Serial Application of a Particulate Filter System on a Common Rail Direct Injection Diesel Engine,'' SAE Paper 2000–01–0473 which may be obtained from Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA, 15096–0001.

[30] Note that these requirements would also apply to a catalyzed diesel particulate filter (CDPF). We use the more common term DPF throughout this discussion.

failure or deterioration of the injection system's ability to properly regulate injection causes the system to be unable to achieve DPF regeneration.

vii. DPF Regeneration Feedback Control System Malfunctions

We are proposing that, if the engine is equipped with feedback control of the DPF regeneration (e.g., feedback control of oxidation catalyst inlet temperature, PM filter inlet or outlet temperature, in-cylinder or in-exhaust fuel injection), the OBD system must detect a malfunction when and if:

- The system fails to begin feedback control within a manufacturer specified time interval;
- A failure or deterioration causes open loop or default operation; or
- Feedback control has used up all of the adjustment allowed by the manufacturer.

c. DPF System Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for all DPF related malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met with the exception that monitoring must occur every time the monitoring conditions are met during the driving cycle rather than once per driving cycle as required for most monitors. For purposes of tracking and reporting as required in section II.E, all monitors used to detect all DPF related malfunctions would have to be tracked separately but reported as a single set of values as specified in section II.E.[31]

d. DPF System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

9. Exhaust Gas Sensor Monitoring

a. Background

Exhaust gas sensors (e.g., oxygen sensors, wide-range air-fuel (A/F) sensors, NO_X sensors) are important to the emission control system of vehicles. These sensors are used for enhancing the performance of several emission control technologies (e.g., catalysts, EGR systems). We expect that both oxygen sensors and wide range A/F sensors may be used by heavy-duty manufacturers to optimize their emission control technologies. We would expect that, in addition to their emissions control functions, these sensors will also be used to satisfy many of the proposed HDOBD monitoring requirements, such as fuel system monitoring, catalyst monitoring, and EGR system monitoring. NO_X sensors may also be used for optimization of several diesel emission control technologies, such as NO_X adsorbers and selective catalytic reduction (SCR) systems. Since an exhaust gas sensor can be a critical component of a vehicle's fuel and emission control system, the proper performance of this component needs to be assured to maintain low emissions. The reliance on these sensors for emissions control and OBD monitoring makes it important that any malfunction that adversely affects the performance of any of these sensors be detected by the OBD system.

b. Exhaust Gas Sensor Monitoring Requirements

We are proposing that the OBD system monitor all exhaust gas sensors (e.g., oxygen, air-fuel ratio, NO_X) used either for emission control system feedback (e.g., EGR control/feedback, SCR control/feedback, NO_X adsorber control/feedback), or as a monitoring device, for proper output signal, activity, response rate, and any other parameter that can affect emissions. For engines equipped with heated exhaust gas sensors, the OBD system would have to monitor the heater for proper performance.

i. Air/Fuel Ratio Sensor Malfunctions

For all air/fuel ratio sensors, we are proposing the following:

- Circuit malfunctions: The OBD system must detect malfunctions of the sensor caused by either a lack of circuit continuity or out-of-range values.
- Feedback malfunctions: The OBD system must detect a malfunction of the sensor when a sensor failure or deterioration causes an emissions control system—e.g., the EGR, SCR, or NO_X adsorber systems—to stop using that sensor as a feedback input (e.g., causes default or open-loop operation).
- Monitoring capability: To the extent feasible, the OBD system must detect a malfunction of the sensor when the sensor output voltage, resistance, impedance, current, amplitude, activity, offset, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst, EGR, SCR, or NO_X adsorber monitoring).

Specifically for sensors located upstream of an aftertreatment device, we are proposing the following:

- Sensor performance malfunctions: The OBD system must detect a malfunction prior to any failure or deterioration of the sensor voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) that would cause an engine's emissions to exceed the applicable emissions thresholds for ''Other Monitors'' as shown in Table II.B–1.

Specifically for sensors located downstream of an aftertreatment device, we are proposing the following:

- Sensor performance malfunctions: The OBD system must detect a malfunction prior to any failure or deterioration of the sensor voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) that would cause an engine's emissions to exceed the applicable emissions thresholds for ''Air-fuel ratio sensors downstream of aftertreatment devices'' as shown in Table II.B–1.

ii. NO_X Sensor Malfunctions

For NO_X sensors, we are proposing the following:

- Sensor performance malfunctions: The OBD system must detect a malfunction prior to any failure or deterioration of the sensor voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) that would cause an engine's emissions to exceed the applicable emissions thresholds for ''NO_X sensors'' as shown in Table II.B–1.
- Circuit malfunctions: The OBD system must detect malfunctions of the sensor caused by either a lack of circuit continuity or out-of-range values.
- Feedback malfunctions: The OBD system shall detect a malfunction of the sensor when a sensor failure or deterioration causes an emission control—e.g., the EGR, SCR, or NO_X adsorber systems—to stop using that sensor as a feedback input (e.g., causes default or open-loop operation).
- Monitoring capability: To the extent feasible, the OBD system must detect a malfunction of the sensor when the sensor output voltage, resistance, impedance, current, amplitude, activity, offset, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst, EGR, SCR, or NO_X adsorber monitoring).

[31] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

iii. Other Exhaust Gas Sensor Malfunctions

For other exhaust gas sensors, we are proposing that the manufacturer submit a monitoring plan to the Administrator for approval. The Administrator would approve the request upon determining that the manufacturer has submitted data and an engineering evaluation that demonstrate that the monitoring plan is as reliable and effective as the monitoring plan required for air/fuel ratio sensors and NO_X sensors.

iv. Exhaust Gas Sensor Heater Malfunctions

We are proposing that the OBD system detect a malfunction of the heater performance when the current or voltage drop in the heater circuit is no longer within the manufacturer's specified limits for normal operation (i.e., within the criteria required to be met by the component vendor for heater circuit performance at high mileage). The manufacturer may use other malfunction criteria for heater performance malfunctions. To do so, the manufacturer would be required to submit data and/or engineering analyses that demonstrate that the monitoring reliability and timeliness would be equivalent to the criteria stated here. Further, the OBD system would be required to detect malfunctions of the heater circuit including open or short circuits that conflict with the commanded state of the heater (e.g., shorted to 12 Volts when commanded to 0 Volts (ground)).

c. Exhaust Gas Sensor Monitoring Conditions

For exhaust gas sensor performance malfunctions, we are proposing that manufacturers define the monitoring conditions such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as required in section II.E, all monitors used to detect sensor performance malfunctions would have to be tracked separately but reported as a single set of values as specified in section II.E.[32]

For exhaust gas sensor monitoring capability malfunctions, manufacturers would have to define the monitoring conditions such that the minimum performance ratio requirements discussed in section II.E would be met with the exception that monitoring must occur every time the monitoring conditions are met during the driving cycle rather than once per driving cycle as required for most monitors.

For exhaust gas sensor circuit malfunctions and feedback malfunctions, monitoring must be conducted continuously.

The manufacturer may disable continuous exhaust gas sensor monitoring when an exhaust gas sensor malfunction cannot be distinguished from other effects (e.g., disable ''out-of-range low'' monitoring during fuel cut conditions). To do so, the manufacturer would be required to submit test data and/or engineering analyses that demonstrate that a properly functioning sensor cannot be distinguished from a malfunctioning sensor and that the disablement interval is limited only to that necessary for avoiding a false detection.

For exhaust gas sensor heater malfunctions, manufacturers must define monitoring conditions such that the minimum performance ratio requirements discussed in section II.E would be met. Monitoring for sensor heater circuit malfunctions must be conducted continuously.

d. Exhaust Gas Sensor MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

C. Monitoring Requirements and Timelines for Gasoline/Spark-Ignition Engines

Table II.C–1 summarizes the proposed gasoline fueled spark ignition emissions thresholds at which point a component or system has failed to the point of requiring an illuminated MIL and a stored DTC. Table II.C–2 summarizes the proposed implementation schedule for these thresholds—i.e., the proposed certification requirements and in-use liabilities. More detail regarding the specific monitoring requirements, implementation schedules, and liabilities can be found in the sections that follow.

TABLE II.C–1.—PROPOSED EMISSIONS THRESHOLDS FOR GASOLINE FUELED SI ENGINES OVER 14,000 POUNDS

Component/Monitor	MY	NMHC	CO	NO_X
Catalytic converter system	2010+	1.75x		1.75x
"Other monitors" with emissions thresholds (see section II.C)	2010+	1.5x	1.5x	1.5x
Evaporative emissions control system	2010+	0.150 inch leak.		

Notes: MY=Model Year; 1.75x means a multiple of 1.75 times the applicable emissions standard; not all proposed monitors have emissions thresholds but instead rely on functionality and rationality checks as described in section II.D.4. The evaporative emissions control system threshold is not, technically, an emissions threshold but rather a leak size that must be detected; nonetheless, for ease we refer to this as the threshold.

There are exceptions to the emissions thresholds shown in Table II.C–1 whereby a manufacturer can demonstrate that emissions do not exceed the threshold even when the component or system is non-functional at which point a functional check would be allowed.

The monitoring requirements described below for gasoline engines mirror those that are already in place for gasoline engines used in vehicles under 14,000 pounds. The HD gasoline industry—General Motors and Ford, as of today [33]—have told us that their preference is to use essentially the same OBD system on their engines used in both under and over 14,000 pound vehicles.[34] In general, we agree with the

[32] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

[33] This is true according to our certification database for both he 2004 and 2005 model years. Other manufacturers certify engines that use the Otto cycle, but those engines do not burn gasoline and instead burn various alternative fuels.

[34] ''EMA Comments on Proposed HDOBD Requirements for HDGE,'' bullet items 3 and 4; April 28, 2005, Docket ID# EPA–HQ–OAR–2005–0047–0003.

HD gasoline industry on this issue for three reasons:

- The engines used in vehicles above and below 14,000 pounds are the same which makes it easy for industry to use the same OBD monitors.
- The existing OBD requirements for engines used in vehicles below 14,000 pounds have proven effective; and,
- The industry members have more than 10 years experience complying with the OBD requirements for engines used in vehicles below 14,000 pounds.

As a result, we are proposing requirements that should allow for OBD system consistency in vehicles under and over 14,000 pounds rather than proposing requirements that mirror the proposed HD diesel requirements discussed in section II.B. Nonetheless, the requirements proposed below are for engine-based OBD monitors only rather than monitors for the entire powertrain (which would include the transmission). We are doing this for the same reasons as done for the proposed diesel OBD requirements in that certification of gasoline applications over 14,000 pounds, like their diesel counterparts, is done on an engine basis and not a vehicle basis.

1. Fuel System Monitoring

a. Background

As with diesel engines, the fuel system of a gasoline engine is an essential component of the engine's emissions control system. Proper delivery of fuel is essential to maintain stoichiometric operation and minimize engine out emissions. Proper stoichiometric control is also critical to maximize catalyst conversion efficiency and reach low tailpipe emission levels. As such, thorough monitoring of the fuel system is an essential element in an OBD system.

For gasoline engines, the fuel system generally includes a fuel pump, fuel pressure regulator, fuel rail, individual injectors for each cylinder, and a closed-loop feedback control system using oxygen sensor(s) or air-fuel ratio (A/F) sensor(s). The feedback sensors are located in the exhaust system and are used to regulate the fuel injection quantity to achieve a stoichiometric mixture in the exhaust. If the sensor indicates a rich (or lean) mixture, the system reduces (or increases) the amount of fuel being injected by applying a short term correction to the fuel injection quantity calculated for the current engine operating condition. To account for aging or deterioration in the system such as reduced injector flow, more permanent long term corrections are also learned and applied to the fuel injection quantity for more precise fueling.

For gasoline engines, fuel system monitoring has been implemented on light-duty vehicles since the 1996 model year and on heavy-duty vehicles less than 14,000 pounds and the engines used in those vehicles since the 2004/2005 model year. For heavy-duty gasoline engines used in vehicles over 14,000 pounds (many of which are the same engine as is used in vehicles less than 14,000 pounds), the system components and control strategies are identical to those used in the light-duty and under 14,000 pound categories. As such, the monitoring requirements established for engines used in vehicles less than 14,000 pounds can be directly applied to engines used in vehicles over 14,000 pounds.

b. Fuel System Monitoring Requirements

We are proposing that the fuel system be continuously monitored for its ability to maintain engine emissions below the applicable emissions thresholds. Manufacturers would also be required to verify that the fuel system is in closed-loop operation—e.g., that it is using the oxygen sensor for feedback control. The individual components of the fuel system would also be covered by separate monitoring requirements for oxygen sensors, misfire (for the fuel injectors), and comprehensive components (in systems such as those with electronically-controlled variable speed fuel pumps or electronically-controlled fuel pressure regulators).

i. Fuel System Performance

We are proposing that the OBD system be required to detect a malfunction of the fuel delivery system (including feedback control based on a secondary oxygen sensor) when the fuel delivery system is unable to maintain the engine's emissions at or below the applicable emissions thresholds for ''Other monitors'' as shown in Table II.C–1.

ii. Fuel System Feedback Control

If the engine is equipped with adaptive feedback control, we are proposing that the OBD system be required to detect a malfunction when the adaptive feedback control has used up all of the adjustment allowed by the manufacturer. However, if the engine is equipped with feedback control that is based on a secondary oxygen (or equivalent) sensor, the OBD system would not be required to detect a malfunction of the fuel system solely when the feedback control based on that secondary oxygen sensor has used up all of the adjustment allowed by the manufacturer. For such systems, the OBD system would be required to meet the fuel system performance requirements presented above.

Additionally, we are proposing that the OBD system be required to detect a malfunction whenever the fuel control system fails to enter closed loop operation within a time interval after engine startup. The manufacturer would be required to submit data and/or engineering analyses that support their chosen time interval.

Lastly, manufacturers would be allowed to adjust the malfunction criteria and/or monitoring conditions to compensate for changes in altitude, temporary introduction of large amounts of purge vapor, or for other similar identifiable operating conditions when they occur.

c. Fuel System Monitoring Conditions

We are proposing that the OBD system monitor continuously for malfunctions of the fuel system.

d. Fuel System MIL Illumination and DTC Storage

We are proposing that a pending DTC be stored immediately upon detecting a malfunction according to the fuel system monitoring requirements presented in section II.C.1.b (i.e., rather than waiting until the end of the drive cycle to store the pending DTC). Once a pending DTC is stored, the OBD system would be required to illuminate the MIL immediately and store a MIL-on DTC if a malfunction is again detected during either of the following two events: (1) The drive cycle immediately following the drive cycle during which the pending DTC was stored, regardless of the conditions encountered during the drive cycle; or, (2) on the next drive cycle during which similar conditions are encountered to those that occurred when the pending DTC was stored.[35]

We are also proposing that the pending DTC may be erased at the end of the next drive cycle in which similar conditions have been encountered without detecting a malfunction according to the fuel system monitoring requirements. The pending DTC may also be erased if similar conditions are not encountered during the 80 drive cycles immediately after the initial

[35] ''Similar conditions,'' as used in conjunction with misfire and fuel system monitoring, means engine conditions having an engine speed within 375 rpm, load conditions within 20 percent, and the same warm up status (i.e., cold or hot) as existing during the applicable previous problem detection. The Administrator may approve other definitions of similar conditions based on comparable timeliness and reliability in detecting similar engine operation.

detection of a malfunction for which the pending DTC was set.

We are proposing some specific requirements with respect to storage of freeze frame information associated with fuel system malfunctions. First, the OBD system must store and erase freeze frame information either in conjunction with storing and erasing a pending DTC or in conjunction with storing and erasing a MIL-on DTC. Second, if freeze frame information is already stored for a malfunction other than an engine misfire or fuel system malfunction at the time that a fuel system DTC is stored, the preexisting freeze frame information must be replaced with freeze frame information regarding the fuel system malfunction.

The OBD system would also be required to store the engine speed, load, and warm up status present when the first fuel system malfunction is detected that resulted in the storage of the pending DTC. The MIL may be extinguished after three sequential drive cycles in which similar conditions have been encountered without detecting a malfunction of the fuel system.

2. Engine Misfire Monitoring

a. Background

Detecting engine misfire on a gasoline spark ignition engine is important for two reasons: Its impact on the emissions performance of the engine and its impact on the durability of the catalytic converter. Engine misfire has two primary causes: Lack of spark and poor fuel metering (delivery). When misfire occurs, unburned fuel and air are pumped out of the engine and into the exhaust system and into the catalyst. This can increase dramatically the operating temperature of the catalyst where temperatures can soar to above 900 degrees Celsius. This problem is usually most severe under high load/high speed engine operating conditions and can cause irreversible damage to the catalyst. Though the durability of catalysts has been improving, most are unable to sustain continuous operation at such high temperatures. Engine misfire also contributes to poor emissions performance, especially when the misfire occurs during engine warm-up and the catalyst itself has not yet reached its operating temperature.

b. Engine Misfire Monitoring Requirements

We are proposing that the OBD system detect both engine misfire capable of causing catalyst damage and engine misfire capable of causing poor emissions performance. Additionally, the OBD system would be required to identify the specific cylinder in which misfire is occurring and/or if there exists a condition in which more than one cylinder is misfiring; when identifying a multiple cylinder misfire condition, the OBD system would not be required to identify individually each of the misfiring cylinders. We are proposing an exception to this whereby if more than 90 percent of the detected misfires are occurring in a single cylinder, the manufacturer may elect to consider it a single cylinder misfire condition rather than a multiple cylinder misfire condition. However, we are proposing that, if two or more cylinders individually have more than 10 percent of the total number of detected misfires, the manufacturer must consider it a multiple cylinder misfire condition.

i. Engine Misfire Capable of Causing Catalyst Damage

We are proposing that the manufacturer be required to detect the percentage of misfire—evaluated in 200 revolution increments—for each engine speed and load condition that would result in a temperature capable of damaging the catalyst. For every engine speed and load condition at which this percentage is determined to be less than five percent, the manufacturer may set the malfunction criteria at five percent. The manufacturer may use a longer interval than a 200 revolution increment but only for determining, on a given drive cycle, the first misfire exceedance; upon detecting the first such exceedance, the 200 revolution increment must be used. The manufacturer may use a longer initial interval by submitting data and/or engineering analyses that demonstrate that catalyst damage would not occur due to unacceptably high catalyst temperatures before the interval has elapsed.

Further, we are proposing that, for the purpose of establishing the temperature at which catalyst damage would occur, manufacturers not be allowed to define the catalyst damaging temperature at a temperature more severe than what the catalyst system could be operated at for 10 consecutive hours and still meet the applicable standards.

ii. Engine Misfire Causing Poor Emissions Performance

We are proposing that the manufacturer be required to detect the percentage of misfire—evaluated in 1000 revolution increments—that would cause emissions to exceed the emissions thresholds for ''Other monitors'' as shown in Table II.C–1 if that percentage of misfire were present from the beginning of the test procedure. To establish this percentage of misfire, the manufacturer would be required to use misfire events occurring at equally spaced, complete engine cycle intervals, across randomly selected cylinders throughout each 1000 revolution increment. If this percentage of misfire is determined to be lower than one percent, the manufacturer may set the malfunction criteria at one percent. The manufacturer may use a different interval than a 1000 revolution increment. To do so, the manufacturer would be required to submit data and/or engineering analyses demonstrating that the strategy would be equally effective and timely at detecting misfire. A malfunction must be detected if the percentage of misfire is exceeded regardless of the pattern of misfire events (e.g., random, equally spaced, continuous).

c. Engine Misfire Monitoring Conditions

We are proposing that the OBD system monitor continuously to detect engine misfire under all of the following conditions:

- From no later than the end of the second crankshaft revolution after engine start;
- During the rise time and settling time as the engine reaches the desired idle speed immediately following engine start-up (i.e., ''flare-up'' and ''flare-down''); and,
- Under all positive torque conditions except within the engine operating region bound by lines connecting the following three points: An engine speed of 3000 rpm with the engine load at the positive torque line (i.e., engine load with the transmission in neutral), an engine speed at the redline rpm with the engine load at the positive torque line, and an engine speed at the redline rpm with an engine load at which intake manifold vacuum is four inches of mercury lower than that at the positive torque line (this would be an engine load somewhat greater than the engine load at the positive torque line).[36]

If a monitoring system cannot detect all misfire patterns under the required engine speed and load conditions, the manufacturer may request approval of the system nonetheless. In evaluating the manufacturer's request, the Administrator would consider:

- The magnitude of the region(s) in which misfire detection is limited;
- The degree to which misfire detection is limited in those region(s)

[36] ''Redline engine speed'' is actually defined by the manufacturer as either the recommended maximum engine speed as normally displayed on instrument panel tachometers or the engine speed at which fuel shutoff occurs.

(i.e., the probability of detection of misfire events);

- The frequency with which said region(s) are expected to be encountered in-use;
- The type of misfire patterns for which misfire detection is troublesome; and,
- Demonstration that the monitoring technology being used is not inherently incapable of detecting misfire under the required conditions (i.e., compliance can be achieved by other manufacturers on their engines).

The Administrator's evaluation would be based on the following misfire patterns:

- Equally spaced misfire occurring on randomly selected cylinders;
- Single cylinder continuous misfire; and,
- Paired cylinder (cylinders firing at the same crank angle) continuous misfire.

Further, a manufacturer may use a monitoring system that has reduced misfire detection capability during the portion of the first 1000 revolutions after engine start during which a cold start emission reduction strategy is active that reduces engine torque (e.g., spark retard strategies). To do so, the manufacturer would be required to submit data and/or engineering analyses demonstrating that the probability of detection is greater than or equal to 75 percent during the worst case condition (i.e., lowest generated torque) for a vehicle operated continuously at idle (park/neutral idle) on a cold start between 50 and 86 degrees Fahrenheit and that the technology cannot reliably detect a higher percentage of the misfire events during these conditions.

A manufacturer may disable misfire monitoring or use an alternative malfunction criterion when misfire cannot be distinguished from other effects. To do so, the manufacturer would be required to submit data and/or engineering analyses demonstrating that the disablement interval or period of use of an alternative malfunction criterion is limited only to that necessary for avoiding a false detection (errors of commission). Such disablements would be allowed for conditions involving:

- Rough road;
- Fuel cut;
- Gear changes for manual transmission vehicles;
- Traction control or other vehicle stability control activation such as anti-lock braking or other engine torque modifications to enhance vehicle stability;
- Off-board control or intrusive activation of vehicle components or diagnostics during service or assembly plant testing;
- Portions of intrusive evaporative system or EGR diagnostics that can significantly affect engine stability (i.e., while the purge valve is open during the vacuum pull-down of a evaporative system leak check but not while the purge valve is closed and the evaporative system is sealed or while an EGR diagnostic causes the EGR valve to be intrusively cycled on and off during positive torque conditions); or,
- Engine speed, load, or torque transients due to throttle movements more rapid than occurs over the FTP cycle for the worst case engine within each engine family.

Additionally, the manufacturer may disable misfire monitoring when the fuel level is 15 percent or less of the nominal capacity of the fuel tank, when PTO units are active, or while engine coolant temperature is below 20 degrees Fahrenheit. For the latter case, the manufacturer may continue the misfire monitoring disablement until engine coolant temperature exceeds 70 degrees Fahrenheit provided the manufacturer can demonstrate that it is necessary.

In general, the Administrator would not approve misfire monitoring disablement for conditions involving normal air conditioning compressor cycling from on-to-off or off-to-on, automatic transmission gear shifts (except for shifts occurring during wide open throttle operation), transitions from idle to off-idle, normal engine speed or load changes that occur during the engine speed rise time and settling time (i.e., ''flare-up'' and ''flare-down'') immediately after engine starting without any vehicle operator-induced actions (e.g., throttle stabs), or excess acceleration (except for acceleration rates that exceed the maximum acceleration rate obtainable at wide open throttle while the vehicle is in gear due to abnormal conditions such as slipping of a clutch).

Further, the manufacturer may request approval of other misfire monitoring disablements or use of alternative malfunction criteria for any other condition. The Administrator would consider such requests on a case by case basis and will consider whether or not the manufacturer has demonstrated that the request is based on an unusual or unforeseen circumstance and that it is applying the best available computer and monitoring technology.

For engines with more than eight cylinders that cannot meet the continuous monitoring and detection requirements listed above, a manufacturer may use alternative misfire monitoring conditions. Any manufacturer wishing to use alternative misfire monitoring conditions must submit data and/or an engineering evaluation that demonstrate that misfire detection throughout the required operating region cannot be achieved when using proven monitoring technology (i.e., a technology that provides for compliance with these requirements on other engines) and provided misfire is detected to the fullest extent permitted by the technology. However, the misfire detection system would still be required to monitor during all positive torque operating conditions encountered during an FTP transient cycle.

d. Engine Misfire MIL Illumination and DTC Storage

Manufacturers may store a general misfire DTC instead of a cylinder specific DTC under certain operating conditions. Do so shall depend on the manufacturer submitting data and/or an engineering evaluation that demonstrate that the specific misfiring cylinder cannot be reliably identified when the certain operating conditions occur.

i. Engine Misfire Capable of Causing Catalyst Damage

We are proposing that a pending DTC shall be stored immediately if, during a single drive cycle, the percentage of misfire determined by the manufacturer as being capable of causing catalyst damage is exceeded three times when operating in the positive torque region encountered during an FTP transient cycle or is exceeded on a single occasion when operating at any other engine speed and load condition in the positive torque region defined above. Immediately after a pending DTC is stored, the MIL shall blink once per second at all times while misfire is occurring during the drive cycle (i.e., the MIL may be extinguished during those times when misfire is not occurring during the drive cycle). If, at the time such a catalyst damaging engine misfire is occurring, the MIL is already illuminated for a malfunction other than engine misfire, the MIL shall blink similarly while the engine misfire is occurring and, if the misfire ceases, the MIL shall stop blinking but shall remain illuminated as commanded by the other malfunction.

If a pending DTC is stored as described above, the OBD system shall immediately store a MIL-on DTC if the percentage of misfire determined by the manufacturer as being capable of causing catalyst damage is again exceeded one or more times during either: (a) the drive cycle immediately

following the storage of the pending DTC, regardless of the conditions encountered during the drive cycle; or, (b) on the next drive cycle in which similar conditions are encountered to those that existed when the pending DTC was stored.

If, during a previous drive cycle, a pending DTC has been stored associated with detection of an engine misfire capable of causing poor emissions performance, the OBD system shall immediately store a MIL-on DTC if the percentage of misfire determined by the manufacturer as capable of causing catalyst damage is exceeded, regardless of the conditions encountered.

Upon storage of a MIL-on DTC associated with engine misfire capable of causing catalyst damage, the MIL shall blink as described above while the engine misfire is occurring and then shall remain continuously illuminated if the engine misfire ceases. This MIL illumination logic shall continue until the requirements for extinguishing the MIL are met, as described below.

If the engine misfire is not again detected by the end of the next drive cycle in which similar conditions are encountered to those that existed when the pending DTC was stored then the pending DTC shall be erased. The pending DTC may also be erased if similar conditions are not encountered during the 80 drive cycles subsequent to the initial malfunction detection.

We are also proposing that engines with fuel shutoff and default fuel control—that are used to prevent catalyst damage should engine misfire capable of causing catalyst damage be detected—shall have some exemptions from these MIL illumination requirements. Most notably, the MIL is not required to blink while the catalyst damaging misfire is occurring. Instead, the MIL may simply illuminate in a steady fashion while the misfire is occurring provided that the fuel shutoff and default fuel control are activated as soon as the misfire is detected. Fuel shutoff and default fuel control may be deactivated only to permit fueling outside of the misfire range. Manufacturers may also periodically, but not more than once every 30 seconds, deactivate fuel shutoff and default fuel control to determine if the catalyst damaging misfire is still occurring. Normal fueling and fuel control may be resumed if the catalyst damaging misfire is no longer being detected.

Manufacturers may also use a MIL illumination strategy that continuously illuminates the MIL in lieu of blinking the MIL during extreme misfire conditions capable of causing catalyst damage (i.e., misfire capable of causing catalyst damage that is occurring at all engine speeds and loads). Manufacturers would be allowed to use such a strategy only when catalyst damaging misfire levels cannot be avoided during reasonable driving conditions and the manufacturer can demonstrate that the strategy will encourage operation of the vehicle in conditions that will minimize catalyst damage (e.g., at low engine speeds and loads).

ii. Engine Misfire Causing Poor Emissions Performance

We are proposing that, for a misfire detected within the first 1000 revolutions after engine start during which misfire detection is active, a pending DTC shall be stored after the first exceedance of the percentage of misfire determined by the manufacturer as capable of causing poor emissions performance. If a pending DTC is stored, the OBD system shall illuminate the MIL and store a MIL-on DTC within 10 seconds if an exceedance of the percentage of misfire is again detected in the first 1000 revolutions during any subsequent drive cycle, regardless of the conditions encountered during the driving cycle. The pending DTC shall be erased at the end of the next drive cycle in which similar conditions are encountered to those that existed when the pending DTC was stored provided the specified percentage of misfire is not again detected. The pending DTC may also be erased if similar conditions are not encountered during the 80 drive cycles subsequent to the initial malfunction detection.

For a misfire detected after the first 1000 revolutions following engine start, a pending DTC shall be stored no later than after the fourth exceedance—during a single drive cycle—of the percentage of misfire determined by the manufacturer as being capable of causing poor emissions performance. If a pending DTC is stored, the OBD system shall illuminate the MIL and store a MIL-on DTC within 10 seconds if an exceedance of the percentage of misfire is again detected four times during: (a) the drive cycle immediately following the storage of the pending DTC, regardless of the conditions encountered during the drive cycle; or, (b) on the next drive cycle in which similar conditions are encountered to those that existed when the pending DTC was stored. The pending DTC shall be erased at the end of the next drive cycle in which similar conditions are encountered to those that existed when the pending DTC was stored provided the specified percentage of misfire is not again detected. The pending DTC may also be erased if similar conditions are not encountered during the 80 drive cycles subsequent to the initial malfunction detection.

We are proposing some specific items with respect to freeze frame storage associated with engine misfire. The OBD system shall store and erase freeze frame conditions either in conjunction with storing and erasing a pending DTC or in conjunction with storing a MIL-on DTC and erasing a MIL-on DTC. In addition to those proposed requirements discussed in section II.A.2, we are proposing that, if freeze frame conditions are stored for a malfunction other than a misfire malfunction when a DTC is stored, the previously stored freeze frame information shall be replaced with freeze frame information regarding the misfire malfunction (i.e., the misfire's freeze frame information should take precedence over freeze frames for other malfunctions). Further, we are proposing that, upon detection of misfire, the OBD system store the following engine conditions: engine speed, load, and warm up status of the first misfire event that resulted in the storage of the pending DTC.

Lastly, we are proposing that the MIL may be extinguished after three sequential driving cycles in which similar conditions have been encountered without an exceedance of the specified percentage of misfire.

3. Exhaust Gas Recirculation (EGR) Monitoring

a. Background

EGR works to reduce NO_X emissions the same way in gasoline engines as described earlier for diesel engines. First, the recirculated exhaust gases dilute the intake air—i.e., oxygen in the fresh air is displaced with relatively non-reactive exhaust gases—which, in turn, results in less oxygen to form NO_X. Second, EGR absorbs heat from the combustion process which reduces combustion chamber temperatures which, in turn, reduces NO_X formation. The amount of heat absorbed from the combustion process is a function of EGR flow rate and recirculated gas temperature, both of which are controlled to minimize NO_X emissions. EGR systems can involve many components to ensure accurate control of EGR flow, including valves, valve position sensors, and actuators.

b. EGR System Monitoring Requirements

We are proposing that the OBD system monitor the EGR system on engines so equipped for low and high

flow rate malfunctions. The individual electronic components (e.g., actuators, valves, sensors) that are used in the EGR system must be monitored in accordance with the comprehensive component requirements in section II.D.4.

i. EGR Low Flow Malfunctions

We are proposing that the OBD system detect a malfunction prior to a decrease from the manufacturer's specified EGR flow rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.C–1. For engines in which no failure or deterioration of the EGR system that causes a decrease in flow could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when the system has reached its control limits such that it cannot increase EGR flow to achieve the commanded flow rate.

ii. EGR High Flow Malfunctions

We are proposing that the OBD system detect a malfunction of the EGR system, including a leaking EGR valve—i.e., exhaust gas flowing through the valve when the valve is commanded closed—prior to an increase from the manufacturer's specified EGR flow rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.C–1. For engines in which no failure or deterioration of the EGR system that causes an increase in flow could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction when the system has reached its control limits such that it cannot reduce EGR flow to achieve the commanded flow rate.

c. EGR System Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for EGR system malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as required in section II.E, all monitors used to detect EGR low flow and high flow malfunctions must be tracked separately but reported as a single set of values as specified in section II.E.[37]

Manufacturers may temporarily disable the EGR system monitor under conditions when monitoring may not be reliable (e.g., when freezing may affect performance of the system). Such temporary disablement would be allowed provided the manufacturer has submitted data and/or an engineering evaluation that demonstrate that the EGR monitor cannot be done reliably when these specific conditions exist.

d. EGR System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

4. Cold Start Emission Reduction Strategy Monitoring

a. Background

The largest portion of exhaust emissions from gasoline engines is generated during the brief period following startup before the engine and catalyst have warmed up to their normal operating temperatures. To meet increasingly stringent emissions standards, manufacturers are developing hardware and associated control strategies to reduce these ''cold start'' emissions. Most efforts center on reducing catalyst warm-up time.

A cold catalyst is heated mainly by two mechanisms: heat transferred from the exhaust gases to the catalyst; and, heat generated in the catalyst as a result of the exothermic catalytic reactions. Most manufacturers use substantial spark retard and/or increased idle speed following a cold engine start, both of which maximize the heat available in the exhaust gases which, in turn, increases the heat transfer to the catalyst. Vehicle drivability and engine idle quality concerns tend to limit the amount of spark retard and/or increased idle speed that a manufacturer can use to accelerate catalyst warm up. These strategies or, more correctly, the systems used to employ these strategies—the ignition system for spark retard and the idle control system for control of engine speed—are normally monitored only after engine warm-up. Therefore, any malfunctions that might occur during the cold start event may not be detected by the OBD system. This could have significant emissions consequences due to the unknown loss of emissions control during the time following engine startup.

This concern is exacerbated by the high cost of precious metals—the platinum group metals (PGM) platinum, palladium, and rhodium—which motivates industry to minimize their use in catalysts. To compensate for the resultant reduction in overall catalyst performance, manufacturers will likely use increasingly more aggressive cold start emission reduction strategies in an attempt to further reduce cold start emissions. These strategies must be successful—and be properly monitored—to meet the more stringent 2008 emissions standards and to maintain low emissions in-use.

b. Cold Start Emission Reduction Strategy Monitoring Requirements

We are proposing that, if an engine incorporates an engine control strategy specifically to reduce cold start emissions, the OBD system must monitor the key components (e.g., idle air control valve), other than the secondary air system, while the control strategy is active to ensure that the control strategy is operating properly. Secondary air systems would have to be monitored separately as discussed in section II.C.5.

The OBD system would be required to detect a malfunction prior to any failure or deterioration of the individual components associated with the cold start emissions reduction control strategy that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.C–1. For components where no failure or deterioration of the component used by the cold start emission reduction strategy could result in an engine's emissions exceeding the applicable emissions thresholds, the individual components would have to be monitored for proper functional response as described in section II.D.4 while the control strategy is active.

Manufacturers would be required to establish the appropriate malfunction criteria based on data from one or more representative engine(s). Further, manufacturers would be required to provide an engineering evaluation for establishing the malfunction criteria for the remainder of the manufacturer's product line. An annual evaluation of these criteria by the Administrator may not be necessary provided the manufacturer can demonstrate that any technological changes from one year to the next do not affect the previously approved malfunction criteria.

c. Cold Start Emission Reduction Strategy Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for

[37] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

malfunctions of the cold start emissions reduction strategy such that the minimum performance ratio requirements discussed in section II.E would be met.

d. Cold Start Emission Reduction Strategy MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

5. Secondary Air System Monitoring

a. Background

Secondary air systems—expected to be used on gasoline engines only—are used to reduce cold start emissions of hydrocarbons and carbon monoxide. Many of today's engines operate near stoichiometry after a cold engine start. However, the future more stringent emission standards may require the addition of a secondary air system in combination with a richer than stoichiometric cold start mixture. Such an approach could quickly warm up the catalyst for improved cold start emissions performance.

Secondary air systems typically consist of an electric air pump, various hoses, and check valves to deliver outside air to the exhaust system upstream of the catalytic converter(s). This system usually operates only after a cold engine start and usually for only a brief period of time. When the electric air pump is operating, fresh air is delivered into the exhaust where it mixes with and ignites any unburned fuel. This serves to warm up the catalyst far more rapidly than would otherwise occur. Any problems that might occur in the field—corroded check valves, damaged tubing and hoses, malfunctioning air switching valves—could cause cold start emissions performance to suffer. Therefore, monitoring is needed given the importance of a properly functioning secondary air system to emissions performance.

b. Secondary Air System Monitoring Requirements

We are proposing that the OBD system on engines equipped with any form of secondary air delivery system be required to monitor the proper functioning of the secondary air delivery system, including all air switching valve(s). The individual electronic components (e.g., actuators, valves, sensors) in the secondary air system would have to be monitored in accordance with the comprehensive component requirements discussed in section II.D.4.

i. Secondary Air System Low Flow Malfunctions

We are proposing that the OBD system detect a secondary air system malfunction prior to a decrease from the manufacturer's specified air flow during normal operation that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.C–1.[38] For engines in which no deterioration or failure of the secondary air system would result in an engine's emissions exceeding any of the applicable emissions thresholds, the OBD system would have to detect a malfunction when no detectable amount of air flow is delivered during normal operation of the secondary air system.

ii. Secondary Air System High Flow Malfunctions

We are proposing that the OBD system detect a secondary air system malfunction prior to an increase from the manufacturer's specified air flow during normal operation that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.C–1.[39] For engines in which no deterioration or failure of the secondary air system would result in an engine's emissions exceeding any of the applicable emissions thresholds, the OBD system would have to detect a malfunction when no detectable amount of air flow is delivered during normal operation of the secondary air system.

c. Secondary Air System Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for malfunctions of the secondary air system such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as required in section II.E, all monitors used to detect malfunctions of the secondary air system during its normal operation must be tracked separately but reported as a single set of values as specified in section II.E

d. Secondary Air System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

6. Catalytic Converter Monitoring

a. Background

Three-way catalysts are one of the most important emission-control components on gasoline engines. They consist of ceramic or metal substrates coated with the one or more of the platinum group metals (PGM) platinum, palladium, and rhodium. These PGMs are dispersed within an alumina washcoat containing ceria, and the substrates are mounted in a stainless steel container in the vehicle exhaust system. Three-way catalysts are capable of oxidizing HC emissions, oxidizing CO emissions, and reducing NO_X emissions, hence the term three-way.

While continuous improvements to catalysts have increased their durability, their performance still deteriorates, especially when subjected to very high temperatures. Such high temperatures can be caused by, among other factors, engine misfire which results in unburned fuel and air entering and igniting in the catalyst. Exposure to such high temperatures will result in reduced catalyst conversion efficiency. Catalyst efficiency can also deteriorate via poisoning if exposed to lead, phosphorus, or high sulfur levels. Catalysts can also fail by mechanical means such as excessive vibration. Given its importance to emissions control and the many factors that can reduce its effectiveness, the catalyst is one of the most important components to be monitored.

b. Catalytic Converter Monitoring Requirements

We are proposing that the OBD system monitor the catalyst system for proper conversion capability. Specifically, the OBD system would be required to detect a catalyst system malfunction when the catalyst system's conversion capability decreases to the point that any of the following occurs:

- NMHC and/or NO_X emissions exceed the emissions thresholds for the ''catalytic converter system'' as shown in Table II.C–1.

For purposes of determining the catalyst system malfunction criteria the manufacturer would be required to use a catalyst system deteriorated to the malfunction criteria using methods established by the manufacturer to

[38] For purposes of secondary air system malfunctions, ''air flow'' is defined as the air flow delivered by the secondary air system to the exhaust system. For engines using secondary air systems with multiple air flow paths/distribution points, the air flow to each bank (i.e., a group of cylinders that share a common exhaust manifold, catalyst, and control sensor) must be monitored in accordance with these malfunction criteria. Also, ''normal operation'' is defined as the condition where the secondary air system is activated during catalyst and/or engine warm-up following engine start. ''Normal operation'' does not include the condition where the secondary air system is intrusively turned on solely for the purpose of monitoring.

[39] *Ibid.*

represent real world catalyst deterioration under normal and malfunctioning operating conditions. The malfunction criteria must be established by using a catalyst system with all monitored and unmonitored catalysts simultaneously deteriorated to the malfunction criteria.[40] For engines using fuel shutoff to prevent over-fueling during misfire conditions (see section II.C.2), the malfunction criteria could be established using a catalyst system with all monitored catalysts simultaneously deteriorated to the malfunction criteria and all unmonitored catalysts deteriorated to the end of the engine's useful life.

c. Catalytic Converter Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for malfunctions of the catalytic converter system such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as required in section II.E, all monitors used to detect malfunctions of the catalytic converter system during its normal operation must be tracked separately but reported as a single set of values as specified in section II.E.

d. Catalytic Converter MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2. Note that the monitoring method for the catalyst(s) would have to be capable of detecting all instances, except diagnostic self-clearing, when a catalyst DTC has been cleared but the catalyst has not been replaced (e.g., catalyst over temperature histogram approaches are not acceptable).

7. Evaporative Emission Control System Monitoring

a. Background

The evaporative emission control system controls HC emissions that would otherwise evaporate from the vehicle's fuel tank and fuel lines. Should any leak develop in the evaporative emission control system—e.g., a disconnected hose—the HC emissions can be quite high and well over the evaporative emissions standards. Additionally, evaporative purge system defects—e.g., deteriorated vacuum lines, damaged canisters, non-functioning purge control valves—may occur which could also result in very high evaporative emissions.

b. Evaporative System Monitoring Requirements

We are proposing that the OBD system verify purge flow from the evaporative system and detect any vapor leaks from the complete evaporative system, excluding the tubing and connections between the purge valve and the intake manifold. Individual components of the evaporative system (e.g. valves, sensors) must be monitored in accordance with the comprehensive components requirements discussed in section II.D.4.

The OBD system would be required to detect an evaporative system malfunction when any of the following conditions exist:

- No purge flow from the evaporative system to the engine can be detected by the OBD system (i.e., the ''purge flow'' requirement); or
- For the 2010 and later model years, the complete evaporative system contains a leak or leaks that cumulatively are greater than or equal to a leak caused by a 0.150 inch diameter orifice (i.e., the ''system leak'' requirement).[41]

If the most reliable monitoring method available cannot reliably detect a system leak as specified above, a manufacturer may design their system to detect a larger leak. The manufacturer would be required to provide data and/or engineering analyses that demonstrate the inability of the monitor to reliably detect the required leak and their justification for detecting at their proposed orifice size. Further, if the manufacturer can demonstrate that leaks of the required size cannot cause evaporative or running loss emissions to exceed 1.5 times the applicable evaporative emissions standards, the Administrator would revise upward the required leak size to the size demonstrated by the manufacturer that would result in emissions exceeding 1.5 times the standards.

c. Evaporative System Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for both purge flow and system leak malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as required in section II.E, all monitors used to detect system leak malfunctions must be tracked separately but reported as a single set of values as specified in section II.E.

Manufacturers may disable or abort an evaporative emission control system monitor when the fuel tank level is over 85 percent of nominal tank capacity or during a refueling event. Manufacturers may design their evaporative emission control system monitor such that it executes only during drive cycles determined by the manufacturer to be cold starts if such a condition is needed to ensure reliable monitoring. The manufacturer would have to provide data and/or an engineering evaluation demonstrating that a reliable check can only be made on drive cycles when the cold start criteria are satisfied. However, the manufacturer may not determine a cold start solely on the basis that ambient temperature is higher than engine coolant temperature at engine start. Lastly, manufacturers would be allowed to disable temporarily the evaporative purge system to perform an evaporative system leak check.

d. Evaporative System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2, with an exception for leaks associated with the fuel filler cap. If the OBD system is capable of discerning that a system leak is being caused by a missing or improperly secured fuel filler cap, the manufacturer is not required to illuminate the MIL or store a DTC provided the vehicle is equipped with an alternative indicator for notifying the vehicle operator of the fuel filler cap ''malfunction.'' The alternative indicator would have to be of sufficient illumination and location to be readily visible to the vehicle operator under all lighting conditions. However, if the vehicle is not equipped with an alternative indicator and, instead, the MIL is illuminated to inform the operator of the ''malfunction,'' the MIL may be extinguished and the corresponding DTC(s) erased once the OBD system has verified that the fuel filler cap has been securely fastened and the MIL has not been commanded ON for any other type of malfunction. The Administrator may approve other strategies provided the manufacturer was able to demonstrate that the vehicle operator would be promptly notified of the missing or improperly secured fuel filler cap and that the notification would reasonably result in corrective action being undertaken.

[40] The unmonitored portion of the catalyst system would be that portion downstream of the sensor(s) used for catalyst monitoring.

[41] In their HDOBD regulation, 13 CCR 1971.1, CARB defines ''orifice'' as an O'Keefe Controls Co. precision metal ''Type B'' orifice with NPT connections with a diameter of the specified dimension (e.g., part number B–31–SS for a stainless steel 0.031 inch diameter orifice).

8. Exhaust Gas Sensor Monitoring

a. Background

Exhaust gas sensors (e.g., oxygen sensors, air-fuel ratio (A/F) sensors) are a critical element of the emissions control system on gasoline engines. In addition to maintaining a stoichiometric air-fuel mixture and, thus, helping to achieve the lowest possible emissions, these sensors are also used for enhancing the performance of several emission control technologies—e.g., catalysts, EGR systems). Many modern vehicles control the fuel supply with an oxygen sensor feedback system to maintain stoichiometry. Oxygen sensors are located typically in the exhaust system upstream and downstream of the catalytic converters. The front, or upstream, oxygen sensor is used generally for fuel control. The rear, or downstream, oxygen sensor is used generally for adjusting the front oxygen sensor signal as it drifts slightly with age related deterioration—often referred to as fuel trimming—and for onboard monitoring the catalyst system. Many vehicles use A/F sensors in lieu of the more conventional oxygen sensors since A/F sensors provide a precise reading of the actual air-fuel ratio.

We expect that heavy-duty gasoline manufacturers will use both of these types of sensors to optimize their emissions control strategies and to satisfy many of the proposed heavy-duty OBD monitoring requirements—fuel system monitoring, catalyst monitoring, EGR system monitoring. Since exhaust gas sensors can be a critical component of an engine's fuel and emissions control system, their proper performance needs to be assured to maintain low emissions. Thus, any malfunction that adversely affects the performance of any of these exhaust gas sensors should be detected by the OBD system.

b. Exhaust Gas Sensor Monitoring Requirements

We are proposing that the OBD system monitor the output signal, response rate, and any other parameter that could affect emissions of all primary (i.e., fuel control) exhaust gas sensors for malfunction. Both the lean to rich and rich to lean response rates must be monitored. In addition, we are proposing that the OBD system monitor all secondary exhaust gas sensors (i.e., those used for fuel trimming or as a monitoring device for another system) for proper output signal, activity, and response rate. For engines equipped with heated exhaust gas sensors, the OBD system would be required to monitor the sensor heater for proper performance.

i. Primary Exhaust Gas Sensors

We are proposing that the OBD system detect a malfunction prior to any failure or deterioration of the exhaust gas sensor output voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) (including drift or bias corrected for by secondary sensors) that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.C–1. The OBD system would also be required to detect the following exhaust gas sensor malfunctions:

- Those caused by either a lack of circuit continuity or out-of-range values.
- Those where a sensor failure or deterioration causes the fuel system to stop using that sensor as a feedback input (e.g., causes default or open-loop operation).
- Those where the sensor output voltage, resistance, impedance, current, amplitude, activity, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst monitoring).

ii. Secondary Exhaust Gas Sensors

We are proposing that the OBD system detect a malfunction prior to any failure or deterioration of the exhaust gas sensor voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.C–1. The OBD system would also be required to detect the following exhaust gas sensor malfunctions:

- Those caused by either a lack of circuit continuity or out-of-range values.
- Those where a sensor failure or deterioration causes the fuel system to stop using that sensor as a feedback input (e.g., causes default or open-loop operation).
- Those where the sensor output voltage, resistance, impedance, current, amplitude, activity, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst monitoring).

iii. Exhaust Gas Sensor Heaters

We are proposing that the OBD system detect a malfunction of the sensor heater performance when the current or voltage drop in the heater circuit is no longer within the manufacturer's specified limits for normal operation (i.e., within the criteria required by the component vendor for heater circuit performance at high mileage). The manufacturer may use other malfunction criteria for heater performance malfunctions. To do so, the manufacturer would be required to submit data and/or engineering analyses that demonstrate that the monitoring reliability and timeliness would be equivalent to the criteria stated here.

In addition, the OBD system would be required to detect malfunctions of the heater circuit including open or short circuits that conflict with the commanded state of the heater (e.g., shorted to 12 Volts when commanded to 0 Volts (ground)).

c. Exhaust Gas Sensor Monitoring Conditions

i. Primary Exhaust Gas Sensors

We are proposing that manufacturers define the monitoring conditions for primary exhaust gas sensor malfunctions causing exceedance of the applicable thresholds and/or inability to perform as an OBD monitoring device such that the minimum performance ratio requirements discussed in section II.E would be met. For purposes of tracking and reporting as required in section II.E, all such monitors must be tracked separately but reported as a single set of values as specified in section II.E.

Monitoring for primary exhaust gas sensor malfunctions related to circuit continuity, out-of-range, and open-loop operation must be done continuously with the exception that manufacturers may disable continuous exhaust gas sensor monitoring when an exhaust gas sensor malfunction cannot be distinguished from other effects. As an example, a manufacturer may disable monitoring for out-of-range on the low side during conditions where fuel has been cut (i.e., shut off temporarily). To do so, the manufacturer would have to submit data and/or engineering analyses that demonstrate that a properly functioning sensor cannot be distinguished from a malfunctioning sensor and that the disablement interval is limited only to that necessary for avoiding a false detection.

ii. Secondary Exhaust Gas Sensors

We are proposing that manufacturers define the monitoring conditions for secondary exhaust gas sensor malfunctions causing exceedance of the applicable emissions thresholds, lack of circuit continuity, and/or inability to perform as an OBD monitoring device such that the minimum performance ratio requirements discussed in section II.E would be met.

Monitoring for secondary exhaust gas sensor malfunctions related to out-of-

range and open loop operation must be done continuously with the exception that manufacturers may disable continuous exhaust gas sensor monitoring when an exhaust gas sensor malfunction cannot be distinguished from other effects. As an example, a manufacturer may disable monitoring for out-of-range on the low side during conditions where fuel has been cut (i.e., shut off temporarily). To do so, the manufacturer would have to submit data and/or engineering analyses that demonstrate that a properly functioning sensor cannot be distinguished from a malfunctioning sensor and that the disablement interval is limited only to that necessary for avoiding a false detection.

iii. Sensor Heaters

We are proposing that manufacturers define monitoring conditions for sensor heater performance malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met. Monitoring for sensor heater circuit malfunctions must be done continuously.

d. Exhaust Gas Sensor MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

D. Monitoring Requirements and Timelines for Other Diesel and Gasoline Systems

1. Variable Valve Timing and/or Control (VVT) System Monitoring

a. Background

Variable valve timing (VVT) and/or control systems are used primarily to optimize engine performance and have many advantages over conventional valve control. Instead of opening and closing the valves by fixed amounts and at fixed times, VVT controls can vary the timing of valve opening/closing and vary the effective size of the valve opening itself (in some systems) depending on the driving conditions (e.g., high engine speed and load). This feature permits a better compromise between performance, driveability, and emissions than conventional systems. With more stringent NO_X emission standards being phased in, more vehicles are anticipated to use VVT. By doing so, some exhaust gas can be retained in the combustion chamber thereby reducing peak combustion temperatures and, hence, NO_X emissions (known as ''internal EGR'').

b. VVT and/or Control System Monitoring Requirements

We are proposing that the OBD system monitor the VVT system on engines so equipped for target error and slow response malfunctions. The individual electronic components (e.g., actuators, valves, sensors) that are used in the VVT system must be monitored in accordance with the comprehensive components requirements in section II.D.4.

i. VVT Target Error Malfunctions

We are proposing that the OBD system detect a malfunction prior to any failure or deterioration in the capability of the VVT system to achieve the commanded valve timing and/or control within a crank angle and/or lift tolerance that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1 for diesel engines or Table II.C–1 for gasoline engines. For engines in which no failure or deterioration of the VVT system could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction of the VVT system when proper functional response of the system to computer commands does not occur.

ii. VVT Slow Response Malfunctions

We are proposing that the OBD system detect a malfunction prior to any failure or deterioration in the capability of the VVT system to achieve the commanded valve timing and/or control within a manufacturer-specified time that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table II.B–1 for diesel engines or Table II.C–1 for gasoline engines. For engines in which no failure or deterioration of the VVT system could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system would have to detect a malfunction of the VVT system when proper functional response of the system to computer commands does not occur.

c. VVT and/or Control System Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for VVT target error or slow response malfunctions such that the minimum performance ratio requirements discussed in section II.E would be met with the exception that monitoring shall occur every time the monitoring conditions are met during the driving cycle rather than once per driving cycle as required for most monitors. For purposes of tracking and reporting as required in section II.E, all monitors used to detect all VVT related malfunctions would have to be tracked separately but reported as a single set of values as specified in section II.E.[42]

d. VVT and/or Control System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

2. Engine Cooling System Monitoring

a. Background

We are concerned about two elements of the engine cooling system. These elements are the thermostat and the engine coolant temperature sensor. Manufacturers typically use a thermostat to control the flow of coolant through the radiator and around the engine. During a cold engine start, the thermostat is closed typically which prevents the flow of coolant and serves to promote more rapid warm-up of the engine. As the coolant approaches a specific temperature, the thermostat begins to open allowing circulation of coolant through the radiator and around the engine. The thermostat then acts to regulate the coolant to the specified temperature. If the temperature rises above the regulated temperature, the thermostat opens further to allow more coolant to circulate, thus reducing the temperature. If the temperature drops below the regulated temperature, the thermostat partially closes to reduce the amount of coolant circulating, thereby increasing the temperature. If a thermostat malfunctions in such a manner that it does not adequately restrict coolant flow during vehicle warm-up, an increase in emissions could occur due to prolonged operation of the vehicle at temperatures below the stabilized, warmed-up value. This is particularly true at lower ambient temperatures—50 degrees Fahrenheit and below—but not so low that they are rare in the U.S. Equally important is that the engine coolant temperature is often used as an enable criterion for many OBD monitors. If the engine's coolant temperature does not reach the

[42] For specific components or systems that have multiple monitors that are required to be reported (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator shall be reported for the specific component.

manufacturer-specified warmed-up value, such monitors would be effectively disabled, perhaps indefinitely, and would, therefore, never detect malfunctions.

Closely linked with the thermostat is the engine coolant temperature (ECT) sensor. Manufacturers typically use an ECT sensor as an input for many of the emission-related engine control systems. For gasoline engines, the ECT sensor is often one of the most important factors in determining when to begin closed-loop fuel control. If the engine coolant does not warm-up sufficiently, closed-loop fuel control is usually not engaged and the vehicle remains in open-loop fuel control. Since open-loop fuel control does not provide the precision of closed-loop control, the result is increased emissions levels. For diesel engines, the ECT sensor is often used to engage closed-loop control of the EGR system. Similar to closed-loop fuel control on gasoline engines, if the coolant temperature does not warm up, closed-loop control of the EGR system would not engage which would result in increased emissions levels. In addition, for both gasoline and diesel engines, the ECT sensor may be used to enable many of the monitors that are being proposed. Such monitors would be effectively disabled and incapable of detecting malfunctions should the ECT sensor itself malfunction.

b. Engine Cooling System Monitoring Requirements

We are proposing that the OBD system monitor the thermostat on engines so equipped for proper operation. We are also proposing that the OBD system monitor the ECT sensor for circuit continuity, out-of-range values, and rationality faults. For engines that use an approach other than the cooling system and ECT sensor—e.g., oil temperature, cylinder head temperature—for an indication of engine operating temperature for emission control purposes (e.g., to modify spark or fuel injection timing or quantity), the manufacturer may forego cooling system monitoring in favor of monitoring the components or systems used in their approach. To do so, the manufacturer would be required to submit data and/or engineering analyses that demonstrate that their monitoring plan is as reliable and effective as the monitoring required for the engine cooling system.

i. Thermostat Monitoring Requirements

We are proposing that the OBD system detect a thermostat malfunction if, within the manufacturer specified time interval following engine start, any of the following conditions occur:

- The coolant temperature does not reach the highest temperature required by the OBD system to enable other diagnostics;
- The coolant temperature does not reach a warmed-up temperature within 20 degrees Fahrenheit of the manufacturer's nominal thermostat regulating temperature. The manufacturer may use a lower temperature for this criterion provided the manufacturer can demonstrate that the fuel, spark timing, and/or other coolant temperature-based modification to the engine control strategies would not cause an emissions increase greater than or equal to 50 percent of any of the applicable emissions standards.

The time interval specified by the manufacturer would have to be supported by the manufacturer via data and/or engineering analyses demonstrating that it provides robust monitoring and minimizes the likelihood of other OBD monitors being disabled. The manufacturer may use alternative malfunction criteria that are a function of temperature at engine start on engines that do not reach the temperatures specified in the malfunction criteria when the thermostat is functioning properly. To do so, the manufacturer would be required to submit data and/or engineering analyses that demonstrate that a properly operating system does not reach the specified temperatures and that the possibility is minimized for cooling system malfunctions to go undetected and disable other OBD monitors. In some cases, a manufacturer may forgo thermostat monitoring if the manufacturer can demonstrate that a malfunctioning thermostat cannot cause a measurable increase in emissions during any reasonable driving condition nor cause any disablement of other OBD monitors.

ii. Engine Coolant Temperature Sensor Monitoring Requirements

We are proposing that the OBD system detect an ECT sensor malfunction when a lack of circuit continuity or an out-of-range value occurs. We are also proposing that the OBD system detect if, within the manufacturer specified time interval following engine start, the ECT sensor does not achieve the highest stabilized minimum temperature that is needed to initiate closed-loop/feedback control of all affected emission control systems (e.g., fuel system, EGR system). The manufacturer specified time interval would have to be a function of the engine coolant temperature and/or intake air temperature at startup. The manufacturer time interval would also have to be supported by the manufacturer via data and/or engineering analyses demonstrating that it provides robust monitoring and minimizes the likelihood of other OBD monitors being disabled. Manufacturers may forego the requirement to detect the ''time to closed loop/feedback enable temperature'' malfunction if the manufacturer does not use engine coolant temperature or the ECT sensor to enable closed-loop/feedback control of any emission control systems.

We are also proposing that, to the extent feasible when using all available information, the OBD system must detect a malfunction if the ECT sensor inappropriately indicates a temperature below the highest minimum enable temperature required by the OBD system to enable other monitors. For example, an OBD system that requires an engine coolant temperature greater than 140 degrees Fahrenheit prior to enabling an OBD monitor must detect malfunctions that cause the ECT sensor to indicate inappropriately a temperature below 140 degrees Fahrenheit. Manufacturers may forego such monitoring within temperature regions in which the thermostat monitor or the ECT sensor ''time to reach closed-loop/feedback enable temperature'' monitor would detect this ''stuck in a range below the highest minimum enable temperature'' ECT sensor malfunction.

Lastly, we are proposing that, to the extent feasible when using all available information, the OBD system must detect a malfunction if the ECT sensor inappropriately indicates a temperature above the lowest maximum enable temperature required by the OBD system to enable other monitors. For example, an OBD system that requires an engine coolant temperature less than 90 degrees Fahrenheit at startup prior to enabling an OBD monitor must detect malfunctions that cause the ECT sensor to indicate inappropriately a temperature above 90 degrees Fahrenheit. Manufacturers may forego such monitoring within temperature regions in which the thermostat monitor, the ECT sensor ''time to reach closed-loop/feedback enable temperature'' monitor, or the ECT sensor ''stuck in a range below the highest minimum enable temperature'' monitor would detect this ECT sensor ''stuck in a range above the lowest maximum enable temperature'' ECT sensor malfunction. The manufacturer may also forego such monitoring if the MIL would be illuminated for entering a ''limp home'' or default mode of

operation—e.g., for an over temperature protection strategy—as discussed in section II.A.2. Manufacturers may also forego this monitoring within temperature regions where the temperature gauge indicates a temperature in the engine overheating ''red zone'' should the vehicle have a temperature gauge on the instrument panel that displays the same temperature information as used by the OBD system (note that a temperature gauge would be required, not a temperature warning light).

c. Engine Cooling System Monitoring Conditions

i. Thermostat Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for thermostat malfunctions in accordance with the general monitoring conditions for all engines described in section II.A.3. Additionally, monitoring for thermostat malfunctions would have to be done once per drive cycle on every drive cycle in which the ECT sensor indicates, at engine start, a temperature lower than the temperature established as the malfunction criteria in section II.D.2.b.i. Manufacturers would be allowed to disable thermostat monitoring at ambient engine start temperatures below 20 degrees Fahrenheit. Manufacturers may suspend or disable thermostat monitoring if the engine is subjected to conditions that could lead to false diagnosis (e.g., engine operation at idle for more than 50 percent of the warm-up time and/or hot restart conditions). To do so, the manufacturer must submit data and/or engineering analyses that demonstrate that the suspension or disablement is necessary. In general, the manufacturer would not be allowed to suspend or disable the thermostat monitor on engine starts where the engine coolant temperature at engine start is more than 35 degrees Fahrenheit lower than the thermostat malfunction threshold temperature.

ii. Engine Coolant Temperature Sensor Monitoring Conditions

We are proposing that monitoring for ECT sensor circuit continuity and out-of-range malfunctions be done continuously. Manufacturers would be allowed to disable continuous ECT sensor monitoring when an ECT sensor malfunction cannot be distinguished from other effects. To do so, the manufacturer would have to submit test data and/or engineering evaluation that demonstrate that a properly functioning sensor cannot be distinguished from a malfunctioning sensor and that the disablement interval is limited only to that necessary for avoiding false detection.

We are also proposing that manufacturers define the monitoring conditions for ''time to reach closed-loop/feedback enable temperature'' malfunctions in accordance with the general monitoring conditions for all engines described in section II.A.3. Additionally, monitoring for ''time to reach closed-loop/feedback enable temperature'' malfunctions would have to be conducted once per drive cycle on every drive cycle in which the ECT sensor at engine start indicates a temperature lower than the closed-loop enable temperature (i.e., all engine start temperatures greater than the ECT sensor out-of-range low temperature and less than the closed-loop enable temperature). Manufacturers would be allowed to suspend or delay the ''time to reach closed-loop/feedback enable temperature'' monitor if the engine is subjected to conditions that could lead to false diagnosis (e.g., vehicle operation at idle for more than 50 to 75 percent of the warm-up time).

We are also proposing that manufacturers define the monitoring conditions for ECT sensor ''stuck in a range below the highest minimum enable temperature'' and ''stuck in a range above the lowest maximum enable temperature'' malfunctions in accordance with the general monitoring conditions for all engines described in section II.A.3 and in accordance with the minimum performance ratio requirements discussed in section II.E.

d. Engine Cooling System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2.

3. Crankcase Ventilation System Monitoring

a. Background

Crankcase emissions are the pollutants emitted in the gases that are vented from an engine's crankcase. These gases are also referred to as ''blowby gases'' because they result from engine exhaust from the combustion chamber ''blowing by'' the piston rings into the crankcase. These gases are vented to prevent high pressures from occurring in the crankcase. Our emission standards have historically prohibited crankcase emissions from all highway engines except turbocharged heavy-duty diesel engines. The most common way to eliminate crankcase emissions has been to vent the blowby gases into the engine air intake system, so that the gases can be recombusted. We made the exception for turbocharged heavy-duty diesel engines in the past because of concerns about fouling that could occur by routing the diesel particulates (including engine oil) into the turbocharger and aftercooler. Newly developed closed crankcase filtration systems specifically designed for turbocharged heavy-duty diesel engines now allow the crankcase gases to be captured.

In general, the crankcase ventilation system consists of a fresh air inlet hose, a crankcase vapor outlet hose, and a crankcase ventilation valve to control the flow through the system. Fresh air is introduced to the crankcase via the inlet (typically a connection from the intake air cleaner assembly). On the opposite side of the crankcase, vapors are vented from the crankcase through the valve by way of the outlet hose and then to the intake manifold. On gasoline engines, the intake manifold provides the vacuum that is needed to accomplish the circulation while the engine is running.

For gasoline engines, the valve is used to regulate the amount of flow based on engine speed. During low engine load operation (e.g., idle), the valve is nearly closed allowing only a small portion of air to flow through the system. With open throttle conditions, the valve opens to allow more air into the system. At high engine load operation (i.e., hard accelerations), the valve begins to close again, limiting air flow to a small amount. For most systems, a mechanical valve is all that is necessary to adequately regulate crankcase ventilation system air flow. The crankcase ventilation system on diesel engines, while slightly different than that for gasoline engines, has essentially the same purpose and function.

We do not believe that failures involving cracked or deteriorated hoses have a significant impact on crankcase emissions because vapors are drawn into the engine by intake manifold vacuum which suggests that fresh air would be drawn into the cracked hose rather than dirty exhaust being blown out of the cracked hose. The more likely cause of crankcase ventilation system malfunctions and excess emissions is improper service or tampering of the system. Such failures include misrouted or disconnected hoses and missing valves. Of these failures, hose disconnections on the vapor vent side of the system and/or missing valves can cause harmful crankcase emissions to be vented directly to the atmosphere.

b. Crankcase Ventilation System Monitoring Requirements

We are proposing that the OBD system monitor the crankcase ventilation system on engines so equipped for system integrity. Engines not equipped with crankcase ventilation systems would be exempt from monitoring the crankcase ventilation system.

Specifically for diesel engines, the manufacturer would be required to submit a plan for the monitoring strategy, malfunction criteria, and monitoring conditions prior to OBD certification. The plan would have to demonstrate the effectiveness of the strategy to monitor the performance of the crankcase ventilation system to the extent feasible with respect to the malfunction criteria below and the monitoring conditions required by the monitor.

We are proposing that the OBD system detect a malfunction of the crankcase ventilation system when a disconnection of the system occurs between either the crankcase and the crankcase ventilation valve, or between the crankcase ventilation valve and the intake manifold. Manufacturers may forego detecting a disconnection between the crankcase and the crankcase ventilation valve provided the manufacturer can demonstrate that the crankcase ventilation system is designed such that the crankcase ventilation valve is fastened directly to the crankcase in a manner that makes it significantly more difficult to remove the valve from the crankcase than to disconnect the line between the valve and the intake manifold (aging effects must be taken into consideration). Manufacturers may also forego detecting a disconnection between the crankcase and the crankcase ventilation valve for system designs that use tubing between the valve and the crankcase provided the manufacturer can demonstrate that the connections between the valve and the crankcase are: (1) Resistant to deterioration or accidental disconnection; (2) significantly more difficult to disconnect than the line between the valve and the intake manifold; and, (3) not subject to disconnection per the manufacturer's repair procedures for non-crankcase ventilation system repair work. Lastly, manufacturers may forego detecting a disconnection between the crankcase ventilation valve and the intake manifold upon determining that the disconnection: (1) Causes the vehicle to stall immediately during idle operation; or, (2) is unlikely to occur due to a crankcase ventilation system design that is integral to the induction system (e.g., machined passages rather than tubing or hoses).

c. Crankcase Ventilation System Monitoring Conditions

We are proposing that manufacturers define the monitoring conditions for crankcase ventilation system malfunctions in accordance with the general monitoring conditions for all engines described in section II.A.3, and the minimum performance ratio requirements discussed in section II.E.

d. Crankcase Ventilation System MIL Illumination and DTC Storage

We are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2. The stored DTC need not specifically identify the crankcase ventilation system (e.g., a DTC for idle speed control or fuel system monitoring can be stored) if the manufacturer can demonstrate that additional monitoring hardware would be necessary to make this identification, and provided the manufacturer's diagnostic and repair procedures for the detected malfunction include directions to check the integrity of the crankcase ventilation system.

4. Comprehensive Component Monitors

a. Background

Comprehensive components is a term meant to capture essentially every other emissions related component not discussed above. Specifically, it covers all other electronic engine components or systems not mentioned above that either can affect vehicle emissions or are used as part of the OBD diagnostic strategy for another monitored component or system. Comprehensive components are generally identified as input components—i.e., those that provide input directly or indirectly to the onboard computer—or as output components and/or systems—i.e., those that receive commands from the onboard computer. Typical examples of input components include temperature sensors and pressure sensors, while examples of output components and/or systems include the idle control system, glow plugs, and wait-to-start lamps.

While a malfunctioning comprehensive component may not have as much impact on emissions as a malfunctioning major emissions-related component, it still could result in a measurable increase in emissions. The proper performance of these components can be critical to both the proper functioning of major emissions-related components, and to the accurate monitoring of those components or systems. Malfunctions of comprehensive components that go undetected by the OBD system may disable or adversely affect the robustness of other OBD monitors without any awareness by the operator that a problem exists. Due to the vital role these components play, monitoring them properly is extremely important.

b. Comprehensive Component Monitoring Requirements

We are proposing that the OBD system monitor for malfunction any electronic engine components/systems not otherwise described in sections above that either provides input to (directly or indirectly) or receives commands from the onboard computer(s), and: (1) Can affect emissions during any reasonable in-use driving condition; or, (2) is used as part of the diagnostic strategy for any other monitored system or component.[43]

Input components required to be monitored may include the crank angle sensor, knock sensor, throttle position sensor, cam position sensor, intake air temperature sensor, boost pressure sensor, manifold pressure sensor, mass air flow sensor, exhaust temperature sensor, exhaust pressure sensor, fuel pressure sensor, and fuel composition sensor (e.g., flexible fuel vehicles). Output components/systems required to be monitored may include the idle speed control system, glow plug system, variable length intake manifold runner systems, supercharger or turbocharger electronic components, heated fuel preparation systems, the wait-to-start lamp on diesel applications, and the MIL. The manufacturer would be responsible for determining which input and output components/systems could affect emissions during any reasonable in-use driving condition. The manufacturer would be allowed to make this determination based on data or engineering judgment. However, if the Administrator reasonably believes that a manufacturer has incorrectly determined that a component/system cannot affect emissions, the manufacturer may be required to provide emissions data showing that the component/system, when malfunctioning and installed in a suitable test engine, does not have an emissions effect. Such emissions data may be requested for any reasonable driving condition.

[43] When referring to ''comprehensive components'' and their monitors, ''electronic engine components/systems'' is not meant to include components/systems that are driven by the engine yet are not related to the control of the fueling, air handling, or emissions of the engine (e.g., PTO components, air conditioning system components, and power steering components are not included).

i. Input Components

We are proposing that the OBD system detect malfunctions of input components caused by a lack of circuit continuity, out-of-range values, and, where feasible, improper rationality. To the extent feasible, the rationality diagnostics should verify that a sensor's input to the onboard computer is neither inappropriately high nor inappropriately low (i.e., ''two-sided'' diagnostics should be used). Also to the extent feasible, the OBD system should detect and store different DTCs that distinguish rationality malfunctions from lack of circuit continuity malfunctions and out-of-range values. For lack of circuit continuity malfunctions and out-of-range values, the OBD system should detect and store different DTCs for each distinct malfunction (e.g., out-of-range low, out-of-range high, open circuit). The OBD system is not required to store separate DTCs for lack of circuit continuity malfunctions that cannot be distinguished from malfunctions associated with out-of-range values.

For input components that are used to activate alternative strategies that can affect emissions (e.g., AECDs, engine shutdown systems), the OBD system would be required to detect rationality malfunctions that cause the system to erroneously activate or deactivate the alternative strategy. To the extent feasible when using all available information, the rationality diagnostics should detect a malfunction if the input component inappropriately indicates a value that activates or deactivates the alternative strategy. For example, if an alternative strategy requires an intake air temperature greater than 120 degrees Fahrenheit prior to activating, the OBD system should detect malfunctions that cause the intake air temperature sensor to inappropriately indicate a temperature above 120 degrees Fahrenheit.

For engines that require precise alignment between the camshaft and the crankshaft, the OBD system would be required to monitor the crankshaft position sensor(s) and camshaft position sensor(s) to verify proper alignment between the camshaft and crankshaft. The OBD system would also have to monitor the sensors for circuit continuity and rationality malfunctions. Such monitoring for proper alignment between a camshaft and a crankshaft would only be required in cases where both are equipped with position sensors.

For engines equipped with VVT systems and a timing belt or chain, the OBD system must detect a malfunction if the alignment between the camshaft and crankshaft is off by one or more cam/crank sprocket cogs (e.g., the timing belt/chain has slipped by one or more teeth/cogs). If a manufacturer demonstrates that a single tooth/cog misalignment cannot cause a measurable increase in emissions during any reasonable driving condition, the OBD system would be required to detect a malfunction when the minimum number of teeth/cogs misalignment needed to cause a measurable emission increase has occurred.

ii. Output Components/Systems

We are proposing that the OBD system detect a malfunction of an output component/system when proper functional response of the component/system to computer commands does not occur. If a functional check is not feasible, the OBD system would be required to detect malfunctions caused by a lack of circuit continuity (e.g., short to ground or high voltage). For output component malfunctions associated with the lack of circuit continuity, the OBD system is not required to store different DTCs for each distinct malfunction (e.g., open circuit, shorted low). Further, manufacturers would not be required to activate an output component/system when it would not normally be active for the exclusive purpose of performing functional monitoring of output components/systems.

Additionally, the idle control system would have to be monitored for proper functional response to computer commands. For gasoline engines that use monitoring strategies based on deviation from target idle speed, a malfunction would have to be detected when either of the following conditions occur: (a) The idle speed control system cannot achieve the target idle speed within 200 revolutions per minute (rpm) above the target speed or 100 rpm below the target speed—the OBD system could use larger engine speed tolerances provided the manufacturer is able to demonstrate via data and/or engineering analyses that the tolerances can be exceeded without a malfunction being present; or, (b) the idle speed control system cannot achieve the target idle speed within the smallest engine speed tolerance range required by the OBD system to enable any other OBD monitors. For diesel engines, a malfunction would have to be detected when either of the following conditions occur: (a) The idle fuel control system cannot achieve the target idle speed or fuel injection quantity within +/−50 percent of the manufacturer-specified fuel quantity and engine speed tolerances; or, (b) the idle fuel control system cannot achieve the target idle speed or fueling quantity within the smallest engine speed or fueling quantity tolerance range required by the OBD system to enable any other OBD monitors.

Glow plugs and intake air heater systems would also have to be monitored for proper functional response to computer commands and for malfunctions associated with circuit continuity. The glow plug and intake air heater circuit(s) would have to be monitored for proper current and voltage drop. The manufacturer may use other monitoring strategies by submitting data and/or engineering analyses that demonstrate that the strategy provides equally reliable and timely detection of malfunctions. In general, the OBD system would have to detect a malfunction when a single glow plug no longer operates within the manufacturer's specified limits for normal operation. If a manufacturer demonstrates that a single glow plug malfunction cannot cause a measurable increase in emissions during any reasonable driving condition, the OBD system must detect a malfunction for the minimum number of glow plugs needed to cause an emissions increase. Further, to the extent feasible without adding additional hardware for this purpose, the stored DTC must identify the specific malfunctioning glow plug(s).

Lastly, the wait-to-start lamp circuit and the MIL circuit would have to be monitored for malfunctions that cause either lamp to fail to illuminate when commanded on (e.g., burned out bulb).

c. Comprehensive Component Monitoring Conditions

i. Input Components

We are proposing that input components be monitored continuously for circuit continuity and for providing values within the proper range. For rationality monitoring, where applicable, manufacturers would define the monitoring conditions for detecting malfunctions in accordance with the general monitoring conditions for all engines described in section II.A.3 and the minimum performance ratio requirements described in section II.E except that rationality monitoring would have to occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in section II.A.3.

A manufacturer may disable continuous monitoring for circuit continuity, and for providing values within the proper range, when a

malfunction cannot be distinguished from other effects. To do so, the manufacturer would have to submit data and/or engineering analyses that demonstrate that a properly functioning input component cannot be distinguished from a malfunctioning input component and that the disablement interval is limited only to that necessary for avoiding false detection.

ii. Output Components/Systems

We are proposing that output components/systems be monitored continuously for circuit continuity. For functional monitoring, manufacturers would define the monitoring conditions for detecting malfunctions in accordance with the general monitoring conditions for all engines described in section II.A.3 and the minimum performance ratio requirements described in section II.E.

For the idle control system, we are proposing that manufacturers define the monitoring conditions for functional monitoring in accordance with the general monitoring conditions for all engines described in section II.A.3 and the minimum performance ratio requirements described in section II.E except that functional monitoring would have to occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in section II.A.3.

A manufacturer may disable continuous monitoring for circuit continuity when a malfunction cannot be distinguished from other effects. To do so, the manufacturer would have to submit data and/or engineering analyses that demonstrate that a properly functioning output component cannot be distinguished from a malfunctioning output component and that the disablement interval is limited only to that necessary for avoiding false detection.

d. Comprehensive Component MIL Illumination and DTC Storage

With a couple of exceptions, we are proposing the general requirements for MIL illumination and DTC storage as discussed in section II.A.2. The exceptions to this being that MIL illumination would not be required in conjunction with storing a MIL-on DTC for any comprehensive component if: (a) The component or system, when malfunctioning, could not cause engine emissions to increase by 15 percent or more of the FTP standard during any reasonable driving condition; and, (b) the component or system is not used as part of the diagnostic strategy for any other monitored system or component. MIL illumination is also not required if a malfunction has been detected in the MIL circuit that prevents the MIL from illuminating (e.g., burned out bulb or light emitting diode (LED)). However, the electronic MIL status must be reported as ''commanded on'' and a MIL-on DTC would have to be stored.

5. Other Emissions Control System Monitoring

a. Background

As noted above, the primary purpose of OBD is to detect malfunctions in the engine and/or emissions control system. Therefore, we are proposing that manufacturers be required to submit to the Administrator a monitoring plan for any new engine and/or emissions control technology not otherwise described above. Such technology might include hydrocarbon traps or homogeneous charge compression ignition (HCCI) systems. This would allow manufacturers and EPA to evaluate the new technology and determine an appropriate level of monitoring that would be both technologically feasible and consistent with the monitoring requirements for the other emissions control devices described above.

As proposed, the Administrator would provide guidance as to what type of components would fall under the ''other emissions control system'' requirements and which would fall under the comprehensive component requirements. Specifically, we are concerned that uncertainty may arise for those emission control components or systems that also meet the definition of electronic engine components. As such, the proposal would delineate the two by requiring components/systems that fit both definitions but are not corrected or compensated for by the adaptive fuel control system to be monitored as ''other emissions control devices'' rather than as comprehensive components. A typical device that would fall under this category instead of the comprehensive components category because of this delineation would be a swirl control valve system. Such delineation is necessary because such emissions control components generally require more thorough monitoring than comprehensive components to ensure low emissions levels throughout an engine's life. Further, emissions control components that are not compensated for by the fuel control system as they age or deteriorate can have a larger impact on tailpipe emissions than is typical of comprehensive components that are corrected for by the fuel control system as they deteriorate.

Note that the Administrator does not foresee any outcome where a promising new emissions control technology would be prohibited based solely on the lack of an OBD monitoring strategy for it. Instead, we want to instill in manufacturers the need to consider OBD monitoring when developing any new emissions control technology. Further, we want to instill in manufacturers the sense that an OBD monitoring strategy will, one day, be necessary so a plan for such should exist prior to introducing the technology on new products.

b. Other Emissions Control System Monitoring Requirements/Conditions

We are proposing that, for other emission control systems that are: (1) Not identified or addressed in sections II.B through II.D.4—e.g., hydrocarbon traps, HCCI control systems; or, (2) identified or addressed in section II.D.4 but not corrected or compensated for by an adaptive control system—e.g., swirl control valves, manufacturers would be required to submit a plan for Administrator approval of the monitoring strategy, the malfunction criteria, and the monitoring conditions prior to introduction on a production engine. Administrator approval of the plan would be based on the effectiveness of the monitoring strategy, the robustness of the malfunction criteria, and the frequency of meeting the necessary monitoring conditions.

We are also proposing that, for engines that use emissions control systems that alter intake air flow or cylinder charge characteristics by actuating valve(s), flap(s), etc., in the intake air delivery system (e.g., swirl control valve systems), the manufacturers, in addition to meeting the requirements above, may elect to have the OBD system monitor the shaft to which all valves in one intake bank are physically attached rather than monitoring the intake air flow, cylinder charge, or individual valve(s)/flap(s) for proper functional response. For non-metal shafts or segmented shafts, the monitor must verify all shaft segments for proper functional response (e.g., by verifying the segment or portion of the shaft furthest from the actuator functions properly). For systems that have more than one shaft to operate valves in multiple intake banks, manufacturers are not required to add more than one set of detection hardware (e.g., sensor, switch) per intake bank to meet this requirement.

6. Exceptions to Monitoring Requirements

a. Background

Under some conditions, the reliability of specific monitors may be diminished significantly. Therefore, we are proposing to allow manufacturers to disable the affected monitors when these conditions are encountered in-use. These include situations of extreme conditions (e.g., very low ambient temperatures, high altitudes) and of periods where default modes of operation are active (e.g., when a tire pressure problem is detected). In some of these cases, we may allow manufacturers to revise the emission malfunction threshold to ensure the most reliable monitoring performance.

b. Requirements for Exceptions to Monitoring

The Administrator may revise the emission threshold for any monitor, or revise the PM filtering performance malfunction criteria for DPFs to exclude detection of specific failure modes such as partially melted substrates, if the most reliable monitoring method developed requires a higher threshold or, in the case of PM filtering performance, the exclusion of specific failure modes, to prevent significant errors of commission in detecting a malfunction. The Administrator would notify the industry of any such revisions to ensure that all manufacturers would be able to implement OBD on an equal basis. In other words, we would not allow one manufacturer to revise a specific monitoring threshold upwards while insisting that another meet the proposed threshold.

Manufacturers may disable an OBD system monitor at ambient engine start temperatures below 20 degrees Fahrenheit (low ambient temperature conditions may be determined based on intake air or engine coolant temperature at engine start) or at elevations higher than 8000 feet above sea level. To do so, the manufacturer would have to submit data and/or engineering analyses that demonstrate that monitoring would be unreliable during the disable conditions. A manufacturer may request that an OBD system monitor be disabled at other ambient engine start temperatures by submitting data and/or engineering analyses demonstrating that misdiagnosis would occur at the given ambient temperatures due to their effect on the component itself (e.g., component freezing).

Manufacturers may disable an OBD system monitor when the fuel level is 15 percent or less of the nominal fuel tank capacity for those monitors that can be affected by low fuel level or running out of fuel (e.g., misfire detection). To do so, the manufacturer would have to submit data and/or engineering analyses that demonstrate that both monitoring at the given fuel levels would be unreliable, and the OBD system is still able to detect a malfunction if the component(s) used to determine fuel level indicates erroneously a fuel level that causes the disablement.

Manufacturers may disable OBD monitors that can be affected by vehicle battery or system voltage levels. For an OBD monitor affected by low vehicle battery or system voltages, manufacturers may disable monitoring when the battery or system voltage is below 11.0 Volts. Manufacturers may use a voltage threshold higher than 11.0 Volts to disable monitors but would have to submit data and/or engineering analyses that demonstrate that monitoring at those voltages would be unreliable and that either operation of a vehicle below the disablement criteria for extended periods of time is unlikely or the OBD system monitors the battery or system voltage and would detect a malfunction at the voltage used to disable other monitors.

For monitoring systems affected by high vehicle battery or system voltages, manufacturers may disable monitoring when the battery or system voltage exceeds a manufacturer-defined voltage. To do so, the manufacturer would have to submit data and/or engineering analyses that demonstrate that monitoring above the manufacturer-defined voltage would be unreliable and that either the electrical charging system/alternator warning light would be illuminated (or voltage gauge would be in the ''red zone'') or the OBD system monitors the battery or system voltage and would detect a malfunction at the voltage used to disable other monitors.

A manufacturer may also disable affected OBD monitors in vehicles designed to accommodate the installation of power take off (PTO) units provided disablement occurs only while the PTO unit is active and the OBD readiness status is cleared by the onboard computer (i.e., all monitors set to indicate ''not complete'') while the PTO unit is activated (see section II.F.4 below). If the disablement occurs, the readiness status may be restored, when the disablement ends, to its state prior to PTO activation.

E. A Standardized Method To Measure Real World Monitoring Performance

As was noted in section II.A.3, manufacturers determine the most appropriate times to run the non-continuous OBD monitors. This way, they are able to make their OBD evaluation either at the operating condition when an emissions control system is active and its operational status can best be evaluated, and/or at the operating condition when the most accurate evaluation can be made (e.g., highly transient conditions or extreme conditions can make evaluation difficult). Importantly, manufacturers are prohibited from using a monitoring strategy that is so restrictive such that it rarely or never runs. To help protect against monitors that rarely run, we are proposing an ''in-use monitor performance ratio'' requirement as described here.

The set of operating conditions that must be met so that an OBD monitor can run are called the ''enable criteria'' for that given monitor. These enable criteria are often different for different monitors and may well be different for different types of engines. A large diesel engine intended for use in a Class 8 truck would be expected to see long periods of relatively steady-state operation while a smaller engine intended for use in an urban delivery truck would be expected to see a lot of transient operation. Manufacturers will need to balance between a rather loose set of enable criteria for their engines and vehicles given the very broad range of operation HD highway engines see and a tight set of enable criteria given the desire for greater monitor accuracy. Manufacturers would be required to design these enable criteria so that the monitor:

- Is robust (i.e., accurate at making pass/fail decisions);
- Runs frequently in the real world; and,
- In general, also runs during the FTP heavy-duty transient cycle.

If designed incorrectly, these enable criteria may be either too broad and result in inaccurate monitors, or overly restrictive thereby preventing the monitor from executing frequently in the real world.

Since the primary purpose of an OBD system is to monitor for and detect emission-related malfunctions while the engine is operating in the real world, a standardized methodology for quantifying real world performance would be beneficial to both EPA and manufacturers. Generally, in determining whether a manufacturer's monitoring conditions are sufficient, a manufacturer would discuss the proposed monitoring conditions with EPA staff. The finalized conditions would be included in the certification applications and submitted to EPA staff who would review the conditions and make determinations on a case-by-case

basis based on the engineering judgment of the staff. In cases where we are concerned that the documented conditions may not be met during reasonable in-use driving conditions, we would most likely ask the manufacturer for data or other engineering analyses used by the manufacturer to determine that the conditions would occur in-use. In proposing a standardized methodology for quantifying real world performance, we believe this review process can be done more efficiently than would occur otherwise. Furthermore, it would serve to ensure that all manufacturers are held to the same standard for real world performance. Lastly, we want review procedures that will ensure that monitors operate properly and frequently in the field.

Therefore, we are proposing that all manufacturers be required to use a standardized method for determining real world monitoring performance and to hold manufacturers liable if monitoring occurs less frequently than a minimum acceptable level, expressed as minimum acceptable in-use performance ratio. We are also proposing that manufacturers be required to implement software in the onboard computer to track how often several of the major monitors (e.g., catalyst, EGR, CDPF, other diesel aftertreatment devices) execute during real world driving. The onboard computer would keep track of how many times each of these monitors has executed and how much the engine has been operated. By measuring both of these values, the ratio of monitor operation relative to engine operation can be calculated to determine monitoring frequency.

The proposed minimum acceptable frequency requirement would apply to many but not all of the OBD monitors. We are proposing that monitors be required to operate either continuously, once per drive cycle, or, in a few cases, multiple times per drive cycle (i.e., whenever the proper monitoring conditions are present). For components or systems that are more likely to experience intermittent failures or failures that can routinely happen in distinct portions of an engine's operating range (e.g., only at high engine speed and load, only when the engine is cold or hot), monitors would be required to operate continuously. Examples of continuous monitors include the fuel system monitor and most electrical/circuit continuity monitors. For components or systems that are less likely to experience intermittent failures or failures that only occur in specific vehicle operating regions or for components or systems where accurate monitoring can only be performed under limited operating conditions, monitors would be required to run once per drive cycle. Examples of once per drive cycle monitors typically include gasoline catalyst monitors, evaporative system leak detection monitors, and output comprehensive component functional monitors. For components or systems that are routinely used to perform functions that are crucial to maintaining low emissions but may still require monitoring under fairly limited conditions, monitors would be required to run each and every time the manufacturer-defined enable conditions are present. Examples of multiple times per drive cycle monitors typically include input comprehensive component rationality monitors and some exhaust aftertreatment monitors.

Monitors required to run continuously, by definition, would always be running, thereby making a minimum frequency requirement moot. The new frequency requirement would essentially apply only to those monitors that are designated as once per drive cycle or multiple times per drive cycle monitors. For all of these monitors, manufacturers would be required to define monitoring conditions that ensure adequate frequency in-use. Specifically, the monitors would need to run often enough so that the measured monitor frequency on in-use engines would exceed the minimum acceptable frequency. However, even though the minimum frequency requirement would apply to nearly all once per drive cycle and multiple times per drive cycle monitors, manufacturers would only be required to implement software to track and report the in-use frequency for a few of the major monitors. These few monitors generally represent the major emissions control components and the ones with the most limited enable criteria.

We believe that OBD monitors should run frequently to ensure early detection of emissions-related malfunctions and, consequently, to maintain low emissions. Allowing malfunctions to continue undetected and unrepaired for long periods of time allows emissions to increase unnecessarily. Frequent monitoring can also help to ensure detection of intermittent emissions-related malfunctions (i.e., those that are not continuously present but occur sporadically for days and even weeks at a time). The nature of mechanical and electrical systems is that intermittent malfunctions can and do occur. The less frequent the monitoring, the less likely these malfunctions will be detected and repaired. Additionally, for both intermittent and continuous malfunctions, earlier detection is equivalent to preventative maintenance in that the original malfunction can be detected and repaired prior to it causing subsequent damage to other components. This can help vehicle operators avoid more costly repairs that could have resulted had the first malfunction gone undetected.

Infrequent monitoring can also have an impact on the service and repair industry. Specifically, monitors that have unreasonable or overly restrictive enable conditions could hinder vehicle repair services. In general, upon completing an OBD-related repair to an engine, a technician will attempt to verify that the repair has indeed fixed the problem. Ideally, a technician will operate the vehicle in a manner that will exercise the appropriate OBD monitor and allow the OBD system to confirm that the malfunction is no longer present. This affords a technician the highest level of assurance that the repair was indeed successful. However, OBD monitors that operate infrequently are difficult to exercise and, therefore, technicians may not be able (or may not be likely) to perform such post-repair evaluations. Despite the service information availability requirements we are proposing—requirements that manufacturers make all of their service and repair information available to all technicians, including the information necessary to exercise OBD monitors—technicians would still find it difficult to exercise monitors that require infrequently encountered engine operating conditions (e.g., abnormally steady constant speed operation for an extended period of time). Additionally, to execute OBD monitors in an expeditious manner or to execute monitors that would require unusual or infrequently encountered conditions, technicians may be required to operate the vehicle in an unsafe manner (e.g., at freeway speeds on residential streets or during heavy traffic). If unsuccessful in executing these monitors, technicians may even take shortcuts in attempting to validate the repair while maintaining a reasonable cost for customers. These shortcuts would likely not be as thorough in verifying repairs and could increase the chance that improperly repaired engines would be returned to the vehicle owner or additional repairs would be performed just to ensure the problem is fixed. In the end, monitors that operate less frequently can result in unnecessary costs and inconvenience to both vehicle owners and technicians.

1. Description of Software Counters to Track Real World Performance

As stated above, manufacturers would be required to track monitor peformance by comparing the number of monitoring events (i.e., how often each monitor has run) to the number of driving events (i.e., how often has the vehicle been operated). The ratio of these two numbers would give an indication of how often the monitor is operating relative to vehicle operation. In equation form, this can be stated as:

$$\text{In-Use Performance (Ratio)} = \frac{\text{Number of Monitoring Events (Numerator)}}{\text{Number of Driving Events (Denominator)}}$$

To ensure that all manufacturers are tracking in-use performance in the same manner, we are proposing very detailed requirements for defining and incrementing both the numerator and denominator of this ratio. Manufacturers would be required to keep track of separate numerators and denominators for each of the major monitors, and to ensure that the data are saved every time the engine is shut off. The numerators and denominators would be reset to zero only in extreme circumstances when the non-volatile memory has been cleared (e.g., when the onboard computer has been reprogrammed in the field or when the onboard computer memory has been corrupted). The values would not be reset to zero during normal occurrences such as clearing of stored DTCs or performing routine service or maintenance.

Further, the numerator and denominator would be structured such that their maximum values would be 65,535 which is the maximum number that can be stored in a 2-byte location. This would ensure that manufacturers allocate sufficient and consistent memory space in the onboard computer. If either the numerator or denominator for a particular monitor reaches the maximum value, both values for that particular monitor would be divided by two before counting resumes. In general, the numerator and denominator would only be allowed to increment a maximum of once per drive cycle because most of the major monitors are designed to operate only once per drive cycle. Additionally, incrementing of both the numerator and denominator for a particular monitor would be disabled (i.e., paused but the stored values would not be erased or reset) only when a problem has been detected (i.e., a pending or MIL-on DTC has been stored) that prevents the monitor from executing. Once the problem is no longer detected and any stored DTCs associated with the problem have been erased, either through the allowable self-clearing process or upon command by a technician via a scan tool, incrementing of both the numerator and denominator would resume.

SAE has developed standards for storing and reporting the data to a generic scan tool. This would help ensure that all manufacturers report the data in an identical manner which should ease data collection in the field.

a. Number of Monitoring Events (''Numerator'')

For the numerator, manufacturers would be required to keep a separate numeric count of how often each of the particular monitors has operated. More specifically, manufacturers would have to implement a software counter that increments by one every time the particular monitor meets all of the enable/monitoring conditions for a long enough period of time such that a malfunctioning component would have been detected. For example, if a manufacturer requires a vehicle to be warmed-up and at idle for 20 seconds continuously to detect a malfunctioning catalyst, the catalyst monitor numerator could only be incremented if the vehicle actually operates simultaneously in all of those conditions. If the vehicle is operated in some but not all of the conditions (e.g., at idle but not warmed-up), the numerator would not be allowed to increment because the monitor would not have been able to detect a malfunctioning catalyst since all of the conditions were not satisfied simultaneously.

Another complication is the difference between a monitor reaching a ''pass'' or ''fail'' decision. At first glance, it would appear that a manufacturer should simply increment the numerator anytime the particular monitor reaches a decision, be it ''pass'' or ''fail''. However, monitoring strategies may have a different set of criteria that must be met to reach a ''pass'' decision versus a ''fail'' decision. As a simple example, a manufacturer may appropriately require only 10 seconds of operation at idle to reach a ''pass'' decision but require 30 seconds of operation at idle to reach a ''fail'' decision. Manufacturers would not be allowed to increment the numerator if the vehicle had idled for 10 seconds and reached a ''pass'' decision since insufficient time had passed to allow for a possible ''fail'' decision. This is necessary because the primary function of OBD systems is to detect malfunctions (i.e., to correctly reach ''fail'' decisions, not ''pass'' decisions) and, thus, the real world ability of the monitors to detect malfunctions is the parameter we want most to measure. Therefore, monitors with different criteria to reach a ''pass'' decision versus a ''fail'' decision would not be allowed to increment the numerator solely upon satisfying the ''pass'' criteria.

The correct implementation of the numerator counters by manufacturers is imperative to ensure a reliable measure for determining real world performance. ''Overcounting'' would falsely indicate the monitor is executing more often than it really is, while ''undercounting'' would make it appear as if the monitor is not running as often as it really is. Manufacturers would be required to describe their numerator incrementing strategy in their certification documentation and to verify the proper performance of their strategy during production vehicle evaluation testing.

b. Number of Driving Events (''Denominator'')

We are also proposing that manufacturers separately track how often the engine is operated. Basically, the denominator would be a counter that increments by one each time the engine is operated. We are proposing that the denominator counter be incremented by one only if several criteria are satisfied during a single drive cycle. This allows very short trips or trips during extreme conditions such as very cold temperatures or very high altitude to be filtered out and excluded from the count. This is appropriate because these are also conditions where most OBD monitors are neither expected nor required to operate.

Specifically, the denominator would be incremented if, on a single key start, the following criteria were satisfied while ambient temperature remained above 20 degrees Fahrenheit and altitude remained below 8,000 feet:

- Minimum engine run time of 10 minutes;

• Minimum of 5 minutes, cumulatively, of operation at vehicle speeds greater than 25 miles-per-hour for gasoline engines or calculated load greater than 15 percent for diesel engines; and

• At least one continuous idle for a minimum of 30 seconds encountered.

We intend to work with industry to collect data during the first few years of implementation and make any adjustments, if necessary, to the criteria used to increment the denominator to ensure that the in-use performance ratio provides a meaningful measure of in-use monitoring performance.

2. Proposed Performance Tracking Requirements

a. In-use Monitoring Performance Ratio Definition

For monitors required to meet the in-use performance tracking requirements,[44] we are proposing that the incrementing of numerators and denominators and the calculation of the in-use performance ratio be done in accordance with the following specifications.

The numerator(s) would be defined as a measure of the number of times a vehicle has been operated such that all monitoring conditions necessary for a specific monitor to detect a malfunction have been encountered. Except for systems using alternative statistical MIL illumination protocols, the numerator is to be incremented by an integer of one. The numerator(s) may not be incremented more than once per drive cycle. The numerator(s) for a specific monitor would be incremented within 10 seconds if and only if the following criteria are satisfied on a single drive cycle:

• Every monitoring condition necessary for the monitor of the specific component to detect a malfunction and store a pending DTC has been satisfied, including enable criteria, presence or absence of related DTCs, sufficient length of monitoring time, and diagnostic executive priority assignments (e.g., diagnostic ''A'' must execute prior to diagnostic ''B''). For the purpose of incrementing the numerator, satisfying all the monitoring conditions necessary for a monitor to determine that the component is passing may not, by itself, be sufficient to meet this criteria.

• For monitors that require multiple stages or events in a single drive cycle to detect a malfunction, every monitoring condition necessary for all events to have completed must be satisfied.

• For monitors that require intrusive operation of components to detect a malfunction, a manufacturer would be required to request Administrator approval of the strategy used to determine that, had a malfunction been present, the monitor would have detected the malfunction. Administrator approval of the request would be based on the equivalence of the strategy to actual intrusive operation and the ability of the strategy to determine accurately if every monitoring condition was satisfied as necessary for the intrusive event to occur.

• For the secondary air system monitor, the three criteria above are satisfied during normal operation of the secondary air system. Monitoring during intrusive operation of the secondary air system later in the same drive cycle solely for the purpose of monitoring may not, by itself, be sufficient to meet these criteria.

The third bullet item above requires explanation. There may be monitors, and there have been monitors in light-duty, designed to use what could be termed a two stage or two step process. The first step is usually a passive and/or short evaluation that can be used to ''pass'' a properly working component where ''pass'' refers to evaluating the component and determining that it is not malfunctioning. The second step is usually an intrusive and/or longer evaluation that is necessary to ''fail'' a malfunctioning component or ''pass'' a component nearing the point of failure. An example of such an approach might be an evaporative leak detection monitor that uses an intrusive vacuum pull-down/bleed-up evaluation during highway cruise conditions. If the evaporative system is sealed tight, the monitor ''passes'' and is done with testing for the given drive cycle. If the monitor senses a leak close to the required detection limit, the monitor does not ''pass'' and an internal flag is stored that will trigger the second stage of the test during the next cold start when a more accurate evaluation can be conducted. On the next cold start, provided the internal flag is set, an intrusive vacuum pull-down/bleed up monitor might be conducted during engine idle a very short time after the cold start. This second evaluation stage, being at idle and cold, gives a more accurate indication of the evaporative system's integrity and provides for a more accurate decision regarding the presence and size of a leak.

In this example, the second stage of this monitor would run less frequently in real use than the first stage since it is activated only on those occasions where the first stage suggests that a leak may be present (which most cars will not have). The rate-based tracking requirements are meant to give a measure of how often a monitor could detect a malfunction. To know the right answer, we need to know how often the first stage is running and could ''fail'', thus triggering the second stage, and then how often the second stage is completing. If we track only the first stage, we would get a false indication of how often the monitor could really detect a leak. But, if we track only the second stage, most cars would never increment the counter since most cars do not have leaks and would not trigger stage two.

In considering this, we see two possible solutions: (1) Always activate the second stage evaluation in which case there would be an intrusive monitor being performed that does not really need to be performed; or, (2) implement a ''ghost'' monitor that pretends that the first stage evaluation triggers the second stage evaluation and then also looks for when the second stage evaluation could have completed had it been necessary. The third bullet item in the list above requires that, if a manufacturer intends to implement a two stage monitor and intends to implement such a ''ghost'' monitor as described here for rate based tracking, approval must be sought for doing so to make sure we agree that you are doing it correctly and properly.

For monitors that can generate results in a ''gray zone'' or ''non-detection zone'' (i.e., results that indicate neither a passing system nor a malfunctioning system) or in a ''non-decision zone'' (e.g., monitors that increment and decrement counters until a pass or fail threshold is reached), the manufacturer would be responsible for incrementing the numerator appropriately. In general, the numerator should not be incremented when the monitor indicates a result in the ''non-detection zone'' or prior to the monitor reaching a decision. When necessary, the Administrator would consider data and/or engineering analyses submitted by the manufacturer demonstrating the expected frequency of results in the ''non-detection zone'' and the ability of the monitor to determine accurately, had an actual malfunction been present, whether or not the monitor would have detected a malfunction instead of a result in the ''non-detection zone.''

[44] These monitors, as presented in section II.A.3, are, for diesel engines: the NMHC catalyst, the CDPF system, the NO_X adsorber system, the NO_X converting catalyst system, and the boost system; and, for gasoline engines: the catalyst, the evaporative system, and the secondary air system; and, for all engines, the exhaust gas sensors, the EGR system, and the VVT system.

For monitors that run or complete their evaluation with the engine off, the numerator must be incremented either within 10 seconds of the monitor completing its evaluation in the engine off state, or during the first 10 seconds of engine start on the subsequent drive cycle.

Manufacturers using alternative statistical MIL illumination protocols for any of the monitors that require a numerator would be required to increment the numerator(s) appropriately. The manufacturer may be required to provide supporting data and/or engineering analyses demonstrating both the equivalence of their incrementing approach to the incrementing specified above for monitors using the standard MIL illumination protocol, and the overall equivalence of their incrementing approach in determining that the minimum acceptable in-use performance ratio has been satisfied.

Regarding the denominator(s), defined as a measure of the number of times a vehicle has been operated, we are proposing that it also be incremented by an integer of one. The denominator(s) may not be incremented more than once per drive cycle. The general denominator and the denominators for each monitor would be incremented within 10 seconds if and only if the following criteria are satisfied on a single drive cycle during which ambient temperature remained at or above 20 degrees Fahrenheit and altitude remained below 8,000 feet:

- Cumulative time since the start of the drive cycle is greater than or equal to 600 seconds (10 minutes);
- Cumulative gasoline engine operation at or above 25 miles per hour or diesel engine operation at or above 15 percent calculated load, either of which occurs for greater than or equal to 300 seconds (5 minutes); and
- Continuous engine operation at idle (e.g., accelerator pedal released by driver and vehicle speed less than or equal to one mile per hour) for greater than or equal to 30 seconds.

In addition to the requirements above, the evaporative system monitor denominator(s) must be incremented if and only if:

- Cumulative time since the start of the drive cycle is greater than or equal to 600 seconds (10 minutes) while at an ambient temperature of greater than or equal to 40 degrees Fahrenheit but less than or equal to 95 degrees Fahrenheit; and
- Engine cold start occurs with engine coolant temperature at engine start greater than or equal to 40 degrees Fahrenheit but less than or equal to 95 degrees Fahrenheit and less than or equal to 12 degrees Fahrenheit higher than ambient temperature at engine start.

In addition to the requirements above, the denominator(s) for the following monitors must be incremented if and only if the component or strategy is commanded ''on'' for a time greater than or equal to 10 seconds:

- Gasoline secondary air system;
- Cold start emission reduction strategy;
- Components or systems that operate only at engine start-up (e.g., glow plugs, intake air heaters) and are subject to monitoring under ''other emission control systems'' (section II.D.5) or comprehensive component output components (see section II.D.4).

For purposes of determining this commanded ''on'' time, the OBD system may not include time during intrusive operation of any of the components or strategies later in the same drive cycle solely for the purposes of monitoring.

In addition to the requirements above, the denominator(s) for the monitors of the following output components (except those operated only at engine start-up as outlined above) must be incremented if and only if the component is commanded to function (e.g., commanded ''on'', ''open'', ''closed'', ''locked'') two or more times during the drive cycle or for a time greater than or equal to 10 seconds, whichever occurs first:

- Variable valve timing and/or control system
- ''Other emission control systems''
- Comprehensive component (output component only, e.g., turbocharger waste-gates, variable length manifold runners)

For monitors of the following components, the manufacturer may use alternative or additional criteria to that set forth above for incrementing the denominator. To do so, the manufacturer would need to be able to demonstrate that the criteria would be equivalent to the criteria outlined above at measuring the frequency of monitor operation relative to the amount of engine operation:

- Engine cooling system input components (section II.D.2)
- ''Other emission control systems'' (section II.D.5)
- Comprehensive component input components that require extended monitoring evaluation (section II.D.4, e.g., stuck fuel level sensor rationality)

For monitors of the following components or other emission controls that experience infrequent regeneration events, the manufacturer may use alternative or additional criteria to that set forth above for incrementing the denominator. To do so, the manufacturer would need to demonstrate that the criteria would be equivalent to the criteria outlined above at measuring the frequency of monitor operation relative to the amount of engine operation:

- Oxidation catalysts
- Diesel particulate filters

For hybrid engine systems, engines that employ alternative engine start hardware or strategies (e.g., integrated starter and generators), or alternative fueled engines (e.g., dedicated, bi-fuel, or dual-fuel applications), the manufacturer may request Administrator approval to use alternative criteria to that set forth above for incrementing the denominator. In general, approval would not be given for alternative criteria that only employ engine shut off at or near idle/vehicle stationary conditions. Approval of the alternative criteria would be based on the equivalence of the alternative criteria at determining the amount of engine operation relative to the measure of conventional engine operation in accordance with the criteria above.

The numerators and denominators may need to be disabled at some times. To do this, within 10 seconds of a malfunction being detected (i.e., a pending, MIL-on, or active DTC being stored) that disables a monitor required to meet the performance tracking requirements,[45] the OBD system must disable further incrementing of the corresponding numerator and denominator for each monitor that is disabled. When the malfunction is no longer detected (e.g., the pending DTC is erased through self-clearing or through a scan tool command), incrementing of all corresponding numerators and denominators should resume within 10 seconds. Also, within 10 seconds of the start of a power takeoff unit (PTO) that disables a monitor required to meet the performance tracking requirements, the OBD system should disable further incrementing of the corresponding numerator and denominator for each monitor that is disabled. When the PTO operation ends, incrementing of all corresponding numerators and denominators should resume within 10 seconds. The OBD system must disable further incrementing of all numerators

[45] These monitors, as presented in section II.A.3, are, for diesel engines: the NMHC catalyst, the CDPF system, the NO_X adsorber system, the NO_X converting catalyst system, and the boost system; and, for gasoline engines: the catalyst, the evaporative system, and the secondary air system; and, for all engines, the exhaust gas sensors, the EGR system, and the VVT system.

and denominators within 10 seconds if a malfunction has been detected in any component used to determine if: vehicle speed/calculated load; ambient temperature; elevation; idle operation; engine cold start; or, time of operation has been satisfied, and the corresponding pending DTC has been stored. Incrementing of all numerators and denominators should resume within 10 seconds when the malfunction is no longer present (e.g., pending DTC erased through self-clearing or by a scan tool command).

The in-use performance monitoring ratio itself is defined as the numerator for the given monitor divided by the denominator for that monitor.

b. Standardized Tracking and Reporting of Monitor Performance

We are proposing that the OBD system separately report an in-use monitor performance numerator and denominator for each of the following components:

- For diesel engines: NMHC catalyst bank 1, NMHC catalyst bank 2, NO_X catalyst bank 1, NO_X catalyst bank 2, exhaust gas sensor bank 1, exhaust gas sensor bank 2, EGR/VVT system, DPF system, turbo boost control system, and the NO_X adsorber. The OBD system must also report a general denominator and an ignition cycle counter in the standardized format discussed below and in section II.F.5.
- For gasoline engines: catalyst bank 1, catalyst bank 2, oxygen sensor bank 1, oxygen sensor bank 2, evaporative leak detection system, EGR/VVT system, and secondary air system. The OBD system must also report a general denominator and an ignition cycle counter in the standardized format specified below and in section II.F.5.

The OBD system would be required to report a separate numerator for each of the components listed in the above bullet lists. For specific components or systems that have multiple monitors that are required to be reported under section II.B—e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics—the OBD system should separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator should be reported for the specific component. The numerator(s) must be reported in accordance with the specifications in section II.F.5.

The OBD system would also be required to report a separate denominator for each of the components listed in the above bullet lists. The denominator(s) must be reported in accordance with the specifications in section II.F.5.

Similarly, for the in-use performance ratio, determining which corresponding numerator and denominator to report as required for specific components or systems that have multiple monitors that are required to be reported—e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics'the ratio should be calculated in accordance with the specifications in section II.F.5.

The ignition cycle counter is defined as a counter that indicates the number of ignition cycles a vehicle has experienced. The ignition cycle counter must also be reported in accordance with the specifications in section II.F.5. The ignition cycle counter, when incremented, should be incremented by an integer of one. The ignition cycle counter may not be incremented more than once per ignition cycle. The ignition cycle counter should be incremented within 10 seconds if and only if the engine exceeds an engine speed of 50 to 150 rpm below the normal, warmed-up idle speed (as determined in the drive position for vehicles equipped with an automatic transmission) for at least two seconds plus or minus one second. The OBD system should disable further incrementing of the ignition cycle counter within 10 seconds if a malfunction has been detected in any component used to determine if engine speed or time of operation has been satisfied and the corresponding pending DTC has been stored. The ignition cycle counter may not be disabled from incrementing for any other condition. Incrementing of the ignition cycle counter should resume within 10 seconds after the malfunction is no longer present (e.g., pending DTC erased through self-clearing or by a scan tool command).

F. Standardization Requirements

The heavy-duty OBD regulation would include requirements for manufacturers to standardize certain features of the OBD system. Effective standardization assists all repair technicians in diagnosing and repairing malfunctions by providing equal access to essential repair information, and requires structuring the information in a common format from manufacturer to manufacturer. Additionally, the standardization would help to facilitate the potential use of OBD checks in heavy-duty inspection and maintenance programs.

Among the features that would be standardized under the proposed heavy-duty OBD regulation include:

- The diagnostic connector, the computer communication protocol;
- The hardware and software specifications for tools used by service technicians;
- The information communicated by the onboard computer and the methods for accessing that information;
- The numeric designation of the DTCs stored when a malfunction is detected; and,
- The terminology used by manufacturers in their service manuals.

Our proposal would require that only a certain minimum set of emissions-related information be made available through the standardized format, protocol, and connector. We are not limiting engine manufacturers as to what protocol they use for engine control, communication between onboard computers, or communication to manufacturer-specific scan tools or test equipment. Further, we are not prohibiting engine manufacturers from equipping the vehicle with additional diagnostic connectors or protocols as required by other suppliers or purchasers. For example, fleets that use data logging or other equipment that requires the use of SAE J1587 communication and connectors could still be installed and supported by the engine and vehicle manufacturers. The OBD rules would only require that engine manufacturers also equip their vehicles with a specific connector and communication protocol that meet the standardized requirements to communicate a minimum set of emissions-related diagnostic, service and, potentially, inspection information.

Additionally, our proposal includes a phase-in of one engine family meeting the requirements of OBD in the model years 2010 through 2012. Because non-compliant engines would not require the proposed standardization features, truck and coach builders could be faced with several integration issues when building product in 2010 through 2012. Specifically, they could be faced with designing their vehicles to accommodate a standardized MIL, diagnostic connector, and communication protocol when using a compliant engine yet to not accommodate those features when using a non-compliant engine. This outcome could easily arise since only one engine-family per manufacturer would be compliant and, therefore, a given truck

designed to accommodate several engines from several engine manufacturers would very likely need to accommodate a compliant engine from manufacturer A and a non-compliant engine from manufacturer B. It should be noted that engine choices are typically driven by the end user—the truck buyer—and not by the truck or coach builder. For that reason, the truck builder must accommodate all possible engines for the truck size and cannot necessarily demand from the engine manufacturer a compliant versus a non-compliant engine.

As a result, rather than force truck and coach builders to accommodate two different systems and risk incompatibilities, we are proposing to exempt the 2010 through 2012 model year engines from meeting certain standardization requirements of OBD. This should allow truck and coach builders to integrate engines in the same manner as done currently and then to switch over to integrating a single system in 2013 when all engines are required to meet all of the standardization requirements of OBD. The proposed implementation schedule for standardization features is shown in Table II.G–2.

1. Reference Documents

We are proposing that OBD systems comply with the following provisions laid out in the following Society of Automotive Engineers (SAE) and/or International Organization of Standards (ISO) documents that are or would be incorporated by reference (IBR) into federal regulation:

TABLE II.F—1. REFERENCE DOCUMENTS FOR OVER 14,000 POUND OBD

Document No.	Document title	Date	Comment
SAE J1962	''Diagnostic Connector—Equivalent to ISO/DIS 15031–3: December 14, 2001''.	April 2002	Updated IBR.
SAE J1930	''Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms—Equivalent to ISO/TR 15031–2: April 30, 2002''.	April 2002	Updated IBR.
SAE J1978	''OBD II Scan Tool—Equivalent to ISO/DIS 15031–4: December 14, 2001''	April 2002	Updated IBR.
SAE J1979	''E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031–5: April 30, 2002''.	April 2002	Updated IBR.
SAE J2012	''Diagnostic Trouble Code Definitions—Equivalent to ISO/DIS 15031–6: April 30, 2002''.	April 2002	Updated IBR.
SAE J1939	''Recommended Practice for a Serial Control and Communications Vehicle Network,'' and the associated subparts included in SAE HS–1939, ''Truck and Bus Control and Communications Network Standards Manual''.	2005 Edition, March 2005	Updated IBR.
SAE J2403	''Medium/Heavy-Duty E/E Systems Diagnosis Nomenclature''	August 2004	New IBR.
SAE J2534	''Recommended Practice for Pass-Thru Vehicle Reprogramming''	February 2002	New IBR.
ISO 15765–4:2001.	''Road Vehicles—Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems''.	December 2001	New IBR.

Copies of these SAE materials may be obtained from Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA, 15096–0001. Copies of these ISO materials may be obtained from the International Organization for Standardization, Case Postale 56, CH–1211 Geneva 20, Switzerland.

2. Diagnostic Connector Requirements

We are proposing that a standard data link connector conforming to either SAE J1962 or SAE J1939–13 specifications (except as noted below) would have to be included in each vehicle. The connector would have to be located in the driver's side foot-well region of the vehicle interior in the area bound by the driver's side of the vehicle and the driver's side edge of the center console (or the vehicle centerline if the vehicle does not have a center console) and at a location no higher than the bottom of the steering wheel when in the lowest adjustable position. The Administrator would not allow the connector to be located on or in the center console (i.e., neither on the horizontal faces near the floor-mounted gear selector, parking brake lever, or cup-holders, nor on the vertical faces near the car stereo, climate system, or navigation system controls). The location of the connector must be easily identifiable and accessed (e.g., to connect an off-board tool). For vehicles equipped with a driver's side door, the connector would have to be easily identified and accessed by someone standing (or ''crouched'') on the ground outside the driver's side of the vehicle with the driver's side door open.

If a manufacturer wants to cover the connector, the cover must be removable by hand without the use of any tools and be labeled ''OBD'' to aid technicians in identifying the location of the connector. Access to the diagnostic connector could not require opening or removing any storage accessory (e.g., ashtray, coinbox). The label would have to clearly identify that the connector is located behind the cover and is consistent with language and/or symbols commonly used in the automobile and/or heavy truck industry.

If the ISO 15765–4 protocol (see section II.F.3) is used for the required OBD standardized functions, the connector would have to meet the ''Type A'' specifications of SAE J1962. Any pins in the connector that provide electrical power must be properly fused to protect the integrity and usefulness of the connector for diagnostic purposes and may not exceed 20.0 Volts DC regardless of the nominal vehicle system or battery voltage (e.g., 12V, 24V, 42V).

If the SAE J1939 protocol (see section II.F.3)) is used for the required OBD standardized functions, the connector must meet the specifications of SAE J1939–13. Any pins in the connector that provide electrical power must be properly fused to protect the integrity and usefulness of the connector for diagnostic purposes.

Manufacturers would be allowed to equip engines/vehicles with additional diagnostic connectors for manufacturer-specific purposes (i.e., purposes other than the required OBD functions). However, if the additional connector conforms to the ''Type A'' specifications of SAE J1962 or the specifications of SAE J1939–13 and is located in the vehicle interior near the required connector as described above, the connector(s) must be clearly labeled to identify which connector is used to access the standardized OBD information proposed below.

3. Communications to a Scan Tool

a. Background

In light-duty OBD, manufacturers are allowed to use one of four protocols for communication between a generic scan tool and the vehicle's onboard computer. A generic scan tool automatically cycles through each of the allowable protocols until it hits upon the proper one with which to establish communication with the particular onboard computer. While this has generally worked successfully in the field, some communication problems have arisen.

In an effort to address these problems, CARB has made recent changes to their light-duty OBD II regulation that require all light-duty vehicle manufacturers to use only one communication protocol by the 2008 model year. In making these changes, CARB staff argued that their experience with standardization under the OBD II regulation showed that having a single set of standards used by all vehicles would be desirable. CARB staff argued that a single protocol offers a tremendous benefit to both scan tool designers and service technicians. Scan tool designers could focus on added feature content and could expend much less time and money validating basic functionality of their product on all the various permutations of protocol interpretations that are implemented. In turn, technicians would likely get a scan tool that works properly on all vehicles without the need for repeated software updates that incorporate ''work-arounds'' or other patches to fix bugs or adapt the tool to accommodate slight variances in how the multiple protocols interact with each other or are implemented by various manufacturers. Further, a single protocol should also be beneficial to fleet operators that use add-on equipment such as data loggers, and for vehicle manufacturers that integrate parts from various engine and component suppliers all of which must work together.

Based on our similar experiences at the federal level with communication protocols giving rise to service and inspection/maintenance program issues, we initially wanted to propose a single communication protocol for engines used in over 14,000 pound vehicles. However, the affected industry has been divided over which single protocol should be required and has strongly argued for more than one protocol to be allowed. Therefore, for vehicles with diesel engines, we are proposing that manufacturers be required to use either the standards set forth in SAE J1939, or those set forth in the 500 kbps baud rate version of ISO 15765. For vehicles with gasoline engines, we are proposing that manufacturers be required to use the 500 kbps baud rate version of ISO 15765. Manufacturers would be required to use only one standard to meet all the standardization requirements on a single vehicle; that is, a vehicle must use only one protocol for all OBD modules on the vehicle.

Several in the heavy-duty industry have argued for options that would allow the use of more than these two protocols on heavy-duty engines. Some have even argued for combinations of these protocols—e.g., diagnostic connector and messages of ISO 15765 on an SAE J1939 physical layer network. However, as described above, experience from multiple protocols and multiple variants within the protocols has unnecessarily caused a significant number of problems with engine and vehicle related computer communications.

b. Requirements for Communications to a Scan Tool

We are proposing that all OBD control modules—e.g., engine, auxiliary emission control module—on a single vehicle be required to use the same protocol for communication of required emissions-related messages from onboard to off-board network communications to a scan tool meeting SAE J1978 specifications or designed to communicate with a SAE J1939 network. Engine manufacturers would not be allowed to alter normal operation of the engine emissions control system due to the presence of off-board test equipment accessing the OBD information proposed below. The OBD system would be required to use one of the following standardized protocols:

- ISO 15765–4 and all required emission-related messages using this protocol would have to use a 500 kbps baud rate.
- SAE J1939 which may only be used on vehicles with diesel engines.

4. Required Emissions Related Functions

Most of the proposed emissions related functions are elements that exist in our light-duty OBD requirements. We are proposing several required functions, these are:

- Readiness status
- Distance and number of warm-up cycles since DTC clear
- Permanent DTC storage
- Real time indication of monitor status
- Communicating readiness status to the vehicle operator
- Diagnostic trouble codes (DTC)
- Data stream
- Freeze frame
- Test results
- Software calibration identification
- Software calibration verification number
- Vehicle identification number (VIN)

i. Readiness Status

The main intent of readiness status is to ensure that a vehicle is ready for an OBD-based inspection—by indicating that monitors have run and operational status of the emissions-control system has been fully evaluated—and to prevent fraudulent testing in inspection programs. In general, for OBD-based inspections, technicians ''fail'' a vehicle with an illuminated MIL since this would indicate the presence of an emissions control system malfunction. Without the readiness status indicators, technicians would not have a clear indication from the OBD system that it had sufficiently evaluated the emissions control system prior to the inspection. Since the potential exists for OBD checks to be used as part of a heavy truck inspection program, we believe that having readiness status indicators as part of this proposal is important—waiting for a subsequent OBD–I/M rulemaking to require such indicators would unnecessarily delay implementation of such OBD–I/M programs.

Absent such OBD–I/M programs, we still believe that readiness indicators are an important OBD tool. Technicians would be expected to use the readiness status to verify OBD-related repairs. Specifically, technicians would clear the computer memory after repairing an OBD-detected fault in order to erase the DTC, extinguish the MIL, and reset the readiness status to ''incomplete.'' Then the vehicle could be operated in such a manner that the monitor of the repaired component would run (i.e., the readiness status of the monitor would be set to ''complete''). The absence of any DTCs or MIL illumination upon readiness status indicating ''complete'' would indicate a successful repair.

Therefore, we are proposing that manufacturers be required to indicate the readiness status of the OBD monitors. This would serve to indicate whether or not engine operation has been sufficient to allow certain OBD monitors to perform their system evaluations. The OBD system would be required to report a readiness status of either ''complete'' if the monitor has run a sufficient number of times to detect a malfunction since computer memory was last cleared, ''incomplete'' if the monitor has not yet run a sufficient number of times since the memory was last cleared, or ''not applicable'' if the

monitor is not present or if the specific monitored component is not equipped on the vehicle. The readiness status of monitors that are required to run continuously would always indicate ''complete.'' The details of the proposal discussed below clarify that the readiness status would be set to ''incomplete'' whenever memory is cleared either by a battery disconnect or by a scan tool but not after a normal vehicle shutdown (i.e., key-off).

ii. Distance Traveled and Number of Warm-Up Cycles Since DTC Clear

As originally envisioned in our OBD–I/M rulemaking (61 FR 40940), we intended to require that all readiness status indicators be set to ''complete'' prior to accepting a vehicle for I/M inspection. However, it became clear that some vehicles were being rejected from inspection for reasons beyond the driver's control. For example, a vehicle driven in extreme ambient conditions would prohibit monitors from running and setting readiness status indicators to ''complete.'' Also, a vehicle repaired just prior to arriving at the inspection station may not have been operated sufficiently to set the readiness status of the monitor for the recently repaired component to ''complete.'' The driver of such a vehicle would, in essence, be punished unintentionally for having taken the time and expense to repair the vehicle just prior to the inspection. As a result, we issued guidance (cite) to state inspectors recommending that vehicles be accepted for I/M inspection provided two or fewer readiness status indicators are ''incomplete.'' Note that most light-duty gasoline vehicles—the bulk of the vehicle fleet facing OBD–I/M checks—have only four monitors for which the readiness status indicator is meaningful (all of their other monitors being continuous monitors). However, there exists evidence that this policy is perhaps accepting vehicles for I/M inspection that should not be accepted due to unscrupulous clearing of DTCs and readiness status by people that understand how to do so and then operate their vehicles just enough to set the required minimum number of readiness indicators to ''complete.''

As a result, we are proposing some additional features that should better differentiate between vehicles that have been repaired recently or have ''incomplete'' readiness indicators through circumstances outside the driver's control, and those vehicles operated by drivers that are attempting to fraudulently get through an OBD-based inspection. We are proposing that the OBD system make available data that would report the distance traveled or engine run time for those engines that do not use vehicle speed information, and the number of warm-up cycles since the fault memory was last cleared.[46] By combining these data with the readiness data, technicians or inspectors would better be able to determine if ''incomplete'' readiness status indicators or an extinguished MIL are due to unscrupulous memory clearing or circumstances beyond the driver's control. For example, a vehicle with several ''incomplete'' readiness indicators but with a high distance traveled/engine run time and a high number of warm-up cycles since the last clearing of fault memory would be unlikely to have undergone a recent fault memory clearing for the purpose of extinguishing the MIL prior to inspection. On the other hand, a vehicle with only one or two ''incomplete'' readiness indicators and a very low distance traveled/engine run time and a low number of warm-up cycles since fault memory clearing should probably be rejected or failed at an inspection. This would better allow an inspection program to be set up to reject only those vehicles with recently cleared memories while minimizing the chances of rejecting vehicles that driven such that monitors rarely run whether by unique driver behaviors or extreme ambient conditions.

iii. Permanent Diagnostic Trouble Code Storage

Consistent with the proposal for distance traveled/engine run time and number of warm-up cycles, we are proposing a requirement to make it much more difficult for a vehicle owner or technician to clear the fault memory and erase all traces of a previously detected malfunction. Current OBD systems on under 14,000 pound vehicles allow a technician or vehicle owner to erase all DTCs and extinguish the MIL by issuing a command from a generic scan tool or, in many cases, simply by disconnecting the vehicle battery. This would set to ''incomplete'' the readiness status indicators for all monitors and would remove all record of the malfunction that had been detected.

We are proposing that manufacturers be required to store in non-volatile memory random access memory (NVRAM) a minimum of four MIL-on DTCs that are, at present, commanding the MIL-on. These ''permanent'' DTCs would have to be stored in NVRAM at the end of every key cycle. By requiring these permanent DTCs to be stored in NVRAM, one would not be able to erase them simply by disconnecting the battery. Further, manufacturers would not be allowed to design their OBD systems such that these permanent DTCs could be erased by any generic or manufacturer-specific scan tool command. Instead, the permanent DTCs could be erased only via an OBD system self-clearing—i.e., upon evaluating the component or system for which the permanent DTC has been stored and detecting on sufficient drive cycles that the malfunction is no longer present, the OBD system would erase the fault memory as discussed in section II.A.2. Once this has occurred, the permanent DTC stored in NVRAM would be erased also.

The permanent DTCs should help if states choose to implement OBD-based I/M programs for heavy trucks. A truck with readiness status indicators for EGR and boost control set to ''incomplete'' and with permanent DTCs stored for both EGR and boost control would quite probably be a truck that should be rejected from inspection. The OBD system on such a truck has almost certainly had its fault memory cleared—via scan tool command or battery disconnect—which would set the readiness indicators to ''incomplete'' and erase all MIL-on DTCs but would still have permanent DTCs stored (only the OBD system itself can erase permanent DTCs). Likewise, a truck with the same readiness indicators set to ''incomplete'' and no permanent DTCs for those monitors should almost certainly be accepted for inspection since the lack of readiness is almost certainly due to circumstances outside the driver's control.

We believe that the permanent DTCs also provide advantages to technicians attempting to repair a malfunction and prepare it for subsequent inspection or proof of correction. The permanent DTC would identify the specific monitor that would need to be exercised after repair and prior to inspection to be sure that the malfunction has been repaired. By combining this information with the vehicle manufacturer's service information, technicians could identify the exact conditions necessary to exercise the particular monitor. As such, technicians could more effectively verify that the specific monitor (that monitor having illuminated the MIL for which the repair has been done) has run and confirmed that the malfunction no longer exists and the repair has been made correctly. This should also reduce vehicle owner ''come-backs'' for incomplete or ineffective repairs.

[46] The fault memory being any DTCs, readiness status indicators, freeze frame information, etc.

iv. Real Time Indication of Monitor Status

We are also proposing provisions to make it easier for technicians to prepare a vehicle for an inspection following a repair. These provisions would require that the OBD system provide real time data that indicate whether the necessary conditions are present currently to set all of the readiness indicators to ''complete.'' These data would indicate whether a particular monitor may still have an opportunity to run on the current drive cycle or whether a condition has been encountered that has disabled the monitor for the rest of the drive cycle regardless of the driving conditions that might be encountered. While these data would not provide technicians with the exact conditions necessary to exercise the monitors (only service information would provide such information), the date in combination with the service information should assist technicians in verifying repairs and/or preparing a vehicle for inspection. Technicians would be able to use this information to identify when specific monitors have indeed completed or to identify situations where they have overlooked one or more of the enable criteria and need to check the service information and try again.

v. Communicating Readiness Status to the Vehicle Operator

As mentioned above, substantial feedback has been received from OBD-based I/M programs throughout the U.S. Much of this feedback pertains to the effect on vehicle owners caused by being rejected from I/M inspection due to ''incomplete'' readiness status indicators. To address this, some light-duty vehicle manufacturers requested that they be allowed to communicate the vehicle's readiness status to the vehicle owner directly without need of a scan tool. This would provide assurance to the vehicle owner that their vehicle is ready for inspection prior to taking the vehicle to the I/M station. We are proposing that heavy-duty engine manufacturers be allowed to do the same thing (this is a proposed option, not a proposed requirement). If a manufacturer chooses to implement this option, though, they would be required to do so in a standardized manner. On engines equipped with this option, the owner would be able to initiate a self-check of the readiness status, thereby greatly reducing the possibility of being rejected at a roadside inspection.

vi. Diagnostic Trouble Codes (DTC)

Malfunctions are reported by the OBD system and displayed on a scan tool for service technicians in the form of diagnostic trouble codes (DTCs). We are proposing that manufacturers be required to report all emissions-related DTCs using a standardized format and to make them accessible to all service technicians, including the independent service industry. The reference document standards selected by the manufacturer would define many generic DTCs to be used by all manufacturers. In the rare circumstances that a manufacturer cannot find within the reference documents a suitable DTC, a unique ''manufacturer-specific'' DTC could be used. However, such manufacturer-specific DTCs are not as easily interpreted by the independent service industry. Excessive use of manufacturer-specific DTCs may increase the time and cost for vehicle repairs. Thus, we are proposing to restrict the use of manufacturer-specific DTCs. If a generic DTC suitable for a given malfunction cannot be found, the manufacturer would be expected to pursue approval and addition of appropriate generic DTCs into the reference documents; the intent being to standardize as much information as possible.

Additionally, we are proposing that the OBD system store DTCs that are as specific as possible to identify the nature of the malfunction. The intent being to provide service technicians with as detailed information as possible to diagnose and repair vehicles in an efficient manner. In other words, manufacturers should use separate DTCs for every monitor where the monitor and repair procedure, or likely cause of the failure, is different. Generally, a manufacturer would design an OBD monitor that detects different root causes (e.g., sensor shorted to ground or battery) for a malfunctioning component or system. We would expect manufacturers to store a specific DTC such as ''sensor circuit high input'' or ''sensor circuit low input'' rather than a general code such as ''sensor circuit malfunction.'' Further, we expect manufacturers to store different DTCs that distinguish circuit malfunctions from rationality and functional malfunctions since the root cause for each is different and, thus, the repair procedures may be different.

We are also proposing specific provisions for storage of pending and MIL-on DTCs. These proposed provisions were discussed in section II.A.2.

We are also proposing requirements that would help to distinguish between DTCs stored for malfunctions that are currently present and for malfunctions that are no longer present. These requirements would apply only to those engines using ISO 15765–4 as the communication protocol. As described in section II.A.2, the OBD system would generally extinguish the MIL if the malfunction responsible for the MIL illumination has not been detected (i.e., the monitor runs and determines that the malfunction no longer exists) on three subsequent sequential drive cycles. However, a manufacturer would not be allowed to erase the associated MIL-on DTC until 40 engine warm-up cycles have occurred without again detecting the malfunction. So even though the malfunction is no longer present and a MIL-on is not being commanded, the DTC would still remain (termed a ''history'' code in the ISO standard). Consequently, if another unrelated malfunction occurs and results in a MIL-on, a new DTC would be stored along with the history DTC. When trying to diagnose the OBD problem, technicians accessing DTC information may have trouble distinguishing which DTC is responsible for illuminating the MIL (i.e., which malfunction is present currently), and thus could have trouble determining what exactly must be repaired. Therefore, we are proposing this requirement for ISO engines to help distinguish between DTCs stored for malfunctions that are present and those that were present. Note that, for engines using SAE J1939 as the communication protocol, such a distinction is already provided for.

Permanent DTCs would also need to be separately identified from the other types of DTCs. Additionally, as described above, manufacturers would be required to develop additional software routines to store and erase permanent DTCs in NVRAM and to prevent erasure from any battery disconnect or scan tool command.

vii. Data Stream/Freeze Frame/Test Results

An important aspect of OBD is the ability of technicians to access critical information from the onboard computer to diagnose and repair emissions-related malfunctions. We believe that having access through the diagnostic connector to real-time electronic information regarding certain emissions critical components and systems would provide valuable assistance for repairing vehicles properly. The availability of real-time information would also provide assistance to technicians

responding to drivability complaints since the vehicle could be operated within the necessary operating conditions and the technician could see how various sensors and systems were acting. Similarly, fuel economy complaints, loss of performance complaints, intermittent problems, and others issues could also be addressed.

We are proposing a number of data parameters that the OBD system would be required to report to a generic scan tool. These parameters, which would include information such as engine speed and exhaust gas sensor readings, would allow technicians to understand how the vehicle engine control system is functioning, either as the vehicle operates in a service bay or during actual driving. They would also help technicians diagnose and repair emission-related malfunctions by allowing them to watch instantaneous changes in the values while operating the vehicle.

Some of the data parameters we are proposing are intended to assist us in performing in-use testing of heavy-duty engines for compliance with emissions standards. One of the parameters that manufacturers would be required to report is the real-time status of the NO_X and PM ''not-to-exceed'' (NTE) control areas. The NTE standards define a wide range of engine operating points where a manufacturer must design the engine to be below a maximum emission level. In theory, whenever the engine is operated within the speed and load region defined as the NTE zone, emissions will be below the required standards. However, within the NTE zone, manufacturers are allowed, if justified on a case-by-case basis, to either modify the time frame in which the standard must be met, and in the second case to be exempted from the emission standards under specific conditions (e.g., an NTE deficiency). Manufacturers can request two types of modifications: first, a five percent limited testing region within which no more than five percent of in-use operation is expected to occur and, thus, no more than five percent of NTE emissions sampling within that region can be compared to the NTE standard for a given sampling event; and second, NTE deficiencies which are precisely defined exemption conditions where compliance cannot be met due to technical reasons or for engine protection. These regions and conditions can be defined by directly measured signals or, in some cases, by complicated modeled values calculated internally in the engine computer. When conducting emissions testing of these engines, knowing if the engine is inside the NTE zone—and subject to the NTE standards—or is outside of the NTE zone or, perhaps, in an NTE limited testing region or covered by an NTE deficiency is imperative. As our in-use testing program requirements are written currently, we must post process data to determine which data points were generated within a compliance zone and which were generated within an exempted zone. Such post processing, while possible, is inefficient, time consuming, and resource intensive. Having the NTE zone data broadcast in real-time over the engine's network would allow for a much more efficient use of our resources.

The specific parameters we are proposing for inclusion in the data stream are, for gasoline engines: calculated load value, engine coolant temperature, engine speed, vehicle speed, time elapsed since engine start, absolute load, fuel level (if used to enable or disable any other monitors), barometric pressure (directly measured or estimated), engine control module system voltage, commanded equivalence ratio, number of stored MIL-on DTCs, catalyst temperature (if directly measured or estimated for purposes of enabling the catalyst monitor(s)), monitor status (i.e., disabled for the rest of this drive cycle, complete this drive cycle, or not complete this drive cycle) since last engine shut-off for each monitor used for readiness status, distance traveled/engine run time with a commanded MIL-on, distance traveled/engine run time since fault memory last cleared, number of warm-up cycles since fault memory last cleared, OBD requirements to which the engine is certified (e.g., California OBD, EPA OBD, non-OBD) and MIL status (i.e., commanded-on or commanded-off). And, for diesel engines: calculated load (engine torque as a percentage of maximum torque available at the current engine speed),[47] driver's demand engine torque (as a percentage of maximum engine torque), actual engine torque (as a percentage of maximum engine torque), reference engine maximum torque, reference maximum engine torque as a function of engine speed (suspect parameter numbers (SPN) 539 through 543 defined in SAE J1939 within parameter group number (PGN) 65251 for engine configuration), engine coolant temperature, engine oil temperature (if used for emission control or any OBD monitors), engine speed, time elapsed since engine start, fuel level (if used to enable or disable any other diagnostics), vehicle speed (if used for emission control or any OBD monitors), barometric pressure (directly measured or estimated), engine control module system voltage, number of stored MIL-on DTCs, monitor status (i.e., disabled for the rest of this drive cycle, complete this drive cycle, or not complete this drive cycle) since last engine shut-off for each monitor used for readiness status, distance traveled/engine run time with a commanded MIL-on, distance traveled/engine run time since fault memory last cleared, number of warm-up cycles since DTC memory last cleared, OBD requirements to which the engine is certified (e.g., EPA OBD parent rating, EPA OBD child rating, non-OBD), and MIL status (i.e., commanded-on or commanded-off). Also for diesel engines, as discussed above, separate NO_X and PM NTE control area status (i.e., inside control area, outside control area, inside manufacturer-specific NTE carve-out area, or deficiency active area). Also, for all engines so equipped (and only those so equipped): absolute throttle position, relative throttle position, fuel control system status (e.g., open loop, closed loop), fuel trim, fuel pressure, ignition timing advance, fuel injection timing, intake air/manifold temperature, engine intercooler (aftercooler) temperature, manifold absolute pressure, air flow rate from mass air flow sensor, secondary air status (upstream, downstream, or atmosphere), ambient air temperature, commanded purge valve duty cycle/position, commanded EGR valve duty cycle/position, actual EGR valve duty cycle/position, EGR error between actual and commanded, PTO status (active or not active), redundant absolute throttle position (for electronic throttle or other systems that utilize two or more sensors), absolute pedal position, redundant absolute pedal position, commanded throttle motor position, fuel rate, boost pressure, commanded/target boost pressure, turbo inlet air temperature, fuel rail pressure, commanded fuel rail pressure, DPF inlet pressure, DPF inlet temperature, DPF outlet pressure, DPF outlet temperature, DPF delta pressure, exhaust pressure sensor output, exhaust gas temperature sensor output, injection control pressure, commanded injection control pressure, turbocharger/turbine speed,

[47] Note that, for purposes of the calculated load and torque parameters for diesel engines, manufacturers would be required to report the most accurate values that are calculated within the applicable electronic control unit (e.g., the engine control computer). ''Most accurate values,'' in this context, would be those of sufficient accuracy, resolution, and filtering that they could be used for the purpose of in-use emissions testing with the engine still in a vehicle (e.g., using portable emissions measurement equipment).

variable geometry turbo position, commanded variable geometry turbo position, turbocharger compressor inlet temperature, turbocharger compressor inlet pressure, turbocharger turbine inlet temperature, turbocharger turbine outlet temperature, wastegate valve position, glow plug lamp status, oxygen sensor output, air/fuel ratio sensor output, NO_X sensor output, and evaporative system vapor pressure.

We are also proposing requirements for storage of ''freeze frame'' information at the time a malfunction is detected and a DTC is stored. The freeze frame provides the operating conditions of the vehicle at the time of malfunction detection and the DTC associated with the data. The parameters we are proposing for inclusion in the freeze frame are a subset of the parameters listed above for the data stream. Note that storage of only one freeze frame would be required. Manufacturers may choose to store additional frames, provided that the required frame can be read using a scan tool meeting SAE J1978 specifications or designed to communicate with an SAE J1939 network.

We are also proposing that the OBD system store the most recent monitoring results for most of the major monitors. Manufacturers would be required to store and make available to the scan tool certain test information—i.e., the minimum and maximum values that should occur during proper operation along with the actual test value—of the most recent monitoring event. ''Passing'' systems would store test results that are within the test limits, while ''failing'' systems would store test results that are outside the test limits. The storage of test results would assist technicians in diagnosing and repairing malfunctions and would help distinguish between components that are performing well below the malfunction thresholds from those that are passing the malfunction thresholds marginally.

viii. Identification Numbers

We are also proposing that manufacturers be required to report two identification numbers related to the software and specific calibration values in the onboard computer. The first item, Calibration Identification Number (CAL ID), would identify the software version installed in the onboard computer. Software is often changed following production of the engine. These software changes often make changes to the emissions control system or the OBD system. We are proposing that these changes include a new CAL ID and that it be communicated via the diagnostic connector to the scan tool. The second item, Calibration Verification Number (CVN), would help to ensure that the current software has not been corrupted, modified inappropriately, or otherwise tampered with. Both CAL ID and CVN help ensure the integrity of the OBD system. The CVN proposal would require manufacturers to develop sophisticated software algorithms that would essentially be a self-check calculation of all of the emissions-related software and calibration values in the onboard computer and would return the result of the calculation to a scan tool. If the calculated result did not equal the expected result for that CAL ID, one would know that the software had been corrupted or otherwise modified. The CVN result would have to be made available at all times to a generic scan tool.

We are also proposing that the Vehicle Identification Number (VIN) be communicated via the diagnostic connector to a generic scan tool in a standardized format. The VIN would be a unique number assigned by the vehicle manufacturer to every vehicle built. The VIN is commonly used for purposes of ownership and registration to uniquely identify every vehicle. By requiring the VIN to be stored in the onboard computer and available electronically to a generic scan tool, the possibility of a fraudulent inspection (e.g., by plugging into a different vehicle than an inspection citation was issued originally to generate a proof of correction) would be minimized. Electronic access to this number would also simplify the inspection process and reduce transcription errors from manual data entry.

We are proposing that the VIN be electronically stored in a control module on the vehicle, but not that it necessarily be stored in the engine control module. As long as the VIN is reported correctly and according to the selected reference document standards, we consider it irrelevant as to which control module (e.g., engine controller, instrument cluster controller) contains the information. Further, we are proposing that the ultimate responsibility would lie with the engine manufacturer to ensure that every vehicle manufactured with one of its engines satisfies this requirement. However, we would expect that the physical task of implementing this requirement would likely be passed from the engine manufacturer to the vehicle manufacturer via an additional build specification. Thus, analogous to how the engine manufacturer currently provides engine purchasers with detailed specifications regarding engine cooling requirements, additional sensor inputs, physical mounting specifications, weight limitations, etc., the engine manufacturer would likely include an additional specification dictating the need for the VIN to be made available electronically. It would be left to each engine manufacturer to determine the most effective method to achieve this, as long as the VIN requirement is met. Some manufacturers may find it most effective to provide the capability in the engine control module delivered with the engine coupled with a mechanism for the vehicle manufacturer to program the module with the VIN upon installation of the engine into an actual vehicle. Others may find it more effective to require the vehicle manufacturer to have the capability built into other modules installed on the vehicle such as instrument cluster modules, etc. We are aware of several current vehicles with engines from three different engine manufacturers that already have the VIN available through engine-manufacturer specific scan tools; this indicates that such arrangements already exist in one form or another and that they are working.

5. In-Use Performance Ratio Tracking Requirements

To separately report an in-use performance ratio for each applicable monitor as discussed in sections II.B through II.D, we are proposing that manufacturers be required to implement software algorithms to report a numerator and denominator in the standardized format specified below and in accordance with the specifications of the reference documents listed in section II.F.1.

For the numerator, denominator, general denominator, and ignition cycle counter:

- Each number must have a minimum value of zero and a maximum value of 65,535 with a resolution of one.
- Each number must be reset to zero only when a non-volatile random access memory (NVRAM) reset occurs (e.g., reprogramming event) or, if the numbers are stored in keep-alive memory (KAM), when KAM is lost due to an interruption in electrical power to the control module (e.g., battery disconnect). Numbers may not be reset to zero under any other circumstances including when commanded to do so via a scan tool command to clear DTCs or reset KAM.
- If either the numerator or denominator for a specific component reaches the maximum value of 65,535 ±2, both numbers should be divided by two before either is incremented again to avoid overflow problems.

• If the ignition cycle counter reaches the maximum value of 65,535 ±2, the ignition cycle counter should rollover and increment to zero on the next ignition cycle to avoid overflow problems.

• If the general denominator reaches the maximum value of 65,535 ±2, the general denominator should rollover and increment to zero on the next drive cycle that meets the general denominator definition to avoid overflow problems.

• If an engine is not equipped with a component (e.g., oxygen sensor bank 2, secondary air system), the corresponding numerator and denominator for that specific component should always be reported as zero.

For the in-use performance ratio:

• The ratio should have a minimum value of zero and a maximum value of 7.99527 with a resolution of 0.000122.

• A ratio for a specific component should be considered to be zero whenever the corresponding numerator is equal to zero and the corresponding denominator is not zero.

• A ratio for a specific component should be considered to be the maximum value of 7.99527 if the corresponding denominator is zero or if the actual value of the numerator divided by the denominator exceeds the maximum value of 7.99527.

For engine run time tracking on all gasoline and diesel engines, manufacturers would be required to implement software algorithms to individually track and report in a standardized format the engine run time while being operated in the following conditions:

• Total engine run time

• Total idle run time (with ''idle'' defined as accelerator pedal released by driver, vehicle speed less than or equal to one mile per hour, and PTO not active);

• Total run time with PTO active.

Each of the above engine run time counters would have the following numerical value specifications:

• Each numerical counter must be a four-byte value with a minimum value of zero at a resolution of one minute per bit.

• Each numerical counter must be reset to zero only when a nonvolatile memory reset occurs (e.g., a reprogramming event). Numerical counters cannot be reset to zero under any other circumstances including a scan tool (generic or enhanced) command to clear DTCs or reset KAM.

• When any of the individual numerical counters reaches its maximum value, all counters must be divided by two before any are incremented again. This is meant to avoid overflow problems.

6. Exceptions to Standardization Requirements

For alternative-fueled engines derived from a diesel-cycle engine, we are proposing that the manufacturer be allowed to meet the standardized requirements discussed in this section that are applicable to diesel engines rather than meeting the requirements applicable to gasoline engines.

G. Implementation Schedule, In-Use Liability, and In-Use Enforcement

1. Implementation Schedule and In-Use Liability Provisions

Table II.G–1 summarizes the proposed implementation schedule for the OBD monitoring requirements—i.e., the proposed certification requirements and in-use liabilities. More detail regarding the implementation schedule and liabilities can be found in the sections that follow.

TABLE II.G–1.—OBD CERTIFICATION REQUIREMENTS AND IN-USE LIABILITY FOR DIESEL FUELED AND GASOLINE FUELED ENGINES OVER 14,000 POUNDS: MONITORING REQUIREMENTS

Model year	Applicability	Certification requirement	In-use liability
2010–2012	Parent rating within 1 compliant engine family. [a]	Full liability to thresholds according to certification demonstration procedures. [b]	Full liability to 2x thresholds. [c]
	Child ratings within the compliant engine family.	Certification documentation only (i.e., no certification demonstration); no liability to thresholds.	Liability to monitor and detect as noted in certification documentation.
	All other engine families and ratings	None	None.
2013–2015	Parent rating from 2010–2012 and parent rating within 1–2 additional engine families.	Full liability to thresholds according to certification demonstration procedures.	Full liability to 2x thresholds.
	Child ratings from 2010–2012 and parent ratings from any remaining engine families or OBD groups.[d]	Full liability to thresholds but certification documentation only.	Full liability to 2x thresholds.
	Additional engine ratings	Certification documentation only; no liability to thresholds.	Liability to monitor and detect as noted in certification demonstration.
2016–2018	One rating from 1–3 engine families and/or OBD groups.	Full liability to thresholds according to certification demonstration procedures.	Full liability to thresholds.
	Remaining ratings	Full liability to thresholds but certification documentation only.	Full liability to 2x thresholds.
2019+	One rating from 1–3 engine families and/or OBD groups.	Full liability to thresholds according to certification demonstration procedures.	Full liability to thresholds.
	Remaining ratings	Full liability to thresholds but certification documentation only.	Full liability to thresholds.

Notes: (a) Parent and child ratings are defined in section II.G; which rating(s) serves as the parent rating and which engine families must comply is not left to the manufacturer, as discussed in section II.G. (b) The certification demonstration procedures and the certification documentation requirements are discussed in section VIII.B. (c) Where in-use liability to thresholds and 2x thresholds is noted, manufacturer liability to monitor and detect as noted in their certification documentation is implied. (d) OBD groups are groupings of engine families that use similar OBD strategies and/or similar emissions control systems, as described in the text.

For the 2010 through 2012 model years, manufacturers would be required to implement OBD on one engine family. All other 2010 through 2012 engine families would not be subject to any OBD requirements unless otherwise required to do so (e.g., to demonstrate that SCR equipped vehicles will not be operated without urea). For 2013,

manufacturers would be required to implement OBD on all engine families.

We are proposing this implementation schedule for several reasons. First, industry has made credible arguments that their resources are stretched to the limit developing and testing strategies for compliance with the 2007/2010 heavy-duty highway emissions standards. We do not want to jeopardize their success toward that goal by being too aggressive with our OBD program. Second, OBD is a complex and difficult regulation with which to comply. We believe that our implementation schedule would give industry the opportunity to introduce OBD systems on a limited number of engines giving them and us very valuable learning experience. Should mistakes or errors in regulatory interpretation occur, the ramifications would be limited to only a subset of the new vehicle fleet rather than the entire new vehicle fleet. Lastly, the proposed OBD requirements outlined above, and the production vehicle evaluation provisions discussed in Section VIII, reflect 10 to 20 years of learning by EPA, CARB, and industry (primarily the light-duty gasoline industry) as to what works and what does not work. This is, perhaps, especially true for those OBD elements that involve the interface between the OBD system and service and I/M inspection personnel. Gasoline manufacturers have had the ability to evolve their OBD systems along with this learning process. However, diesel engine manufacturers have not really been involved in this learning process and, as a result, 100 percent implementation in 2010 would be analogous to implementing 10 to 20 years of OBD learning in one implementation step. We believe that implementing in two or three gradual steps rather than one big step will benefit everyone involved.

Table II.G–1 makes reference to ''parent'' and ''child'' ratings. In general, engine manufacturers certify an engine family that consists of several ratings having slightly different horsepower and/or torque characteristics but no differences large enough to require a different engine family designation. For emissions certification, the parent rating—i.e., the rating for which emissions data are submitted to EPA for the purpose of demonstrating emissions compliance—is defined as the ''worst case'' rating. This worst case rating is the rating considered as having the worst emissions performance and, therefore, its compliance demonstrates that all other ratings within the family must comply. For OBD purposes, we wanted to limit the burden on industry—hence the proposal for only one compliant engine family in 2010—yet maximize the impact of the OBD system. Therefore, for model years 2010 through 2012, we are defining the OBD parent rating as the rating having the highest weighted projected sales within the engine family having the highest weighted projected sales, with sales being weighted by the useful life of the engine rating. Table II.G–2 presents a hypothetical example for how this would work. Using this approach, the OBD compliant engine family in 2010 would be the engine family projected to produce the most in-use emissions (based on sales weighted by expected miles driven). Likewise, the fully liable parent OBD rating would be the rating within that family projected to produce the most in-use emissions.

TABLE II.G–2.—HYPOTHETICAL EXAMPLE OF HOW THE OBD PARENT AND CHILD RATINGS WOULD BE DETERMINED

OBD group	Engine family	Rating	Projected sales	Certified useful life	OBD weighting—engine rating [a] (billions)	OBD weighting—engine family [b] (billions)
I	A	1	10,000	285,000	2.85	14.25
		2	40,000	285,000	11.4	.....
	B	1	10,000	435,000	4.35	21.60
		2	20,000	435,000	8.70	.....
		3	30,000	285,000	8.55	.....
II	C	1	20,000	110,000	2.20	7.70
		2	50,000	110,000	5.50	.....

Notes: (a) For engine family A, rating 1, 10,000 × 285,000 / 1 billion = 2.85.
(b) For engine family A, 2.85 + 11.4 = 14.25.

In the example shown in Table II.G–2, the compliant engine family in 2010 would be engine family B and the parent OBD rating within that family would be rating 2. The other OBD compliant ratings within engine family B would be dubbed the ''child'' ratings. For model years 2013 through 2015, the parent ratings would be those ratings having the highest weighted projected sales within each of the one to three engine families having the highest weighted projected sales, with sales being weighted by the useful life of the engine rating. In the example shown in Table II.G–2, the parent ratings would be rating 2 of engine family A, rating 2 of engine family B, and rating 2 of engine family C (Note that this is only for illustration purposes since our proposal would not require that a manufacturer with only three engine families have three parent ratings and instead would require only one).

The manufacturer would not need to submit test data demonstrating compliance with the emissions thresholds for the child ratings. We would fully expect these child ratings to use OBD calibrations—i.e., malfunction trigger points—that are identical or nearly so to those used on the parent rating. However, we would allow manufacturers to revise the calibrations on their child ratings where necessary so as to avoid unnecessary or inappropriate MIL illumination. Such revisions to OBD calibrations have been termed ''extrapolated'' OBD calibrations and/or systems. The revisions to the calibrations on child ratings and the rationale for them would need to be very clearly described in the certification documentation.

For the 2013 and later model years, we are proposing that manufacturers certify one to three parent ratings. The actual number of parent ratings would depend upon the manufacturer's fleet and would be based on both the emissions control system architectures present in their fleet and the similarities/differences of the engine families in their fleet. For example, a manufacturer that uses a DPF with NO_X adsorber on each of the engines would have only one system architecture. Another manufacturer that uses a DPF with NO_X adsorber on some engines and a DPF with SCR on others would have at least two architectures. We would expect that manufacturers would group similar architectures and similar engine

families into so called ''OBD groups.'' These OBD groups would consist of a combination of engines, engine families, or engine ratings that use the same OBD strategies and similar calibrations. The manufacturer would be required to submit details regarding their OBD groups as part of their certification documentation that shows the engine families and engine ratings within each OBD group for the coming model year. While a manufacturer may end up with more than three OBD groups, we do not intend to require a parent rating for more than three OBD groups. Therefore, in the example shown in Table II.G–2, rather than submitting test data for the three parent ratings as suggested above, the OBD grouping would result in the parent ratings being rating 2 of engine family B and rating 2 of engine family C. These parents would represent OBD groups I and II, and the manufacturer's product line. For 2013 through 2015, we intend to allow the 2010 parent to again act as a parent rating and, provided no significant changes had been made to the engine or its emissions control system, complete carryover would be possible. However, for model years 2016 and beyond, we would work closely with CARB staff and the manufacturer to determine the parent ratings so that the same ratings are not acting as the parents every year. In other words, our definitions for the OBD parent ratings as discussed here apply only during the years 2010 through 2012 and again for the years 2013 through 2015. We request comment on this approach.

In addition to this gradual certification implementation schedule, we are proposing some relaxations for in-use liability during the 2010 through 2018 model years. The first such relaxation is higher interim in-use compliance standards for those OBD monitors calibrated to specific emissions thresholds. For the 2010 through 2015 model years, an OBD monitor on an in-use engine would not be considered non-compliant (i.e., subject to enforcement action) unless emissions exceeded twice the OBD threshold without detection of a malfunction. For example, for an EGR monitor on an engine with a NO_X FEL of 0.2 g/bhp-hr and an OBD threshold of 0.5 g/bhp-hr (i.e., the NO_X FEL+0.3), a manufacturer would not be subject to enforcement action unless emissions exceeded 1.0 g/bhp-hr NO_X without a malfunction being detected. For the model years 2016 through 2018, parent ratings would be liable to the certification emissions thresholds, but child ratings and other ratings would remain liable to twice the certification thresholds. Beginning in the 2019 model year, all families and all ratings would be liable to the certification thresholds.

The second in-use relaxation is a limitation in the number of engines that would be liable for in-use compliance with the OBD emissions thresholds. For 2010 through 2012, we are proposing that manufacturers be fully liable in-use to twice the thresholds for only the OBD parent rating. The child ratings within the compliant engine family would have liability for monitoring in the manner described in the certification documentation, but would not have liability for detecting a malfunction at the specified emissions thresholds. For example, a child rating's DPF monitor designed to operate under conditions X, Y, and Z and calibrated to detect a backpressure within the range A to B would be expected to do exactly that during in-use operation. However, if the tailpipe emissions of the child engine were to exceed the applicable OBD in-use thresholds (i.e., 2x the certification thresholds during 2010–2015), despite having a backpressure within range A to B under conditions X, Y, and Z, there would be no in-use OBD failure nor cause for enforcement action. In fact, we would expect the OBD monitor to determine that the DPF was functioning properly since its backpressure was in the acceptable range. For model years 2013 through 2015, this same in-use relaxation would apply to those engine families that do not lie within an engine family for which a parent rating has been certified. For 2016 and later model years, all engines would have some in-use liability to thresholds, either the certification thresholds or twice those thresholds.

These in-use relaxations are meant to provide ample time for manufacturers to gain experience without an excessive level of risk for mistakes. They would also allow manufacturers to fine-tune their calibration techniques over a six to ten year period.

We are also proposing some a specific implementation schedule for the standardization requirements discussed in section II.F. We initially intended to require that any compliant OBD engine family would be required to implement all of the standardization requirements. However, we became concerned that, during model years 2010 through 2012, we could have a situation where OBD compliant engines from manufacturer A might be competing against non-OBD engines from manufacturer B for sales in the same truck. In such a case, the truck builder would be placed in a difficult position of needing to design their truck to accommodate OBD compliant engines—along with a standardized MIL, a specific diagnostic connector location specification, etc.—and non-OBD engines. After consideration of this almost certain outcome, we have decided to limit the standardization requirements that must be met during the 2010 through 2012 model years. Beginning in 2013, all engines will be OBD compliant and this would become a moot issue. Table II.G–3 shows the proposed implementation schedule for standardization requirements.

TABLE II.G–3.—OBD STANDARDIZATION REQUIREMENTS FOR DIESEL FUELED AND GASOLINE FUELED ENGINES OVER 14,000 POUNDS

Model year	Applicability	Required standardization features	Waived standardization features
2010–2012	Parent and Child ratings within 1 compliant engine family. [a]	Emissions related (II.F.4) except for the requirement to make the data available in a standardized format or in accordance with SAE J1979/1939 specifications). MIL activation and deactivation.[b] Performance tracking—calculation of numerators, denominators, ratios.	Standardized connector (II.F.2). Dedicated (i.e., regulated OBD-only) MIL. Communication protocols (II.F.3). Emissions related functions (II.F.4) with respect to the requirement to make the data available in a standardized format or in accordance with SAE J1979/1939 specifications)
	Other engine families	None	All.
2013+	All engine families and ratings	All	None.

Notes: (a) Parent and child ratings are defined in section II.G; which rating serves as the parent rating and which engine families must comply is not left to the manufacturer, as discussed in section II.G. (b) There would be no requirement for a dedicated MIL and no requirement to use a specific MIL symbol, only that a MIL be used and that it use the proposed activation/deactivation logic.

2. In-Use Enforcement

When conducting our in-use enforcement investigations into OBD systems, we intend to use all tools we have available to analyze the effectiveness and compliance of the system. These tools may include on-vehicle emission testing systems such as the portable emissions measurement systems (PEMS). We would also use scan tools and data loggers to analyze the data stream information to compare real world operation to the documentation provided at certification.

Importantly, we would not intend to pursue enforcement action against a manufacturer for not detecting a failure mode that could not have been reasonably predicted or otherwise detected using monitoring methods known at the time of certification. For example, we are proposing a challenging set of requirements for monitoring of DPF systems. As of today, engine manufacturers are reasonably confident in their ability to detect certain DPF failure modes at or near the proposed thresholds—e.g., a leaking DPF resulting from a cracked substrate—but are not confident in their ability to detect some other DPF failure modes—e.g., a leaking DPF resulting from a partially melted substrate. If a partially melted substrate indeed cannot be detected and this is known during the certification process, we cannot expect such a failure to be detected on an in-use vehicle.

We also want to make it clear who would be the responsible party should we pursue any in-use enforcement action with respect to OBD. We are very familiar with the heavy-duty industry and its tendency toward separate engine and component suppliers. This contrasts with the light-duty industry which tends toward a more vertically integrated structure. The non-vertically integrated nature of the heavy-duty industry can present unique difficulties for OBD implementation and for OBD enforcement. With the complexity of OBD systems, especially those meeting the requirements being proposed today, we would expect the interactions between the various parties involved—engine manufacturer, transmission manufacturer, vehicle manufacturer, etc.—to be further complicated. Nonetheless, in the end the vast majority of the proposed OBD requirements would apply directly to the engine and its associated emission controls, and the engine manufacturer would have complete responsibility to ensure that the OBD system performs properly in-use. Given the central role the engine and engine control unit would play in the OBD system, we are proposing that the party certifying the engine and OBD system (typically, the engine manufacturer) be the responsible party for in-use compliance and enforcement actions. In this role, the certifying party would be our sole point of contact for potential noncompliances identified during in-use or enforcement testing. We would leave it to the engine manufacturer to determine the ultimate party responsible for the potential noncompliance (e.g., the engine manufacturer, the vehicle manufacturer, or some other supplier). In cases where remedial action such as an engine recall would be required, the certifying party would take on the responsibility of arranging to bring the engines or OBD systems back into compliance. Given that heavy-duty engines are already subject to various emission requirements including engine emission standards, labels, and certification, engine manufacturers currently impose restrictions via signed agreements with engine purchasers to ensure that their engines do not deviate from their certified configuration when installed. We would expect the OBD system's installation to be part of such agreements in the future.

H. Proposed Changes to the Existing 8,500 to 14,000 Pound Diesel OBD Requirements

We are also proposing changes to our OBD requirements for diesel engines used in heavy-duty vehicles under 14,000 pounds (see 40 CFR 86.005–17 for engine-based requirements and 40 CFR 86.1806–05 for vehicle or chassis-based requirements). Table II.H–1 summarizes the proposed changes to under 14,000 pound heavy-duty diesel emissions thresholds at which point a component or system has failed to the point of requiring an illuminated MIL and a stored DTC. Table II.H–2 summarizes the proposed changes for diesel engines used in heavy-duty applications under 14,000 pounds. The proposed changes are meant to maintain consistency with the diesel OBD requirements we are proposing for over 14,000 pound applications.

TABLE II.H–1.—PROPOSED NEW, OR PROPOSED CHANGES TO EXISTING, EMISSIONS THRESHOLDS FOR DIESEL FUELED CI HEAVY-DUTY VEHICLES UNDER 14,000 POUNDS (G/MI)

Component/monitor	MY	NMHC	CO	NO_X	PM
NMHC catalyst system	2010–2012	2.5x.			
	2013+	2x.			
NO_X catalyst system	2007–2009			3x..	
	2010+			+0.3.	
DPF system	2010–2012	2.5x			4x.
	2013+	2x			+0.04.
Air-fuel ratio sensors upstream	2007–2009	2.5x	2.5x	3x	4x.
	2010–2012	2.5x	2.5x	+0.3	+0.02.
	2013+	2x	2x	+0.3	+0.02.
Air-fuel ratio sensors downstream	2007–2009	2.5x		3x	4x.
	2010–2012	2.5x		+0.3	4x.
	2013+	2x		+0.3	+0.04.
NO_X sensors	2007–2009			4x	5x.
	2010–2012			+0.3	4x.
	2013+			+0.3	+0.04.
"Other monitors" with emissions thresholds	2007–2009	2.5x	2.5x	3x	4x.
	2010–2012	2.5x	2.5x	+0.3	4x.
	2013+	2x	2x	+0.3	+0.02.

Notes: MY=Model Year; 2.5x means a multiple of 2.5 times the applicable emissions standard; +0.3 means the standard plus 0.3; not all proposed monitors have emissions thresholds but instead rely on functionality and rationality checks as described in section II.D.4.

TABLE II.H–2.—PROPOSED NEW, OR PROPOSED CHANGES TO EXISTING, EMISSIONS THRESHOLDS FOR DIESEL FUELED CI ENGINES USED IN HEAVY-DUTY VEHICLES UNDER 14,000 POUNDS (G/BHP-HR)

Component/Monitor	MY	Std/FEL	NMHC	CO	NO_X	PM
NMHC catalyst system	2010–2012	All	2.5x.			
	2013+	All	2x.			
NO_X catalyst system	2007–2009	>0.5 NO_X			1.75x.	
	2007–2009	<=0.5 NO_X			+0.5.	
	2010+	All			+0.3.	
DPF system	2010–2012	All	2.5x			0.05/+0.04.
	2013+	All	2x			0.05/+0.04.
Air-fuel ratio sensors upstream	2007–2009	>0.5 NO_X	2.5x	2.5x	1.75x	0.05/+0.04.
	2007–2009	<=0.5 NO_X	2.5x	2.5x	+0.5	0.05/+0.04.
	2010–2012	All	2.5x	2.5x	+0.3	0.03/+0.02.
	2013+	All	2x	2x	+0.3	0.03/+0.02.
Air-fuel ratio sensors downstream	2007–2009	>0.5 NO_X	2.5x		1.75x	0.05/+0.04.
	2007–2009	<=0.5 NO_X	2.5x		+0.5	0.05/+0.04.
	2010–2012	All	2.5x		+0.3	0.05/+0.04.
	2013+	All	2x		+0.3	0.05/+0.04.
NO_X sensors	2007–2009	>0.5 NO_X			1.75x	0.05/+0.04.
	2007–2009	<=0.5 NO_X			+0.5	0.05/+0.04.
	2010+	All			+0.3	0.05/+0.04.
"Other monitors" with emissions thresholds	2007–2009	>0.5 NO_X	2.5x	2.5x	1.75x	0.05/+0.04.
	2007–2009	<=0.5 NO_X	2.5x	2.5x	+0.5	0.05/+0.04.
	2010–2012	All	2.5x	2.5x	+0.3	0.03/+0.02.
	2013+	All	2x	2x	+0.3	0.03/+0.02.

Notes: MY=Model Year; 2.5x means a multiple of 2.5 times the applicable emissions standard or family emissions limit (FEL); +0.3 means the standard or FEL plus 0.3; 0.05/+0.04 means an absolute level of 0.05 or an additive level of the standard or FEL plus 0.04, whichever level is higher; not all proposed monitors have emissions thresholds but instead rely on functionality and rationality checks as described in section II.D.4.

1. Selective Catalytic Reduction and Lean NO_X Catalyst Monitoring

We are proposing that the 8,500 to 14,000 pound SCR and lean NO_X catalyst monitoring requirements mirror those discussed in section II.B.6. The current regulations require detection of a NO_X catalyst malfunction before emissions exceed 1.5x the emissions standards. We no longer believe that such a tight threshold level is appropriate for diesel SCR and lean NO_X catalyst systems. We believe that such a tight threshold could result in too many false failure indications. The required monitoring conditions with respect to performance tracking (discussed in section II.B.6.c) would not apply for under 14,000 pound heavy-duty applications since we do not have performance tracking requirements for under 14,000 pound applications. We are proposing this change for the 2007 model year.

2. NO_X Adsorber System Monitoring

We are proposing that the 8,500 to 14,000 pound NO_X adsorber monitoring requirements mirror those discussed in section II.B.7. The current regulations require detection of a NO_X adsorber malfunction before emissions exceed 1.5x the emissions standards. We no longer believe that such a tight threshold level is appropriate for diesel NO_X adsorber systems. We believe that such a tight threshold could result in too many false failure indications. The required monitoring conditions with respect to performance tracking (discussed in section II.B.7.c) would not apply for under 14,000 pound heavy-duty applications since we do not have performance tracking requirements for under 14,000 pound applications. We are proposing this change for the 2007 model year.

3. Diesel Particulate Filter System Monitoring

We are proposing that the 8,500 to 14,000 pound DPF monitoring requirements mirror those discussed in section II.B.8. Our current regulations require detection of a catastrophic failure only. The proposed monitoring requirements discussed in section II.B.8 would be far more comprehensive and protective of the environment than would a catastrophic failure monitor. The required monitoring conditions with respect to performance tracking (discussed in section II.B.8.c) would not apply for under 14,000 pound heavy-duty applications since we do not have performance tracking requirements for under 14,000 pound applications. We are proposing no changes to the DPF monitoring requirements in the 2007 to 2009 model years because there is not sufficient lead time for manufacturers to develop a new monitor. The new, more stringent monitoring requirements would begin in the 2010 model year, with a further tightening of the DPF NMHC threshold in the 2013 model year as is also proposed for over 14,000 pound applications.

4. NMHC Converting Catalyst Monitoring

We are proposing that the 8,500 to 14,000 pound NMHC converting catalyst monitoring requirements mirror those discussed in section II.B.5. Our current regulations do not require the monitoring of NMHC catalysts on diesel applications. The proposed monitoring requirements discussed in section II.B.5 would be far more comprehensive and protective of the environment than the current lack of any requirement. The required monitoring conditions with respect to performance tracking (discussed in section II.B.8.c) would not apply for under 14,000 pound heavy-duty applications since we do not have performance tracking requirements for under 14,000 pound applications. We are not proposing this new threshold for the 2007 to 2009 model years because there is not sufficient lead time for manufacturers to develop a new monitor. The new, more stringent monitoring requirements would begin in the 2010 model year, with a further tightening of the NMHC threshold in the 2013 model year as is also proposed for over 14,000 pound applications.

5. Other Monitors

We are also proposing changes to the emissions thresholds for all other diesel monitors in the 8,500 to 14,000 pound range (e.g., NO_X sensors, air fuel ratio

sensors, etc.). These proposed changes are meant to maintain consistency with the proposed changes for over 14,000 pound applications. We believe that these proposed thresholds are far more appropriate for diesel applications than the thresholds we have in our current OBD requirements which are, generally, 1.5 times the applicable standards. None of the proposed thresholds represents a new threshold where none currently exists. Instead, they represent different thresholds that would require, in most cases, malfunction detection at different emissions levels than would be required by our current OBD requirements.

6. CARB OBDII Compliance Option and Deficiencies

We are also proposing some changes to our deficiency provisions for vehicles and engines meant for vehicles under 14,000 pounds. We have included specific mention of air-fuel ratio sensors and NO_X sensors where we had long referred only to oxygen sensors. We have also updated the referenced CARB OBDII document that can be used to satisfy the federal OBD requirements.[48]

I. How Do the Proposed Requirements Compare to California's?

The California Air Resources Board (CARB) has its own OBD regulations for engines used in vehicles over 14,000 pounds GVWR.[49] (13 CCR 1971.1) In August of 2004, EPA and CARB signed a memorandum of agreement to work together to develop a single, nationwide OBD program for engines used in vehicles over 14,000 pounds.[50] We believe that, for the most part, we have been successful in doing so at least for the early years of implementation. Nonetheless, there are differences in some of the details contained within each regulation. These differences are summarized here and we request comment on all of these differences.

The first difference is that the CARB regulation contains some more stringent thresholds beginning in the 2013 timeframe for some engines and 2016 for all engines. Specifically, CARB's PM threshold for diesel particulate filters (DPF) and exhaust gas sensors downstream of aftertreatment devices, and their NO_X threshold for NO_X aftertreatment devices and exhaust gas sensors downstream of aftertreatment devices, become more stringent in 2013 for some engines and 2016 for all. We are not proposing these more stringent thresholds—our proposed thresholds are shown in Table II.B–1. At this time, EPA is not in a position to propose these more stringent OBD thresholds for the national program. The industry believes that CARB's more stringent NO_X and PM thresholds for 2013 and 2016 are not technically feasible. EPA is reviewing these longer term OBD thresholds, but at this time we have not made a decision regarding the feasibility and the appropriateness of these longer term thresholds. Because these thresholds do not take effect until model year 2013 at the earliest, we do not believe it is necessary to make such a determination in this rulemaking. It would be our intention to monitor the progress made towards complying with the 2010 thresholds contained in today's proposal and potentially revisit the appropriateness of more stringent OBD thresholds for model year 2013 and later in the future. CARB has made commitments to review their HD OBD program every two years and they can consider making changes to their long-term program during this biennial review process. EPA's regulatory development process does not lend itself to making updates every two years because the Federal rulemaking process tends to be lengthier than CARB's. As mentioned above, we intend to monitor the CARB long-term thresholds during the coming years, and if we determine that more stringent thresholds are appropriate, we would consider changing our thresholds to include the more stringent thresholds through a notice and comment rulemaking process.

CARB also has some slightly different certification demonstration requirements in the 2011 and 2012 model years. They are requiring demonstration testing of the child ratings from the 2010 model year certified engine family for 2011 and 2012 model year certification. As Table II.B–1 shows, we are not requiring such demonstration testing in the 2011 and 2012 model years provided the child ratings meet the requirements of certification carry-over. Further, CARB is requiring that one engine rating from one to three engine families undergo full certification demonstration testing in the 2013 model year and every model year thereafter. In contrast, EPA is requiring that one to three engine ratings be fully demonstrated in the 2013 model year and then carry-over through the 2015 model year (again, provided the engine ratings meet the requirements of certification carry-over). In 2016 and subsequent model years, EPA would require that one to three engine ratings be fully demonstrated on an ''as needed'' basis. In the same vein, our evaluation protocol associated with certification demonstration testing, as discussed in section VIII.C, requires less testing than is required in CARB's regulation.

Our OBD requirements for over 14,000 pounds do not contain any provisions to monitor control strategies associated with idle emission control strategies because EPA does not have currently any regulatory requirements that specifically target idle emissions control strategies.[51] We are not proposing a provision to charge fees associated with OBD deficiencies as CARB does. We are also not proposing provisions for ''retroactive deficiencies'' as CARB has. Our deficiency provisions along with our misbuild and other in-use enforcement programs accomplish the same thing. Deficiencies are discussed in section VIII.D.[52]

For diesel engines used in heavy-duty vehicles under 14,000 pounds, our proposed OBD requirements are in line with those recently proposed by CARB.[53] Our proposed requirements are also in line—both the technical aspects and the implementation timing aspects—with our proposed requirements for over 14,000 pound diesel applications. We are also proposing diesel vehicle-based OBD requirements in line with the proposed diesel engine-based requirements. In contrast, CARB does not have diesel thresholds in terms of ''grams per mile'' specified in their regulation for the 8,500 to 14,000 pound range.

Specifically for gasoline engines meant for applications over 14,000 pounds, our proposal differs from CARB's in that we are not requiring detection of catalysts that are less than 50 percent effective at converting emissions.[54] We are not requiring this because we are relying on the emissions threshold of 1.75 times the applicable standard as a means of defining a catalyst system malfunction. We are also proposing some differences with respect to misfire monitoring. Most notably, we are not proposing a provision analogous

[48] See 13 CCR 1968.2, released August 11, 2006, Docket ID# EPA–HQ–OAR–2005–0047–0005.

[49] 13 CCR 1971.1, Docket ID# EPA–HQ–OAR–2005–0047–0006.

[50] ''Memorandum of Agreement: On-road Heavy-duty Diagnostic Regulation Development,'' signed by Chet France, U.S. EPA, and Tom Cackette, California ARB, August 11, 2004, Docket ID# EPA–HQ–OAR–2005–0047–0002.

[51] Note that, by idle emission control strategies we mean strategies that, for example, shut down the engine after 10 minutes of constant idle. We do not mean strategies that control emissions during engine idles that occur at stop lights or in congested traffic.

[52] See also proposed § 86.010–18(n).

[53] See 13 CCR 1968.2, released August 11, 2006, Docket ID# EPA–HQ–OAR–2005–0047–0005.

[54] See 13 CCR 1971.1(f)(6.2.1)(B) and compare to proposed § 86.010–18(h)(6)(ii).

to CARB's provision that allows the Executive Officer to approve misfire monitor disablement or alternative malfunction criteria on a case by case basis.[55] In general, we prefer to avoid having regulatory provisions that are implemented on a case by case basis. For similar reasons, we are also not proposing a provision analogous to CARB's provision that allows the Executive Officer to revise the orifice for evaporative leak detection if the most reliable monitoring strategy cannot detect the required orifice.[56]

III. Are the Proposed Monitoring Requirements Feasible?

Some of the OBD monitoring strategies discussed here would be intrusive monitors that would result in very brief emissions increases, or spikes, for the sake of determining if certain emissions control components/systems are working properly during the remaining 99 percent or more of the engine's operation. While these emissions spikes are brief, and their levels cannot be meaningfully predicted or estimated, we are concerned about strategies that might give little concern to emissions during such spikes in favor of an easier monitor. We request comment on this issue—should such strategies be allowed or should such strategies be prohibited? If a commenter has the latter opinion, then suggestions should be provided for how the monitoring requirements should be changed to allow for a non-intrusive monitor—i.e., one that could run during normal operation or operation ''on the cycle''—that may not provide the monitoring capability nor the control expected by the requirements we are proposing.

A. Feasibility of the Monitoring Requirements for Diesel/Compression-Ignition Engines

1. Fuel System Monitoring

a. Fuel Pressure Monitoring

Manufacturers control fuel pressure by using a closed-loop feedback algorithm that allows them to increase or decrease fuel pressure until the fuel pressure sensor indicates they have achieved the desired fuel pressure. For the common-rail OBD systems certified in the under 14,000 pound category, the manufacturers are monitoring the actual fuel system pressure sensed by a fuel rail pressure sensor, comparing it to the target fuel system pressure stored in a software table or calculated by an algorithm inside the onboard computer, and indicating a malfunction if the magnitude of the difference between these two exceeds an acceptable level. The error limits are established by engine dynamometer emission tests to ensure that a malfunction would be detected before emissions exceed the applicable thresholds.

In cases where no fuel pressure error can generate a large enough emission increase to exceed the applicable thresholds, manufacturers are required to set the malfunction trigger at their fuel pressure control limits (e.g., when they reach a point where they can no longer increase or decrease fuel pressure to achieve the desired fuel pressure). This monitoring requirement has been demonstrated as technically feasible given that several under 14,000 pound diesels already meet this requirement. Further, the nature of a closed-loop algorithm is that such a system is inherently capable of being monitored because it simply requires analysis of the same closed-loop feedback parameter being used by the system for control purposes.

Another promising technology is a pressure sensing glow plug. The glow plug is an electronic device in the cylinder of most diesel engines used to facilitate combustion during cold engine starting conditions. Glow plugs are being developed that incorporate a pressure sensor capable of detecting the quality of combustion within the cylinder.[57] Pressure-sensing glow plugs provide feedback to the engine-management system that controls the timing and quantity of fuel injected into the cylinder. This feedback allows the engine electronics to adjust the injection characteristics so the engine avoids fuel-mixture combinations that generate high levels of NO_X. In this sense, a feedback loop is available that works like the oxygen sensor in a gasoline engine exhaust system. By measuring the quality of combustion, a determination can also be made about the quality of the fuel injection event—the pressure of fuel delivered, quantity of fuel delivered, timing of fuel delivered.

b. Fuel Injection Quantity Monitoring

Absent combustion sensors and/or pressure sensing glow plugs mentioned above, there is currently no feedback sensor indicating that the proper quantity of fuel has been injected. Therefore, injection quantity monitoring will be more difficult than pressure monitoring. Nonetheless, a manufacturer has identified a strategy currently being used that verifies the injection quantity under very specific engine operating conditions and appears to be capable of determining that the system is accurately delivering the desired fuel quantity. This strategy entails intrusive operation of the fuel injection system during a deceleration event where fuel injection is normally shut off (e.g., coasting or braking from a higher vehicle speed down to a low speed or a stop). During the deceleration, fuel injection to a single cylinder is turned back on to deliver a very small amount of fuel. Typically, the amount of fuel would be smaller than, or perhaps comparable to, the amount of fuel injected during a pilot or pre-injection. If the fuel injection system is working correctly, that known injected fuel quantity will generate a known increase in fluctuations (accelerations) of the crankshaft that can be measured by the crankshaft position sensor. If too little fuel is delivered, the measured crankshaft acceleration will be smaller than expected. If too much fuel is delivered, the measured crankshaft acceleration will be larger than expected. This process can even be used to ''balance'' out each cylinder or correct for system tolerances or deterioration by modifying the commanded injection quantity until it produces the desired crankshaft acceleration and applying a correction or adaptive term to that cylinder's future injections. Each cylinder can, in turn, be cycled through this process and a separate analysis can be made for the performance of the fuel injection system for each cylinder. Even if this procedure would require only one cylinder be tested per revolution (to eliminate any change in engine operation or output that would be noticeable to the driver) and require each cylinder to be tested on four separate revolutions, this process would only take two seconds for a six cylinder engine decelerating through 1500 rpm.

The crankshaft position sensor is commonly used to identify the precise position of the piston relative to the intake and exhaust valves to allow for very accurate fuel injection timing control and, as such, there exists sufficient resolution and data sampling within the onboard computer to enable such measurement of crankshaft accelerations. Further, in addition to the current use of this strategy in an under 14,000 pound diesel application, a nearly identical crankshaft fluctuation technique has been used since 1997 on under 14,000 pound diesel engines

[55] See 13 CCR 1971.1(f)(2.3.4)(D) and compare to proposed § 86.010–18(h)(2)(iii)(D).

[56] See 13 CCR 1971.1(f)(7.2.3) and compare to proposed § 86.010–18(h)(7)(ii)(B) and (C).

[57] ''Spotlight on Technology: Smart glowplugs may make Clean Diesels cost-effective Pressure-sensing units could let designers cut NO_X aftertreatment,'' Tony Lewin, Automotive News, February 6, 2006.

during idle conditions to determine if individual cylinders are misfiring.

Another technique that may be used to achieve the same monitoring capability is some variation on the current cylinder balance tests used by many manufacturers to improve idle quality. In such strategies, fueling to individual cylinders is increased, decreased, or shut off to determine if the cylinder is contributing an equal share to the output of the engine. This strategy again relies on changes in crankshaft/engine speed to measure the individual cylinder's contribution relative to known good values and/or the other cylinders. Such an approach seems viable to determine whether the fuel injection quantity is correct for each cylinder, but it has the disadvantage of not necessarily being able to verify whether the system is able to deliver small amounts of fuel precisely (such as those commanded during a pilot injection).

One other approach that has been mentioned but not investigated thoroughly is the use of a wide-range air-fuel (A/F) sensor in the exhaust to confirm fuel injection quantity. The A/F sensor output could be compared to the measured air going into the engine and calculated fuel quantity injected to see if the two agree. Differences in the comparison may allow for the identification of incorrect fuel injection quantity.

c. Fuel Injection Timing Monitoring

In the same manner as described for quantity monitoring, we believe that fuel injection timing could be verified. By monitoring the crankshaft speed fluctuation and, most notably, the time at which such fluctuation begins, ends, or reaches a peak, the OBD system could compare the time to the commanded fuel injection timing point and verify that the crankcase fluctuation occurred within an acceptable time delay relative to the commanded fuel injection. If the system was working improperly and actual fuel injection was delayed relative to when it was commanded, the corresponding crankshaft speed fluctuation would also be delayed and would result in a longer than acceptable time period between commanded fuel injection timing and crankshaft speed fluctuation. A more detailed discussion of this possible monitoring method is presented in the technical support document contained in the docket.[58]

Another possible monitoring method that has been mentioned but not investigated thoroughly would be to look for an electrical feedback signal from the injector to the computer to confirm when the injection occurred. Such a technique would likely use an inductive signature to identify exactly when an injector opened or closed and verify that it was at the expected timing. We expect that further investigation would be needed to confirm that such a monitoring technique would be sufficient to verify fuel injection timing.

d. Fuel System Feedback Control Monitoring

The conditions necessary for feedback control (i.e., the feedback enable criteria) are defined as part of the control strategy in the engine computer. The feedback enable criteria are typically based on minimum conditions necessary for reliable and stable feedback control. When the manufacturer is designing and calibrating the OBD system, the manufacturer would determine, for the range of in-use operating conditions, the time needed to satisfy these feedback enable criteria on a properly functioning engine. In-use, the OBD system would evaluate the time needed for these conditions to be satisfied following an engine start, compare that to normal behavior for the system, and indicate a malfunction when the time exceeds a specified value (i.e., the malfunction criterion). For example, fuel pressure feedback control may be calibrated to begin once fuel system pressure has reached a minimum specified value. In a properly functioning system, pressure builds in the system during engine cranking and shortly after starting and the pressure enable criterion are reached within a few seconds. However, in a malfunctioning system (e.g., due to a faulty low-pressure fuel pump), it may take a significantly longer time to reach the feedback enable pressure. A malfunction would be indicated when the actual time to reach feedback enable pressure exceeds the malfunction criterion.

Malfunctions that cause open-loop or default operation can be readily detected as well. As discussed above, the feedback enable criteria are clearly defined in the computer and are based on what is necessary for reliable control. After feedback control has begun, the OBD system can detect these criteria and indicate a malfunction when they are no longer being satisfied. For example, one enable criterion could be a pressure sensor reading within a certain range where the upper pressure limit would be based on the maximum pressure that could be generated in a properly functioning system. A malfunction would be indicated if the pressure sensor reading exceeded the upper limit which would cause the fuel system to go open loop.

The feedback control system adjusts the base fuel strategy such that actual engine operating characteristics meet driver demand. But, the feedback control system has limits on how much adjustment can be made based, presumably, on the ability to maintain acceptable control. Like the feedback enable criteria, these control limits are defined in the computer. The OBD system would track the actual adjustments made by the control system and continuously compare them with the control limits. A malfunction would be indicated if the limits were reached.

2. Engine Misfire Monitoring

Diesel engines certified to the under 14,000 pound OBD requirements have been monitoring for misfire since the 1998 model year. The monitoring requirements we are proposing for over 14,000 pound applications are identical to the existing requirements for under 14,000 pound applications for those engines that do not use combustion sensors.[59] Therefore, technological feasibility has been demonstrated for these applications.

For engines that use combustion sensors, the misfire monitoring requirements are more stringent since the requirement calls for detection of malfunctions causing emissions to exceed the emissions thresholds. Nonetheless, detection on these engines should be straight forward since the combustion sensors would provide a direct measurement of combustion. Therefore, lack of combustion (i.e., misfire) could be measured directly. The combustion sensors are intended to measure various characteristics of a combustion event for feedback control. Such feedback is needed for engines that require very precise air and fuel metering controls such as would be required for homogeneous charge compression ignition (HCCI) engine. Accordingly, the resolution of sensors having that capability is well beyond what would be needed to detect a complete lack of combustion.

[58] Draft Technical Support Document, HDOBD NPRM, EPA420–D–06–006, Docket ID# EPA–HQ–OAR–2005–0047–0008.

[59] Technically, the EPA OBD diesel misfire monitoring requirement for under 14,000 pound applications is to detect a lack of combustion whereas the California OBDII diesel misfire monitoring requirement is identical to what we are proposing for over 14,000 pounds. Since all manufacturers to date are designing to the OBDII requirements, this statement is, for practical purposes, true.

3. Exhaust Gas Recirculation (EGR) Monitoring

a. EGR Low Flow/High Flow Monitoring

Typically, the EGR control system determines a desired EGR flow rate based on the engine operating conditions such as engine speed and engine load. The desired EGR flow rates, and the corresponding EGR valve positions needed to achieve the desired flow rates, are established when the manufacturer designs and calibrates the EGR system. Once established, manufacturers store the desired EGR flow rate/valve position in a lookup table in the onboard computer. During operation, the onboard computer commands the EGR valve to the position necessary to achieve the desired flow—i.e., the commanded EGR flow. The onboard computer then calculates or directly measures both the fresh air charge (fresh air intake) and total intake charge. The difference between the total intake charge and fresh air intake is the actual EGR flow. The closed-loop control system continuously adjusts the EGR valve position until the actual EGR flow equals the desired EGR flow.

Such closed-loop control strategies and their associated OBD monitoring strategies are used on many existing gasoline and diesel vehicles under 14,000 pounds. The OBD system evaluates the difference (i.e., error) between the look-up value—i.e., the desired flow rate—and the final commanded value needed to achieve the desired flow rate. Typically, as the feedback parameter or learned offset increases, there is an attendant increase in emissions. A correlation can be made between feedback adjustment and emissions. When the error exceeds a specific threshold, a malfunction would be indicated. This type of monitoring strategy could be used to detect both high and low flow malfunctions.

While the closed-loop control strategy described above is effective in measuring and controlling EGR flow, some manufacturers are currently investigating the use of a second control loop based on an air-fuel ratio (A/F) sensor (also known as wide-range oxygen sensors or linear oxygen sensors) to further improve EGR control and emissions. With this second control loop, the desired air-fuel ratio is calculated based on engine operating conditions (i.e., intake airflow, commanded EGR flow and commanded fuel). The calculated air-fuel ratio is compared to the air-fuel ratio from the A/F sensor and refinements can be made to the EGR and airflow rates—i.e., the control can be ''trimmed''—to achieve the desired rates. On systems that use the second control loop, flow rate malfunctions could also be detected using the feedback information from the A/F sensor and by applying a similar monitoring strategy as discussed above for the primary EGR control loop.

We are also proposing that two leaking EGR valve failure modes be detected. One type is the failure of the valve to seal when in the closed position. For example, if the valve or seating surface is eroded, the valve could close and seat, yet still allow some flow across the valve. A flow check is necessary to detect a malfunctioning valve that closes properly but still leaks. EGR flow—total intake charge minus fresh air charge—could be calculated using the monitoring strategy described above for high and low flow malfunctions. With the valve closed, a malfunction would be indicated when flow exceeds unacceptable levels. Or, some cooled EGR systems will incorporate an EGR temperature sensor that could be used to detect a leaking EGR valve by reacting to the presence of hot exhaust gases when none should be present. A leaking valve can also be caused by failure of the valve to close/seat. For example, carbon deposits on the valve or seat could prevent the valve from closing fully. The flow check described above could detect failure of the valve to close/seat, but this approach would require a repair technician to further diagnose whether the problem is a sealing or seating problem. Such a failure of the valve to close/seat could be more specifically monitored by closing the valve and checking the zero position of the valve with a position sensor. If the valve position is out of the acceptable range for a closed valve, a malfunction would be indicated. This type of zero position sensor check is commonly used to verify the closed position of valves/actuators used in gasoline OBD systems (e.g. gasoline EGR valves, electronic throttle) and should be feasible for diesel EGR valves.

b. EGR Slow Response Monitoring

While the flow rate monitor discussed above would evaluate the ability of the EGR system to achieve a commanded flow rate under relatively steady state conditions, the EGR slow response monitor would evaluate the ability of the EGR system to modulate (i.e., increase and decrease) EGR flow as engine operating conditions and, consequently, commanded EGR rates change. Specifically, as engine operating conditions and commanded EGR flow rates change, the monitor would evaluate the time it takes for the EGR control system to achieve the commanded change in EGR flow. This monitor could evaluate EGR response passively during transient engine operating conditions encountered during in-use operation. The monitor could also evaluate EGR response intrusively by commanding a change in EGR flow under a steady state engine operating condition and measuring the time it takes to achieve the new EGR flow rate. Similar passive and intrusive strategies have been developed for variable valve control and/or timing (VVT) monitoring on vehicles under 14,000 pounds.

c. EGR Feedback Control Monitoring

Monitoring of EGR feedback control could be performed using analogous strategies to those discussed in Section III.A.1 for monitoring of fuel system feedback control.

d. EGR Cooling System Monitoring

Some diesel engine manufacturers currently use exhaust gas temperature sensors as an input to their EGR control systems. On such systems—EGR temperature—which is measured downstream of the EGR cooler—could be used to monitor the effectiveness of the EGR cooler. For a given engine operating condition (e.g., a steady speed/load that generates a known exhaust mass flow and exhaust temperature to the EGR cooler), EGR temperature will increase as the performance of the EGR cooling system decreases. During the OBD calibration process, manufacturers could develop a correlation between increased EGR temperatures and cooling system performance (i.e., increased emissions). The EGR cooling system monitor would use such a correlation and indicate a malfunction when the EGR temperature increases to the level that would cause emissions to exceed the emissions thresholds.

While we anticipate that most, if not all, manufacturers will use EGR temperature sensors to meet future emissions standards, EGR cooling system monitoring may be feasible without such a temperature sensor. The monitor could be done using the intake manifold temperature (IMT) sensor by looking at the change in IMT (i.e., ''delta'' IMT) with EGR turned on and EGR turned off (IMT would be higher with EGR turned on). If there is significant cooling capacity with a normally functioning EGR cooling system, there would likely be a significant difference in IMT with EGR turned on versus turned off. Delta IMT could be correlated to decreased EGR cooling system performance and increased emissions.

4. Turbo Boost Control System Monitoring

a. Turbo Underboost/Overboost Monitoring

To monitor boost control systems, manufacturers are expected to look at the difference between the actual pressure sensor reading (or calculation thereof) and the desired/target boost pressure. If the error between the two is too large or persists for too long, a malfunction would be indicated. Manufacturers would need to calibrate the size of error and/or error duration to ensure robust malfunction detection occurs before the emissions thresholds are exceeded. Given that the purpose of a closed-loop control system with a feedback sensor is to measure continuously the difference between actual and desired boost pressure, the control system is already monitoring that difference and attempting to minimize it. As such, a monitoring requirement to indicate a malfunction when the difference gets large enough such that it can no longer achieve the desired boost is essentially an extension of the existing control strategy.

To monitor for malfunction or deterioration of the boost pressure sensors, manufacturers could validate sensor readings against other sensors present on the vehicle or against ambient conditions. For example, at initial key-on before the engine is running, the boost pressure sensor should read ambient pressure. If the vehicle is equipped with a barometric pressure sensor, the two sensors could be compared and a malfunction indicated when the two readings differ beyond the specific tolerances. A more crude rationality check of the boost pressure sensor could be accomplished by verifying that the pressure reading is within reasonable atmospheric limits for the conditions the vehicle will be subjected to.

b. VGT Slow Response Monitoring

The VGT slow response monitor would evaluate the ability of the VGT system to modulate (i.e., increase and decrease) boost pressure as engine operating conditions and, consequently, commanded boost pressure changes. Specifically, as engine operating conditions and commanded boost pressures change, the monitor would evaluate the time it takes for the VGT control system to achieve the commanded change in boost pressure. This monitor could evaluate VGT response passively during transient engine operating conditions encountered during in-use operation. The monitor could also evaluate VGT response intrusively by commanding a change in boost pressure under a steady state engine operating condition and measuring the time it takes to achieve the new boost pressure.

Rationality monitoring of VGT position sensors could be accomplished by comparing the measured sensor value to expected values for the given engine speed and load conditions. For example, at high engine speeds and loads, the position sensor should indicate that the VGT position is opened more than would be expected at low engine speeds and loads. Such rationality checks would need to be two-sided (i.e., position sensors should be checked for appropriate readings at both high and low engine speed/load operating conditions.

c. Turbo Boost Feedback Control Monitoring

Monitoring of boost pressure feedback control could be performed using analogous strategies to those discussed for fuel system feedback control monitoring in Section III.A.1.

d. Charge Air Undercooling Monitoring

We expect that most engines will make use of a temperature sensor downstream of the charge air cooler to protect against overcooling conditions that could cause excessive condensation, and to prevent undercooling that could result in loss of performance. A comparison of the actual charge air temperature to the expected, or design, temperature would indicate any errors that might be occurring. Manufacturers could correlate that error to an emissions impact and, when the error reached a level such that emissions would exceed the emissions thresholds, a malfunction would be indicated.

5. Non-Methane Hydrocarbon (NMHC) Converting Catalyst Monitoring

a. NMHC Converting Catalyst Conversion Efficiency Monitoring

Monitoring of the NMHC converting catalyst, or diesel oxidation catalyst (DOC), could be performed similar to three-way catalyst monitoring on gasoline engines. Three-way catalyst monitoring uses the concept that catalyst's oxygen storage capacity correlates well with its hydrocarbon conversion efficiency. Oxygen sensors located upstream and downstream of the catalyst can be used to determine when its oxygen storage capacity—and, hence, its conversion efficiency—has deteriorated below a predetermined level.

Determining the oxygen storage capacity would require lean air-fuel (A/F) operation followed by rich A/F operation or vice-versa during the catalyst monitoring event. Since a diesel engine normally operates lean of stoichiometry, lean A/F operation would be normal operation. However, rich A/F operation would have to be commanded intrusively when the catalyst monitor is active. The rich A/F operation could be achieved by injecting some fuel late enough in the four stroke process (i.e., late injection) that the raw fuel would not combust in-cylinder. Rich A/F operation could also be achieved using an in-exhaust fuel injector upstream of the catalyst. During normal lean operation, the catalyst would become saturated with stored oxygen. As a result, both the front and rear oxygen sensors should be reading lean. When rich A/F operation initiates, the front oxygen sensor would switch immediately to a ''rich'' indication. For a short time, the rear oxygen sensor should continue to read ''lean'' until such time as the stored oxygen in the catalyst is consumed by the rich fuel mixture in the exhaust and the rear oxygen sensor would read ''rich.'' As the catalyst deteriorates, the delay time between the front and rear oxygen sensors switching from their normal lean state to a rich state would become progressively smaller because the deteriorated catalyst would have less oxygen storage capacity. Thus, by comparing the time difference between the responses of the front and rear oxygen sensors to the lean-to-rich or rich-to-lean A/F changes, the performance of the catalyst could be estimated. Although this discussion suggests the use of conventional oxygen sensors, these sensors could be substituted with A/F sensors which would also provide for additional engine control benefits such as EGR trimming and fuel trimming.

If a malfunction of the catalyst cannot cause emissions to exceed the emissions thresholds, then only a functional monitor would be required. A functional monitor could be done using temperature sensors. A functioning oxidation catalyst would be expected to provide some level of exotherm when it oxidizes HC and CO. The temperature of the catalyst could be measured by placing one or more temperature sensors at or near the catalyst. However, depending on the nominal conversion efficiency of the catalyst and the duty cycle of the vehicle, the exotherm may be difficult to discern from the inlet exhaust temperatures. To add robustness to the monitor, the functional monitor would need to be conducted during predetermined

operating conditions where the amount of HC and CO entering the catalyst could be known. This may require an intrusive monitor that actively forces the fueling strategy richer (e.g., through late or post injection) than normal for a short period of time. If the measured exotherm does not exceed a predetermined amount that only a properly-working catalyst could achieve, a malfunction would be indicated. As noted, such an approach would require a brief period of commanded rich operation that would result in a very brief HC and perhaps a PM emissions spike.

b. Other Aftertreatment Assistance Function Monitoring

A functional monitor should be sufficient for monitoring the oxidation catalyst's ability to fulfill aftertreatment assistance functions such as generating an exotherm for DPF regeneration or providing a proper feedgas for SCR or NO_X adsorbers. We would expect that manufacturers would use the exotherm approach mentioned above either to measure directly for the proper exotherm or to correlate indirectly for the proper feedgas. For catalysts upstream of a DPF, we expect that this monitoring would be conducted during an active or forced regeneration event.[60] For catalysts downstream of the DPF, we expect that manufacturers would have to add fuel intrusively (either in-exhaust or through in-cylinder post-injection) to create a sufficient exotherm to distinguish malfunctioning from properly operating catalysts.

6. Selective Catalytic Reduction (SCR) and NO_X Conversion Catalyst Monitoring

a. SCR and NO_X Catalyst Conversion Efficiency Monitoring

We would expect manufacturers to use NO_X sensors to monitor a lean NO_X catalyst. NO_X sensors placed upstream and downstream of the lean NO_X catalyst could be used to determine directly the NO_X conversion efficiency. Manufacturers could potentially use a single NO_X sensor placed downstream of the catalyst to measure catalyst-out NO_X emissions. This would have to be done within a tightly controlled engine operation window where engine-out NO_X emissions (i.e., NO_X emissions at the lean NO_X catalyst inlet) performance is relatively stable and could be estimated reliably. Within this engine operation window, catalyst-out measurements could be compared to the expected engine-out NO_X emissions and a catalyst conversion efficiency could be calculated. Should the calculated conversion efficiency be insufficient to maintain emissions below the emissions thresholds, a malfunctioning or deteriorated lean NO_X catalyst would be indicated. If both an upstream and downstream NO_X sensor are used for monitoring, the upstream sensor could be used to improve the overall effectiveness of the catalyst by precisely controlling the air-fuel ratio in the exhaust to the levels where the catalyst is most effective.

For monitoring the SCR catalyst, care must be taken to account for the cross sensitivity of NO_X sensors to ammonia (NH_3). Current NO_X sensor technology tends to have such a cross-sensitivity to ammonia in that as much as 65 percent of ammonia can be read as NO_X.[61] However, urea SCR feedback control studies have shown that the NH_3 interference signal is discernable from the NO_X signal and can, in effect, allow the design of a better feedback control loop than a NO_X sensor that doesn't have any NH_3 cross-sensitivity. In one study, a signal conditioning method was developed that resulted in a linear output for both NH_3 and NO_X from the NO_X sensor downstream of the catalyst.[62] Monitoring of the catalyst can be done by using the same NO_X sensors that are used for SCR control. When the SCR catalyst is functioning properly, the upstream sensor should read ''high'' for high NO_X levels while the downstream sensor should read ''low'' for low NO_X and low ammonia levels. With a deteriorated SCR catalyst, the downstream sensor should read similar or higher values as the upstream sensor (i.e., high NO_X and high ammonia levels) since the NO_X reduction capability of the catalyst has diminished. Therefore, a malfunctioning SCR catalyst could be detected when the downstream sensor output is near to or greater than the upstream sensor output. A similar monitoring approach could be used if a manufacturer models upstream NO_X emissions instead of using an upstream NO_X sensor. In this case, the comparison would be made between the modeled upstream NO_X value and the downstream sensor value.

Manufacturers have expressed concern over both the sensitivity and the durability of NO_X sensors. They are concerned that NO_X sensors will not have the necessary sensitivity to detect NO_X at the low levels that will exist downstream of the NO_X catalyst. They are also concerned that NO_X sensors will not be durable enough to last the full useful life of big diesel trucks. We have researched NO_X sensors—the current state of development and future expectations—and summarized our findings in the technical support document in the docket for this rule.[63] Some of our findings are summarized here.

Regarding NO_X sensor sensitivity, we expect that 2010 and later model year engines will have average tailpipe NO_X emissions in the 0 to 50 ppm range. Current NO_X sensors have an accuracy of ±10 ppm in the 0 to 100 ppm range. This means that current NO_X sensors should be able to detect NO_X emissions that exceed the standard by two to three times the 2010 limit.[64] This should allow for compliance with our proposed threshold which is effectively 2.5 times the 2010 limit. Further, we expect that NO_X sensors in the 0 to 100 ppm range with ±5 ppm accuracy will be available by the middle of 2006. Regarding durability, improvements are being made and a test program is currently underway with the intent of aging several NO_X sensors placed at various exhaust system locations out to 6,000 hours (roughly equivalent to 360,000 miles). Results after 2,000 hours of aging are promising and results after 4,000 hours of aging are currently being analyzed.[65]

b. SCR and NO_X Catalyst Active/Intrusive Reductant Injection System Monitoring

If an active catalyst system is used—i.e., one that relies on injection of a reductant upstream of the catalyst to assist in emissions conversion—manufacturers would be required to monitor the mechanism for adding the fuel reductant. In the active catalyst system, a temperature sensor is expected to be placed near or at the catalyst to determine when the catalyst temperature is high enough to convert emissions. Because NO_X catalyst systems, especially lean NO_X catalyst systems, tend to have a narrow temperature range where they are most effective, adding reductant when the catalyst temperature is not sufficiently high would waste reductant. If fuel is

[60] An active or forced regeneration would be those regeneration events that are initiated via a driver selectable switch or activator and/or those initiated by computer software.

[61] Schaer, C.M., Onder, C.H., Geering, H.P., and Elsener, M., ''Control of a Urea SCR Catalytic Converter System for a Mobile Heavy-Duty Diesel Engine,'' SAE Paper 2003–01–0776 which may be obtained from Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA, 15096–0001.

[62] *Ibid.*

[63] Draft Technical Support Document, HDOBD NPRM, EPA420–D–06–006, Docket ID# EPA–HQ–OAR–2005–0047–0008.

[64] Ibid.

[65] Ibid.

used as the reductant, this would adversely affect fuel economy without a corresponding reduction in emissions levels. Therefore, a temperature sensor is expected to be placed in the exhaust near or at the catalyst to help determine when reductant injection should occur. This same sensor could be used to determine if an exotherm resulted following reductant injection. The lack of an exotherm would indicate a malfunction of the reductant delivery system.

Alternatively, any NO_X sensors used to monitor conversion efficiency could be used to determine if reductant injection has occurred. NO_X sensors are also oxygen sensors so they could be used to determine the air-fuel ratio in the exhaust stream which would allow for verification of reductant injection into the exhaust. Further, with a properly functioning injector, the downstream NO_X sensor should see a change from high NO_X levels to low NO_X levels. In contrast, a lack of reductant injection would result in continuously high NO_X levels at the downstream NO_X sensor. Therefore, a malfunctioning injector could be indicated when the downstream NO_X sensor continues to measure high NO_X after an injection event has been commanded.

Reductant level monitoring could also be conducted by using the existing NO_X sensors that are used for control purposes. Specifically, the downstream NO_X sensor can be used to determine if the reductant tank no longer has sufficient reductant available. Similar to the fuel reductant injection functionality monitor described above, when the reductant tank has a sufficient reductant quantity and the injection system is working properly, the downstream NO_X sensor should see a change from high NO_X levels to low NO_X levels. If the NO_X levels remain constant both before and after reductant injection, then the reductant was not properly delivered and either the injection system is malfunctioning or there is no longer sufficient reductant available in the reductant tank. Alternatively, reductant level monitoring could be conducted by using a dedicated ''float'' type level sensor similar to the ones used in fuel tanks. Some manufacturers may prefer using a dedicated reductant level sensor in the reductant tank to inform the vehicle operator of current reductant levels via a gauge on the instrument panel. If such a sensor is used by the manufacturer for operator convenience, it could also be used to monitor the reductant level in the tank.

Monitoring the reductant itself—whether it be the wrong reductant or a poor quality reductant—could also be conducted using the NO_X sensors used for control purposes. If an improper reductant is injected, the NO_X catalyst system would not function properly. Therefore, NO_X emissions downstream from the catalyst would remain high both before and after injection. The downstream NO_X sensor would see the high NO_X levels after injection and a malfunction would be indicated. If the reductant tank level sensor indicated sufficient levels for injection and decreasing levels following injections (which would mean the injection system was working), then the probable cause of the malfunction would be the reductant itself. For urea SCR systems, another possible means of monitoring the reductant itself would be to use a urea quality sensor in the urea tank. First generation sensors show promise at verifying that urea is indeed in the tank, rather than water or some other fluid, and that the urea concentration is within the needed range (i.e., not diluted with water or some other fluid). The sensor could also be used in place of a urea level sensor. By 2010, we would expect subsequent generation sensors to provide even better capability.[66]

c. SCR and NO_X Catalyst Feedback Control Monitoring

Monitoring of feedback control could be performed using analogous strategies to those discussed for fuel system feedback control monitoring in Section III.A.1.

7. NO_X Adsorber Monitoring

a. NO_X Adsorber Capability Monitoring

We expect that either NO_X sensors or A/F sensors along with a temperature sensor will be used to provide the feedback necessary to control the NO_X adsorber system. These same sensors could also be used to monitor the NO_X adsorber system's capability. The use of NO_X sensors placed upstream and downstream of the adsorber system would allow the system's NO_X reduction performance to be continuously monitored. For example, the upstream NO_X sensor on a properly functioning adsorber system operating with lean fuel mixtures, will read high NO_X levels while the downstream NO_X sensor should read low NO_X levels. With a deteriorated NO_X adsorber system, the upstream NO_X levels will continue to be high while the downstream NO_X levels will also be high. Therefore, a malfunction of the system can be detected by comparing the NO_X levels measured by the downstream NO_X sensor versus the upstream sensor.

The possibility exists that an upstream NO_X sensor will not be used for NO_X adsorber control. Manufacturers may choose to model engine-out NO_X levels—based on engine operating parameters such as engine speed, fuel injection quantity and timing, EGR flow rate—thereby eliminating the need for the upstream NO_X sensor. In this case, we believe that monitoring of the system could be conducted using A/F sensors in place of NO_X sensors.[67] During lean engine operation with a properly operating NO_X adsorber system, both the upstream and downstream A/F sensors would indicate lean mixtures. When the exhaust gas is intrusively commanded rich to regenerate the NO_X adsorber, the upstream A/F sensor would quickly indicate a rich mixture while the downstream sensor should continue to see a lean mixture due to the chemical reaction of the reducing agents with NO_X and oxygen stored on the adsorber. Once all of the stored NO_X and oxygen has been released, the reducing agents in the exhaust would cause the downstream A/F sensor to indicate a rich reading. The more NO_X that is stored in the adsorber, the longer the delay between the rich indications from the upstream and downstream sensors. Thus, the time differential between the rich indications from the upstream and downstream A/F sensors is a gauge of the NO_X storage capacity of the adsorber. This delay could be correlated to an emissions increase and the monitor could be calibrated to indicate a malfunction upon detecting an unacceptably short delay. In fact, Honda currently uses a similar approach to monitor the NO_X adsorber on a 2003 model year gasoline vehicle which demonstrates the viability of the approach in a shorter lived application. We have studied A/F sensors and their durability with respect to longer lived diesel applications and our results are summarized in a report placed in the docket to this rule.[68]

[66] Crawford, John M., Mitsui Mining & Smelting Co., Ltd., presentation to EPA, October 2006, Docket ID# EPA–HQ–OAR–2005–0047–0007.

[67] Ingram, G.A. and Surnilla, G., ''On-Line Estimation of Sulfation Levels in a Lean NO_X Trap,'' SAE Paper 2002–01–0731 may be obtained from Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA 15096–0001.

[68] Draft Technical Support Document, HDOBD NPRM, EPA420–D–06–006, Docket ID# EPA–HQ–OAR–2005–0047–0008.

b. NO_X Adsorber Active/Intrusive Reductant Injection System Monitoring

The injection system used to achieve NO_X regeneration of the NO_X adsorber could also be monitored with A/F sensors. When the control system injects extra fuel to achieve a rich mixture, the upstream A/F sensor would respond to the change in fueling and could measure directly whether or not the proper amount of fuel had been injected. If manufacturers employ a NO_X adsorber system design that uses only a single A/F sensor downstream of the adsorber, that downstream sensor could be used to monitor the performance of the injection system. As discussed above, the downstream sensor would switch from a lean reading to a rich reading when the stored NO_X has been completely released and reduced. If the sensor switches too quickly after rich fueling is initiated, then either too much fuel has been injected or the adsorber itself has poor storage capability. Conversely, if the sensor takes too long to switch after rich fueling is initiated, it may be an indication that the adsorber has very good storage capability. However, excessive switch times (i.e., times that exceed the maximum storage capability of the adsorber) could be indicative of an injection system malfunction (i.e., insufficient fuel has been injected) or a sensor malfunction (i.e., the sensor has a slow response).

c. NO_X Adsorber Feedback Control Monitoring

Monitoring of feedback control could be performed using analogous strategies to those discussed for fuel system feedback control monitoring in Section III.A.1.

8. Diesel Particulate Filter (DPF) Monitoring

a. PM Filtering Performance Monitoring

The PM filtering performance monitor is perhaps the monitor for which we have the most concern with respect to feasibility. Part of this concern stems from the difficulty in detecting the very low PM emissions levels required for 2007/2010 engines (i.e., 0.01 g/bhp-hr). While we have made changes to our test procedures that will allow for more accurate measurement of PM in the test cell, it is still very difficult to do. With today's proposal, we are expecting manufacturers to detect failures in the filtering performance of only a few times the actual standards. Success at doing so presents a very difficult challenge to manufacturers. Our concerns, in part, have led us to propose a different 2013 and later emissions threshold for this monitor than that proposed by ARB. This was discussed in more detail in section I.D.2.

We anticipate that manufacturers can meet the proposed PM filtering monitor requirements without adding hardware other than that used for control purposes. We believe that the same pressure and temperature sensors that are used to control DPF regeneration will be used for OBD monitoring. For control purposes, manufacturers generally use a differential or delta pressure sensor placed across the DPF and at least one temperature sensor located near the DPF. The differential pressure sensor is expected to be used on DPF systems to prevent damage that could be caused by delayed or incomplete regeneration. Such conditions could lead to excessive temperatures and melting of the DPF substrate. When the differential pressure exceeds a predetermined level, a regeneration event would be initiated to burn the trapped PM.

However, engine manufacturers have told us that differential pressure alone does not provide a robust indication of trapped PM in the DPF. For example, most if not all DPFs in the 2010 timeframe will be catalyzed DPFs that are designed to regenerate passively during most operation. Sometimes, conditions will not permit the passive regeneration and an active regeneration would have to be initiated. Relying solely on the differential pressure sensor to determine when an active regeneration event was necessary would not be sufficient. A low differential pressure could mean a low PM load and could also mean a leaking DPF substrate. A high differential pressure could mean a high PM load and could also mean a melted substrate. In the latter case, the system may continually attempt to regenerate the DPF despite a low PM load which would both waste fuel and increase HC emissions.

As a result, manufacturers will probably use some sort of soot-loading model to predict the PM load on the DPF as part of their regeneration strategy. Without a robust prediction, a regeneration event could be initiated too early (i.e., when too little PM was present which would be a waste of fuel and would increase HC emissions) or too late (i.e., when too much PM has been allowed to build and the regeneration event could cause a meltdown of the substrate). The model would estimate the PM load by tracking the difference between the modeled engine-out PM (i.e., the emissions that are being loaded on the DPF) and regenerated PM (i.e., the PM that is being burned off the DPF due to passive and/or active regenerations).

Given this, we believe that a comprehensive and accurate soot-loading model is also necessary for successful monitoring of DPF filtering performance. The model would predict the PM load on the DPF based on fuel consumption and engine operating conditions and would predict passively regenerated PM based on temperatures. This predicted PM load would be compared to the measured PM load taken from the differential pressure sensors. Differences would correspond to either a leaking substrate (i.e., predicted load greater than measured load) or melting of the substrate faceplate (i.e., measured load greater than predicted load).

Nonetheless, much development remains to be done and success is not guaranteed. Manufacturers have noted that a melted substrate through which a large channel has opened could have differential pressure characteristics identical to a good substrate despite allowing most of the engine-out PM to flow directly through. We agree that this is a difficult failure mode and have proposed language that would allow certification of DPF monitors that are unable to detect it. Possibly, a temperature sensor in the DPF could detect the extreme temperatures capable of causing such a severe substrate melting. Upon detecting such a temperature, a regeneration event could be initiated to burn off any trapped PM. Following that event, the soot model would expect a certain increase in differential pressure based on modeled engine-out PM and passive regeneration characteristics. Presumably, the measured differential pressure profile would not match the predicted profile because most PM would be flowing straight through the melted channel. This same approach, or perhaps a simple temperature sensor, should quite easily be able to detect a missing substrate.

Lastly, manufacturers have noted their concern that small differences in substrate crack size or location may generate large differences in tailpipe emission levels. They have also noted their lack of confidence that they will be able to reliably detect all leaks that would result in emissions exceeding the proposed thresholds. Accordingly, the manufacturers have suggested pursuing an alternate malfunction criterion independent of emission level. They have suggested criteria such as a percent of exhaust flow leakage or a specific leak or hole size that must be detected. We believe that pursuit of such alternate thresholds would not be appropriate at this time. Manufacturers have not yet completed work on initial widespread

implementation of DPFs for the 2007 model year. We expect that during the year or two following that implementation, substantial refinement and optimization will occur based on field experiences and that correlation of sensor readings to emissions levels will be possible for at least some DPF failure modes by the 2010 model year.

b. DPF Regeneration Monitoring

Pressure sensing, in combination with the soot model, could also be used to determine if regeneration is functioning correctly. After a regeneration event, the differential pressure should drop significantly since the trapped PM has been removed. If it does not drop to within the soot model's predicted range after the regeneration event, either the regeneration did not function correctly or the filter could have excessive ash loading. Ash loading is a normal byproduct of engine operation (the ash loading is largely a function of oil consumption by the engine and the ash content of the engine oil). The ash builds up in the DPF and does not burnout as does the PM but rather must be removed or blown out of the DPF. Manufacturers are working with us to determine the necessary maintenance intervals at which this ash removal will occur. The soot model would have to account for ash buildup in the DPF with miles or hours of operation. Future engine oils will have lower ash content and have tighter quality control such that more accurate predictions of ash loading will be possible. By including ash loading in the soot model, we believe that its effects could be accounted for in the predicted differential pressure following a regeneration event.

As stated, manufacturers are projected to make use of temperature sensors for regeneration control. These same sensors could also be used to monitor active regeneration of the filter. If excess temperatures are seen by the temperature sensor during active regeneration, the regeneration process can be stopped or slowed down to protect the filter. If an active regeneration event is initiated and there a temperature rise commensurate with the amount of trapped PM is not detected, the regeneration system is not working and a malfunction would be indicated.

c. DPF NMHC Conversion Efficiency Monitoring

Given the stringency of the 2010 standards, we believe that manufactures may rely somewhat on the DPF to convert some of the HC emissions. The proposed requirement requires monitoring this function only if the system serves this function. We believe that, provided the filtering performance and regeneration system monitors have not detected any malfunctions, the NMHC conversion is probably working fine. Given the level of the threshold, and the expectation that the DPF will serve to control NMHC only marginally, we do not anticipate this monitor needing emissions correlation work. Instead, we expect that, with the DPF temperature sensor, it should be possible to infer adequate NMHC conversion by verifying an exotherm. Nonetheless, if a manufacturer relies so heavily on the DPF for NMHC conversion that its ability to convert could be compromised to the point of emissions exceeding the threshold, a more robust monitor may be required by correlating exotherm levels to NMHC impacts.

d. DPF Regeneration Feedback Control Monitoring

Monitoring of DPF regeneration feedback control could be performed using analogous strategies to those discussed for fuel system feedback control monitoring in Section III.A.1.

9. Exhaust Gas Sensor Monitoring

The under 14,000 pound OBD regulations have required oxygen sensor monitoring since the 1996 model year. Vehicles have been certified during that time meeting the requirements. The technological feasibility of monitoring oxygen sensors has been demonstrated. Additionally, A/F sensor monitoring has been required, manufacturers have complied, and the feasibility has been similarly demonstrated.

NO_X sensors are a recent technology and, as such, they are still being developed and improved. However, we would expect that manufacturers would design their upstream NO_X sensor monitors to be similar the A/F sensor monitors used in under 14,000 pound applications. Monitoring of downstream sensors may require modifications to existing A/F sensor strategies and/or new strategies. Since NO_X sensors are projected to be used only for control and monitoring of aftertreatment systems that reduce NO_X emissions (e.g., SCR systems), the OBD system would have to distinguish between deterioration of the aftertreatment system and the NO_X sensor itself. As the aftertreatment deteriorates, NO_X emissions downstream of the aftertreatment device will increase and, assuming there is no such deterioration in the NO_X sensor, the NO_X sensor will read these increasing NO_X levels. As discussed in sections III.A.6 and III.A.7, the increased NO_X levels can be the basis for monitoring the performance of the aftertreatment system. However, if the NO_X sensor does deteriorate with the aftertreatment device (i.e., its response rate slows with mileage/operating hours), the sensor may not properly read the increasing NO_X levels from the deteriorating aftertreatment system, and the aftertreatment monitor might conclude that the aftertreatment system is functioning properly. Similarly, the performance or level of deterioration of the NO_X aftertreatment device could affect the results of the NO_X sensor monitor. Therefore to achieve robust monitoring of aftertreatment and sensors, the OBD system has to distinguish between deterioration of the aftertreatment system and deterioration of the NO_X sensor. To properly monitor the NO_X sensor, the sensor monitor has to run under conditions where the aftertreatment performance can be quantified and compensated for or eliminated in the monitoring results.

For example, the effects of the SCR performance could be eliminated by monitoring the NO_X sensor under a steady-state operating condition during which engine-out NO_X emissions were stable. Under a relatively steady-state condition, reductant injection could be ''frozen'' (i.e., the reductant injection quantity could be held constant) which would also freeze the conversion efficiency of the SCR system. With SCR performance held constant, engine-out NO_X emissions could be intrusively increased by a known amount (e.g., by reducing EGR flow or changing fuel injection timing and allowing the engine-out NO_X model to determine the increase in emissions). The resulting increase in emissions would pass through the SCR catalyst unconverted, and the sensor response to the known increase in NO_X concentrations could be measured and evaluated. This strategy could be used to detect both response malfunctions (i.e., the sensor reads the correct NO_X concentration levels but the sensor reading does not change fast enough to keep up with changing exhaust NO_X concentrations) and rationality malfunctions (i.e., the sensor reads the wrong NO_X level). Rationality malfunctions could be detected by making sure the sensor reading changes by the same amount as the intrusive change in emissions. Lastly, the sensor response to decreasing NO_X concentrations could also be evaluated by measuring the response when the intrusive strategy is turned off and engine-out NO_X emissions are returned to normal levels. By correlating sensor response rates and the resulting

emissions impacts, the malfunction criteria could then be determined.

B. Feasibility of the Monitoring Requirements for Gasoline/Spark-Ignition Engines

1. Fuel System Monitoring

For gasoline vehicles since the 1996 model year and gasoline engines since the 2005 model year, the under 14,000 pound OBD requirements have required fuel system monitoring identical to that being proposed. Over 100 million cars and light trucks have been built and sold in the U.S. to these fuel system monitoring requirements including some heavy-duty vehicles that use the exact same gasoline engines that are used in some over 14,000 pound applications. This clearly demonstrates the technological feasibility of the proposed requirements.

2. Engine Misfire Monitoring

For gasoline vehicles since the 1996 model year and gasoline engines since the 2005 model year, the under 14,000 pound OBD requirements have required misfire monitoring identical to that being proposed. One of the most reliable methods for detecting misfire is the use of a crankshaft position sensor—which measures the fluctuations in engine angular velocity to determine the presence of misfire—along with a camshaft position sensor—which can be used to identify the misfiring cylinder. This method has been shown to be technologically feasible and should work equally well on over 14,000 pound applications.

3. Exhaust Gas Recirculation (EGR) Monitoring

For vehicles since the 1996 model year and engines since the 2005 model year, the under 14,000 pound OBD requirements have required EGR system monitoring identical to that being proposed. The general approach has been to detect EGR flow rate malfunctions by looking at the change in fuel trim or manifold pressure under conditions when the EGR system is active. This demonstrates the technological feasibility of the proposed requirements.

4. Cold Start Emission Reduction Strategy Monitoring

We expect this monitoring to be done mainly via computer software. For example, if spark retard is used during cold starts, the commanded amount of spark retard would have to be monitored if the amount of spark retard can be restricted by external factors such as idle quality or driveability. This can be done with software algorithms that compare the actual overall commanded final ignition timing with the threshold timing that would result in emissions that exceed the emissions thresholds. Cold start strategies that always command a predetermined amount of ignition retard independent of all other factors and do not allow idle quality or other factors to override the desired ignition retard would not require monitoring of the commanded timing. Other methods that could be used to ensure that the actual timing has been reached include verifying other factors such as corresponding increases in mass air flow and idle speed indicative of retarded spark combustion. Both mass air flow and idle speed are used currently by the engine control system and the OBD system and, therefore, only minor software modifications should be required to analyze these signals while the cold start strategy is invoked.

5. Secondary Air System Monitoring

A/F sensors would most likely be required to monitor effectively the secondary air system when it is normally active. These sensors are currently installed on many new cars and their implementation is projected to increase in the future as more stringent emission standards are phased in. A/F sensors are useful in determining air-fuel ratio over a broader range than conventional oxygen sensors and are especially valuable in engines that require very precise fuel control. They would be useful for secondary air system monitoring because of their ability to determine air-fuel ratio with high accuracy. This would enable a correlation between secondary airflow rates and emissions.

6. Catalytic Converter Monitoring

A common method used for estimating catalyst efficiency is to measure the catalyst's oxygen storage capacity. This monitoring method has been used by all light-duty gasoline vehicles since the 1996 model year and most gasoline engines since the 2005 model year as a result of our under 14,000 OBD requirements. Generally, as the catalyst's oxygen storage capacity decreases, the conversion efficiencies of HC and NO_X also decrease. With this strategy, a catalyst malfunction would be detected when its oxygen storage capacity has deteriorated to a predetermined level. Manufacturers determine this by using the information from an upstream oxygen sensor and a downstream or mid-bed oxygen sensor (this second sensor is also used for trimming the front sensor to maintain more precise fuel control). By comparing the level of oxygen measured by the second sensor with that measured by the upstream sensor, manufacturers can determine the catalyst's oxygen storage capacity and estimate its conversion efficiency. With a properly functioning catalyst, the second oxygen sensor signal will be fairly steady since the fluctuating oxygen concentration (due to fuel system cycling around stoichiometry) at the inlet of the catalyst is damped by the storage and release of oxygen in the catalyst. When a catalyst is deteriorated it is no longer capable of storing and releasing oxygen. This causes the frequency and peak-to-peak voltage of the second oxygen sensor to simulate the signal from the upstream oxygen sensor at which time a malfunction would be indicated.

7. Evaporative System Monitoring

Our OBD requirements have required monitoring for evaporative system leaks for many years. The EPA OBD requirement has been the equivalent of a 0.040 inch hole, while the ARB requirement has gone as low as a 0.020 inch hole. These requirements have been met on applications such as incomplete trucks and engine dynamometer certified configurations equipped with similar and, in many cases, identical configurations as are used in over 14,000 pound applications. Manufacturers have successfully met these requirements by using engine vacuum to create a vacuum in both the fuel tank and evaporative system and then monitoring the system's ability to maintain that vacuum. The ramp down in vacuum (or ramp up in pressure) can then be correlated to leak size. In general, these systems require the addition of an evaporative system pressure sensor and a canister vent valve capable of closing the vent line.

Manufacturers of over 14,000 pound applications have expressed concerns with their ability to detect evaporative system leaks on these larger vehicles. One such concern relates to the relatively larger fuel tank sizes on the larger applications. These tanks can be on the order of 50 to 80 gallons, which makes the impact of a small hole, on a percentage basis, less severe and less easily detected. Another concern is the relatively large number of fuel tank and evaporative system configurations on the larger applications. Confounding both of these concerns is that the engine manufacturers quite often have no idea what tanks and configurations will ultimately be matched with their engine in the final vehicle product.

While we agree that these concerns are valid, they can also be said of the

under 14,000 pound applications (except perhaps the tank size concern). The over 14,000 pound gasoline applications are expected to use near identical, if not equivalent, evaporative system components and we are not aware of any reason why the existing monitoring techniques would not continue to work on over 14,000 pound applications. Nonetheless, we do not want false failures in the field. By limiting the monitoring requirement to leaks of 0.150 inch or larger, we believe that manufacturers would be able to employ a single monitoring strategy to all possible tank sizes and configurations without much concern for false failures. Nonetheless, it may be necessary for manufacturers to impose tighter restrictions on their engine purchasers than is done currently with regards to tank specifications and evaporative system components.

8. Exhaust Gas Sensor Monitoring

Our light-duty OBD requirements since the 1996 model year and our 8,500 to 14,000 pound OBD requirements since the 2005 model year have required oxygen sensor monitoring similar to the requirements being proposed. Years of compliance with those requirements demonstrates the technological feasibility of the proposed requirements. Additionally, A/F sensor monitoring has been required and demonstrated on these vehicles for many years.

C. Feasibility of the Monitoring Requirements for Other Diesel and Gasoline Systems

1. Variable Valve Timing and/or Control (VVT) System Monitoring

VVT systems are already in general use in many under 14,000 pound applications. Further, under the California OBD II requirements, vehicles equipped with VVT systems have been monitoring those systems for proper function since the 1996 model year. More recently, manufacturers have employed monitoring strategies to detect VVT system malfunctions that detect not only proper function but also exceedances of emissions thresholds. Such strategies include the use of the crank angle sensor and camshaft position sensor to confirm that the valve opening and closing occurs within an allowable tolerance of the commanded crank angle. By calculating the difference between the commanded valve opening crank angle and the achieved valve opening crank angle, a diagnostic algorithm can differentiate between a malfunctioning system with too large of an error and a properly functioning system with very little to no error. By calibrating the size of this error (or integrating it over time), manufacturers can design the system to indicate a malfunction prior to the required emissions thresholds. In the same manner, system response can be measured by monitoring the length of time necessary to achieve the commanded valve timing. To ensure adequate resolution between properly functioning systems and malfunctioning systems, most manufacturers perform this type of monitor only when a sufficiently large ''step change'' in commanded valve timing occurs.

2. Engine Cooling System Monitoring

The existing OBD requirements have required identical ECT sensor and thermostat monitoring for several years. While the technical feasibility of the proposed requirements has been demonstrated on lighter applications which tend to be produced through a vertically integrated manufacturing process, the manufacturers of big diesel engines have expressed concerns that monitoring of the cooling system on over 14,000 pound applications would create unique and possibly insurmountable challenges. Generally, the cooling system is divided into two cooling circuits connected by the thermostat. The two circuits are the engine circuit and the radiator circuit. Since the big diesel engine industry tends to be horizontally integrated, the manufacturers contend that they do not know what types of devices will be added to the cooling system when the vehicle is manufactured or the vehicle is put into service. They are concerned that the unknown devices can add/remove unknown quantities of heat to/from the system which would prevent them from predicting reliably the proper system behavior (e.g., warm up). Without the ability to predict system behavior reliably, they fear that they cannot know when the system is malfunctioning (e.g., not warming up as expected).

The industry's concerns regarding unknown devices added on the radiator circuit of the system seem unwarranted. A properly functioning thermostat does not allow flow through the radiator during warm-up. Devices added to the radiator circuit could only affect coolant temperature when there is significant coolant flow through the radiator (i.e., after the engine is warmed-up and the thermostat is open, allowing coolant to flow through the radiator).

We agree that unknown devices added on the engine circuit (e.g., passenger compartment heaters) can affect the warm-up rate of the system. Manufacturers of under 14,000 pound applications have demonstrated robust thermostat monitoring with high capacity passenger heaters in the cooling system. To do so, they have to know the maximum rate of heat loss due to the heater. Manufacturers of over 14,000 pound applications have control over this by providing limits on such devices in the build specifications that they provide to the vehicle manufacturers. In some cases, an engine manufacturer might need multiple build specifications with corresponding thermostat monitoring calibrations to accommodate the ranges of heater capacities that are needed when a given engine is used in a range of vehicle applications (e.g., a local delivery truck having a passenger compartment for two people and a small capacity heater versus a bus having a passenger compartment for 20 people and a large capacity heater). The vehicle manufacturer would then select the appropriate calibration for the engine when installing it in the vehicle. Nonetheless, engine manufacturers have requested limited enable conditions for the thermostat monitor (e.g., to disable the thermostat monitor below 50 degrees F). This would help to minimize their resource needs to calibrate the thermostat monitor. While this may be directionally favorable to manufacturers, it would result in disabled thermostat monitoring during cold ambient conditions which occur in much of the country and, in some areas, during a large portion of the year. In such regions, a vehicle could experience a thermostat malfunction with no indication to the vehicle operator. Since many other OBD monitors will operate only after reaching a certain engine coolant temperature, a malfunctioning thermostat without any indication could effectively result in disablement of the OBD system.

3. Crankcase Ventilation System Monitoring

Crankcase ventilation system monitoring requirements have been met for years by manufacturers of under 14,000 pound gasoline applications. Therefore, the technological feasibility has been demonstrated for gasoline applications.

Effectively, diesel engine manufacturers would be required to meet design requirements for the entire system in lieu of actually monitoring any of the hoses for disconnection. Specifically, the proposed requirement would allow for an exemption for any portion of the system that is resistant to deterioration or accidental disconnection and not subject to disconnection during any of the

manufacturer's repair procedures for non-crankcase ventilation system repair work. These safeguards would be expected to eliminate the chances of disconnected or improperly connected hoses while still allowing manufacturers to meet the requirements without adding any additional hardware meant solely for the purpose of meeting the monitoring requirements.

4. Comprehensive Component Monitoring

Both ARB and EPA OBD requirements have for year contained requirements to monitor computer input and output components. While these monitors are sometimes tricky and are not easy as many incorrectly assume, the many years of successful implementation and compliance with the existing requirements demonstrates their feasibility. The proposed requirements are equivalent to the under 14,000 pound requirements.

IV. What Are the Service Information Availability Requirements?

A. What Is the Important Background Information for the Proposed Service Information Provisions?

Section 202(m)(5) of the CAA directs EPA to promulgate regulations requiring OEMs to provide to:

> any person engaged in the repairing or servicing of motor vehicles or motor vehicle engines, and the Administrator for use by any such persons, * * * any and all information needed to make use of the [vehicle's] emission control diagnostic system * * * and such other information including instructions for making emission-related diagnoses and repairs.

Such requirements are subject to the requirements of section 208(c) regarding protection of trade secrets; however, no such information may be withheld under section 208(c) if that information is provided (directly or indirectly) by the manufacturer to its franchised dealers or other persons engaged in the repair, diagnosing or servicing of motor vehicles.

On June 27, 2003 EPA published a final rulemaking (68 FR 38428) which set forth the Agency's service information regulations for light- and heavy-duty vehicles and engines below 14,000 pounds GVWR. These regulations, in part, required each-covered Original Equipment Manufacturer (OEM) to do the following: (1) OEMs must make full text emissions-related service information available via the World Wide Web. (2) OEMs must provide equipment and tool companies with information that allows them to develop pass-through reprogramming tools. (3) OEMs must make available enhanced diagnostic information to equipment and tool manufacturers and to make available OEM-specific diagnostic tools for sale. These requirements were finalized to ensure that aftermarket service and repair facilities have access to the same emission-related service information, in the same or similar manner, as that provided by OEMs to their franchised dealerships.

As EPA moves forward proposing OBD requirements for the heavy-duty over 14,000 pounds sector, EPA is similarly moving forward with proposals to require the availability of service information to heavy-duty aftermarket service providers as required by section 202(m) of the Clean Air Act.

All of the following proposed provisions regarding the availability of service information for the heavy-duty industry are based on our extensive experience and regulatory history with the light-duty service industry. However, as discussed below, EPA understands that there may be significant differences between the light-duty service industry and the heavy-duty service industry. EPA welcomes comment on all of the proposed provisions and their need and/or applicability to the heavy-duty service industry.

B. How Do the Below 14,000 Pound and Above 14,000 Pounds Aftermarket Service Industry Compare?

As we consider proposing the availability of service information for the heavy-duty sector above 14,000 pounds, EPA recognizes that differences do exist between the industries that service vehicles above and below 14,000 pounds. On the below 14,000 pound side, estimates indicate that independent technicians perform up to 80% of all vehicle service and repairs once a vehicle exceeds the manufacturer warranty period.[69] On the above 14,000 pound side, the 1997 U.S. Census Bureau Vehicle Inventory and Use Survey, estimated that 25 percent of the general maintenance and over 30 percent of the major overhaul on heavy-duty vehicles was performed by the independent sector. According to the Census Bureau, these values represent a 16.7 percent increase in general maintenance and a 6.2 percent increase in major overhaul from 1992. Trucks and Parts Service Magazine provides the following information on the breakdown of the independent repair industry for vehicles above 14,000 pounds (not including any fuel injection shops):

U.S. independent machine shops for above 14,000 pounds—5,820
U.S. independent engine service shops for above 14,000 pounds—12,170
U.S. independent transmission repair shops for above 14,000 pounds—11,420
Technicians, independent repair shops for above 14,000 pounds—133,700
Technicians, truck parts distributors for vehicles above 14,000 pounds—41,600

Thus, the increase in business and the large number of independent aftermarket shops make it necessary that repair information is readily available for the aftermarket trucking industry.

On the light-duty side, vehicle manufacturers are entirely integrated in that they are responsible for the design and production of the entire vehicle from the chassis to the body. In comparison, the heavy-duty industry is mostly non-integrated. In other words, different manufacturers separately produce the engine, the chassis, and the transmission of a vehicle. This non-integration speaks to the fact that a completed vehicle is typically produced in response to the customized needs of owners/operators. In addition, the lack of integration indicates that a given engine will ultimately be part of many different engine, transmission, and chassis configurations. In addition, heavy-duty manufacturers have stated that diagnostic tool designs differ significantly from tools produced for light-duty vehicles as a result of this non-integration.

EPA requests comment and also additional data on the current state of the heavy-duty aftermarket industry.

C. What Provisions Are Being Proposed for Service Information Availability?

1. What Information Is Proposed To Be Made Available by OEMs?

Today's action proposes a provision that requires OEMs to make available to any person engaged in the repairing or servicing of heavy-duty motor vehicles or motor vehicle engines above 14,000 pounds all information necessary to make use of the OBD systems and any information for making emission-related repairs, including any emissions-related information that is provided by the OEM to franchised dealers beginning with MY2010. We are proposing that this information includes, but is not limited to, the following:

(1) Manuals, technical service bulletins (TSBs), diagrams, and charts (the provisions for training materials,

[69] Motor and Equipment Manufacturers Association, Automotive Industry Status Report, 1999.

including videos and other media are discussed in Sections II.C.3 and II.C.4 below.

(2) A general description of the operation of each monitor, including a description of the parameter that is being monitored.

(3) A listing of all typical OBD diagnostic trouble codes associated with each monitor.

(4) A description of the typical enabling conditions for each monitor to execute during vehicle operation, including, but not limited to, minimum and maximum intake air and engine coolant temperature, vehicle speed range, and time after engine startup. A listing and description of all existing monitor-specific drive cycle information for those vehicles that perform misfire, fuel system, and comprehensive component monitoring.

(5) A listing of each monitor sequence, execution frequency and typical duration.

(6) A listing of typical malfunction thresholds for each monitor.

(7) For OBD parameters that deviate from the typical parameters, the OBD description shall indicate the deviation for the vehicles it applies to and provide a separate listing of the typical values for those vehicles.

(8) Identification and scaling information necessary to interpret and understand data available to a generic scan tool through Diagnostic Message 8 pursuant to SAE Recommended Practice J1939–73, which is incorporated by reference in section X.

(9) For vehicles below 14,000 pounds, EPA requires that any information related to the service, repair, installation or replacement of parts or systems developed by third party (Tier 1) suppliers for OEMs, to the extent they are made available to franchise dealerships. EPA believes that Tier 1 suppliers are an important element of the market related to vehicles below 14,000 pounds and EPA is requesting comment on the role that Tier 1 suppliers play in the heavy-duty market above 14,000 pounds and the need to extend this provision to the heavy-duty industry above 14,000 pounds.

(10) Any information on other systems that can directly effect the emission system within a multiplexed system (including how information is sent between emission-related system modules and other modules on a multiplexed bus),

(11) Any information regarding any system, component, or part of a vehicle monitored by the OBD system that could in a failure mode cause the OBD system to illuminate the malfunction indicator light (MIL).

(12) Any other information relevant to the diagnosis and completion of an emissions-related repair. This information includes, but is not limited to, information needed to start the vehicle when the vehicle is equipped with an anti-theft or similar system that disables the engine described below in paragraph (13). This information also includes any OEM-specific emissions-related diagnostic trouble codes (DTCs) and any related service bulletins, trouble shooting guides, and/or repair procedures associated with these OEM-specific DTCs.

(13) For vehicles below 14,000 pounds, EPA requires that OEMs make available computer or anti-theft system initialization information necessary for the proper installation of on-board computers on motor vehicles that employ integral vehicle security systems or the repair or replacement of any other emission-related part. We did not finalize a provision that would require OEMs to make this information available on the OEM's Web site unless they chose to do so. However, we did finalize a provision requiring that the OEM's Web site contain information on alternate means for obtaining the information and/or ability to perform reintialization. EPA is proposing to expand this provision to OEMs for vehicles above 14,000 pounds and requests comment on the prevalence of this type of repair, the means and methods for performing this type of repair and the need to extend this provision to the heavy-duty industry.

In addition, EPA's current service information rules require that, beginning with the 2008 model year, all OEM systems will be designed in such a way that no special tools or processes will be necessary to perform re-initialization. In other words, EPA expects that the re-initialization of vehicles can be completed with generic aftermarket tools, a pass-through device, or an inexpensive OEM-specific cable. EPA finalized this provision for vehicles below 14,000 pounds to prevent the need for aftermarket service providers to invest in expensive OEM-specific or specialty tools to complete an emissions-related repair that does not occur very frequently, but does in fact occur. In the June 2003 final rule, EPA gave OEMs a significant amount of lead time to either separate the need for reinitialization from an emissions related repair or otherwise redesign the reinitialization process in such a way that it does not require the use of special tools. EPA requests comment on the need for such a provision for the above 14,000 pound market. To the extent that such a provision may be needed for the heavy-duty arena, EPA also requests comment and what lead-time might be needed to meet EPA's goal of not relying on special tools or processes to perform reinitialization.

Information for making emission-related repairs does not include information used to design and manufacture parts, but may include OEM changes to internal calibrations, and other indirect information, as discussed below.

2. What Are the Proposed Requirements for Web-Based Delivery of the Required Information?

a. OEM Web Sites

Today's action proposes a provision that would require OEMs to make available in full-text all of the information outlined above, on individual OEM Web sites. Today's action further proposes that each OEM launch their individual Web sites with the required information within 6 months of publication of the final rule for all 2010 and later model year vehicles. The only proposed exceptions to the full-text requirements are training information, anti-theft information, and indirect information.

b. Timeliness and Maintenance of Information on OEM Web Sites

Today's action proposes a provision that would require OEMs to make available the required information on their Web site within six months of model introduction. After this six month period, we propose that the required information for each model must be available and updated on the OEM Web site at the same time it is available by any means to their dealers.

For vehicles under 14,000 pounds, EPA finalized a provision that OEMs maintain the required information in full text on their Web sites for at least 15 years after model introduction. After this fifteen-year period, OEMs can archive the required service information, but it must be made available upon request, in a format of the OEM's choice (e.g. CD–ROM). Given the significantly longer lifetime of heavy-duty vehicles and engines above 14,000 pounds, EPA requests comment on the need to require that the required information be required to remain on the Web sites for a longer period of time.

c. Accessibility, Reporting and Performance Requirements for OEM Web Sites

Performance reports that adequately demonstrate that their individual Web sites meets the requirements outlined in Section C(1) above will be submitted to the Administrator annually or upon

request by the Administrator. These reports shall also indicate the performance and effectiveness of the Web sites by using commonly used Internet statistics (e.g. successful requests, frequency of use, number of subscriptions purchased, etc). EPA will issue additional direction in the form of official manufacturer guidance to further specify the process for submitting reports to the Administrator.

In addition, EPA is proposing a provision that requires OEMs to launch Web sites that meet the following performance criteria:

(1) OEM Web sites shall possess sufficient server capacity to allow ready access by all users and have sufficient downloading capacity to assure that all users may obtain needed information without undue delay;

(2) Broken Web links shall be corrected or deleted weekly.

(3) Web site navigation does not require a user to return to the OEM home page or a search engine in order to access a different portion of the site.

(4) It is also proposed that any manufacturer-specific acronym or abbreviation shall be defined in a glossary webpage which, at a minimum, is hyperlinked by each webpage that uses such acronyms and abbreviations. OEMs may request Administrator approval to use alternate methods to define such acronyms and abbreviations. The Administrator shall approve such methods if the motor vehicle manufacturer adequately demonstrates that the method provides equivalent or better ease-of-use to the Web site user.

(5) Indicates the minimum hardware and software specifications required for satisfactory access to the Web site(s).

d. Structure and Cost of OEM Web Sites

In addition to the proposed requirements described above, EPA is proposing that OEMs establish a three-tiered approach for the access to their Web-based service information. These three tiers are proposed to include, but are not limited to short-term, mid-term, and long-term access to the required information.

(1) Short-Term Access

OEMs shall provide short-term access for a period of 24–72 hours whereby an aftermarket service provider will be able to access that OEM's Web site, search for the information they need, and purchase and/or print it for a set fee.

(2) Mid-Term Access

OEMs shall provide mid-term access for a period of 30 days whereby an aftermarket service provider will be able to access that OEM's Web site, search for the information they need, and purchase and/or print it for a set fee.

(3) Long-Term Access

OEMs shall provide long-term access for a period of 365 days whereby an aftermarket service provider will be able to access that OEM's Web site, search for the information they need, and purchase and/or print it for a set fee.

In addition, for each of the tiers, we propose that OEMs make their entire site accessible for the respective period of time and price. In other words, we propose that an OEM may not limit any or all of the tiers to just one make or one model.

EPA finalized the three-tiered information access approach in our June 2003 rulemaking to accommodate the wide variety of ways in which EPA believes aftermarket service providers utilize service information. On the under 14,000 side, aftermarket technicians approach the service of vehicles anywhere from servicing any make or model that comes into their shops to specializing in one particular manufacturer. In addition, EPA believes that there are other parties such as ''do-it-yourself'' mechanics or Inspection/Maintenance programs that may be interested in accessing such OEM web-sites. In addition, aftermarket service providers for vehicles below 14,000 pounds also relay on third party information consolidation entities such as Mitchell or All Data to supplement OEM-specific information. These factors, in addition to the fact that there are approximately 25ish (check this number) light-duty vehicle manufacturers, led EPA to the conclusion that a tiered approach to Web site access was necessary to ensure maximum availability to the aftermarket. EPA requests comment on the nature of aftermarket service for the heavy-duty above 14,000 pound industry and the need for a tiered approach to information availability.

Today's action also proposes that, prior to the official launch of OEM Web sites, each OEM will be required to present to the Administrator a specific outline of what will be charged for access to each of the tiers. We are further proposing that OEMs must justify these charges, and submit to the Administrator information on the following parameters, which include but are not limited to, the following:

(1) The price the manufacturer currently charges their branded dealers for service information. At a minimum, this must include the direct price charged that is identified exclusively as being for service information, not including any payment that is incorporated in other fees paid by a dealer, such as franchise fees. In addition, we propose that the OEM must describe the information that is provided to dealers, including the nature of the information (e.g., the complete service manual), etc.; whether dealers have the option of purchasing less than all of the available information, or if purchase of all information is mandatory; the number of branded dealers who currently pay for this service information; and whether this information is made available to any persons at a reduced or no cost, and if so, identification of these persons and the reason they receive the information at a reduced cost.

(2) The price the manufacturer currently charges persons other than branded dealers for service information. The OEM must describe the information that is provided, including the nature of the information (e.g., the complete service manual, emissions control service manual), etc.; and the number of persons other than branded dealers to whom the information is supplied.

(3) The estimated number of persons to whom the manufacturer would be expected to provide the service information following implementation of today's requirements. If the manufacturer is proposing a fee structure with different access periods (e.g., daily, monthly and annual periods), the manufacturer must estimate the number of users who would be expected to subscribe for the different access periods.

A complete list of the proposed criteria for establishing reasonable cost can be found in the proposed regulatory language for this final rule. We are also proposing that, subsequent to the launch of the OEM Web sites, OEMs would be required to notify the Administrator upon the increase in price of any one or all of the tiers of twenty percent or more accounting for inflation or that sets the charge for end-user access over the established price guidelines discussed above, including a justification based on the criteria for reasonable cost as established by this regulation.

Throughout the history of the current service information regulations, the price of service information and how price impacts the availability of service information has been a source of significant debate and discussion. In looking at the legislative history that led to the inclusion of the service information mandate in the Clean Air Act Amendments of 1990, it is clear that Congress did not intend for the pricing of information to be an artificial barrier

to access. Further, Congress did not intend for information access charges to become a profit center for OEMs. However, EPA has interpreted that Congress did intend for OEMs to be able to recover reasonable costs for making information available. Since the initial implementation of the service information requirements beginning with original 1995 final rulemaking, EPA has continued to refine the provisions regulating the cost of service to try to balance the Congressional intent while understanding that OEMs should be able to recover reasonable costs for making the required information available to the aftermarket. In fact, the relatively prescriptive nature of some of the requirements stem directly from instances on the light-duty side where, in the past, we believe some manufacturers deliberately priced access to information in such a way that effectively made it unavailable to the aftermarket. The provisions being proposed today regarding the pricing of service information reflect many years of implementation experience, debate, and discussion on the light-duty side and EPA specifically requests comment from heavy-duty aftermarket service providers on current state of pricing of OEM heavy-duty service information and what else EPA should consider for heavy-duty that might be different from light-duty.

e. Hyperlinking to and From OEM Web Sites

Today's action proposes a provision that requires OEMs to allow direct simple hyperlinking to their Web sites from government Web sites and from all automotive-related Web sites, such as aftermarket service providers, educational institutions, and automotive associations.

f. Administrator Access to OEM Web Sites

Today's action proposes a provision that requires that the Administrator shall have access to each OEM Web site at no charge to the Agency. The Administrator shall have access to the site, reports, records and other information as provided by sections 114 and 208 of the Clean Air Act and other provisions of law.

g. Other Media

We are proposing a provision which would require OEMs to make available for ordering the required information in some format approved by the Administrator directly from their Web site after the proposed full-text window of 15 years has expired. It is proposed that each OEM shall index their available information with a title that adequately describes the contents of the document to which it refers. In the alternate, OEMs may allow for the ordering of information directly from their Web site, or from a Web site hyperlinked to the OEM Web site. We also propose that OEMs be required to list a phone number and address where aftermarket service providers can call or write to obtain the desired information. We also propose that OEMs must also provide the price of each item listed, as well as the price of items ordered on a subscription basis. To the extent that any additional information is added or changed for these model years, OEMs shall update the index as appropriate. OEMs will be responsible for ensuring that their information distributors do so within one regular business day of received the order. Items are less than 20 pages (e.g. technical service bulletins) shall be faxed to the requestor and distributors are required to deliver the information overnight if requested and paid for by the ordering party.

h. Small Volume Provisions for OEM Web Sites

In the July 2003 final rulemaking, EPA finalized a provision to provide flexibility for small volume OEMs. In particular, EPA finalized a provision that requires OEMs who are issued certificates of conformity with total annual sales of less than one thousand vehicles are be exempt from the full-text Internet requirements, provided they present to the Administrator and obtain approval for an alternative method by which emissions-related information can be obtained by the aftermarket or other interested parties. EPA also finalized a provision giving OEMs with total annual sales of less than five thousand vehicles an additional 12 months to launch their full-text Web sites.

These small-volume flexibilities are limited to the distribution and availability of service information via the World Wide Web under paragraph (4) of the regulations. All OEMs, regardless of volume, must comply with all other provisions as finalized in this rulemaking. EPA is requesting comment on the existence of small volume OEMs in the heavy-duty arena and the need for any provisions relating to small volume OEMs.

3. What Provisions Are Being Proposed for Service Information for Third Party Information Providers?

The nature of the light-duty aftermarket service industry is such that they rely to a great extent on consolidated service information that is development by third party information providers such as Mitchell and All-data. Third-party information providers will license OEM service information and consolidate that information for sale to the aftermarket. In the June 2003 final rule, EPA finalized a provision that will require OEMs who currently have, or in the future engage in, licensing or business arrangements with third party information providers, as defined in the regulations, to provide information to those parties in an electronic format in English that utilizes non-proprietary software. Further, EPA required that any OEM licensing or business arrangements with third party information providers are subject to fair and reasonable cost requirements. Lastly, we expect that OEMs will develop pricing structures for access to this information that make it affordable to any third party information providers with which they do business. EPA proposes to extend these provisions to the heavy-duty vehicle and engine manufacturers beginning with the 2010 model year.

However, EPA is specifically requesting comment on what role third-party consolidated information plays in the heavy-duty aftermarket. Further, EPA requests comment on the need for these, or additional provisions, related to third-party information providers.

4. What Requirements are Being Proposed for the Availability of Training Information?

a. Purchase of Training Materials for OEM Web Sites

In the light-duty service information final rule, EPA finalized two provisions for access to OEM emissions-related training. First, OEMs are required to make available for purchase on their Web sites the following items: Training manuals, training videos, and interactive, multimedia CD's or similar training tools available to franchised dealerships. Second, we finalized a provision that OEMs who transmit emissions-related training via satellite or the Internet must tape these transmissions and make them available for purchase on their Web sites within 30 days after the first transmission to franchised dealerships. Further, all of the items included in this provision must be shipped within 24 hours of the order being placed and are to be made available at a reasonable price. We also finalized a provision that will allow for an exception to the 24 hour shipping requirement in those circumstances where orders exceed supply and additional time is needed by the distributor to reproduce the item being ordered. For subsequent model years,

the required information must be made available for purchase within three months of model introduction, and then be made available at the same time it is made available to franchised dealerships.

EPA is proposing to extend these provisions to the heavy-duty industry and requests comment on the need to so or to develop other provisions pertaining to the availability of training information for the heavy-duty aftermarket.

b. Third Party Access to OEM Training Material

In the light-duty final rule, we also finalized a provision that requires OEMs who utilize Internet and satellite transmissions to present emissions-related training to their dealerships to make these same transmissions available to third party training providers. In this way, we believe we are providing at least one opportunity for aftermarket technicians to receive similar emissions-related training information as provided to dealerships, thus furthering the goals and letter of section 202(m)(5). This requirement only requires OEMs to provide the same information to legitimate aftermarket training providers as is provided to dealerships and aftermarket service providers. It is not a requirement to license OEM copyrighted materials to these entities.

OEMs may take reasonable steps to protect their copyright to the extent some or all of this material may be copyrighted and may refuse to do business with any party that does not agree to such steps. However, we do expect OEMs to use fair business practices in its dealings with these third parties, in keeping with the ''fair and reasonable price'' requirements in these regulations. OEMs may not charge unreasonable up-front fees for access to these transmissions, but OEMs may require a royalty, percentage or other arranged fee based limits of on a per-use or enrollment subscription basis.

EPA requests comment on the need to expand the light-duty requirements to the heavy-duty sector. EPA also requests comments on any additional provisions it should consider to ensure that heavy-duty aftermarket service providers and trainers have sufficient access to OEM training information at a fair and reasonable price. EPA also requests comments on the types of training that is currently development by heavy-duty OEMs and what processes may already be in place for availability to the aftermarket.

5. What Requirements Are Being Proposed for Reprogramming of Vehicles?

The 2003 final rule required that light-duty OEMs comply with SAE J2534, ''Recommended Practice for Pass-Thru Vehicle Programming''. EPA understands that the heavy-duty industry has a similar standard in place that is similar to SAE J2534 specification for reprogramming. Therefore, today's action proposes two options for pass-thru reprogramming. We are proposing that heavy-duty OEMs comply with SAE J2534 beginning with 2010 model year. In the alternate, heavy-duty OEMs may comply with the Technology and Maintenance Council's Recommended Practice RP1210a, ''Windows Communication API,'' July 1999 beginning in the 2010 model year. We will also propose a provision that will require that reprogramming information be made available within 3 months of vehicle introduction for new models.

6. What Requirements are Being Proposed for the Availability of Enhanced Information for Scan Tools for Equipment and Tool Companies?

a. Description of Information That Must Be Provided

Today's action proposes a provision that requires OEMs to make available to equipment and tool companies all generic and enhanced information, including bi-directional control and data stream information. In addition, it is proposed that OEMs must make available the following information.

(i) The physical hardware requirements for data communication (e.g. system voltage requirements, cable terminals/pins, connections such as RS232 or USB, wires, etc.).

(ii) ECU data communication (e.g. serial data protocols, transmission speed or baud rate, bit timing requirements, etc.).

(iii) Information on the application physical interface (API) or layers. (i.e., processing algorithms or software design descriptions for procedures such as connection, initialization, and termination).

(iv) Vehicle application information or any other related service information such as special pins and voltages or additional vehicle connectors that require enablement and specifications for the enablement.

(v) Information that describes which interfaces, or combinations of interfaces, from each of the categories as described in paragraphs (g)(12)(vii)(A) through (D) of the regulatory language.

b. Distribution of Enhanced Diagnostic Information

Today's action proposes a provision that will require the above information for generic and enhanced diagnostic information be provided to aftermarket tool and equipment companies with whom appropriate licensing, contractual, and confidentiality agreements have been arranged. This information shall be made available in electronic format using common document formats such as Microsoft Excel, Adobe Acrobat, Microsoft Word, etc. Further, any OEM licensing or business arrangements with equipment and tool companies are subject to a fair and reasonable cost determination.

7. What Requirements Are Being Proposed for the Availability of OEM-Specific Diagnostic Scan Tools and Other Special Tools?

a. Availability of OEM-Specific Diagnostic Scan Tools

Today's action proposes a provision that OEMs must make available for sale to interested parties the same OEM-specific scan tools that are available to franchised dealerships, except as discussed below. It is proposed that these tools shall be made available at a fair and reasonable price. It is also proposed, that these tools shall also be made available in a timely fashion either through the OEM Web site or through an OEM-designated intermediary.

b. Decontenting of OEM-Specific Diagnostic Scan Tools

Today's action proposes a provision that requires OEMs who opt to remove non-emissions related content from their OEM-specific scan tools and sell them to the persons specified in paragraph (g)(2)(i) and (f)(2)(i) of the regulatory language for this final rule shall adjust the cost of the tool accordingly lower to reflect the decreased value of the scan tool. It is proposed that all emissions-related content that remains in the OEM-specific tool shall be identical to the information that is contained in the complete version of the OEM-specific tool. Any OEM who wishes to implement this option must request approval from the Administrator prior to the introduction of the tool into commerce.

c. Availability of Special Tools

The 2003 final rule precluded light-duty OEMs from using special tools to extinguish the malfunction indicator light (MIL) beginning with model year 2004. For model years 1994 through 2003, the final rule required OEMs who

currently require such tools to extinguish the MIL must release the necessary information to equipment and tool companies to design a comparable generic tool. We also required that this information shall be made available no later than one month following the effective date of the Final Rule. EPA requests comment on this or other special tools that may be unique to the heavy-duty industry and on the need for provisions covering these tools.

8. Which Reference Materials are Being Proposed for Incorporation by Reference?

Today's action will finalize a provision requiring that OEMs comply with the following SAE Recommended Practices.

(1) SAE Recommended Practice J2403 (October 1998), ''Medium/Heavy-Duty EE Systems Diagnosis Nomenclature'' beginning with the 2010 model year.

(2) SAE Recommended Practice J2534 (February, 2002), ''Recommended Practice for Pass-Thru Vehicle Reprogramming''. EPA will require that OEMs comply with SAE J2534 beginning with the 2010 model year.

(3) SAE Recommended Practice J1939–73.

(4) ISO/DIS 15031–5 April 30, 2002.

V. What Are the Emissions Reductions Associated With the Proposed OBD Requirements?

In the 2007HD highway rule, we estimated the emissions reductions we expected to occur as a result of the emissions standards being made final in the rule. Since the OBD requirements contained in today's proposal are considered by EPA to be an important element of the 2007HD highway program and its ultimate success, rather than a new element being included as an addition to that program, we are not estimating emissions reductions associated with today's proposal. Instead, we consider the new 2007/2010 tailpipe emissions standards and fuel standards to be the drivers of emissions reductions and HDOBD to be part of the assurance we all have that those emissions reductions are indeed realized. Therefore, this analysis presents the emissions reductions estimated for the 2007HD highway program. Inherent in those estimates is an understanding that, while emissions control systems sometimes malfunction, they presumably are repaired in a timely manner. Today's proposed OBD requirements would provide substantial tools to assure that our presumption will be realized by helping to ensure that emission control systems continue to operate properly throughout their life. We believe that the OBD requirements proposed today would lead to more repairs of malfunctioning or deteriorating emission control systems, and may also lead to emission control systems that are more robust throughout the life of the engine and less likely to trigger illumination of MILs. The requirements would therefore provide greater assurance that the emission reductions expected from the Clean Diesel Trucks and Buses program will actually occur. Viewed from another perspective, while the OBD requirements would not increase the emission reductions that we estimated for the 2007HD highway rule, they would be expected to lead to actual emission reductions in-use compared with a program with no OBD system.

The costs associated with HDOBD were not fully estimated in the 2007HD highway rule. Those costs are more fully considered in section VI of this preamble. These newly developed HDOBD costs are added to those costs estimated for the 2007/2010 standards and a new set of costs for those standards are presented in section VII. Section VII also calculates a new set of costs per ton associated with the 2007/2010 standards which include the previously estimated costs and emissions reductions for the 2007/2010 standards and the newly estimated costs associated with today's HDOBD proposal.

Here we present the emission benefits we anticipate from heavy-duty vehicles as a result of our 2007/2010 NO_X, PM, and NMHC emission standards for heavy-duty engines. The graphs and tables that follow illustrate the Agency's projection of future emissions from heavy-duty vehicles for each pollutant. The baseline case represents future emissions from heavy-duty vehicles at present standards (including the MY2004 standards). The controlled case represents the future emissions from heavy-duty vehicles once the new 2007/2010 standards are implemented. A detailed analysis of the emissions reductions associated with the 2007/2010 HD highway standards is contained in the Regulatory Impact Analysis for that final rule.[70] The results of that analysis are presented in Table V.A–1 and in Figures V.A–1 through V.A–3.

TABLE V.A–1.—ANNUAL EMISSIONS REDUCTIONS ASSOCIATED WITH THE 2007HD HIGHWAY PROGRAM

[thousand short tons]

Year	NO_X	PM	NMHC
2007	58	11	2
2010	419	36	21
2015	1,260	61	54
2020	1,820	82	83
2030	2,570	109	115

[70] Regulatory Impact Analysis: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements; EPA420–R–00–026; December 2000.

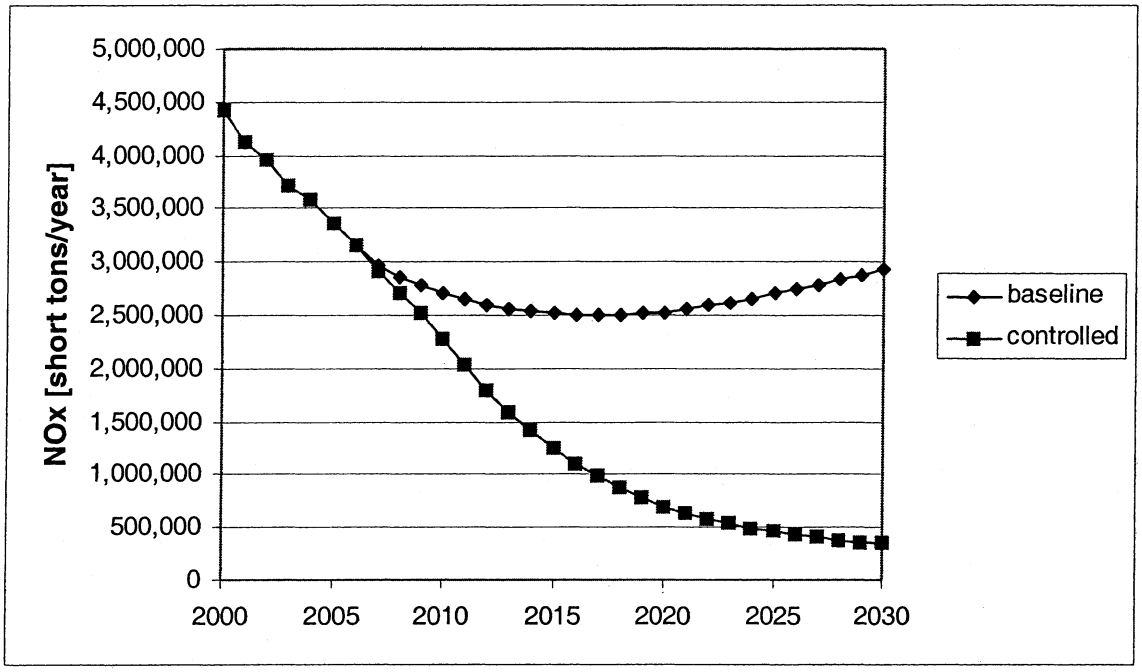


Figure V.A-1: Projected Nationwide Heavy-Duty Vehicle NOx Emissions; Control Case Represents the 2007/2010 Emissions Standards

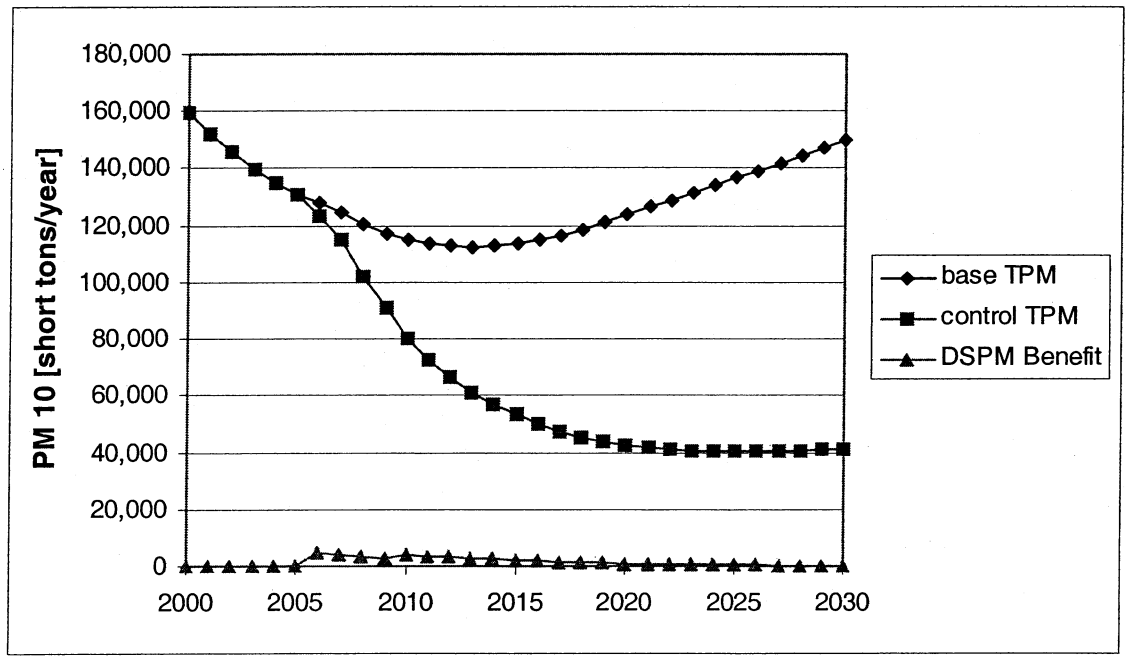


Figure V.A-2: Projected Nationwide Heavy-Duty Vehicle PM Emissions and Direct Sulfate PM Emission Reductions; Control Case Represents the 2007/2010 Emissions Standards

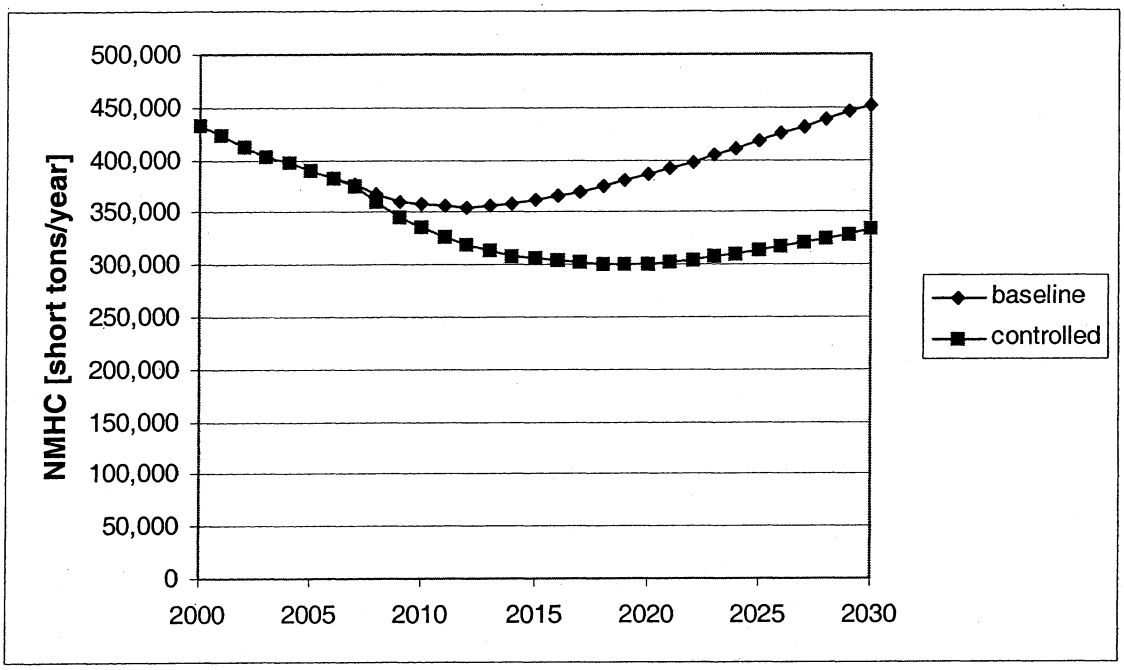


Figure V.A-3: Projected Nationwide Heavy-Duty Vehicle NMHC Emissions; Control Case Represents the 2007/2010 Emissions Standards

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There were additional estimated emissions reductions associated with the 2007HD highway rule—namely CO, SO_X, and air toxics. We have not presented those additional emissions reductions here since, while HDOBD will identify malfunctions and hasten their repair with the result of reducing all emissions constituents, these additional emissions are not those specifically targeted by OBD systems.

VI. What Are the Costs Associated With the Proposed OBD Requirements?

Estimated engine costs are broken into variable costs and fixed costs. Variable costs are those costs associated with any new hardware required to meet the proposed requirements, the associated assembly time to install that hardware, and the increased warranty costs associated with the new hardware. Variable costs are additionally marked up to account for both manufacturer and dealer overhead and carrying costs. The manufacturer's carrying cost was estimated to be four percent of the direct costs to account for the capital cost of the extra inventory and the incremental costs of insurance, handling, and storage. The dealer's carrying cost was estimated to be three percent of their direct costs to account for the cost of capital tied up in inventory. We adopted this same approach to markups in the 2007HD highway rule and our more recent Nonroad Tier 4 rule based on industry input.

Fixed costs considered here are those for research and development (R&D), certification, and production evaluation testing. The fixed costs for engine R&D are estimated to be incurred over the four-year period preceding introduction of the engine. The fixed costs for certification include costs associated with demonstration testing of OBD parent engines including the ''limit'' parts used to demonstrate detection of malfunctions at or near the applicable OBD thresholds, and generation of certification documentation. Production evaluation testing includes testing real world products for standardization features, monitor function, and performance ratios. The certification costs are estimated to be incurred one year preceding introduction of the engine while the production evaluation testing is estimated to occur in the same year as introduction.

The details of our cost analysis are contained in the technical support document which can be found in the docket for this rule.[71] We have only summarized the results of that analysis here and point the reader to the technical support document for details. We request comment on all aspects of our cost analysis.

A. Variable Costs for Engines Used in Vehicles Over 14,000 Pounds

The variable costs we have estimated represent those costs associated with various sensors that we believe would have to be added to the engine to provide the required OBD monitoring capability. For the 2010 model year, we believe that upgraded computers and the new sensors needed for OBD would result in costs to the buyer of $40 and $50 for diesel and gasoline engines, respectively. For the 2013 model year, we have included costs associated with the dedicated MIL and its wiring resulting in a hardware cost to the buyer of $50 and $60 for both diesel and gasoline engines, respectively. By multiplying these costs per engine by the projected annual sales we get annual costs of around $40–50 million for diesel engines and $3–4 million for gasoline engines, depending on sales. The 30 year net present value of the annual variable costs would be $666 million and $352 million at a three percent and a seven percent discount rate, respectively. These costs are summarized in Table VI.A–1.

[71] Draft Technical Support Document, HDOBD NPRM, EPA420–D–06–006, Docket ID# EPA–HQ–OAR–2005–0047–0008.

TABLE VI.A–1.—OBD VARIABLE COSTS FOR ENGINES USED IN VEHICLES OVER 14,000 POUNDS

[All costs in $millions except per engine costs; 2004 dollars]

	Diesel	Gasoline	Total
Cost per engine (2010–2012)	$40	$50	n/a
Cost per engine (2013+)	50	60	n/a
Annual Variable Costs in 2010 [a]	14	1	$15
Annual Variable Costs in 2013 [a]	38	3	40
Annual Variable Costs in 2030 [a]	48	4	52
30 year NPV at a 3% discount rate	620	47	666
30 year NPV at a 7% discount rate	328	25	352

[a] Annual variable costs increase as projected sales increase.

B. Fixed Costs for Engines Used in Vehicles Over 14,000 Pounds

We have estimated fixed costs for research and development (R&D), certification, and production evaluation testing. The R&D costs include the costs to develop the computer algorithms required to diagnose engine and emission control systems, and the costs for applying the developed algorithms to each engine family and to each variant within each engine family. R&D costs also include the testing time and effort needed to develop and apply the OBD algorithms. The certification costs include the costs associated with testing of durability engines (i.e., the OBD parent engines), the costs associated with generating the ''limit'' parts that are required to demonstrate OBD detection at or near the applicable emissions thresholds, and the costs associated with generating the necessary certification documentation. Production evaluation testing costs included the costs associated with the three types of production testing: standardization features, monitor function, and performance ratios.

Table VI.B–1 summarizes the R&D, certification, and production evaluation testing costs that we have estimated. The R&D costs we have estimated were totaled and then spread over the four year period prior to implementation of the requirements for which the R&D is conducted. By 2013, all of the R&D work would be completed in advance of 100 percent compliance in 2013; hence, R&D costs are zero by 2013. Certification costs are higher in 2013 than in 2010 because 2010 requires one engine family to comply while 2013 requires all engine families to comply. The 30 year net present value of the annual fixed costs would be $291 million and $241 million at a three percent and a seven percent discount rate, respectively.

TABLE VI.B–1.—OBD FIXED COSTS FOR ENGINES USED IN VEHICLES OVER 14,000 POUNDS

[All costs in $millions; 2004 dollars]

	Diesel			Gasoline			
	R&D	Certification & PE testing	Subtotal	R&D	Certification & PE testing	Subtotal	Total
Annual OBD Fixed Costs in given years:							
2010	$51	$0.2	$52	$0.9	<$0.1	$1	$53
2013	0	0.4	0.4	0	<0.1	<0.1	0.4
2030	0	3	3	0	<0.1	<0.1	3
30 year NPV at the given discount rate:							
3 percent	$263	$17	$280	$10	$0.3	$10	$291
7 percent	223	10	232	9	0.2	9	241

C. Total Costs for Engines Used in Vehicles Over 14,000 Pounds

The total OBD costs for engines used in vehicles over 14,000 pounds are summarized in Table VI.C–1. As shown in the table, the 30 year net present value cost is estimated at $1 billion and $594 million at a three percent and a seven percent discount rate, respectively. These costs are much lower than the 30 year net present value costs estimated for the 2007HD highway emissions standards which were $25 billion and $15 billion at a three percent and a seven percent discount rate, respectively, for diesel and gasoline engines. Including the cost for the diesel fuel changes resulted in 30 year net present value costs for that rule of $70 billion and $42 billion at a three percent and a seven percent discount rate, respectively. See section VII for more details regarding the cost estimates from the 2007HD highway final rule.

TABLE VI.C–1.—OBD TOTAL COSTS FOR ENGINES USED IN VEHICLES OVER 14,000 POUNDS

[All costs in $millions; 2004 dollars]

	Diesel	Gasoline	Total
Annual OBD Total Costs in given years			
2010	$65	$2	$67
2013	38	3	41
2030	51	4	55
30 year NPV at the given discount rate			
3%	900	57	957
7%	560	34	594

D. Costs for Diesel Heavy-Duty Vehicles and Engines Used in Heavy-duty Vehicles Under 14,000 Pounds

The total OBD costs for 8,500 to 14,000 pound diesel applications are summarized in Table VI.D–1. As shown in the table, the 30 year net present value cost is estimated at $6 million and $5 million at a three percent and a seven percent discount rate, respectively. These costs represent the incremental costs of the proposed additional OBD requirements, as compared to our current OBD requirements, for 8,500 to 14,000 pound diesel applications and do not represent the total costs for 8,500 to 14,000 pound diesel OBD. We are proposing no changes to the 8,500 to 14,000 pound gasoline requirements so, therefore, have estimated no costs for gasoline vehicles. Details behind these estimated costs can be found in the technical support document contained in the docket for this rule.[72]

TABLE VI.D–1.—TOTAL OBD COSTS FOR 8,500 TO 14,000 POUND DIESEL APPLICATIONS

[All costs in $millions; 2004 dollars]

	Diesel	Gasoline	Total
Annual OBD Total Costs in given years			
2010	$0.1	$0	$0.1
2013	0	0	0
2030	0.4	0	0.4
30 year NPV at the given discount rate			
3%	6	0	6
7%	5	0	5

VII. What are the Updated Annual Costs and Costs per Ton Associated With the 2007/2010 Heavy-duty Highway Program?

In the 2007HD highway rule, we estimated the costs we expected to occur as a result of the emissions standards being made final in that rule. As noted in section V, we consider the OBD requirements contained in today's proposal to be an important element of the 2007HD highway program and its ultimate success and not a new element being included as an addition to that program. In fact, without the proposed OBD requirements we would not expect the emissions reductions associated with the 2007/2010 standards to be fully realized because emissions control systems cannot be expected to operate without some need for repair which, absent OBD, may well never be done. However, as noted in section VI, because we did not include an OBD program in the 2007HD highway program, we did not estimate OBD related costs at that time. We have now done so and those costs are presented in section VI.

Here we present the OBD costs as part of the greater 2007HD highway program. To do this, we present both the costs developed for that program and the additional OBD costs presented in section VI. We also calculate a new set of costs per ton associated with the 2007/2010 standards which include the previously estimated costs and emissions reductions for the 2007/2010 standards and the newly estimated costs associated with today's HDOBD proposal.

Note that the costs estimates associated with the 2007HD highway program were done using 1999 dollars. We have estimated OBD costs in 2004 dollars. We consulted the Producer Price Index (PPI) for ''Motor vehicle parts manufacturing-new exhaust system parts'' developed by the Bureau of Labor Statistics and found that the PPI for such parts had actually decreased from 1999 to 2004.[73] This suggests that the cost to produce exhaust system parts has decreased since 1999. For clarity, rather than adjusting downward the 2007HD highway program costs from 1999 dollars, or adjusting upward the OBD costs from 2004 dollars, we have chosen to present the 2007HD highway rule costs as they were presented in that final rule alongside the OBD costs presented in section VI. In short, we are ignoring the PPI effect in the following tables.

A. Updated 2007 Heavy-Duty Highway Rule Costs Including OBD

Table VII.A–1 shows the 2007HD highway program costs along with the estimated OBD related costs.

TABLE VII.A–1.—UPDATED 2007HD HIGHWAY PROGRAM COSTS, INCLUDING NEW OBD-RELATED COSTS, NET PRESENT VALUE OF ANNUAL COSTS FOR THE YEARS 2006–2035

[All costs in $millions]

Discount rate	2007 HD Highway Final Rule				Proposed HD OBD	Updated total program costs
	Diesel engine costs	Gasoline engine & vehicle costs	Diesel fuel costs	Original total costs		
3 percent	$23,721	$1,514	$45,191	$70,427	$963	$71,389
7 percent	14,369	877	26,957	42,203	599	42,802

[72] Draft Technical Support Document, HDOBD NPRM, EPA420–D–06–006, Docket ID# EPA–HQ–OAR–2005–0047–0008.

[73] See *www.bls.gov/ppi;* All other motor vehicle parts mfg; Exhaust system parts, new; series ID PCU3363993363993; Base date 8812.

B. Updated 2007 Heavy-Duty Highway Rule Costs per Ton Including OBD

Table VII.B–1 shows the 2007HD highway program costs per ton of pollutant reduced. These numbers are straight from the 2007HD highway final rule which contains the details regarding the split between NO_X+NMHC and PM related costs.

TABLE VII.B–1.—ORIGINAL 2007HD HIGHWAY PROGRAM COSTS, EMISSIONS REDUCTIONS, AND $/TON REDUCED

[Net present values are for annual costs for the years 2006–2035]

Discount rate	Pollutant	30 year NPV cost ($billions)	30 year NPV reduction (million tons)	$/ton
3 percent	NO_X+NMHC	54.6	30.6	1,780
	PM	16.0	1.4	11,790
7 percent	NO_X+NMHC	34.9	16.2	2,150
	PM	10.3	0.8	13,610

Table VII.B–2 shows the updated 2007HD highway program costs per ton of pollutant reduced once the new OBD costs have been included. For the split between NO_X+NMHC and PM-related OBD costs, we have used a 50/50 allocation. As shown in Table VII.B–2, the OBD costs associated with the proposed OBD requirements have little impact on the overall costs and costs per ton of emissions reduced within the context of the 2007HD highway program.

TABLE VII.B–2.—UPDATED 2007HD HIGHWAY PROGRAM COSTS, EMISSIONS REDUCTIONS, AND $/TON REDUCED INCLUDING OBD RELATED COSTS

[Net present values are for annual costs for the years 2006–2035]

Discount rate	Pollutant	30 year NPV cost ($billions)	30 year NPV reduction (million tons)	$/ton
3 percent	NO_X+NMHC	55.1	30.6	1,800
	PM	16.5	1.4	12,210
7 percent	NO_X+NMHC	35.2	16.2	2,170
	PM	10.6	0.8	14,130

VIII. What Are the Requirements for Engine Manufacturers?

A. Documentation Requirements

The OBD system certification requirements would require manufacturers to submit OBD system documentation that represents each engine family. The certification documentation would be required to contain all of the information needed to determine if the OBD system meets the proposed OBD requirements. The proposed regulation lists the information that would be required as part of the certification package. If any of the information in the certification package is the same for all of a manufacturer's engine families (e.g., the OBD system general description), the manufacturer would only be required to submit one set of documents each model year for such items that would cover all of its engine families.

While the majority of the proposed OBD requirements would apply to the engine and be incorporated by design into the engine control module by the engine manufacturer, a portion of the proposed OBD requirements would apply to the vehicle and not be self-contained within the engine. Examples include the proposed requirements to have a MIL in the instrument cluster and a diagnostic connector in the cab compartment. As is currently done by the engine manufacturers, a build specification is provided to vehicle manufacturers detailing mechanical and electrical specifications that must be adhered to for proper installation and use of the engine (and to maintain compliance with emissions standards). We expect engine manufacturers would continue to follow this practice so that the vehicle manufacturer would be able to maintain compliance with the proposed OBD regulations. Installation specifications would be expected to include instructions regarding the location, color, and display icon of the MIL (as well as electrical connections to ensure proper illumination), location and type of diagnostic connector, and electronic VIN access. During the certification process, in addition to submitting the details of all of the diagnostic strategies and other information required, engine manufacturers would be required to submit a copy of the OBD-relevant installation specifications provided to vehicle manufacturers and a description of the method used by the engine manufacturer to ensure vehicle manufacturers adhere to the provided installation specifications (e.g., required audit procedures or signed agreements to adhere to the requirements). We are requiring that this information be submitted to us to provide a reasonable level of verification that the proposed OBD requirements would indeed be satisfied. In summary, engine manufacturers would be responsible for submitting a certification package that includes:

- A detailed description of all OBD monitors, including monitors on signals or messages coming from other modules upon which the engine control unit relies to perform other OBD monitors; and,
- A copy of the OBD-relevant installation specifications provided to vehicle manufacturers/chassis builders and the method used to reasonably ensure compliance with those specifications.

As was discussed in the context of our implementation schedule (see section II.G.1), the proposed regulations would allow engine manufacturers to establish

OBD groups consisting of more than one engine family with each having similar OBD systems. The manufacturer could then submit only one set of representative OBD information from each OBD group. We anticipate that the representative information would normally consist of an application from a single representative engine rating within each OBD group. In selecting the engine ratings to represent each OBD group, consideration should be given to the exhaust emission control components for all engine families and ratings within an OBD group. For example, if one engine family within an OBD group has additional emission control devices relative to another family in the group (e.g., the first family has a DPF+SCR while the second has only a DPF), the representative rating should probably come from the first engine family. Manufacturers seeking to consolidate several engine families into one OBD group would be required to get approval of the grouping prior to submitting the information for certification.

Two of the most important parts of the certification package would be the OBD system description and summary table. The OBD system description would include a complete written description for each monitoring strategy outlining every step in the decision-making process of the monitor, including a general explanation of the monitoring conditions and malfunction criteria. This description should include graphs, diagrams, and/or other data that would help our compliance staff understand how each monitor works and interacts. The OBD summary table would include specific parameter values. This table would provide a summary of the OBD system specifications, including: the component/system, the DTC identifying each related malfunction, the monitoring strategy, the parameter used to detect a malfunction and the malfunction criteria limits against which the parameter is evaluated, any secondary parameter values and the operating conditions needed to run the monitor, the time required to execute and complete a monitoring event for both a pass decision and a fail decision, and the criteria or procedure for illuminating the MIL. In these tables, manufacturers would be required to use a common set of engineering units to simplify and expedite the review process.

We are also proposing that the manufacturer submit a logic flowchart for each monitor that would illustrate the step-by-step decision process for determining malfunctions. Additionally, we would need any data that supports the criteria used to determine malfunctions that cause emissions to exceed the specified malfunction thresholds (see Tables II.B–1 and II.C–1). The manufacturer would have to include data that demonstrates the probability of misfire detection by the misfire monitor over the full engine speed and load operating range (for gasoline engines only) or the capability of the misfire monitor to correctly identify a ''one cylinder out'' misfire for each cylinder (for diesel engines only), a description of all the parameters and conditions necessary to begin closed-loop fuel control operation (for gasoline engines only), closed-loop EGR control (for diesel engines only), closed-loop fuel pressure control (for diesel engines only), and closed-loop boost control (for diesel engines only). We would also need a listing of all electronic powertrain input and output signals (including those not monitored by the OBD system) that identifies which signals are monitored by the OBD system, and the emission data from the OBD demonstration testing (as described below). Lastly, the manufacturer would be expected to provide any other OBD-related information necessary to determine the OBD compliance status of the manufacturer's product line.

B. Catalyst Aging Procedures

For purposes of determining the catalyst malfunction criteria for diesel NMHC converting catalysts, SCR catalysts, and lean NO_X catalysts, and for gasoline catalysts, where those catalysts are monitored individually, the manufacturer must use a catalyst deteriorated to the malfunction criteria using methods established by the manufacturer to represent real world catalyst deterioration under normal and malfunctioning engine operating conditions. For purposes of determining the catalyst malfunction criteria for diesel NMHC converting catalysts, SCR catalysts, and lean NO_X catalysts, and for gasoline catalysts, where those catalysts are monitored in combination with other catalysts, the manufacturer would have to submit their catalyst system aging and monitoring plan to the Administrator as part of their certification documentation package. The plan would include the description, emission control purpose, and location of each component, the monitoring strategy for each component and/or combination of components, and the method for determining the applicable malfunction criteria including the deterioration/aging process.

C. Demonstration Testing

While the proposed certification documentation requirements discussed above would require manufacturers to submit technical details of each monitor (e.g., how each monitor worked, when the monitor would run), we would still need some assurance that the manufacturer's OBD monitors are indeed calibrated correctly and are able to detect a malfunction before an emissions threshold is exceeded. Thus, we are proposing that manufacturers conduct certification demonstration testing of the major monitors to verify the malfunction threshold values. This testing would be required on one to three demonstration engines per year. Before receiving a certificate of compliance, the manufacturer would be required to submit documentation and emissions data demonstrating that the major OBD monitors are able to detect a malfunction when emissions exceed the emissions thresholds. On each demonstration engine, this testing would consist of the following two elements:

- Testing the OBD system with ''threshold'' components (i.e., components that are deteriorated or malfunctioning right at the threshold required for MIL illumination); and,
- Testing the OBD system with ''worst case'' components. This element of the demonstration test would have to be done for the DPF and any NO_X aftertreatment system only.

By testing with both threshold components (i.e., the best performing malfunctioning components) and with worst case components (i.e., the worst performing malfunctioning components), we would be better able to verify that the OBD system should perform as expected regardless of the level of deterioration of the component. This could become increasingly important with new technology aftertreatment devices that could be subject to complete failure (such as DPFs) or even to tampering by vehicle operators looking to improve fuel economy or vehicle performance. We believe that, given the likely combinations of emissions control hardware, a diesel engine manufacturer would likely need to conduct 8 to 10 emissions tests per demonstration engine to satisfy these requirements and a gasoline engine manufacturer would likely need to conduct five to seven emissions tests per demonstration engine.[74]

[74] For diesel engines these would include: the fuel system; misfire (HCCI engines); EGR, turbo boost control, DPF, NO_X adsorber or SCR system,

Continued

1. Selection of Test Engines

To minimize the test burden on manufacturers, we are proposing that this testing be done on only one to three demonstration engines per year per manufacturer rather than requiring that all engines be tested. Such an approach should still allow us to be reasonably sure that manufacturers have calibrated their OBD systems correctly on all of their engines. This also spreads the test burden over several years and allows manufacturers to better utilize their test cell resources. This approach is consistent with our approach to demonstration testing to existing emissions standards where a parent engine is chosen to represent each engine family and emissions test data for only that parent engine are submitted to EPA.[75]

The number of demonstration engines manufacturers would be required to test would be aligned with the phase-in of OBD in the 2010 and 2013 model years and based on the year and the total number of engine families the manufacturer would be certifying for that model year. Specifically, for the 2010 model year when a manufacturer is only required to implement OBD on a single engine family, demonstration testing would be required on only one engine (a single engine rating within the one engine family). This would be the OBD parent rating as discussed in section II.G. For the 2013 model year, manufacturers would be required to conduct demonstration testing on one to three engines per year (i.e., one to three OBD parent ratings). The number of parent ratings would be chosen depending on the total number of engine families certified by the manufacturer. A manufacturer certifying one to five engine families in the given year would be required to test one demonstration engine. A manufacturer certifying six to ten engine families in the given year would be required to test two demonstration engines, and a manufacturer certifying more than ten engine families in the given year would be required to test three demonstration engines. For the 2016 and subsequent model years, we would work closely with CARB staff and the manufacturer to determine the parent ratings so that the same ratings are not acting as the parents every year. In other words, our definitions for the OBD parent ratings as discussed here apply only during the years 2010 through 2012 and again for the years 2013 through 2015.

Given the difficulty and expense in removing an in-use engine from a vehicle for engine dynamometer testing, this demonstration testing would likely represent nearly all of the OBD emission testing that would ever be done on these engines. Requiring a manufacturer who is fully equipped to do such testing, and already has the engines on engine dynamometers for emission testing, to test one to three engines per year would be a minimal testing burden that provides invaluable and, in a practical sense, otherwise unobtainable proof of compliance with the OBD emissions thresholds.

Regarding the selection of which engine ratings would have to be demonstrated, manufacturers would be required to submit descriptions of all engine families and ratings planned for the upcoming model year. We would review the information and make the selection(s) in consultation with CARB staff and the manufacturer. For each engine family and rating, the information submitted by the manufacturer would need to identify engine model(s), power ratings, applicable emissions standards or family emissions limits, emissions controls on the engine, and projected engine sales volume. Factors that would be used in selecting the one to three engine ratings for demonstration testing include, but are not limited to, new versus old/carryover engines, emissions control system design, possible transition point to more stringent emissions standards and/or OBD emissions thresholds, and projected sales volume.

2. Required Testing

Regarding the actual testing, the manufacturer would be required to perform ''single fault'' testing using the applicable test procedure and with the appropriate components/systems set at the manufacturer defined malfunction criteria limits for the following monitors:

- For diesel engines: Fuel system; misfire; EGR; turbo boost control; NMHC catalyst; NO_X catalyst/adsorber; DPF; exhaust gas sensors; VVT; and any other monitor that would fall within the discussion of section II.D.5.
- For gasoline engines: Fuel system; misfire; EGR; cold start strategy; secondary air; catalyst; exhaust gas sensors; VVT; and any other monitor that would fall within the discussion of section II.D.5.

Such ''single fault'' testing would require that, when performing a test for a specific parameter, that parameter must be operating at the malfunction criteria limit while all other parameters would be operating within normal characteristics (unless the malfunction prohibits some other parameter from operating within its normal characteristics). Also, the manufacturer would be allowed to use computer modifications to cause the specific parameter to operate at the malfunction limit provided the manufacturer can demonstrate that the computer modifications produce test results equivalent to an induced hardware malfunction. Lastly, for each of these testing requirements, wherever the manufacturer has established that only a functional check is required because no failure or deterioration of the specific tested component/system could result in an engine's emissions exceeding the applicable emissions thresholds, the manufacturer would not be required to perform a demonstration test. In such cases, the manufacturer could simply provide the data and/or engineering analysis used to determine that only a functional test of the component/system was required.

Manufacturers required to submit data from more than one engine rating would be granted some flexibility by allowing the data to be collected under less rigorous testing requirements than the official FTP or SET certification test. That is, for the possible second and third engine ratings required for demonstration testing, manufacturers would be allowed to submit data using internal sign-off test procedures that are representative of the official FTP or SET in lieu of running the official test. Commonly used procedures include the use of engine emissions test cells with less rigorous quality control procedures than those required for the FTP or SET or the use of forced cool-downs to minimize time between tests. Manufacturers would still be liable for meeting the OBD emissions thresholds on FTPs and/or SETs conducted in full accordance with the Code of Federal Regulations. Nonetheless, this latitude would allow them to use some short-cut methods that they have developed to assure themselves that the system is calibrated to the correct level without incurring the additional testing cost and burden of running the official FTP or SET on every demonstration engine.

For the demonstration engine(s), a manufacturer would be required to use an engine(s) aged for a minimum of 125

NMHC catalyst, exhaust gas sensors, VVT, and possible other emissions controls (see section II.D.5). For gasoline engines these would include: the fuel system, misfire, EGR, cold start strategy, secondary air system, catalyst, exhaust gas sensors, VVT, and possible other emissions controls (see section II.D.5). Some of these may require more than one emissions test while others may not require any due to the use of a functional monitor rather than an emissions threshold monitor.

[75] For over 14,000 pound OBD, we are proposing a different definition of a ''parent'' engine than is used for emissions certification. This is discussed at length in section II.G.

hours plus exhaust aftertreatment devices aged to be representative of full useful life. Manufacturers would be expected to use, subject to approval, an aging process that ensures that deterioration of the exhaust aftertreatment devices is stabilized sufficiently such that it properly represents the performance of the devices at the end of their useful life.

3. Testing Protocol

We are proposing that the manufacturer be allowed to use any applicable test cycle for preconditioning test engines prior to conducting each of the emissions tests discussed above. Additional preconditioning can be done if the manufacturer has provided data and/or engineering analyses that demonstrate that additional preconditioning is necessary.

The manufacturer would then set the system or component of interest at the criteria limit(s) prior to conducting the applicable preconditioning cycle(s). If more than one preconditioning cycle is being used, the manufacturer may adjust the system or component of interest prior to conducting the subsequent preconditioning cycle. However, the manufacturer may not replace, modify, or adjust the system or component of interest following the last preconditioning cycle.

After preconditioning, the test engine would be operated over the applicable test cycle to allow for the initial detection of the tested system or component malfunction. This test cycle may be omitted from the testing protocol if it is unnecessary. If required by the designated monitoring strategy, a cold soak may be performed prior to conducting this test cycle. The test engine would then be operated over the applicable exhaust emission test.

A manufacturer required to test more than one test engine may use internal calibration sign-off test procedures (e.g., forced cool downs, less frequently calibrated emission analyzers) instead of official test procedures to obtain this emissions test data for all but one of the required test engines. However, the manufacturer should use sound engineering judgment to ensure that the data generated using such alternative test/sign-off procedures are good data because manufacturers would still be responsible for meeting the malfunction criteria when emissions tests are performed in accordance with official test procedures.

Manufacturers would be allowed to use alternative testing protocols, even chassis testing, for demonstration of MIL illumination if the engine dynamometer emissions test cycle does not allow all of a monitor's enable conditions to be satisfied. Manufacturers wanting to do so would be required to demonstrate the technical necessity for using their alternative test cycle and that using it demonstrates that the MIL would illuminate during in-use operation with the malfunctioning component.

4. Evaluation Protocol

For all demonstration tests on parent engines, we would expect that the MIL would activate upon detecting the malfunctioning system or component, and that it should occur before the end of the first engine start portion of the emissions test. If the MIL were to activate prior to emissions exceeding the applicable malfunction criteria, no further demonstration would be required. With respect to the misfire monitor demonstration test, if the manufacturer has elected to use the minimum misfire malfunction criterion of one percent (as is allowed), then no further demonstration would be required provided the MIL were to illuminate during a test with an implanted misfire of one percent.

If the MIL does not activate when the system or component being tested is set at its malfunction criteria limits, then the criteria limits or the OBD system would not be considered acceptable. Retesting would be required with more tightly controlled criteria limits (i.e., recalibrated limits) and/or another suitable system or component that would result in MIL activation. If the criteria limits are recalibrated, the manufacturer would be required to confirm that the systems and components that were tested prior to recalibration would still function properly and as required.

5. Confirmatory Testing

We may choose to confirmatory test a demonstration engine to verify the emissions test data submitted by the manufacturer. Any such confirmatory testing would be limited to the engine rating represented by the demonstration engine(s) (i.e., the parent engine(s)). To do so, we, or our designee, would install appropriately deteriorated or malfunctioning components (or simulate a deteriorated or malfunctioning component) in an otherwise properly functioning engine of the same engine family and rating as the demonstration engine. Such confirmatory testing would be done on those OBD monitors for which demonstration testing had been conducted as described in this section. The manufacturer would be required to make available, upon Administrator request, a test engine and all test equipment—e.g., malfunction simulators, deteriorated components—necessary to duplicate the manufacturer's testing.

D. Deficiencies

Our under 14,000 pound OBD requirements have contained a deficiency provision for years. The OBD deficiency provision was first introduced on March 23, 1995 (60 FR 15242), and was revised on December 22, 1998 (63 FR 70681). Consistent with that provision, we are proposing a deficiency provision for over 14,000 pound OBD. We believe that, like has occurred and even still occurs with under 14,000 pound OBD, some manufacturers will encounter unforeseen and generally last minute problems with some of their OBD monitoring strategies despite having made a good faith effort to comply with the requirements. Therefore, we are proposing a provision that would permit certification of an over 14,000 pound OBD system with ''deficiencies'' in cases where a good faith effort to fully comply has been demonstrated. In making deficiency determinations, we would consider the extent to which the proposed OBD requirements have been satisfied overall based on our review of the certification application, the relative performance of the given OBD system compared to systems that truly are fully compliant with the proposed OBD requirements, and a demonstrated good-faith effort on the part of the manufacturer to both meet the proposed requirements in full and come into full compliance as expeditiously as possible.

We believe that having the proposed deficiency provision is important because it would facilitate OBD implementation by allowing for certification of an engine despite having a relatively minor shortfall. Note that we do not expect to certify engines with OBD systems that have more than one deficiency, or to allow carryover of any deficiency to the following model year unless it can be demonstrated that correction of the deficiency requires hardware and/or software modifications that cannot be accomplished in the time available, as determined by the Administrator.[76] Nonetheless, we recognize that there may be situations where more than one deficiency is necessary and appropriate, or where carry-over of a deficiency or deficiencies for more than one year is necessary and

[76] The CARB HDOBD rulemaking has a provision to charge fees associated with OBD deficiencies 13 CCR 1971.1(k)(3), Docket ID# EPA–HQ–OAR–2005–0047–0006. We have never had and are not proposing any such fee provision.

appropriate. In such situations, more than one deficiency, or carry-over for more than one year, may be approved, provided the manufacturer has demonstrated an acceptable level of effort toward full OBD compliance. Most importantly, the deficiency provisions cannot be used as a means to avoid compliance or delay implementation of any OBD monitors or as a means to compromise the overall effectiveness of the OBD program.

There has often been some confusion by manufacturers regarding what CARB has termed ''retroactive'' deficiencies. The CARB rule states that, ''During the first 6 months after commencement of normal production, manufacturers may request that the Executive Officer grant a deficiency and amend an engine's certification to conform to the granting of the deficiencies for each aspect of the monitoring system: (a) Identified by the manufacturer (during testing required by section (l)(2) or any other testing) to be functioning different than the certified system or otherwise not meeting the requirements of any aspect of section 1971.1; and (b) reported to the Executive Officer.'' [77] We have never had and are not proposing any such retroactive deficiency provision. We have regulations in place that govern situations, whether they be detected by EPA or by the manufacturer, where in-use vehicles or engines are determined to be functioning differently than the certified system.[78] We refer to these regulations as our defect reporting requirements and manufacturers are required to comply with these regulations, even for situations deemed by CARB to be ''retroactive'' deficiencies, unless the defect is corrected prior to the sale of engines to an ultimate purchaser. In other words, a retroactive deficiency granted by the Executive Officer does not preclude a manufacturer from complying with our defect reporting requirements.

E. Production Evaluation Testing

The OBD system is a complex software and hardware system, so there are many opportunities for unintended interactions that can result in certain elements of the system not working as intended. We have seen many such mistakes in the under 14,000 pound arena ranging from OBD systems that are unable to communicate any information to a scan tool to monitors that are unable to store a DTC and illuminate the MIL. While over 14,000 pound heavy-duty vehicles are very different from light-duty vehicles in terms of emission controls and OBD monitoring strategies, among other things, these types of problems do not depend on these differences and, as such, are as likely to occur with over 14,000 pound OBD as they are with under 14,000 pound OBD. Additionally, we believe that there is great value in having manufacturers self-test actual production end products that operate on the road, as opposed to pre-production products, where errors can be found in individual subsystems that may work fine by themselves but not when integrated into a complete product (e.g., due to mistakes like improper wiring).

Therefore, we are proposing that manufacturers self-test a small fraction of their product line to verify compliance with the OBD requirements. The test requirements are divided into three distinct sections with each section representing a test for a different portion of the OBD requirements. These three sections being: compliance with the applicable SAE and/or ISO standardization requirements; compliance with the monitoring requirements for proper DTC storage and MIL illumination; and, compliance with the in-use monitoring performance ratios.

1. Verification of Standardization Requirements

An essential part of the OBD system is the requirement for standardization. The proposed standardization requirements include items as simple as the location and shape of the diagnostic connector (where technicians can ''plug in'' a scan tool to the onboard computer) to more complex subjects concerning the manner and format in which DTC information is accessed by technicians via a ''generic'' scan tool. Manufacturers must meet these standardization requirements to facilitate the success of the proposed OBD program because they ensure consistent access by all repair technicians to the stored information in the onboard computer. The need for consistency is even greater when considering the potential use of OBD system checks in inspection and maintenance (I/M) programs for heavy-duty. Such OBD base I/M checks would benefit from having access to the diagnostic information in the onboard computer via a single ''generic'' scan tool instead of individual tools for every make and model of truck that might be inspected. For OBD based inspections to work effectively and efficiently, all engines/vehicles must be designed and built to meet all of the applicable standardization requirements.

While we anticipate that the vast majority of vehicles would comply with all of the standardization requirements, some problems involving the communication between vehicles and ''generic'' scan tools are likely to occur in the field. The cause of such problems could range from differing interpretations of the existing standardization requirements to possible oversights by design engineers or hardware inconsistencies or even last-minute production changes on the assembly line.

To minimize the chance for such problems on future over 14,000 pound trucks, we are proposing that engine manufacturers be required to test a sample of production vehicles from the assembly line to verify that the vehicles have indeed been designed and built to the required specifications for communication with a ''generic'' scan tool. We are proposing that manufacturers be required to test complete vehicles to ensure that they comply with some of the basic ''generic'' scan tool standardization requirements, including those that are essential for proper inspection in an I/M setting. Ideally, manufacturers would be required to test one vehicle for each truck and engine model combination that is introduced into commerce. However, for a large engine manufacturer, this can be in the neighborhood of 5,000 to 10,000 unique combinations making it unreasonable to require testing of every combination. Therefore, we are proposing that manufacturers test 10 such combinations per engine family. Given that a typical engine family has roughly five different engine ratings, this works out to testing only around two vehicles per engine rating.

More specifically, manufacturers would be required to test one vehicle per software ''version'' released by the manufacturer. With proper demonstration, manufacturers would be allowed to group different calibrations together to be demonstrated by a common vehicle. Prior to acquiring these data, the proposal would require engine manufacturers to submit for approval a test plan verifying that the vehicles scheduled for testing would be representative of all vehicle configurations (e.g., each engine control module variant coupled with and without the other available vehicle components that could affect scan tool communication such as automatic transmission or hybrid powertrain control modules). The plan would have to include details on all the different applications and configurations that would be tested.

[77] See 13 CFR 1971.1(k)(6)), Docket ID# EPA–HQ–OAR–2005–0047–0006.

[78] See 40 CFR 85.1903.

As noted, manufacturers would be required to conduct this testing on actual production vehicles, not stand-alone engines. This is important since controllers that work properly in a stand alone setting (e.g., the engine before it is installed in a vehicle) may have interaction problems when installed and attempting to communicate with other vehicle controllers (e.g., the transmission controller). In such a case, separate testing of the controllers would be blind to the problem. Since heavy-duty engine manufacturers are expected to sell the same engine (with the same calibration) to various vehicle manufacturers who would put them in different final products (e.g., with different transmission control modules), the same communication problem would be expected in each final product.

This testing should occur soon enough in the production cycle to provide manufacturers with early feedback regarding the existence of any problems and time to resolve the problem prior to the entire model year's products being introduced into the field. We are proposing that the testing be done and the data submitted to us within either three months of the start of normal engine production or one month of the start of vehicle production, whichever is later.

To be sure that all manufacturers are testing vehicles to the same level of stringency, we are proposing that engine manufacturers submit documentation outlining the testing equipment and methods they intend to use to perform this testing. We anticipate that engine manufacturers and scan tool manufacturers would probably develop a common piece of hardware and software that could be used by all engine manufacturers at the end of the vehicle assembly line to meet this requirement. Two different projects (SAE J1699 and LOC3T) have developed such equipment in response to California OBD II requirements.[79] The equipment is currently being used to test 2005 and 2006 model year vehicles under 14,000 pounds. We believe that similar equipment could be developed for vehicles over 14,000 pounds in time for the 2013 model year. Ideally, the equipment and the test procedure would verify each and every requirement of the communication specifications including the various physical layers, message structure, response times, and message content. Presumably, any such verification equipment would not replace the function of existing ''generic'' scan tools used by repair technicians or I/M inspectors. The equipment would likely be custom-designed and be used for the express purpose of this assembly line testing (i.e., it would not include all of the necessary diagnostic features needed by repair technicians).

2. Verification of Monitoring Requirements

As noted above, the OBD system is a complex software and hardware system, so there are many opportunities for unintended interactions that can result in certain elements of the system not working as intended. The causes of possible problems vary from simple typing errors in the software code to component supplier hardware changes late in development or just prior to start of production. Given the complexity of OBD monitors and their associated algorithms, there can be thousands of lines of software code required to meet the diagnostic requirements. Implementing that code without interfering with the software code required for normal operation is and will be a very difficult task with many opportunities for human error. We expect that manufacturers will conduct some validation testing on end products to ensure that there are no problems that would be noticed by the vehicle operator. We believe that manufacturers should include in such verification testing an evaluation of the OBD system (e.g., does the MIL illuminate as intended in response to a malfunction?).

Therefore, we are proposing that engine manufacturers be required to perform a thorough level of validation testing on at least one production vehicle and up to two more production engines per model year. The production vehicles/engines required for testing would have to be equipped with/be from the same engine families and ratings as used for the certification demonstration testing described in section VIII.B.3. If a manufacturer demonstrated one, two, or three engines for certification, then at least one production vehicle and perhaps an additional one to two engines would have to be tested, respectively. We would work with the manufacturer and CARB staff to determine the actual vehicles and engines to test.

The testing itself would consist of implanting or simulating malfunctions to verify that virtually every single engine-related OBD monitor on the vehicle correctly identifies the malfunction, stores an appropriate DTC, and illuminates the MIL. Manufacturers would not be required to conduct any emissions testing. Instead, for those malfunctions designed against an emissions threshold, the manufacturer would simply implant or simulate a malfunction and verify detection, DTC storage, and MIL illumination. Actual ''threshold'' parts would not be needed for such testing. Implanted malfunctions could use severely deteriorated parts if desired by the manufacturer since the point of the testing is to verify detection, DTC storage, and MIL illumination. Upon submitting the data to the Administrator, the manufacturer would be required to also provide a description of the testing and the methods used to implant or simulate each malfunction. Note that testing of specific monitors would not be required if the manufacturer can show that no possible test exists that could be done on that monitor without causing physical damage to the production vehicle. We are proposing that the testing be completed and reported to us within six months after the manufacturer begins normal engine production. This should provide early feedback on the performance of every monitor on the vehicle prior to too many entering production. Upon good cause, we may extend the time period for testing.

Note that, in their HDOBD rule,[80] CARB allows, as an incentive to perform a thorough validation test, a manufacturer to request that any problem discovered during this self-test be treated as a ''retroactive'' deficiency. As discussed in section VIII.B.4, we do not have a provision for retroactive deficiencies. Importantly, a retroactive deficiency granted by the Executive Officer does not preclude a manufacturer from complying with our defect reporting requirements. This issue was discussed in more detail in section VIII.B.4.

3. Verification of In-Use Monitoring Performance Ratios

We are proposing that manufacturers track the performance of several of the most important monitors on the engine to determine how often they are monitoring during in-use operation. These requirements are discussed in more detail in section II.E. To summarize that discussion, monitors would be expected to execute in the real world and meet a minimum acceptable performance level determined as the ratio of the number of good monitoring events to the number of actual trips. The ratio being proposed is 10 percent, meaning that monitors should execute during at least 10 percent of the trips taken by the engine/vehicle. Monitors

[79] 13 CCR 1968.2, August 11, 2006, Docket ID# EPA–HQ–OAR–2005–0047–0005.

[80] 13 CCR 1971.1, Docket ID# EPA–HQ–OAR–2005–0047–0006.

that perform below the minimum ratio would be subject to remedial action and possibly recall. However, the minimum ratio is not effective until the 2013 and later model years. For the 2010 through 2012 model year engines certified to today's proposed OBD requirements, we are proposing that the data be collected even though the minimum ratio is not yet effective. The data gathered on these engines will help to determine whether the 10 percent ratio is appropriate for all applications and, if not, we would intend to propose a change to the proposed requirement to reflect that learning.

We are proposing that manufacturers gather these data on production vehicles rather than engines. Since not every vehicle can be evaluated, we are proposing that manufacturers generate groups of engine/vehicle combinations to ensure adequate representation of the fleet. Specifically, manufacturers would be required to separate production vehicles into monitoring performance groups based on the following criteria and submit performance ratio data representative of each group:

- Emission control system architecture type—All engines that use the same or similar emissions control system architecture and associated monitoring system would be in the same emission architecture category. By architecture we mean engines with EGR+DPF+SCR, or EGR+DPF+NO_X Adsorber, or EGR+DPF-only, etc.
- Application type—Within an emission architecture category, engines would be separated by vehicle application. The separate application categories would be based on three classifications: engines intended primarily for line-haul chassis applications, engines intended primarily for urban delivery chassis applications, and all other engines.

We are proposing that these data be submitted to us within 12 months of the production vehicles entering the market. Upon submitting the collected data to us, the manufacturer would also be required to provide a detailed description of how the data were gathered, how vehicles were grouped to represent sales of their engines, and the number of engines tested per monitoring performance group. Manufacturers would be required to submit performance ratio data from a sample of at least 15 vehicles per monitoring performance group. For example, a manufacturer with two emission control system architectures sold into each of the line-haul, urban delivery, and ''other'' groupings, would be required to submit data on up to 90 vehicles (i.e., $2 \times 3 \times 15$). We are proposing that these data be collected every year. Some manufacturers may find it easiest to collect data from vehicles that come in to its authorized repair facilities for routine maintenance or warranty work during the time period required, while others may find it more advantageous to hire a contractor to collect the data. Upon good cause, we may extend the time period for testing.

As stated before, the data collected under this program are intended primarily to provide an early indication that the systems are working as intended in the field, to provide information to ''fine-tune'' the proposed requirement to track the performance of monitors, and to provide data to be used to develop a more appropriate minimum ratio for future regulatory revisions. The data are not intended to substitute for testing that we would perform for enforcement reasons to determine if a manufacturer is complying with the minimum acceptable performance ratios. In fact, the data collected would not likely meet all the required elements for testing to make an official determination that the system is noncompliant. As such, we believe the testing would be of most value to manufacturers since monitor performance problems can be corrected prior to EPA conducting a full enforcement action that could result in a recall.

IX. What are the Issues Concerning Inspection and Maintenance Programs?

A. Current Heavy-Duty I/M Programs

While there are currently no regulatory requirements for heavy-duty inspection and maintenance (I/M), and no State Implementation Plan (SIP) credit given for heavy-duty I/M, a recent review shows that programs in the United States as well as abroad are currently testing heavy-duty diesel and heavy-duty gasoline vehicles as part of their Inspection and Maintenance programs. A recent study found that the mandated vehicle emission I/M programs in the CAAA of 1990, originally required in areas where ambient levels of ozone and CO exceeded the national standards, are being utilized as a framework as diesel PM becomes increasingly recognized as an important health concern in the United States.[81] Some countries outside the U.S., particularly developing countries, have been seeking to improve air quality by implementing both light-duty and heavy-duty I/M programs.

In the U.S., the light-duty fleet has become cleaner. As a result, heavy-duty vehicles are responsible for an increasing contribution of the mobile source emission inventory. EPA has responded to the increased contribution by promulgating technology-promoting standards, to be phased in during the years leading up to 2010. Some non-attainment areas are implementing HD vehicle I/M programs to improve their regional air quality. The current tailpipe emissions measurements result in a number of issues, so other technologies such as remote sensing are being examined. Interrogation of the OBD system on over 14,000 pound vehicles would likely be a candidate I/M test method.

As of 2004, according to the aforementioned study, many I/M programs in the U.S. have developed a wide range of emission tests for HD diesel vehicles and HD gasoline vehicles. 19 States currently test HD diesel vehicles (these are: AZ, CA, CO, CT, ID, IL, KY, ME, MD, MA, NV, NH, NJ, NM, NY, OH, UT, VT, WA); 25 states test HD gasoline vehicles (these are: AK, AZ, CA, CO, CT, ID, IL, IN, KY, MD, MA, NV, NJ, NM, NY, NC, OH, OR, PA, TN, TX, UT, VA, WA, WI). Canada, China, Singapore, Sweden, and the United Kingdom test HD diesel vehicles. Lastly, Germany, Singapore, and Sweden test HD gasoline vehicles.

Whether or not voluntary or regulated inspection and maintenance programs become prominent, heavy-duty OBD should be designed to allow ease of interrogation to maximize the potential of this technology to help realize environmental benefit. There is evidence that localities are utilizing this strategy in their air quality protection programs. There is also a wealth of light-duty OBD experience to support making an I/M-type test as user-friendly as possible so technician training and scan tool designs do not limit the ability to assess a vehicle's status.

B. Challenges for Heavy-Duty I/M

There are a number of challenges that are being discovered as programs implement heavy-duty I/M. Existing HD I/M programs utilize of a number of different emission test types, such as snap-idle testing (based on SAE J1667), loaded cruise testing (chassis dynamometer), ASM testing, Transient IMXXX, Two-Speed Idle or Curb Idle, and Lug-down testing. Projections of heavy-duty vehicle inventory contributions for VOC, NO_X, PM, and toxics have substantiated the need for more stringent regulations. Repairs

[81] Review of Light-Duty Diesel and Heavy-Duty Diesel/Gasoline Inspection Programs, St. Denis and Lindner, Journal of the Air and Waste Management Association, December 2005.

based on individual emission test types, such as opacity testing, may target and reduce one pollutant (e.g., PM) while neglecting or increasing others (e.g., NO_X). A sound test should effectively control all harmful pollutants, thus must be able to measure multiple pollutants—specifically PM and NO_X emissions.

Systems capable of measuring both pollutants at the same time have to date been prohibitively expensive for I/M programs, and traditionally require a heavy-duty dynamometer so that vehicles can be tested under load. Recent work has begun to investigate the use of remote sensing and other technologies for measuring heavy-duty gaseous and PM emissions. While this technology has not yet been routinely implemented in HD vehicle I/M programs to date, the impetus to identify more robust or user-friendly emission testing strategies exists. Portable emissions measurement systems (PEMS) are not really conducive to an I/M environment at this time because the units are very costly, require a great deal of expertise to operate, and require considerable time for completing a test. Such systems are best suited for intensive analysis of emissions performance on a limited number of vehicles rather than the widespread testing of nearly all vehicles as is the attempt in most I/M programs. All these factors heighten the potential that OBD systems will be utilized in I/M programs for vehicles over 14,000 pounds.

C. Heavy-Duty OBD and I/M

Heavy-duty OBD should be designed with the anticipation that there may be new use of OBD to help insure local or regional emission benefits. If multiple individuals are querying OBD, standardization of testing equipment and protocol, and information format and availability should be considered to maximize the effective use of this technology. Many of the lessons learned from the use of light-duty OBD in I/M programs point to a need to ensure standard protocols for testing, so that test equipment and data collection requirements can be accommodated in system designs. Along with common connectors, data formats, and specific parameter monitoring requirements, future technologies enabling standardization of data stream logic (e.g., built-in checks, broadcasted updates, etc.) and other currently non-existing strategies may be attractive to minimize training requirements for test personnel and data management for model year-specific information.

Due to the regional or national registrations of many heavy-duty vehicles, there is the potential that eventual I/M use of OBD to control heavy-duty vehicle emission exceedences could be at the fleet or corporate level, rather than at the state level as is the current light-duty convention. Stakeholders will need to inform the debate but today's HD I/M programs may not follow the same development pattern as light-duty I/M programs did a decade ago. The lessons learned from light-duty OBD I/M should be complemented with early data on HD I/M programs being piloted in the U.S. and globally.

As one example, Ontario's Ministry of the Environment has prepared a report on their Heavy-Duty Drive Clean program. This study developed estimates of emissions benefits for inspected diesel vehicles and compares them to estimated baseline emissions for the case with no Drive Clean program, for calendar years 2000, 2001, and 2002. According to this study, over the three years of the program the total accumulated emission reductions generated by the program's operation were estimated to be 1092 tonnes of PM10 emissions, 654 tonnes of HC emissions, and 721 tonnes of NO_X emissions.[82] This particular study utilized opacity testing, and compared failed and fixed vehicles for different model year vehicles and for different weight classes. The malperformance model developed originally by Radian Corporation for ARB in 1986 was utilized since the statistical correlation between smoke opacity an mass emissions is weak, especially in newer vehicles; and the EPA MOBILE model assume zero deterioration of emissions for most HD diesel engines, thereby implying no benefit for I/M. The relationship between maintenance and emission deterioration is complicated by the use of high efficiency aftertreatment devices, which lose emission conversion efficiency with age, so this model's basic premise is likely appropriate only until the year 2008. Nevertheless, as the benefits of inspection and maintenance become more clearly articulated, the interest in assessing test methodologies that provide ease of use as well as multi-pollutant screening will likely increase. For these reasons consideration of potential I/M program use of OBD for the heavy-duty fleet is warranted, and should include lessons-learned from the light-duty fleet as well as anticipate new strategies for utilizing OBD information.

We request comment with respect to the level of interest in I/M programs that make use of the proposed OBD system on over 14,000 pound vehicles. Specifically, are states interested in I/M for over 14,000 pound vehicles that mirrors existing programs for passenger cars and other light trucks? For those that might be interested, does the proposed OBD system meet the needs of their potential I/M program?

X. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

This action is not a ''significant regulatory action'' under the terms of Executive Order (EO) 12866 (58 FR 51735, October 4, 1993) and is, therefore, not subject to review under the EO.

EPA prepared an analysis of the potential costs associated with this action. This analysis is contained in the technical support document.[83] A copy of the analysis is available in the docket and was summarized in section VI of this preamble.

B. Paperwork Reduction Act

The proposed information collection requirements for this action 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 number 1684.09. Under Title II of the Clean Air Act (42 U.S.C. 7521 *et seq.*; CAA), EPA is charged with issuing certificates of conformity for those engines that comply with applicable emission standards. Such a certificate must be issued before engines may be legally introduced into commerce. EPA uses certification information to verify that the proper engine prototypes have been selected and that the necessary testing has been performed to assure that each engine complies with emission standards. In addition, EPA also has the authority under Title II of the Clean Air to ensure compliance by require in-use testing of vehicles and engines. EPA is proposing to require additional information at the time of certification to ensure that that on-board diagnostic (OBD) requirements are being met. EPA is also proposing that manufacturers conduct and report the results of in-use testing of the OBD systems to

[82] ''Drive Clean Program Emission Benefit Analysis and Reporting—Heavy-Duty Diesel Vehicles,'' Canada Ministry of the Environment, October 2003.

[83] Draft Technical Support Document, HDOBD NPRM, EPA420–D–06–006, Docket ID# EPA–HQ–OAR–2005–0047–0008.

demonstrate that they are performing properly. Therefore, EPA is proposing 207 hours of annual burden per each of the 12 respondents to conduct the OBD certification, compliance, and in-use testing requirements proposed by this action. EPA estimates that the total of the of the 2484 hours of annual cost burden will be $16,018 per respondent for a total annual industry cost burden for the 12 respondents of $1,236,481.

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. technology and systems for the purposes of collecting, validating, and verifying. This includes the time needed to review instructions; develop, acquire, install, and utilize 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–2005–0047. Submit any comments related to the ICR for this proposed rule to EPA and OMB. See the **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 January 24, 2007, a comment to OMB is best assured of having its full effect if OMB receives it by February 23, 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 (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et. seq.

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's proposed rule on small entities, small entity is defined as: (1) A motor vehicle manufacturer with fewer than 1,000 employees; (2) a motor vehicle converter with fewer than 750 employees; (3) 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 (4) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. After considering the economic impacts of today's proposed rule on small entities, we have determined that this action would not have a significant economic impact on a substantial number of small entities. This proposed rule would not have any adverse economic impact on small entities. Today's rule places new requirements on manufacturers of large engines meant for highway use. These are large manufacturers. Today's rule also changes existing requirements on manufacturers of passenger car and smaller heavy-duty engines meant for highway use. These changes place no meaningful new requirements on those manufacturers.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 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 for any single year. Before promulgating a 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 to 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 that is not the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation of why such an alternative was not adopted.

Before EPA establishes any regulatory requirement 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 (under the regulatory provisions of Title II of the UMRA) for State, local, or tribal governments or the private sector. The rule imposes no enforceable duties on any of these entities. Nothing in the rule would significantly or uniquely affect small governments. We have determined that this rule does not contain a federal mandate that may result in estimated expenditures of more than $100 million to the private sector in any single year. Therefore, the requirements of the UMRA do not apply to this action.

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. This proposed rule places new requirements on manufacturers of large engines meant for highway use and changes existing requirements on manufacturers of passenger car and smaller heavy-duty engines meant for highway use. These changes do not affect States or the relationship between the national government and the States. Thus, Executive Order 13132 does not apply to this rule.

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. Today's rule does not uniquely affect the communities of American Indian tribal governments since the motor vehicle requirements for private businesses in today's rule would have national applicability. Furthermore, today's rule does not impose any direct compliance costs on these communities and no circumstances specific to such communities exist that would cause an impact on these communities beyond those discussed in the other sections of today's document. Thus, Executive Order 13175 does not apply to this rule.

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 the Executive Order because it is not an economically significant regulatory action as defined by Executive Order 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Section 12(d) of Public Law 104–113, 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) developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This proposed rule references technical standards. The technical standards being proposed are listed in Table II.F–1 of this preamble, and directions for how they may be obtained are provided in section II.F.1. EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify other potentially-applicable voluntary consensus standards and to explain why such standards should be used in this regulation.

XI. Statutory Provisions and Legal Authority

Statutory authority for today's proposed rule is found in the Clean Air Act, 42 U.S.C. 7401 *et seq.*, in particular, sections 202 and 206 of the Act, 42 U.S.C. 7521, 7525. This rule is being promulgated under the administrative and procedural provisions of Clean Air Act section 307(d), 42 U.S.C. 7607(d).

List of Subjects in 40 CFR Part 86

Environmental Protection, Administrative practice and procedure, Motor vehicle pollution.

Dated: December 11, 2006.

Stephen L. Johnson,

Administrator.

For the reasons set out in the preamble, part 86 of title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 86—CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

1. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

2. Section 86.1 is amended as follows:

a. In the table to paragraph (b)(2) by adding new entries to the end of the table.

b. In the table to paragraph (b)(5) by adding a new entry to the end of the table.

§ 86.1 Reference materials.

* * * * *

(b) * * *

(2) * * *

Document No. and name	40 CFR part 86 reference
* * * * * * *	
SAE J1930, Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms—Equivalent to ISO/TR 15031–2: April 2002.	86.010–18
SAE J1939, MONTH 2006, Recommended Practice for a Serial Control and Communications Vehicle Network	86.010–18; 86.010–38
SAE J1939–13, MONTH 2006, Off-Board Diagnostic Connector	86.013–18
SAE J1962, Diagnostic Connector—Equivalent to ISO/DIS 15031–3: April 2002	86.013–18
SAE J1978, OBD II Scan Tool—Equivalent to ISO/DIS 15031–4: April 2002	86.010–18

Document No. and name	40 CFR part 86 reference
SAE J1979, E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031–5: April 2002	86.010–18; 86.010–38
SAE J2012, Diagnostic Trouble Code Definitions—Equivalent to ISO/DIS 15031–6: April 2002	86.010–18
SAE J2403, Medium/Heavy-Duty E/E Systems Diagnosis Nomenclature; August 2004	86.007–17; 86.010–18; 86.010–38; 86.1806–07
SAE J2534, Recommended Practice for Pass-Thru Vehicle Reprogramming: February 2002	86.010–18; 86.010–38

* * * * * (5) * * *

Document No. and name	40 CFR part 86 reference
* * * * * * *	
ISO 15765–4:2001, Road Vehicles—Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems: December 2001.	86.010–18

* * * * *

3. Section 86.007–17 is added to Subpart A to read as follows:

§ 86.007–17 On-board Diagnostics for engines used in applications less than or equal to 14,000 pounds GVWR.

Section 86.007–17 includes text that specifies requirements that differ from § 86.005–17. Where a paragraph in § 86.005–17 is identical and applicable to § 86.007–17, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.005–17.''

(a)(1) [Reserved]. For guidance see § 86.005–17.

(a)(2) An OBD system demonstrated to fully meet the requirements in § 86.1806–07 may be used to meet the requirements of this section, provided that the Administrator finds that a manufacturer's decision to use the flexibility in this paragraph (a)(2) is based on good engineering judgment.

(b) introductory text and (b)(1)(i) [Reserved]. For guidance see § 86.005–17.

(b)(1)(ii) *Diesel.*

(A) If equipped, catalyst deterioration or malfunction before it results in exhaust NO_X emissions exceeding either: 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr. This requirement applies only to reduction catalysts; monitoring of oxidation catalysts is not required. This monitoring need not be done if the manufacturer can demonstrate that deterioration or malfunction of the system will not result in exceedance of the threshold.

(b)(1)(ii)(B) and (b)(2) [Reserved]. For guidance see § 86.005–17.

(b)(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr; or, 2.5 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to .50 g/bhp-hr; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(iii) NO_X *sensors.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: The applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr.

(b)(4) [Reserved]. For guidance see § 86.005—17.

(b)(5) *Other emission control systems and components.*

(i) *Otto-cycle.* Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, the secondary air system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding 1.5 times the applicable emission standard or FEL for NMHC, NO_X or CO. For engines equipped with a secondary air system, a functional check, as described in § 86.005–17(b)(6), may satisfy the requirements of this paragraph (b)(5) provided the manufacturer can demonstrate that deterioration of the flow distribution system is unlikely. This demonstration is subject to Administrator approval and, if the demonstration and associated functional check are approved, the diagnostic system must indicate a malfunction when some degree of secondary airflow is not detectable in the exhaust system during the check. For engines equipped with positive crankcase ventilation (PCV), monitoring of the PCV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the PCV system is unlikely to fail.

(ii) *Diesel.* Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas

recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: The applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard. A functional check, as described in § 86.005–17(b)(6), may satisfy the requirements of this paragraph (b)(5) provided the manufacturer can demonstrate that a malfunction would not cause emissions to exceed the applicable levels. This demonstration is subject to Administrator approval. For engines equipped with crankcase ventilation (CV), monitoring of the CV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the CV system is unlikely to fail.

(b)(6) [Reserved]. For guidance see § 86.005–17.

(b)(7) *Performance of OBD functions.* Any sensor or other component deterioration or malfunction which renders that sensor or component incapable of performing its function as part of the OBD system must be detected and identified on engines so equipped.

(c), (d), (e), (f), (g), and (h)(1)(i) through (h)(1)(iv) [Reserved]. For guidance see § 86.005–17.

(h)(1)(v) All acronyms, definitions and abbreviations shall be formatted according to SAE J1930 ''Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms Equivalent to ISO/TR 15031–2: April 30, 2002'', (Revised, April 2002), or SAE J2403, ''Medium/Heavy-Duty E/E Systems Diagnosis Nomenclature: August 2004.''

(h)(1)(vi) through (h)(3) [Reserved]. For guidance see § 86.005–17.

(i) *Deficiencies and alternative fueled engines.* Upon application by the manufacturer, the Administrator may accept an OBD system as compliant even though specific requirements are not fully met. Such compliances without meeting specific requirements, or deficiencies, will be granted only if compliance would be infeasible or unreasonable considering such factors as, but not limited to: Technical feasibility of the given monitor and lead time and production cycles including phase-in or phase-out of engines or vehicle designs and programmed upgrades of computers. Unmet requirements should not be carried over from the previous model year except where unreasonable hardware or software modifications would be necessary to correct the deficiency, and the manufacturer has demonstrated an acceptable level of effort toward compliance as determined by the Administrator. Furthermore, EPA will not accept any deficiency requests that include the complete lack of a major diagnostic monitor (''major'' diagnostic monitors being those for exhaust aftertreatment devices, oxygen sensor, air-fuel ratio sensor, NO_X sensor, engine misfire, evaporative leaks, and diesel EGR, if equipped), with the possible exception of the special provisions for alternative fueled engines. For alternative fueled heavy-duty engines (e.g. natural gas, liquefied petroleum gas, methanol, ethanol), manufacturers may request the Administrator to waive specific monitoring requirements of this section for which monitoring may not be reliable with respect to the use of the alternative fuel. At a minimum, alternative fuel engines must be equipped with an OBD system meeting OBD requirements to the extent feasible as approved by the Administrator.

(j) *California OBDII compliance option.* For heavy-duty engines used in applications weighing 14,000 pounds GVWR or less, demonstration of compliance with California OBD II requirements (Title 13 California Code of Regulations section 1968.2 (13 CCR 1968.2)), as modified and released on August 11, 2006, shall satisfy the requirements of this section, except that compliance with 13 CCR 1968.2(e)(4.2.2)(C), pertaining to 0.02 inch evaporative leak detection, and 13 CCR 1968.2(d)(1.4), pertaining to tampering protection, are not required to satisfy the requirements of this section. Also, the deficiency provisions of 13 CCR 1968.2(k) do not apply. The deficiency provisions of paragraph (i) of this section and the evaporative leak detection requirement of § 86.005–17(b)(4) apply to manufacturers selecting this paragraph for demonstrating compliance. In addition, demonstration of compliance with 13 CCR 1968.2(e)(15.2.1)(C), to the extent it applies to the verification of proper alignment between the camshaft and crankshaft, applies only to vehicles equipped with variable valve timing.

(k) [Reserved]. For guidance see § 86.005–17.

4. Section 86.007–30 is added to Subpart A to read as follows:

Section 86.007–30 includes text that specifies requirements that differ from §§ 86.094–30, 86.095–30, 86.096–30, 86.098–30, 86.001–30 or 86.004–30. Where a paragraph in § 86.094–30, § 86.095–30, § 86.096–30, § 86.098–30, § 86.001–30 or § 86.004–30 is identical and applicable to § 86.007–30, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.094–30.'' or ''[Reserved]. For guidance see § 86.095–30.'' or ''[Reserved]. For guidance see § 86.096–30.'' or ''[Reserved]. For guidance see § 86.098–30.'' or ''[Reserved]. For guidance see § 86.001–30.'' or ''[Reserved]. For guidance see 86.004–30.''

§ 86.007–30 Certification.

(a)(1) and (a)(2) [Reserved]. For guidance see § 86.094–30.

(a)(3)(i) through (a)(4)(ii) [Reserved]. For guidance see § 86.004–30.

(a)(4)(iii) introductory text through (a)(4)(iii)(C) [Reserved]. For guidance see § 86.094–30.

(a)(4)(iv) introductory text [Reserved]. For guidance see § 86.095–30.

(a)(4)(iv)(A)–(a)(9) [Reserved]. For guidance see § 86.094–30.

(a)(10) and (a)(11) [Reserved]. For guidance see § 86.004–30.

(a)(12) [Reserved]. For guidance see § 86.094–30.

(a)(13) [Reserved]. For guidance see § 86.095–30.

(a)(14) [Reserved]. For guidance see § 86.094–30.

(a) (15)–(18) [Reserved]. For guidance see § 86.096–30.

(a)(19) [Reserved]. For guidance see § 86.098–30.

(a)(20) [Reserved]. For guidance see § 86.001–30.

(a)(21) [Reserved]. For guidance see § 86.004–30.

(b)(1) introductory text through (b)(1)(ii)(A) [Reserved]. For guidance see § 86.094–30.

(b)(1)(ii)(B) [Reserved]. For guidance see § 86.004–30.

(b)(1)(ii)(C) [Reserved]. For guidance see § 86.094–30.

(b)(1)(ii)(D) [Reserved]. For guidance see § 86.004–30.

(b)(1)(iii) and (b)(1)(iv) [Reserved]. For guidance see § 86.094–30.

(b)(2) [Reserved]. For guidance see § 86.098–30.

(b)(3)–(b)(4)(i) [Reserved]. For guidance see § 86.094–30.

(b)(4)(ii) introductory text [Reserved]. For guidance see § 86.098–30.

(b)(4)(ii)(A) [Reserved]. For guidance see § 86.094–30.

(b)(4)(ii)(B)–(b)(4)(iv) [Reserved]. For guidance see § 86.098–30.

(b)(5)–(e) [Reserved]. For guidance see § 86.094–30.

(f) introductory text through (f)(1)(i) [Reserved]. For guidance see § 86.004–30.

(f)(1)(ii) *Diesel.*

(A) If monitored for emissions performance—a catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust emissions exceeding 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr. This requirement applies only to reduction catalysts.

(B) If monitored for performance—a particulate trap is replaced with a trap that has catastrophically failed, or an electronic simulation of such.

(f)(2) [Reserved]. For guidance see § 86.004–30.

(f)(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices.*

(A) *Otto-cycle.* If so equipped, any oxygen sensor or air-fuel ratio sensor located downstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If so equipped, any oxygen sensor or air-fuel ratio sensor located downstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr; or, 2.5 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices.*

(A) *Otto-cycle.* If so equipped, any oxygen sensor or air-fuel ratio sensor located upstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If so equipped, any oxygen sensor or air-fuel ratio sensor located upstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(iii) NO_X *sensors.*

(A) *Otto-cycle.* If so equipped, any NO_X sensor is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If so equipped, any NO_X sensor is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr.

(f)(4) [Reserved]. For guidance see § 86.004–30.

(f)(5)(i) *Otto-cycle.* A malfunction condition is induced in any emission-related engine system or component, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, the secondary air system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding 1.5 times the applicable emission standard or FEL for NMHC, NO_X, or CO.

(ii) *Diesel.* A malfunction condition is induced in any emission-related engine system or component, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, 1.75 times the applicable NO_X standard for engines certified to a NO_X FEL greater than 0.50 g/bhp-hr; or, the applicable NO_X FEL+0.5 g/bhp-hr for engines certified to a NO_X FEL less than or equal to 0.50 g/bhp-hr; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(f)(6) [Reserved]. For guidance see § 86.004–30.

5. Section 86.010–2 is added to Subpart A to read as follows:

§ 86.010–2 Definitions.

The definitions of § 86.004–2 continue to apply to 2004 and later model year vehicles. The definitions listed in this section apply beginning with the 2010 model year.

Drive cycle or driving cycle means operation that consists of engine startup and engine shutoff during which a given onboard diagnostic (OBD) monitor makes a diagnostic decision. A drive cycle need not consist of all OBD monitors making a diagnostic decision during the engine startup and engine shutoff cycle. An engine restart following an engine shutoff that has been neither commanded by the vehicle operator nor by the engine control strategy but caused by an event such as an engine stall may be considered a new drive cycle or a continuation of the existing drive cycle.

DTC means diagnostic trouble code.

Engine start as used in § 86.010–18 means the point when the engine reaches a speed 150 rpm below the normal, warmed-up idle speed (as determined in the drive position for vehicles equipped with an automatic transmission). For hybrid vehicles or for engines employing alternative engine start hardware or strategies (e.g., integrated starter and generators.), the manufacturer may use an alternative definition for engine start (e.g., key-on) provided the alternative definition is based on equivalence to an engine start for a conventional vehicle.

Functional check, in the context of onboard diagnostics, means verifying that a component and/or system that receives information from a control computer responds properly to a command from the control computer.

Ignition cycle as used in § 86.010–18 means a cycle that begins with engine start, meets the engine start definition for at least two seconds plus or minus one second, and ends with engine shutoff.

Limp-home operation as used in § 86.010–18 means an operating mode that an engine is designed to enter upon determining that normal operation cannot be maintained. In general, limp-home operation implies that a component or system is not operating properly or is believed to be not operating properly.

Malfunction means the conditions have been met that require the activation of an OBD malfunction indicator light and storage of a DTC.

MIL-on DTC means the diagnostic trouble code stored when an OBD system has detected and confirmed that a malfunction exists (e.g., typically on the second drive cycle during which a given OBD monitor has evaluated a system or component). Industry standards may refer to this as a confirmed or an active DTC.

Pending DTC means the diagnostic trouble code stored upon the detection of a potential malfunction.

Permanent DTC means a DTC that corresponds to a MIL-on DTC and is stored in non-volatile random access memory (NVRAM). A permanent DTC can only be erased by the OBD system itself and cannot be erased through human interaction with the OBD system or any onboard computer.

Previous-MIL-on DTC means a DTC that corresponds to a MIL-on DTC but is distinguished by representing a malfunction that the OBD system has determined no longer exists but for which insufficient operation has occurred to satisfy the DTC erasure provisions.

Potential malfunction means that conditions have been detected that meet the OBD malfunction criteria but for which more drive cycles are allowed to provide further evaluation prior to confirming that a malfunction exists.

Rationality check, in the context of onboard diagnostics, means verifying that a component that provides input to a control computer provides an accurate input to the control computer while in the range of normal operation and when compared to all other available information.

Similar conditions, in the context of onboard diagnostics, means engine conditions having an engine speed within 375 rpm, load conditions within 20 percent, and the same warm up status (i.e., cold or hot). The manufacturer may use other definitions of similar conditions based on comparable timeliness and reliability in detecting similar engine operation.

6. Section 86.010–17 is added to Subpart A to read as follows:

§ 86.010–17 On-board Diagnostics for engines used in applications less than or equal to 14,000 pounds GVWR.

Section 86.010–17 includes text that specifies requirements that differ from § 86.005–17 and § 86.007–17. Where a paragraph in § 86.005–17 or § 86.007–17 is identical and applicable to § 86.010–17, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.005–17.'' or ''[Reserved]. For guidance see § 86.007–17.''

(a) *General.*

(1) All heavy-duty engines intended for use in a heavy-duty vehicle weighing 14,000 pounds GVWR or less must be equipped with an on-board diagnostic (OBD) system capable of monitoring all emission-related engine systems or components during the applicable useful life. All monitored systems and components must be evaluated periodically, but no less frequently than once per applicable certification test cycle as defined in Appendix I, paragraph (f), of this part, or similar trip as approved by the Administrator.

(2) An OBD system demonstrated to fully meet the requirements in § 86.1806–10 may be used to meet the requirements of this section, provided that the Administrator finds that a manufacturer's decision to use the flexibility in this paragraph (a)(2) is based on good engineering judgment.

(b) Introductory text and (b)(1)(i) [Reserved]. For guidance see § 86.005–17.

(b)(1)(ii) *Diesel.*

(A) If equipped, reduction catalyst deterioration or malfunction before it results in exhaust NO_X emissions exceeding the applicable NO_X FEL+0.3 g/bhp-hr. If equipped, oxidation catalyst deterioration or malfunction before it results in exhaust NMHC emissions exceeding 2.5 times the applicable NMHC standard. These catalyst monitoring requirements need not be done if the manufacturer can demonstrate that deterioration or malfunction of the system will not result in exceedance of the threshold.

(B) If equipped, diesel particulate trap deterioration or malfunction before it results in exhaust emissions exceeding any of the following levels: The applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, exhaust NMHC emissions exceeding 2.5 times the applicable NMHC standard. Catastrophic failure of the particulate trap must also be detected. In addition, the absence of the particulate trap or the trapping substrate must be detected.

(b)(2) [Reserved]. For guidance see § 86.005–17.

(b)(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2.5 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.02 g/bhp-hr or 0.03 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(iii) *NO_X sensors.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr.

(b)(4) [Reserved]. For guidance see § 86.005–17.

(b)(5) *Other emission control systems and components.*

(i) *Otto-cycle.* Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, the secondary air system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding 1.5 times the applicable emission standard or FEL for NMHC, NO_X or CO. For engines equipped with a secondary air system, a functional check, as described in § 86.005–17(b)(6), may satisfy the requirements of this paragraph (b)(5) provided the manufacturer can demonstrate that deterioration of the flow distribution system is unlikely. This demonstration is subject to Administrator approval and, if the demonstration and associated functional check are approved, the diagnostic system must indicate a malfunction when some degree of secondary airflow is not detectable in the exhaust system during the check. For engines equipped with positive crankcase ventilation (PCV), monitoring of the PCV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the PCV system is unlikely to fail.

(ii) *Diesel.* Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions

exceeding any of the following levels: the applicable PM FEL+0.02 g/bhp-hr or 0.03 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2.5x the applicable NMHC standard; or, 2.5x the applicable CO standard. A functional check, as described in § 86.005–17(b)(6), may satisfy the requirements of this paragraph (b)(5) provided the manufacturer can demonstrate that a malfunction would not cause emissions to exceed the applicable levels. This demonstration is subject to Administrator approval. For engines equipped with crankcase ventilation (CV), monitoring of the CV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the CV system is unlikely to fail.

(b)(6) [Reserved]. For guidance see § 86.005–17.

(b)(7) [Reserved]. For guidance see § 86.007–17.

(c) [Reserved]. For guidance see § 86.005–17.

(d) *MIL illumination.*

(1) The MIL must illuminate and remain illuminated when any of the conditions specified in paragraph (b) of this section are detected and verified, or whenever the engine control enters a default or secondary mode of operation considered abnormal for the given engine operating conditions. The MIL must blink once per second under any period of operation during which engine misfire is occurring and catalyst damage is imminent. If such misfire is detected again during the following driving cycle (i.e., operation consisting of, at a minimum, engine start-up and engine shut-off) or the next driving cycle in which similar conditions are encountered, the MIL must maintain a steady illumination when the misfire is not occurring and then remain illuminated until the MIL extinguishing criteria of this section are satisfied. The MIL must also illuminate when the vehicle's ignition is in the ''key-on'' position before engine starting or cranking and extinguish after engine starting if no malfunction has previously been detected. If a fuel system or engine misfire malfunction has previously been detected, the MIL may be extinguished if the malfunction does not reoccur during three subsequent sequential trips during which similar conditions are encountered and no new malfunctions have been detected. Similar conditions are defined as engine speed within 375 rpm, engine load within 20 percent, and engine warm-up status equivalent to that under which the malfunction was first detected. If any malfunction other than a fuel system or engine misfire malfunction has been detected, the MIL may be extinguished if the malfunction does not reoccur during three subsequent sequential trips during which the monitoring system responsible for illuminating the MIL functions without detecting the malfunction, and no new malfunctions have been detected. Upon Administrator approval, statistical MIL illumination protocols may be employed, provided they result in comparable timeliness in detecting a malfunction and evaluating system performance, i.e., three to six driving cycles would be considered acceptable.

(2) *Drive cycle or driving cycle,* in the context of this section § 86.010–17, the definition for drive cycle or driving cycle given in § 86.010–2 is enhanced. A drive cycle means an OBD trip that consists of engine startup and engine shutoff and includes the period of engine off time up to the next engine startup. For vehicles that employ engine shutoff strategies (e.g., engine shutoff at idle), the manufacturer may use an alternative definition for drive cycle (e.g., key-on followed by key-off). Any alternative definition must be based on equivalence to engine startup and engine shutoff signaling the beginning and ending of a single driving event for a conventional vehicle. For applications that span 14,000 pounds GVWR, the manufacturer may use the drive cycle definition of § 86.010–18 in lieu of the definition in this paragraph.

(e), (f), (g), and (h)(1)(i) through (h)(1)(iv) [Reserved]. For guidance see § 86.005–17.

(h)(1)(v) [Reserved]. For guidance see § 86.007–17.

(h)(1)(vi) through (h)(3) [Reserved]. For guidance see § 86.005–17.

(i) and (j) [Reserved]. For guidance see § 86.007–17.

(k) [Reserved.]

7. Section 86.010–18 is added to Subpart A to read as follows:

§ 86.010–18 On-board Diagnostics for engines used in applications greater than 14,000 pounds GVWR.

(a) *General.* According to the implementation schedule shown in paragraph (o) of this section, heavy-duty engines intended for use in a heavy-duty vehicle weighing more than 14,000 pounds GVWR must be equipped with an on-board diagnostic (OBD) system capable of monitoring all emission-related engine systems or components during the life of the engine. The OBD system is required to detect all malfunctions specified in paragraphs (g), (h), and (i) of this section although the OBD system is not required to use a unique monitor to detect each of those malfunctions.

(1) When the OBD system detects a malfunction, it must store a pending, a MIL-on, or a previous-MIL-on diagnostic trouble code (DTC) in the onboard computer's memory. A malfunction indicator light (MIL) must also be activated as specified in paragraph (b) of this section.

(2) The OBD system must be equipped with a data link connector to provide access to the stored DTCs as specified in paragraph (k)(2) of this section.

(3) The OBD system cannot be programmed or otherwise designed to deactivate based on age and/or mileage. This requirement does not alter existing law and enforcement practice regarding a manufacturer's liability for an engine beyond its regulatory useful life, except where an engine has been programmed or otherwise designed so that an OBD system deactivates based on age and/or mileage of the engine.

(4) *Drive cycle or driving cycle*, in the context of this section, the definition for drive cycle or driving cycle given in § 86.010–2 is enhanced. A drive cycle means an OBD trip that meets any of the conditions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section. Further, for OBD monitors that run during engine-off conditions, the period of engine-off time following engine shutoff and up to the next engine start may be considered part of the drive cycle for the conditions of paragraphs (a)(4)(i) and (a)(4)(iv) of this section. For engines/vehicles that employ engine shutoff OBD monitoring strategies that do not require the vehicle operator to restart the engine to continue vehicle operation (e.g., a hybrid bus with engine shutoff at idle), the manufacturer may use an alternative definition for drive cycle (e.g., key-on followed by key-off). Any alternative definition must be based on equivalence to engine startup and engine shutoff signaling the beginning and ending of a single driving event for a conventional vehicle. For engines that are not likely to be routinely operated for long continuous periods of time, a manufacturer may also request approval to use an alternative definition for drive cycle (e.g., solely based on engine start and engine shutoff without regard to four hours of continuous engine-on time). Administrator approval of the alternative definition will be based on manufacturer-submitted data and/or information demonstrating the typical usage, operating habits, and/or driving patterns of these vehicles.

(i) Begins with engine start and ends with engine shutoff;

(ii) Begins with engine start and ends after four hours of continuous engine-on operation;

(iii) Begins at the end of the previous four hours of continuous engine-on operation and ends after four hours of continuous engine-on operation; or

(iv) Begins at the end of the previous four hours of continuous engine-on operation and ends with engine shutoff.

(b) *Malfunction indicator light (MIL) and Diagnostic Trouble Codes (DTC).* The OBD system must incorporate a malfunction indicator light (MIL) or equivalent and must store specific types of diagnostic trouble codes (DTC).

(1) *MIL specifications.*

(i) [Reserved.]

(ii) The OBD system must activate the MIL when the ignition is in the key-on/engine-off position before engine cranking to indicate that the MIL is functional. The MIL shall be activated continuously during this functional check for a minimum of 5 seconds. During this MIL key-on functional check, the data stream value (see paragraph (k)(4)(ii) of this section) for MIL status must indicate ''commanded off'' unless the OBD system has detected a malfunction and has stored a MIL-on DTC. This MIL key-on functional check is not required during vehicle operation in the key-on/engine-off position subsequent to the initial engine cranking of an ignition cycle (e.g., due to an engine stall or other non-commanded engine shutoff).

(iii) As an option, the MIL may be used to indicate readiness status (see paragraph (k)(4)(i) of this section) in a standardized format in the key-on/engine-off position.

(iv) A manufacturer may also use the MIL to indicate which, if any, DTCs are currently stored (e.g., to ''blink'' the stored DTCs). Such use must not activate unintentionally during routine driver operation.

(v) [Reserved.]

(2) *MIL activation and DTC storage protocol.*

(i) Within 10 seconds of detecting a potential malfunction, the OBD system must store a pending DTC that identifies the potential malfunction.

(ii) If the potential malfunction is again detected before the end of the next drive cycle during which monitoring occurs (i.e., the potential malfunction has been confirmed as a malfunction), then within 10 seconds of such detection the OBD system must activate the MIL continuously and store a MIL-on DTC. If the potential malfunction is not detected before the end of the next drive cycle during which monitoring occurs (i.e., there is no indication of the malfunction at any time during the drive cycle), the corresponding pending DTC should be erased at the end of the drive cycle. Similarly, if a malfunction is detected for the first time and confirmed on a given drive cycle without need for further evaluation, then within 10 seconds of such detection the OBD system must activate the MIL continuously and store a MIL-on DTC.

(iii) A manufacturer may request Administrator approval to employ alternative statistical MIL activation and DTC storage protocols to those specified in paragraphs (b)(2)(i) and (b)(2)(ii) of this section. Approval will depend upon the manufacturer providing data and/or engineering evaluations that demonstrate that the alternative protocols can evaluate system performance and detect malfunctions in a manner that is equally effective and timely. Strategies requiring on average more than six drive cycles for MIL activation will not be accepted.

(iv) The OBD system must store a ''freeze frame'' of the operating conditions (as defined in paragraph (k)(4)(iii) of this section) present upon detecting a malfunction or a potential malfunction. In the event that a pending DTC has matured to a MIL-on DTC, the manufacturer shall either retain the currently stored freeze frame conditions or replace the stored freeze frame with freeze frame conditions regarding the MIL-on DTC. Any freeze frame stored in conjunction with any pending DTC or MIL-on DTC should be erased upon erasure of the corresponding DTC.

(v) If the engine enters a limp-home mode of operation that can affect emissions or the performance of the OBD system, or in the event of a malfunction of an onboard computer(s) itself that can affect the performance of the OBD system, the OBD system must activate the MIL and store a MIL-on DTC within 10 seconds to inform the vehicle operator. If the limp-home mode of operation is recoverable (i.e., operation automatically returns to normal at the beginning of the following ignition cycle), the OBD system may wait to activate the MIL and store the MIL-on DTC if the limp-home mode of operation is again entered before the end of the next ignition cycle rather than activating the MIL within 10 seconds on the first drive cycle during which the limp-home mode of operation is entered.

(vi) Before the end of an ignition cycle, the OBD system must store a permanent DTC(s) that corresponds to any stored MIL-on DTC(s).

(3) *MIL deactivation and DTC erasure protocol.*

(i) *Deactivating the MIL.* Except as otherwise provided for in paragraph (g)(6)(iv)(B) of this section for empty reductant tanks, and paragraphs (h)(1)(iv)(F), (h)(2)(viii), and (h)(7)(iv)(B) of this section for gasoline fuel system, misfire, and evaporative system malfunctions, once the MIL has been activated, it may be deactivated after three subsequent sequential drive cycles during which the monitoring system responsible for activating the MIL functions and the previously detected malfunction is no longer present and provided no other malfunction has been detected that would independently activate the MIL according to the requirements outlined in paragraph (b)(2) of this section.

(ii) *Erasing a MIL-on DTC.* The OBD system may erase a MIL-on DTC if the identified malfunction has not again been detected in at least 40 engine warm up cycles and the MIL is presently not activated for that malfunction. The OBD system may also erase a MIL-on DTC upon deactivating the MIL according to paragraph (b)(3)(i) of this section provided a previous-MIL-on DTC is stored upon erasure of the MIL-on DTC. The OBD system may erase a previous-MIL-on DTC if the identified malfunction has not again been detected in at least 40 engine warm up cycles and the MIL is presently not activated for that malfunction.

(iii) *Erasing a permanent DTC.* The OBD system can erase a permanent DTC only if either of the following conditions occur:

(A) The OBD system itself determines that the malfunction that caused the corresponding MIL-on DTC to be stored is no longer present and is not commanding activation of the MIL, concurrent with the requirements of paragraph (b)(3)(i) of this section.

(B) Subsequent to erasing the DTC information from the on-board computer (i.e., through the use of a scan tool or a battery disconnect), the OBD monitor for the malfunction that caused the permanent DTC to be stored has executed the minimum number of monitoring events necessary for MIL activation and has determined that the malfunction is no longer present.

(4) *Exceptions to MIL and DTC requirements.*

(i) If a limp-home mode of operation causes an overt indication (e.g., activation of a red engine shut-down warning light) such that the driver is certain to respond and have the problem corrected, a manufacturer may choose not to activate the MIL as required by paragraph (b)(2)(v) of this section. Additionally, if an auxiliary emission control device has been properly

activated as approved by the Administrator, a manufacturer may choose not to activate the MIL.

(ii) For gasoline engines, a manufacturer may choose to meet the MIL and DTC requirements in § 86.010–17 in lieu of meeting the requirements of paragraph (b) of § 86.010–18.

(a) *Monitoring conditions.* The OBD system must monitor and detect the malfunctions specified in paragraphs (g), (h), and (i) of this section under the following general monitoring conditions. The more specific monitoring conditions of paragraph (d) of this section are sometimes required according to the provisions of paragraphs (g), (h), and (i) of this section.

(1) As specifically provided for in paragraphs (g), (h), and (i) of this section, the monitoring conditions for detecting malfunctions must be technically necessary to ensure robust detection of malfunctions (e.g., avoid false passes and false indications of malfunctions); designed to ensure monitoring will occur under conditions that may reasonably be expected to be encountered in normal vehicle operation and normal vehicle use; and, designed to ensure monitoring will occur during the FTP transient test cycle contained in Appendix I paragraph (f), of this part, or similar drive cycle as approved by the Administrator.

(2) Monitoring must occur at least once per drive cycle in which the monitoring conditions are met.

(3) Manufacturers may request approval to define monitoring conditions that are not encountered during the FTP cycle as required in paragraph (c)(1) of this section. In evaluating the manufacturer's request, the Administrator will consider the degree to which the requirement to run during the FTP transient cycle restricts monitoring during in-use operation, the technical necessity for defining monitoring conditions that are not encountered during the FTP cycle, data and/or an engineering evaluation submitted by the manufacturer that demonstrate that the component/system does not normally function during the FTP, whether monitoring is otherwise not feasible during the FTP cycle, and/or the ability of the manufacturer to demonstrate that the monitoring conditions satisfy the minimum acceptable in-use monitor performance ratio requirement as defined in paragraph (d) of this section.

(d) *In-use performance tracking.* As specifically required in paragraphs (g), (h), and (i) of this section, the OBD system must monitor and detect the malfunctions specified in paragraphs (g), (h), and (i) of this section according to the criteria of this paragraph (d). The OBD system is not required to track and report in-use performance for monitors other than those specifically identified in paragraph (d)(1) of this section.

(1) The manufacturer must implement software algorithms in the OBD system to individually track and report the in-use performance of the following monitors, if equipped, in the standardized format specified in paragraph (e) of this section: NMHC converting catalyst (paragraph (g)(5) of this section); NO_X converting catalyst (paragraph (g)(6) of this section); gasoline catalyst (paragraph (h)(6) of this section); exhaust gas sensor (paragraph (g)(9) or (h)(8) of this section); evaporative system (paragraph (h)(7) of this section); EGR system (paragraph (g)(3) or (h)(3) of this section); VVT system (paragraph (g)(10) or (h)(9) of this section); secondary air system (paragraph (h)(5) of this section); DPF system (paragraph (g)(8) of this section); boost pressure control system (paragraph (g)(4) of this section); and, NO_X adsorber system (paragraph (g)(7) of this section).

(i) The manufacturer shall not use the calculated ratio specified in paragraph (d)(2) of this section or any other indication of monitor frequency as a monitoring condition for a monitor (e.g., using a low ratio to enable more frequent monitoring through diagnostic executive priority or modification of other monitoring conditions, or using a high ratio to enable less frequent monitoring).

(ii) [Reserved.]

(2) *In-use performance ratio definition.* For monitors required to meet the requirements of paragraph (d) of this section, the performance ratio must be calculated in accordance with the specifications of this paragraph (d)(2).

(i) The numerator of the performance ratio is defined as the number of times a vehicle has been operated such that all monitoring conditions have been encountered that are necessary for the specific monitor to detect a malfunction.

(ii) The denominator is defined as the number of times a vehicle has been operated in accordance with the provisions of paragraph (d)(4) of this section.

(iii) The performance ratio is defined as the numerator divided by the denominator.

(3) *Specifications for incrementing the numerator.*

(i) Except as provided for in paragraph (d)(3)(v) of this paragraph (d)(3), the numerator, when incremented, must be incremented by an integer of one. The numerator shall not be incremented more than once per drive cycle.

(ii) The numerator for a specific monitor must be incremented within 10 seconds if and only if the following criteria are satisfied on a single drive cycle:

(A) Every monitoring condition has been satisfied that is necessary for the specific monitor to detect a malfunction and store a pending DTC, including applicable enable criteria, presence or absence of related DTCs, sufficient length of monitoring time, and diagnostic executive priority assignments (e.g., diagnostic ''A'' must execute prior to diagnostic ''B''). For the purpose of incrementing the numerator, satisfying all the monitoring conditions necessary for a monitor to determine that the monitor is not malfunctioning shall not, by itself, be sufficient to meet this criteria.

(B) For monitors that require multiple stages or events in a single drive cycle to detect a malfunction, every monitoring condition necessary for all events to complete must be satisfied.

(C) For monitors that require intrusive operation of components to detect a malfunction, a manufacturer must request approval of the strategy used to determine that, had a malfunction been present, the monitor would have detected the malfunction. Administrator approval of the request will be based on the equivalence of the strategy to actual intrusive operation and the ability of the strategy to determine accurately if every monitoring condition was satisfied that was necessary for the intrusive event to occur.

(D) For the secondary air system monitor, the criteria in paragraphs (d)(3)(ii)(A) through (d)(3)(ii)(C) of this section are satisfied during normal operation of the secondary air system. Monitoring during intrusive operation of the secondary air system later in the same drive cycle for the sole purpose of monitoring shall not, by itself, be sufficient to meet these criteria.

(iii) For monitors that can generate results in a ''gray zone'' or ''non-detection zone'' (i.e., monitor results that indicate neither a properly operating system nor a malfunctioning system) or in a ''non-decision zone'' (e.g., monitors that increment and decrement counters until a pass or fail threshold is reached), the numerator, in general, shall not be incremented when the monitor indicates a result in the ''non-detection zone'' or prior to the monitor reaching a complete decision. When necessary, the Administrator will consider data and/or engineering analyses submitted by the manufacturer

demonstrating the expected frequency of results in the ''non-detection zone'' and the ability of the monitor to determine accurately, had an actual malfunction been present, whether or not the monitor would have detected a malfunction instead of a result in the ''non-detection zone.''

(iv) For monitors that run or complete their evaluation with the engine off, the numerator must be incremented either within 10 seconds of the monitor completing its evaluation in the engine off state, or during the first 10 seconds of engine start on the subsequent drive cycle.

(v) Manufacturers that use alternative statistical MIL activation protocols as allowed in paragraph (b)(2)(iii) of this section for any of the monitors requiring a numerator, are required to increment the numerator(s) appropriately. The manufacturer may be required to provide supporting data and/or engineering analyses demonstrating both the equivalence of their incrementing approach to the incrementing specified in this paragraph (d)(3) for monitors using the standard MIL activation protocol.

(4) *Specifications for incrementing the denominator.*

(i) The denominator, when incremented, must be incremented by an integer of one. The denominator shall not be incremented more than once per drive cycle.

(ii) The denominator for each monitor must be incremented within 10 seconds if and only if the following criteria are satisfied on a single drive cycle:

(A) Cumulative time since the start of the drive cycle is greater than or equal to 600 seconds while at an elevation of less than 8,000 feet (2,400 meters) above sea level and at an ambient temperature of greater than or equal to 20 degrees Fahrenheit (−7 C);

(B) Cumulative gasoline engine operation at or above 25 miles per hour or diesel engine operation at or above 15% calculated load, either of which occurs for greater than or equal to 300 seconds while at an elevation of less than 8,000 feet (2,400 meters) above sea level and at an ambient temperature of greater than or equal to 20 degrees Fahrenheit (−7 C); and

(C) Continuous vehicle operation at idle (e.g., accelerator pedal released by driver and vehicle speed less than or equal to one mile per hour) for greater than or equal to 30 seconds while at an elevation of less than 8,000 feet (2,400 meters) above sea level and at an ambient temperature of greater than or equal to 20 degrees Fahrenheit (−7 C).

(iii) In addition to the requirements of paragraph (d)(4)(ii) of this section, the evaporative system monitor denominator(s) may be incremented if and only if:

(A) Cumulative time since the start of the drive cycle is greater than or equal to 600 seconds while at an ambient temperature of greater than or equal to 40 degrees Fahrenheit (4 C) but less than or equal to 95 degrees Fahrenheit (35 C); and,

(B) Engine cold start occurs with the engine coolant temperature greater than or equal to 40 degrees Fahrenheit (4 C) but less than or equal to 95 degrees Fahrenheit (35 C) and less than or equal to 12 degrees Fahrenheit (7 C) higher than the ambient temperature.

(iv) In addition to the requirements of paragraph (d)(4)(ii) of this section, the denominator(s) for the following monitors may be incremented if and only if the component or strategy is commanded ''on'' for a time greater than or equal to 10 seconds. For purposes of determining this commanded ''on'' time, the OBD system shall not include time during intrusive operation of any of the components or strategies that occurs later in the same drive cycle for the sole purpose of monitoring.

(A) Secondary air system (paragraph (h)(5) of this section).

(B) Cold start emission reduction strategy (paragraph (h)(4) of this section).

(C) Components or systems that operate only at engine start-up (e.g., glow plugs, intake air heaters) and are subject to monitoring under ''other emission control systems'' (paragraph (i)(4) of this section) or comprehensive component output components (paragraph (i)(3)(iii) of this section).

(v) In addition to the requirements of paragraph (d)(4)(ii) of this section, the denominator(s) for the following monitors of output components (except those operated only at engine start-up and subject to the requirements of paragraph (d)(4)(iv) of this section, may be incremented if and only if the component is commanded to function (e.g., commanded ''on'', ''opened'', ''closed'', ''locked'') on two or more occasions during the drive cycle or for a time greater than or equal to 10 seconds, whichever occurs first:

(A) Variable valve timing and/or control system (paragraph (g)(10) or (h)(9) of this section).

(B) ''Other emission control systems'' (paragraph (i)(4) of this section).

(C) Comprehensive component output component (paragraph (i)(3) of this section) (e.g., turbocharger waste-gates, variable length manifold runners).

(vi) For monitors of the following components, the manufacturer may use alternative or additional criteria for incrementing the denominator to that set forth in paragraph (d)(4)(ii) of this section. To do so, the alternative criteria must be based on equivalence to the criteria of paragraph (d)(4)(ii) of this section in measuring the frequency of monitor operation relative to the amount of engine operation:

(A) Engine cooling system input components (paragraph (i)(1) of this section).

(B) ''Other emission control systems'' (paragraph (i)(4) of this section).

(C) Comprehensive component input components that require extended monitoring evaluation (paragraph (i)(3) of this section) (e.g., stuck fuel level sensor rationality).

(vii) For monitors of the following components or other emission controls that experience infrequent regeneration events, the manufacturer may use alternative or additional criteria for incrementing the denominator to that set forth in paragraph (d)(4)(ii) of this section. To do so, the alternative criteria must be based on equivalence to the criteria of paragraph (d)(4)(ii) of this section in measuring the frequency of monitor operation relative to the amount of engine operation:

(A) Oxidation catalyst (paragraph (g)(5) of this section).

(B) DPF (paragraph (g)(8) of this section).

(viii) For hybrids that employ alternative engine start hardware or strategies (e.g., integrated starter and generators), or alternative fuel vehicles (e.g. dedicated, bi-fuel, or dual-fuel applications), the manufacturer may use alternative criteria for incrementing the denominator to that set forth in paragraph (d)(4)(ii) of this section. In general, the Administrator will not approve alternative criteria for those hybrids that employ engine shut off only at or near idle and/or vehicle stop conditions. To use alternative criteria, the alternative criteria must be based on the equivalence to the criteria of paragraph (d)(4)(ii) of this section in measuring the amount of vehicle operation relative to the measure of conventional vehicle operation.

(5) *Disablement of numerators and denominators.*

(i) Within 10 seconds of detecting a malfunction (i.e. a pending or a MIL-on DTC has been stored) that disables a monitor for which the monitoring conditions in paragraph (d) of this section must be met, the OBD system must stop incrementing the numerator and denominator for any monitor that may be disabled as a consequence of the detected malfunction. Within 10 seconds of the time at which the malfunction is no longer being detected

(e.g., the pending DTC is erased through OBD system self-clearing or through a scan tool command), incrementing of all applicable numerators and denominators must resume.

(ii) Within 10 seconds of the start of a power take-off unit (e.g., dump bed, snow plow blade, or aerial bucket, etc.) that disables a monitor for which the monitoring conditions in paragraph (d) of this section must be met, the OBD system must stop incrementing the numerator and denominator for any monitor that may be disabled as a consequence of power take-off operation. Within 10 seconds of the time at which the power take-off operation ends, incrementing of all applicable numerators and denominators must resume.

(iii) Within 10 seconds of detecting a malfunction (i.e., a pending or a MIL-on DTC has been stored) of any component used to determine if the criteria of paragraphs (d)(4)(ii) and (d)(4)(iii) of this section are satisfied, the OBD system must stop incrementing all applicable numerators and denominators. Within 10 seconds of the time at which the malfunction is no longer being detected (e.g., the pending DTC is erased through OBD system self-clearing or through a scan tool command), incrementing of all applicable numerators and denominators must resume.

(e) *Standardized tracking and reporting of in-use monitor performance.*

(1) *General.* For monitors required to track and report in-use monitor performance according to paragraph (d) of this section, the performance data must be tracked and reported in accordance with the specifications in paragraphs (d)(2), (e), and (k)(5) of this section. The OBD system must separately report an in-use monitor performance numerator and denominator for each of the following components:

(i) For diesel engines, NMHC catalyst bank 1, NMHC catalyst bank 2, NO_X catalyst bank 1, NO_X catalyst bank 2, exhaust gas sensor bank 1, exhaust gas sensor bank 2, EGR/VVT system, DPF, boost pressure control system, and NO_X adsorber. The OBD system must also report a general denominator and an ignition cycle counter in the standardized format specified in paragraphs (e)(5), (e)(6), and (k)(5) of this section.

(ii) For gasoline engines, catalyst bank 1, catalyst bank 2, exhaust gas sensor bank 1, exhaust gas sensor bank 2, evaporative leak detection system, EGR/VVT system, and secondary air system. The OBD system must also report a general denominator and an ignition cycle counter in the standardized format specified in paragraphs (e)(5), (e)(6), and (k)(5) of this section.

(iii) For specific components or systems that have multiple monitors that are required to be reported under paragraphs (g) and (h) of this section (e.g., exhaust gas sensor bank 1 may have multiple monitors for sensor response or other sensor characteristics), the OBD system must separately track numerators and denominators for each of the specific monitors and report only the corresponding numerator and denominator for the specific monitor that has the lowest numerical ratio. If two or more specific monitors have identical ratios, the corresponding numerator and denominator for the specific monitor that has the highest denominator must be reported for the specific component.

(2) *Numerator.*

(i) The OBD system must report a separate numerator for each of the applicable components listed in paragraph (e)(1) of this section.

(ii) The numerator(s) must be reported in accordance with the specifications in paragraph (k)(5)(ii) of this section.

(3) *Denominator.*

(i) The OBD system must report a separate denominator for each of the applicable components listed in paragraph (e)(1) of this section.

(ii) The denominator(s) must be reported in accordance with the specifications in paragraph (k)(5)(ii) of this section.

(4) *Monitor performance ratio.* For purposes of determining which corresponding numerator and denominator to report as required in paragraph (e)(1)(iii) of this section, the ratio must be calculated in accordance with the specifications in paragraph (k)(5)(iii) of this section.

(5) *Ignition cycle counter.*

(i) The ignition cycle counter is defined as a counter that indicates the number of ignition cycles a vehicle has experienced according to the specifications of paragraph (e)(5)(ii)(B) of this section. The ignition cycle counter must be reported in accordance with the specifications in paragraph (k)(5)(ii) of this section.

(ii) The ignition cycle counter must be incremented as follows:

(A) The ignition cycle counter, when incremented, must be incremented by an integer of one. The ignition cycle counter shall not be incremented more than once per ignition cycle.

(B) The ignition cycle counter must be incremented within 10 seconds if and only if the engine exceeds an engine speed of 50 to 150 rpm below the normal, warmed-up idle speed (as determined in the drive position for engines paired with an automatic transmission) for at least two seconds plus or minus one second.

(iii) Within 10 seconds of detecting a malfunction (i.e., a pending or a MIL-on DTC has been stored) of any component used to determine if the criteria in paragraph (e)(5)(ii)(B) of this section are satisfied (i.e., engine speed or time of operation), the OBD system must stop incrementing the ignition cycle counter. Incrementing of the ignition cycle counter shall not be stopped for any other condition. Within 10 seconds of the time at which the malfunction is no longer being detected (e.g., the pending DTC is erased through OBD system self-clearing or through a scan tool command), incrementing of the ignition cycle counter must resume.

(6) *General denominator.*

(i) The general denominator is defined as a measure of the number of times an engine has been operated according to the specifications of paragraph (e)(6)(ii)(B) of this section. The general denominator must be reported in accordance with the specifications in paragraph (k)(5)(ii) of this section.

(ii) The general denominator must be incremented as follows:

(A) The general denominator, when incremented, must be incremented by an integer of one. The general denominator shall not be incremented more than once per drive cycle.

(B) The general denominator must be incremented within 10 seconds if and only if the criteria identified in paragraph (d)(4)(ii) of this section are satisfied on a single drive cycle.

(C) Within 10 seconds of detecting a malfunction (i.e., a pending or a MIL-on DTC has been stored) of any component used to determine if the criteria in paragraph (d)(4)(ii) of this section are satisfied (i.e., vehicle speed/load, ambient temperature, elevation, idle operation, or time of operation), the OBD system must stop incrementing the general denominator. Incrementing of the general denominator shall not be stopped for any other condition (e.g., the disablement criteria in paragraphs (d)(5)(i) and (d)(5)(ii) of this section shall not disable the general denominator). Within 10 seconds of the time at which the malfunction is no longer being detected (e.g., the pending DTC is erased through OBD system self-clearing or through a scan tool command), incrementing of the general denominator must resume.

(f) *Malfunction criteria determination.*

(1) In determining the malfunction criteria for the diesel engine monitors required under paragraphs (g) and (i) of

this section that are required to indicate a malfunction before emissions exceed an emission threshold based on any applicable standard, the manufacturer must:

(i) Use the emission test cycle and standard (i.e., the transient FTP or the supplemental emissions test (SET)) determined by the manufacturer to be more stringent (i.e., to result in higher emissions with the same level of monitored component malfunction). The manufacturer must use data and/or engineering analysis to determine the test cycle and standard that is more stringent.

(ii) Identify in the certification documentation required under paragraph (m) of this section, the test cycle and standard determined by the manufacturer to be the most stringent for each applicable monitor.

(iii) If the Administrator reasonably believes that a manufacturer has determined incorrectly the test cycle and standard that is most stringent, the manufacturer must be able to provide emission data and/or engineering analysis supporting their choice of test cycle and standard.

(2) On engines equipped with emission controls that experience infrequent regeneration events, a manufacturer must adjust the emission test results that are used to determine the malfunction criteria for monitors that are required to indicate a malfunction before emissions exceed a certain emission threshold. For each such monitor, the manufacturer must adjust the emission result as done in accordance with the provisions of section 86.004–28(i) with the component for which the malfunction criteria are being established having been deteriorated to the malfunction threshold. The adjusted emission value must be used for purposes of determining whether or not the applicable emission threshold is exceeded.

(i) For purposes of this paragraph (f)(2) of this section, regeneration means an event, by design, during which emissions levels change while the emission control performance is being restored.

(ii) For purposes of this paragraph (f)(2) of this section, infrequent means having an expected frequency of less than once per transient FTP cycle.

(3) For gasoline engines, rather than meeting the malfunction criteria specified under paragraphs (h) and (i) of this section, the manufacturer may request approval to use an OBD system certified to the requirements of § 86.010–17. To do so, the manufacturer must demonstrate use of good engineering judgment in determining equivalent malfunction detection criteria to those required in this section.

(g) *OBD monitoring requirements for diesel-fueled/compression-ignition engines.* The following table shows the thresholds at which point certain components or systems, as specified in this paragraph (g), are considered malfunctioning.

TABLE 1.—OBD EMISSIONS THRESHOLDS FOR DIESEL-FUELED/COMPRESSION-IGNITION ENGINES MEANT FOR PLACEMENT IN APPLICATIONS GREATER THAN 14,000 POUNDS GVWR (G/BHP-HR)

Component	§ 86.010–18 reference	NMHC	CO	NO_X	PM
NMHC catalyst system	(g)(5)	2.5x			
NO_X aftertreatment system	(g)(6), (g)(7)			+0.3	
Diesel particulate filter (DPF) system	(g)(8)	2.5x			0.05/+0.04
Air-fuel ratio sensors upstream of aftertreatment devices	(g)(9)	2.5x	2.5x	+0.3	0.03/+0.02
Air-fuel ratio sensors downstream of aftertreatment devices	(g)(9)	2.5x		+0.3	0.05/+0.04
NO_X sensors	(g)(9)			+0.3	0.05/+0.04
"Other monitors" with emissions thresholds	(g)(1), (g)(3), (g)(4), (g)(10).	2.5x	2.5x	+0.3	0.03/+0.02

Notes: FEL=Family Emissions Limit; 2.5x std means a multiple of 2.5 times the applicable emissions standard; +0.3 means the standard or FEL plus 0.3; 0.05/+0.04 means an absolute level of 0.05 or an additive level of the standard or FEL plus 0.04, whilchever level is higher; these emissions thresholds apply to the monitoring requirements of paragraph (g) of this section 86.010–18.

(1) *Fuel system monitoring.*

(i) *General.* The OBD system must monitor the fuel delivery system to verify that it is functioning properly. The individual electronic components (e.g., actuators, valves, sensors, pumps) that are used in the fuel system and are not specifically addressed in this paragraph (g)(1) must be monitored in accordance with the requirements of paragraph (i)(3) of this section.

(ii) *Fuel system malfunction criteria.*

(A) *Fuel system pressure control.* The OBD system must monitor the fuel system's ability to control to the desired fuel pressure. This monitoring must be done continuously unless new hardware has to be added, in which case the monitoring must be done at least once per drive cycle. The OBD system must detect a malfunction of the fuel system's pressure control system when the pressure control system is unable to maintain an engine's emissions at or below the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the fuel system pressure control could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that the commanded fuel system pressure cannot be delivered.

(B) *Fuel system injection quantity.* The OBD system must detect a malfunction of the fuel injection system when the system is unable to deliver the commanded quantity of fuel necessary to maintain an engine's emissions at or below the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the fuel injection quantity could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that the commanded fuel quantity cannot be delivered.

(C) *Fuel system injection timing.* The OBD system must detect a malfunction of the fuel injection system when the system is unable to deliver fuel at the proper crank angle/timing (e.g., injection timing too advanced or too retarded) necessary to maintain an engine's emissions at or below the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the fuel injection timing could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that the commanded fuel injection timing cannot be achieved.

(D) *Fuel system feedback control.* See paragraph (i)(6) of this section.

(iii) *Fuel system monitoring conditions.*

(A) The OBD system must monitor continuously for malfunctions identified in paragraphs (g)(1)(ii)(A) and (g)(1)(ii)(D) of this section.

(B) The manufacturer must define the monitoring conditions for malfunctions identified in paragraphs (g)(1)(ii)(B) and (g)(1)(ii)(C) in accordance with paragraphs (c) and (d) of this section.

(iv) *Fuel system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(2) *Engine misfire monitoring.*

(i) *General.* The OBD system must monitor the engine for misfire causing excess emissions.

(ii) *Engine misfire malfunction criteria.* The OBD system must be capable of detecting misfire occurring in one or more cylinders. To the extent possible without adding hardware for this specific purpose, the OBD system must also identify the specific misfiring cylinder. If more than one cylinder is misfiring continuously, a separate DTC must be stored indicating that multiple cylinders are misfiring. When identifying multiple cylinder misfire, the OBD system is not required to identify individually through separate DTCs each of the continuously misfiring cylinders.

(iii) *Engine misfire monitoring conditions.*

(A) The OBD system must monitor for engine misfire during engine idle conditions at least once per drive cycle in which the monitoring conditions for misfire are met. The manufacturer must be able to demonstrate via engineering analysis and/or data that the self-defined monitoring conditions: Are technically necessary to ensure robust detection of malfunctions (e.g., avoid false passes and false detection of malfunctions); require no more than 1000 cumulative engine revolutions; and, do not require any single continuous idle operation of more than 15 seconds to make a determination that a malfunction is present (e.g., a decision can be made with data gathered during several idle operations of 15 seconds or less); or, satisfy the requirements of paragraph (c) of this section with alternative engine operating conditions.

(B) Manufacturers may employ alternative monitoring conditions (e.g., off-idle) provided the manufacturer is able to demonstrate that the alternative monitoring ensure equivalent robust detection of malfunctions and equivalent timeliness in detection of malfunctions.

(iv) *Engine misfire MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(3) *EGR system monitoring.*

(i) *General.* The OBD system must monitor the EGR system on engines so equipped for low flow rate, high flow rate, and slow response malfunctions. For engines equipped with EGR coolers (e.g., heat exchangers), the OBD system must monitor the cooler for insufficient cooling malfunctions. The individual electronic components (e.g., actuators, valves, sensors) that are used in the EGR system must be monitored in accordance with the comprehensive component requirements in paragraph (i)(3) of this section.

(ii) *EGR system malfunction criteria.*

(A) *EGR low flow.* The OBD system must detect a malfunction of the EGR system prior to a decrease from the manufacturer's specified EGR flow rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the EGR system that causes a decrease in flow could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that it cannot increase EGR flow to achieve the commanded flow rate.

(B) *EGR high flow.* The OBD system must detect a malfunction of the EGR system, including a leaking EGR valve (i.e., exhaust gas flowing through the valve when the valve is commanded closed) prior to an increase from the manufacturer's specified EGR flow rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the EGR system that causes an increase in flow could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that it cannot reduce EGR flow to achieve the commanded flow rate.

(C) *EGR slow response.* The OBD system must detect a malfunction of the EGR system prior to any failure or deterioration in the capability of the EGR system to achieve the commanded flow rate within a manufacturer-specified time that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). The OBD system must monitor both the capability of the EGR system to respond to a commanded increase in flow and the capability of the EGR system to respond to a commanded decrease in flow.

(D) *EGR system feedback control.* See paragraph (i)(6) of this section.

(E) *EGR cooler performance.* The OBD system must detect a malfunction of the EGR cooler prior to a reduction from the manufacturer's specified cooling performance that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the EGR cooler could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has no detectable amount of EGR cooling.

(iii) *EGR system monitoring conditions.*

(A) The OBD system must monitor continuously for malfunctions identified in paragraphs (g)(3)(ii)(A), (g)(3)(ii)(B), and (g)(3)(ii)(D) of this section.

(B) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (g)(3)(ii)(C) in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in paragraph (c)(2) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (g)(3)(ii)(C) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(C) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (g)(3)(ii)(E) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (g)(3)(ii)(E) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(D) The manufacturer may request Administrator approval to disable temporarily the EGR system monitor(s) under specific conditions (e.g., when freezing may affect performance of the system) provided the manufacturer is

able to demonstrate via data or engineering analysis that a reliable monitor cannot be run when these conditions exist.

(iv) *EGR system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(4) *Turbo boost control system monitoring.*

(i) *General.* The OBD system must monitor the boost pressure control system (e.g., turbocharger) on engines so equipped for under and over boost malfunctions. For engines equipped with variable geometry turbochargers (VGT), the OBD system must monitor the VGT system for slow response malfunctions. For engines equipped with charge air cooler systems, the OBD system must monitor the charge air cooler system for cooling system performance malfunctions. The individual electronic components (e.g., actuators, valves, sensors) that are used in the boost pressure control system must be monitored in accordance with the comprehensive component requirements in paragraph (i)(3) of this section.

(ii) *Turbo boost control system malfunction criteria.*

(A) *Turbo underboost.* The OBD system must detect a malfunction of the boost pressure control system prior to a decrease from the manufacturer's commanded boost pressure that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the boost pressure control system that causes a decrease in boost could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that it cannot increase boost to achieve the commanded boost pressure.

(B) *Turbo overboost.* The OBD system must detect a malfunction of the boost pressure control system prior to an increase from the manufacturer's commanded boost pressure that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the boost pressure control system that causes an increase in boost could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that it cannot decrease boost to achieve the commanded boost pressure.

(C) *VGT slow response.* The OBD system must detect a malfunction prior to any failure or deterioration in the capability of the VGT system to achieve the commanded turbocharger geometry within a manufacturer-specified time that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the VGT system response could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction of the VGT system when proper functional response of the system to computer commands does not occur.

(D) *Turbo boost feedback control.* See paragraph (i)(6) of this section.

(E) *Charge air undercooling.* The OBD system must detect a malfunction of the charge air cooling system prior to a decrease from the manufacturer's specified cooling rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g). For engines in which no failure or deterioration of the charge air cooling system that causes a decrease in cooling performance could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has no detectable amount of charge air cooling.

(iii) *Turbo boost monitoring conditions.*

(A) The OBD system must monitor continuously for malfunctions identified in paragraphs (g)(4)(ii)(A), (g)(4)(ii)(B), and (g)(4)(ii)(D) of this section.

(B) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (g)(4)(ii)(C) of this section in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in paragraph (c)(2) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (g)(4)(ii)(C) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(C) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (g)(4)(ii)(E) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (g)(4)(ii)(E) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(iv) *Turbo boost system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(5) *NMHC converting catalyst monitoring.*

(i) *General.* The OBD system must monitor the NMHC converting catalyst(s) for proper NMHC conversion capability. For engines equipped with catalyzed diesel particulate filter(s) (DPF) that convert NMHC emissions, the catalyst function of the DPF must be monitored in accordance with the DPF requirements of paragraph (g)(8) of this section. For purposes of this paragraph (g)(5), each catalyst that converts NMHC must be monitored either individually or in combination with others.

(ii) *NMHC converting catalyst malfunction criteria.*

(A) *NMHC converting catalyst conversion efficiency.* The OBD system must detect a catalyst malfunction when the catalyst conversion capability decreases to the point that NMHC emissions exceed the emissions thresholds for the NMHC catalyst system as shown in Table 1 of this paragraph (g). If no failure or deterioration of the catalyst NMHC conversion capability could result in an engine's NMHC emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the catalyst has no detectable amount of NMHC conversion capability.

(B) *NMHC converting catalyst aftertreatment assistance functions.* For catalysts used to generate an exotherm to assist DPF regeneration, the OBD system must detect a malfunction when the catalyst is unable to generate a sufficient exotherm to achieve DPF regeneration. For catalysts used to generate a feedgas constituency to assist selective catalytic reduction (SCR) systems (e.g., to increase NO_2 concentration upstream of an SCR system), the OBD system must detect a malfunction when the catalyst is unable to generate the necessary feedgas constituents for proper SCR system operation. For catalysts located downstream of a DPF and used to convert NMHC emissions during DPF regeneration, the OBD system must detect a malfunction when the catalyst has no detectable amount of NMHC conversion capability.

(iii) *NMHC converting catalyst monitoring conditions.* The manufacturer must define the monitoring conditions for malfunctions identified in paragraphs (g)(5)(ii)(A) and (g)(5)(ii)(B) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraphs (g)(5)(ii)(A) and (g)(5)(ii)(B) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(iv) *NMHC converting catalyst MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section. The monitoring method for the NMHC converting catalyst(s) must be capable of detecting all instances, except diagnostic self-clearing, when a catalyst DTC has been erased but the catalyst has not been replaced (e.g., catalyst over-temperature histogram approaches are not acceptable).

(6) *Selective catalytic reduction (SCR) and lean NO_X catalyst monitoring.*

(i) *General.* The OBD system must monitor the SCR and/or the lean NO_X converting catalyst(s) for proper conversion capability. For engines equipped with SCR systems or other catalyst systems that use an active/intrusive reductant injection (e.g., active lean NO_X catalysts that use diesel fuel post-injection or in-exhaust injection), the OBD system must monitor the active/intrusive reductant injection system for proper performance. The individual electronic components (e.g., actuators, valves, sensors, heaters, pumps) in the active/intrusive reductant injection system must be monitored in accordance with the comprehensive component requirements in paragraph (i)(3) of this section. For purposes of this paragraph (g)(6), each catalyst that converts NO_X must be monitored either individually or in combination with others.

(ii) *SCR and lean NO_X catalyst malfunction criteria.*

(A) *SCR and lean NO_X catalyst conversion efficiency.* The OBD system must detect a catalyst malfunction when the catalyst conversion capability decreases to the point that would cause an engine's emissions to exceed the emissions thresholds for NO_X aftertreatment systems as shown in Table 1 of this paragraph (g). If no failure or deterioration of the catalyst NO_X conversion capability could result in an engine's emissions exceeding any of the applicable emissions thresholds, the OBD system must detect a malfunction when the catalyst has no detectable amount of NO_X conversion capability.

(B) *SCR and lean NO_X catalyst active/intrusive reductant delivery performance.* The OBD system must detect a malfunction prior to any failure or deterioration of the system to properly regulate reductant delivery (e.g., urea injection, separate injector fuel injection, post injection of fuel, air assisted injection/mixing) that would cause an engine's emissions to exceed any of the applicable emissions thresholds for NO_X aftertreatment systems as shown in Table 1 of this paragraph (g). If no failure or deterioration of the reductant delivery system could result in an engine's emissions exceeding any of the applicable thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that it is no longer able to deliver the desired quantity of reductant.

(C) *SCR and lean NO_X catalyst active/intrusive reductant quantity.* If the SCR or lean NO_X catalyst system uses a reductant other than the fuel used for the engine, or uses a reservoir/tank for the reductant that is separate from the fuel tank used for the engine, the OBD system must detect a malfunction when there is no longer sufficient reductant available (e.g., the reductant tank is empty).

(D) *SCR and lean NO_X catalyst active/intrusive reductant quality.* If the SCR or lean NO_X catalyst system uses a reservoir/tank for the reductant that is separate from the fuel tank used for the engine, the OBD system must detect a malfunction when an improper reductant is used in the reductant reservoir/tank (e.g., the reductant tank is filled with something other than the reductant).

(E) *SCR and lean NO_X catalyst active/intrusive reductant feedback control.* See paragraph (i)(6) of this section.

(iii) *SCR and lean NO_X catalyst monitoring conditions.*

(A) The manufacturers must define the monitoring conditions for malfunctions identified in paragraphs (g)(6)(ii)(A) and (g)(6)(ii)(D) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (g)(6)(ii)(A) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(B) The OBD system must monitor continuously for malfunctions identified in paragraphs (g)(6)(ii)(B), (g)(6)(ii)(C), and (g)(6)(ii)(E) of this section.

(iv) *SCR and lean NO_X catalyst MIL activation and DTC storage.*

(A) For malfunctions identified in paragraph (g)(6)(ii)(A) of this section, the MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(B) For malfunctions identified in paragraphs (g)(6)(ii)(B), (g)(6)(ii)(C), and (g)(6)(ii)(D) of this section, the manufacturer may delay activating the MIL if the vehicle is equipped with an alternative indicator for notifying the vehicle operator of the malfunction. The alternative indicator must be of sufficient illumination and be located such that it is readily visible to the vehicle operator under all lighting conditions. If the vehicle is not equipped with such an alternative indicator and the OBD MIL activates, the MIL may be immediately deactivated and the corresponding DTC(s) erased once the OBD system has verified that the reductant tank has been refilled properly and the MIL has not been activated for any other malfunction. The Administrator may approve other strategies that provide equivalent assurance that a vehicle operator would be promptly notified and that corrective action would be taken.

(C) The monitoring method for the SCR and lean NO_X catalyst(s) must be capable of detecting all instances, except diagnostic self-clearing, when a catalyst DTC(s) has been erased but the catalyst has not been replaced (e.g., catalyst over-temperature histogram approaches are not acceptable).

(7) *NO_X adsorber system monitoring.*

(i) *General.* The OBD system must monitor the NO_X adsorber on engines so-equipped for proper performance. For engines equipped with active/intrusive injection (e.g., in-exhaust fuel and/or air injection) to achieve desorption of the NO_X adsorber, the OBD system must monitor the active/intrusive injection system for proper performance. The individual electronic components (e.g., injectors, valves, sensors) that are used in the active/intrusive injection system must be monitored in accordance with the comprehensive component requirements in paragraph (i)(3) of this section.

(ii) *NO_X adsorber system malfunction criteria.*

(A) *NO_X adsorber system capability.* The OBD system must detect a NO_X adsorber malfunction when its capability (i.e., its combined adsorption and conversion capability) decreases to

the point that would cause an engine's NO_X emissions to exceed the emissions thresholds for NO_X aftertreatment systems as shown in Table 1 of this paragraph (g). If no failure or deterioration of the NO_X adsorber capability could result in an engine's NO_X emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has no detectable amount of NO_X adsorber capability.

(B) *NO_X adsorber system active/intrusive reductant delivery performance.* For NO_X adsorber systems that use active/intrusive injection (e.g., in-cylinder post fuel injection, in-exhaust air-assisted fuel injection) to achieve desorption of the NO_X adsorber, the OBD system must detect a malfunction if any failure or deterioration of the injection system's ability to properly regulate injection causes the system to be unable to achieve desorption of the NO_X adsorber.

(C) *NO_X adsorber system feedback control.* Malfunction criteria for the NO_X adsorber and the NO_X adsorber active/instrusive reductant delivery system are contained in paragraph (i)(6)of this section.

(iii) *NO_X adsorber system monitoring conditions.*

(A) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (g)(7)(ii)(A) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (g)(7)(ii)(A) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(B) The OBD system must monitor continuously for malfunctions identified in paragraphs (g)(7)(ii)(B) and (g)(7)(ii)(C) of this section.

(iv) *NO_X adsorber system MIL activation and DTC* storage. The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(8) *Diesel particulate filter (DPF) system monitoring.*

(i) *General.* The OBD system must monitor the DPF on engines so-equipped for proper performance. For engines equipped with active regeneration systems that use an active/intrusive injection (e.g., in-exhaust fuel injection, in-exhaust fuel/air burner), the OBD system must monitor the active/intrusive injection system for proper performance. The individual electronic components (e.g., injectors, valves, sensors) that are used in the active/intrusive injection system must be monitored in accordance with the comprehensive component requirements in paragraph (i)(3) of this section.

(ii) *DPF system malfunction criteria.*

(A) *DPF filtering performance.* The OBD system must detect a malfunction prior to a decrease in the PM filtering capability of the DPF (e.g., cracking, melting, etc.) that would cause an engine's PM emissions to exceed the emissions thresholds for DPF systems as shown in Table 1 of this paragraph (g). If no failure or deterioration of the PM filtering performance could result in an engine's PM emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when no detectable amount of PM filtering occurs.

(B) *DPF regeneration frequency.* The OBD system must detect a malfunction when the DPF regeneration frequency increases from (i.e., occurs more often than) the manufacturer's specified regeneration frequency to a level such that it would cause an engine's NMHC emissions to exceed the emissions threshold for DPF systems as shown in Table 1 of this paragraph (g). If no such regeneration frequency exists that could cause NMHC emissions to exceed the applicable emission threshold, the OBD system must detect a malfunction when the DPF regeneration frequency exceeds the manufacturer's specified design limits for allowable regeneration frequency.

(C) *DPF incomplete regeneration.* The OBD system must detect a regeneration malfunction when the DPF does not properly regenerate under manufacturer-defined conditions where regeneration is designed to occur.

(D) *DPF NMHC conversion.* For any DPF that serves to convert NMHC emissions, the OBD system must detect a malfunction when the NMHC conversion capability decreases to the point that NMHC emissions exceed the emissions threshold for DPF systems as shown in Table 1 of this paragraph (g). If no failure or deterioration of the NMHC conversion capability could result in NMHC emissions exceeding the applicable threshold, the OBD system must detect a malfunction when the system has no detectable amount of NMHC conversion capability.

(E) *DPF missing substrate.* The OBD system must detect a malfunction if either the DPF substrate is completely destroyed, removed, or missing, or if the DPF assembly has been replaced with a muffler or straight pipe.

(F) *DPF system active/intrusive injection.* For DPF systems that use active/intrusive injection (e.g., in-cylinder post fuel injection, in-exhaust air-assisted fuel injection) to achieve regeneration of the DPF, the OBD system must detect a malfunction if any failure or deterioration of the injection system's ability to properly regulate injection causes the system to be unable to achieve regeneration of the DPF.

(G) *DPF regeneration feedback control.* See paragraph (i)(6) of this section.

(iii) *DPF monitoring conditions.* The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (g)(8)(ii) of this section in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in paragraph (c)(2) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (g)(8)(ii) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(iv) *DPF system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(9) *Exhaust gas sensor and sensor heater monitoring.*

(i) *General.* The OBD system must monitor for proper output signal, activity, response rate, and any other parameter that can affect emissions, all exhaust gas sensors (e.g., oxygen, air-fuel ratio, NO_X) used for emission control system feedback (e.g., EGR control/feedback, SCR control/feedback, NO_X adsorber control/feedback) and/or as a monitoring device. For engines equipped with heated exhaust gas sensors, the OBD system must monitor the heater for proper performance.

(ii) *Malfunction criteria for air-fuel ratio sensors located upstream of aftertreatment devices.*

(A) *Sensor performance.* The OBD system must detect a malfunction prior to any failure or deterioration of the sensor voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g).

(B) *Circuit integrity.* The OBD system must detect malfunctions of the sensor related to a lack of circuit continuity or signal out-of-range values.

(C) *Feedback function.* The OBD system must detect a malfunction of the

sensor if the emission control system (e.g., EGR, SCR, or NO_X adsorber) is unable to use that sensor as a feedback input (e.g., causes limp-home or open-loop operation).

(D) *Monitoring function.* To the extent feasible, the OBD system must detect a malfunction of the sensor when the sensor output voltage, resistance, impedance, current, amplitude, activity, offset, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst, EGR, SCR, or NO_X adsorber monitoring).

(iii) *Malfunction criteria for air-fuel ratio sensors located downstream of aftertreatment devices.*

(A) *Sensor performance.* The OBD system must detect a malfunction prior to any failure or deterioration of the sensor voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) that would cause an engine's emissions to exceed the emissions thresholds for air-fuel ratio sensors downstream of aftertreatment devices as shown in Table 1 of this paragraph (g).

(B) *Circuit integrity.* The OBD system must detect malfunctions of the sensor related to a lack of circuit continuity or signal out-of-range values.

(C) *Feedback function.* The OBD system must detect a malfunction of the sensor if the emission control system (e.g., EGR, SCR, or NO_X adsorber) is unable to use that sensor as a feedback input (e.g., causes limp-home or open-loop operation).

(D) *Monitoring function.* To the extent feasible, the OBD system must detect a malfunction of the sensor when the sensor output voltage, resistance, impedance, current, amplitude, activity, offset, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst, EGR, SCR, or NO_X adsorber monitoring).

(iv) *Malfunction criteria for NO_X sensors.*

(A) *Sensor performance.* The OBD system must detect a malfunction prior to any failure or deterioration of the sensor voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) that would cause an engine's emissions to exceed the emissions thresholds for NO_X sensors as shown in Table 1 of this paragraph (g).

(B) *Circuit integrity.* The OBD system must detect malfunctions of the sensor related to a lack of circuit continuity or signal out-of-range values.

(C) *Feedback function.*The OBD system must detect a malfunction of the sensor if the emission control system (e.g., EGR, SCR, or NO_X adsorber) is unable to use that sensor as a feedback input (e.g., causes limp-home or open-loop operation).

(D) *Monitoring function.* To the extent feasible, the OBD system must detect a malfunction of the sensor when the sensor output voltage, resistance, impedance, current, amplitude, activity, offset, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst, EGR, SCR, or NO_X adsorber monitoring).

(v) *Malfunction criteria for other exhaust gas sensors.* For other exhaust gas sensors, the manufacturer must submit a monitoring plan to the Administrator for approval. The plan must include data and/or engineering evaluations that demonstrate that the monitoring plan is as reliable and effective as the monitoring required in paragraphs (g)(9)(ii) through (g)(9)(iv) of this section.

(vi) *Malfunction criteria for exhaust gas sensor heaters.*

(A) The OBD system must detect a malfunction of the heater performance when the current or voltage drop in the heater circuit is no longer within the manufacturer's specified limits for normal operation (i.e., within the criteria required to be met by the component vendor for heater circuit performance at high mileage). The manufacturer may use other malfunction criteria for heater performance malfunctions. To do so, the manufacturer must be able to demonstrate via data and/or an engineering evaluation that the monitor is reliable and robust.

(B) The OBD system must detect malfunctions of the heater circuit including open or short circuits that conflict with the commanded state of the heater (e.g., shorted to 12 Volts when commanded to 0 Volts (ground)).

(vii) *Monitoring conditions for exhaust gas sensors.*

(A) The manufacturer must define the monitoring conditions for malfunctions identified in paragraphs (g)(9)(ii)(A), (g)(9)(iii)(A), and (g)(9)(iv)(A) of this section (i.e., sensor performance) in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraphs (g)(9)(ii)(A), (g)(9)(iii)(A), and (g)(9)(iv)(A) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(B) The manufacturer must define the monitoring conditions for malfunctions identified in paragraphs (g)(9)(ii)(D), (g)(9)(iii)(D), and (g)(9)(iv)(D) of this section (i.e., monitoring function) in accordance with paragraphs (c) and (d) of this section with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in paragraph (c)(2) of this section.

(C) Except as provided for in paragraph (g)(9)(vii)(D) of this paragraph (g)(9), the OBD system must monitor continuously for malfunctions identified in paragraphs (g)(9)(ii)(B), (g)(9)(ii)(C), (g)(9)(iii)(B), (g)(9)(iii)(C), (g)(9)(iv)(B), and (g)(9)(iv)(C) (i.e., circuit integrity and feedback function).

(D) A manufacturer may request approval to disable continuous exhaust gas sensor monitoring when an exhaust gas sensor malfunction cannot be distinguished from other effects (e.g., disable monitoring for out-of-range on the low side during fuel cut conditions). To do so, the manufacturer must demonstrate via data and/or engineering analyses that a properly functioning sensor cannot be distinguished from a malfunctioning sensor and that the disablement interval is limited only to that necessary for avoiding false malfunction detection.

(viii) *Monitoring conditions for exhaust gas sensor heaters.*

(A) The manufacturer must define monitoring conditions for malfunctions identified in paragraph (g)(9)(vi)(A) of this section (i.e., sensor heater performance) in accordance with paragraphs (c) and (d) of this section.

(B) The OBD system must monitor continuously for malfunctions identified in paragraph (g)(9)(vi)(B) of this section (i.e., circuit malfunctions).

(ix) *Exhaust gas sensor and sensor heater MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(10) *Variable Valve Timing (VVT) system monitoring.*

(i) *General.* The OBD system must monitor the VVT system on engines so equipped for target error and slow response malfunctions. The individual electronic components (e.g., actuators, valves, sensors) that are used in the VVT system must be monitored in accordance with the comprehensive components requirements in paragraph (i)(3) of this section.

(ii) *VVT system malfunction criteria.*

(A) *VVT system target error.* The OBD system must detect a malfunction prior to any failure or deterioration in the capability of the VVT system to achieve the commanded valve timing and/or control within a crank angle and/or lift tolerance that would cause an engine's

emissions to exceed the emission thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g).

(B) *VVT slow response.* The OBD system must detect a malfunction prior to any failure or deterioration in the capability of the VVT system to achieve the commanded valve timing and/or control within a manufacturer-specified time that would cause an engine's emissions to exceed the emission thresholds for ''other monitors'' as shown in Table 1 of this paragraph (g).

(C) For engines in which no failure or deterioration of the VVT system could result in an engine's emissions exceeding the applicable emissions thresholds of paragraphs (g)(10)(ii)(A) and (g)(10)(ii)(B) of this section, the OBD system must detect a malfunction of the VVT system when proper functional response of the system to computer commands does not occur.

(iii) *VVT system monitoring conditions.* Manufacturers must define the monitoring conditions for VVT system malfunctions identified in paragraph (g)(10)(ii) of this section in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in paragraph (c)(2) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (g)(10)(ii) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(iv) *VVT MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(h) *OBD monitoring requirements for gasoline-fueled/spark-ignition engines.* The following table shows the thresholds at which point certain components or systems, as specified in this paragraph (h), are considered malfunctioning.

TABLE 2.—OBD EMISSIONS THRESHOLDS FOR GASOLINE-FUELED/SPARK-IGNITION ENGINES MEANT FOR PLACEMENT IN APPLICATIONS GREATER THAN 14,000 POUNDS GVWR (G/BHP-HR)

Component	NO_X	NMHC	CO	§ 86.010–18 reference
Catalyst system	1.75x std ..	1.75x std	.....	(h)(6).
Evaporative emissions control system	.....	0.150 inch leak	.....	(h)(7).
''Other monitors'' with emissions thresholds	1.5x std	1.5x std	1.5x std	(h)(1), (h)(2), (h)(3), (h)(4), (h)(5), (h)(8), (h)(9).

Notes: 1.75x std means a multiple of 1.75 times the applicable emissions standard; these emissions thresholds apply to the monitoring requirements of paragraph (h) of this section 86.010–18; The evaporative emissions control system threshold is not, technically, an emissions threshold but rather a leak size that must be detected; nonetheless, for ease we refer to this as the threshold.

(1) *Fuel system monitoring.*

(i) *General.* The OBD system must monitor the fuel delivery system to determine its ability to provide compliance with emission standards.

(ii) *Fuel system malfunction criteria.*

(A) The OBD system must detect a malfunction of the fuel delivery system (including feedback control based on a secondary oxygen sensor) when the fuel delivery system is unable to maintain an engine's emissions at or below the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h).

(B) Except as provided for in paragraph (h)(1)(ii)(C) of this section, if the engine is equipped with adaptive feedback control, the OBD system must detect a malfunction when the adaptive feedback control has used up all of the adjustment allowed by the manufacturer.

(C) If the engine is equipped with feedback control that is based on a secondary oxygen (or equivalent) sensor, the OBD system is not required to detect a malfunction of the fuel system solely when the feedback control based on a secondary oxygen sensor has used up all of the adjustment allowed by the manufacturer. However, if a failure or deterioration results in engine emissions that exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h), the OBD system is required to detect a malfunction.

(D) The OBD system must detect a malfunction whenever the fuel control system fails to enter closed loop operation following engine start within a manufacturer specified time interval. The specified time interval must be supported by data and/or engineering analyses submitted by the manufacturer.

(E) The manufacturer may adjust the malfunction criteria and/or monitoring conditions to compensate for changes in altitude, for temporary introduction of large amounts of purge vapor, or for other similar identifiable operating conditions when such conditions occur.

(iii) *Fuel system monitoring conditions.* The fuel system must be monitored continuously for the presence of a malfunction.

(iv) *Fuel system MIL activation and DTC storage.*

(A) A pending DTC must be stored immediately upon the fuel system exceeding the malfunction criteria established in paragraph (h)(1)(ii) of this section.

(B) Except as provided for in paragraph (h)(1)(iv)(C) of this section, if a pending DTC is stored, the OBD system must activate the MIL immediately and store a MIL-on DTC if a malfunction is again detected during either the drive cycle immediately following storage of the pending DTC regardless of the conditions encountered during that drive cycle, or on the next drive cycle in which similar conditions are encountered to those that occurred when the pending DTC was stored. Similar conditions means engine conditions having an engine speed within 375 rpm, load conditions within 20 percent, and the same warm up status (i.e., cold or hot) as the engine conditions stored pursuant to paragraph (h)(1)(iv)(E) of this section. Other definitions of similar conditions may be used but must result in comparable timeliness and reliability in detecting similar engine operation.

(C) The pending DTC may be erased at the end of the next drive cycle in which similar conditions have been encountered without having again exceeded the specified fuel system malfunction criteria. The pending DTC may also be erased if similar conditions are not encountered during the 80 drive cycles immediately following detection of the potential malfunction for which the pending DTC was stored.

(D) Storage of freeze frame conditions. The OBD system must store and erase freeze frame conditions either in conjunction with storing and erasing a pending DTC or in conjunction with storing and erasing a MIL-on DTC. Freeze frame information associated with a fuel system malfunction shall be

stored in preference to freeze frame information required elsewhere in paragraphs (h) or (i) of this section.

(E) Storage of fuel system conditions for determining similar conditions of operation. The OBD must store the engine speed, load, and warm-up status present at the time it first detects a potential malfunction meeting the criteria of paragraph (h)(1)(ii) of this section and stores a pending DTC.

(F) Deactivating the MIL. The MIL may be extinguished after three sequential driving cycles in which similar conditions have been encountered without detecting a malfunction of the fuel system.

(2) *Engine misfire monitoring.*

(i) *General.*

(A) The OBD system must monitor the engine for misfire causing catalyst damage and misfire causing excess emissions.

(B) The OBD system must identify the specific cylinder that is misfiring. The manufacturer may store a general misfire DTC instead of a cylinder specific DTC under certain operating conditions. To do so, the manufacturer must submit data and/or engineering analyses that demonstrate that the misfiring cylinder cannot be identified reliably when the conditions occur.

(C) If more than one cylinder is misfiring, a separate DTC must be stored to indicate that multiple cylinders are misfiring unless otherwise allowed by this paragraph (h)(2). When identifying multiple cylinder misfire, the OBD system is not required to also identify using separate DTCs each of the misfiring cylinders individually. If more than 90 percent of the detected misfires occur in a single cylinder, an appropriate DTC may be stored that indicates the specific misfiring cylinder rather than storing the multiple cylinder misfire DTC. If two or more cylinders individually have more than 10 percent of the total number of detected misfires, a multiple cylinder DTC must be stored.

(ii) *Engine misfire malfunction criteria.*

(A) *Misfire causing catalyst damage.* The manufacturer must determine the percentage of misfire evaluated in 200 revolution increments for each engine speed and load condition that would result in a temperature that causes catalyst damage. If this percentage of misfire is exceeded, it shall be considered a malfunction that must be detected. For every engine speed and load condition for which this percentage of misfire is determined to be lower than five percent, the manufacturer may set the malfunction criteria at five percent. The manufacturer may use a longer interval than 200 revolutions but only for determining, on a given drive cycle, the first misfire exceedance as provided in paragraph (h)(2)(iv)(A) of this section. To do so, the manufacturer must demonstrate that the interval is not so long that catalyst damage would occur prior to the interval being elapsed.

(B) *Misfire causing emissions to exceed the applicable thresholds.* The manufacturer must determine the percentage of misfire evaluated in 1000 revolution increments that would cause emissions from an emissions durability demonstration engine to exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h) if that percentage of misfire were present from the beginning of the test. If this percentage of misfire is exceeded, regardless of the pattern of misfire events (e.g., random, equally spaced, continuous), it shall be considered a malfunction that must be detected. To establish this percentage of misfire, the manufacturer must use misfire events occurring at equally spaced, complete engine cycle intervals, across randomly selected cylinders throughout each 1000-revolution increment. If this percentage of misfire is determined to be lower than one percent, the manufacturer may set the malfunction criteria at one percent. The manufacturer may use a longer interval than 1000 revolutions. To do so, the manufacturer must demonstrate that the strategy would be equally effective and timely at detecting misfire.

(iii) *Engine misfire monitoring conditions.*

(A) The OBD system must monitor continuously for misfire under the following conditions: from no later than the end of the second crankshaft revolution after engine start; during the rise time and settling time for engine speed to reach the desired idle engine speed at engine start-up (i.e., ''flare-up'' and ''flare-down''); and, under all positive torque engine speeds and load conditions except within the engine operating region bound by the positive torque line (i.e., engine load with the transmission in neutral), and the points represented by an engine speed of 3000 rpm with the engine load at the positive torque line and the redline engine speed with the engine's manifold vacuum at four inches of mercury lower than that at the positive torque line. For this purpose, redline engine speed is defined as either the recommended maximum engine speed as displayed on the instrument panel tachometer, or the engine speed at which fuel shutoff occurs.

(B) If an OBD monitor cannot detect all misfire patterns under all required engine speed and load conditions as required by paragraph (h)(2)(iii)(A) of this section, the OBD system may still be acceptable. The Administrator will evaluate the following factors in making a determination: the magnitude of the region(s) in which misfire detection is limited; the degree to which misfire detection is limited in the region(s) (i.e., the probability of detection of misfire events); the frequency with which said region(s) are expected to be encountered in-use; the type of misfire patterns for which misfire detection is troublesome; and demonstration that the monitoring technology employed is not inherently incapable of detecting misfire under the required conditions (i.e., compliance can be achieved on other engines). The evaluation will be based on the following misfire patterns: equally spaced misfire occurring on randomly selected cylinders; single cylinder continuous misfire; and paired cylinder (cylinders firing at the same crank angle) continuous misfire.

(C) The manufacturer may use monitoring system that has reduced misfire detection capability during the portion of the first 1000 revolutions after engine start that a cold start emission reduction strategy is active that reduces engine torque (e.g., spark retard strategies). To do so, the manufacturer must demonstrate that the probability of detection is greater than or equal to 75 percent during the worst case condition (i.e., lowest generated torque) for a vehicle operated continuously at idle (park/neutral idle) on a cold start between 50 and 86 degrees Fahrenheit and that the technology cannot reliably detect a higher percentage of the misfire events during the conditions.

(D) The manufacturer may disable misfire monitoring or use an alternative malfunction criterion when misfire cannot be distinguished from other effects. To do so, the manufacturer must demonstrate that the disablement interval or the period of use of an alternative malfunction criterion is limited only to that necessary for avoiding false detection and for one or more of the following operating conditions: rough road; fuel cut; gear changes for manual transmission vehicles; traction control or other vehicle stability control activation such as anti-lock braking or other engine torque modifications to enhance vehicle stability; off-board control or intrusive activation of vehicle components or monitors during service or assembly plant testing; portions of intrusive evaporative system or EGR monitors that can significantly affect engine stability (i.e., while the purge valve is open during the vacuum pull-down of a

evaporative system leak check but not while the purge valve is closed and the evaporative system is sealed or while an EGR monitor causes the EGR valve to be cycled intrusively on and off during positive torque conditions); or, engine speed, load, or torque transients due to throttle movements more rapid than those that occur over the FTP cycle for the worst case engine within each engine family. In general, the Administrator will not approve disablement for conditions involving normal air conditioning compressor cycling from on-to-off or off-to-on, automatic transmission gear shifts (except for shifts occurring during wide open throttle operation), transitions from idle to off-idle, normal engine speed or load changes that occur during the engine speed rise time and settling time (i.e., ''flare-up'' and ''flare-down'') immediately after engine starting without any vehicle operator-induced actions (e.g., throttle stabs), or excess acceleration (except for acceleration rates that exceed the maximum acceleration rate obtainable at wide open throttle while the vehicle is in gear due to abnormal conditions such as slipping of a clutch).

(iv) *MIL activation and DTC storage for engine misfire causing catalyst damage.*

(A) *Pending DTCs.* A pending DTC must be stored immediately if, during a single drive cycle, the specified misfire percentage described in paragraph (h)(2)(ii)(A) of this section is exceeded three times when operating in the positive torque region encountered during a FTP cycle or is exceeded on a single occasion when operating at any other engine speed and load condition in the positive torque region defined in paragraph (h)(2)(iii)(A) of this section. Immediately after a pending DTC is stored pursuant to this paragraph, the MIL must blink once per second at all times during the drive cycle that engine misfire is occurring. The MIL may be deactivated during those times that misfire is not occurring. If, at the time that a catalyst damaging misfire malfunction occurs, the MIL is already activated for a malfunction other than misfire, the MIL must still blink once per second at all times during the drive cycle that engine misfire is occurring. If misfire ceases, the MIL must stop blinking but remain activated as appropriate in accordance with the other malfunction.

(B) *MIL-on DTCs.* If a pending DTC is stored in accordance with paragraph (h)(2)(iv)(A) of this section, the OBD system must immediately store a MIL-on DTC if the percentage of misfire described in paragraph (h)(2)(ii)(A) of this section is again exceeded one or more times during either the drive cycle immediately following storage of the pending DTC, regardless of the conditions encountered during that drive cycle, or on the next drive cycle in which similar conditions are encountered to those that occurred when the pending DTC was stored. If, during a previous drive cycle, a pending DTC is stored in accordance with paragraph (h)(2)(iv)(A) of this section, a MIL-on DTC must be stored immediately upon exceeding the percentage misfire described in paragraph (h)(2)(ii)(A) of this section regardless of the conditions encountered. Upon storage of a MIL-on DTC, the MIL must blink once per second at all times during the drive cycle that engine misfire is occurring. If misfire ceases, the MIL must stop blinking but remain activated until the conditions are met for extinguishing the MIL.

(C) *Erasure of pending DTCs.* Pending DTCs stored in accordance with paragraph (h)(2)(iv)(A) of this section must be erased at the end of the next drive cycle in which similar conditions are encountered to those that occurred when the pending DTC was stored provided no exceedances have been detected of the misfire percentage described in paragraph (h)(2)(ii)(A) of this section. The pending DTC may also be erased if similar conditions are not encountered during the next 80 drive cycles immediately following storage of the pending DTC.

(D) *Exemptions for engines with fuel shutoff and default fuel control.* In engines that provide for fuel shutoff and default fuel control to prevent over fueling during catalyst damaging misfire conditions, the MIL need not blink as required by paragraphs (h)(2)(iv)(A) and (h)(2)(iv)(B) of this section. Instead, the MIL may be activated continuously upon misfire detection provided that the fuel shutoff and default fuel control are activated immediately upon misfire detection. Fuel shutoff and default fuel control may be deactivated only when the engine is outside of the misfire range except that the manufacturer may periodically, but not more than once every 30 seconds, deactivate fuel shutoff and default fuel control to determine if the catalyst damaging misfire is still occurring. Normal fueling and fuel control may be resumed if the catalyst damaging misfire is no longer occurring.

(E) The manufacturer may use a strategy that activates the MIL continuously rather than blinking the MIL during extreme catalyst damage misfire conditions (i.e., catalyst damage misfire occurring at all engine speeds and loads). Use of such a strategy must be limited to catalyst damage misfire levels that cannot be avoided during reasonable driving conditions. To use such a strategy, the manufacturer must be able to demonstrate that the strategy will encourage operation of the vehicle in conditions that will minimize catalyst damage (e.g., at low engine speeds and loads).

(v) *MIL activation and DTC storage for engine misfire causing emissions to exceed applicable emissions thresholds.*

(A) Immediately upon detection, during the first 1000 revolutions after engine start of the misfire percentage described in paragraph (h)(2)(ii)(B) of this section, a pending DTC must be stored. If such a pending DTC is stored already and another such exceedance of the misfire percentage is detected within the first 1000 revolutions after engine start on any subsequent drive cycle, the MIL must activate and a MIL-on DTC must be stored. The pending DTC may be erased if, at the end of the next drive cycle in which similar conditions are encountered to those that occurred when the pending DTC was stored, there has been no exceedance of the misfire percentage described in paragraph (h)(2)(ii)(B) of this section. The pending DTC may also be erased if similar conditions are not encountered during the next 80 drive cycles immediately following storage of the pending DTC.

(B) No later than the fourth detection during a single drive cycle, following the first 1000 revolutions after engine start of the misfire percentage described in paragraph (h)(2)(ii)(B) of this section, a pending DTC must be stored. If such a pending DTC is stored already, then the MIL must activate and a MIL-on DTC must be stored within 10 seconds of the fourth detection of the misfire percentage described in paragraph (h)(2)(ii)(B) of this section during either the drive cycle immediately following storage of the pending DTC, regardless of the conditions encountered during that drive cycle excepting those conditions within the first 1000 revolutions after engine start, or on the next drive cycle in which similar conditions are encountered to those that occurred when the pending DTC was stored excepting those conditions within the first 1000 revolutions after engine start. The pending DTC may be erased if, at the end of the next drive cycle in which similar conditions are encountered to those that occurred when the pending DTC was stored, there has been no exceedance of the misfire percentage described in paragraph (h)(2)(ii)(B) of this section. The pending DTC may also be erased if

similar conditions are not encountered during the next 80 drive cycles immediately following storage of the pending DTC.

(vi) *Storage of freeze frame conditions for engine misfire.*

(A) The OBD system must store and erase freeze frame conditions (as defined in paragraph (k)(4)(iii) of this section) either in conjunction with storing and erasing a pending DTC or in conjunction with storing and erasing a MIL-on DTC.

(B) If, upon storage of a DTC as required by paragraphs (h)(2)(iv) and (h)(2)(v) of this section, there already exist stored freeze frame conditions for a malfunction other than a misfire or fuel system malfunction (see paragraph (h)(1) of this section) then the stored freeze frame information shall be replaced with freeze frame information associated with the misfire malfunction.

(vii) *Storage of engine conditions in association with engine misfire.* Upon detection of the misfire percentages described in paragraphs (h)(2)(ii)(A) and (h)(2)(ii)(B) of this section, the following engine conditions must be stored for use in determining similar conditions: engine speed, load, and warm up status of the first misfire event that resulted in pending DTC storage.

(viii) *MIL deactivation in association with engine misfire.* The MIL may be deactivated after three sequential drive cycles in which similar conditions have been encountered without an exceedance of the misfire percentages described in paragraphs (h)(2)(ii)(A) and (h)(2)(ii)(B) of this section.

(3) *Exhaust gas recirculation system monitoring.*

(i) *General.* The OBD system must monitor the EGR system on engines so equipped for low and high flow rate malfunctions. The individual electronic components (e.g., actuators, valves, sensors) that are used in the EGR system must be monitored in accordance with the comprehensive component requirements in paragraph (i)(3) of this section.

(ii) *EGR system malfunction criteria.*

(A) The OBD system must detect a malfunction of the EGR system prior to a decrease from the manufacturer's specified EGR flow rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h). For engines in which no failure or deterioration of the EGR system that causes a decrease in flow could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has no detectable amount of EGR flow.

(B) The OBD system must detect a malfunction of the EGR system prior to an increase from the manufacturer's specified EGR flow rate that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h). For engines in which no failure or deterioration of the EGR system that causes an increase in flow could result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when the system has reached its control limits such that it cannot reduce EGR flow.

(iii) *EGR system monitoring conditions.*

(A) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (h)(3)(ii) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required by paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (h)(3)(ii) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(B) The manufacturer may disable temporarily the EGR monitor under conditions when monitoring may not be reliable (e.g., when freezing may affect performance of the system). To do so, the manufacturer must be able to demonstrate that the monitor is unreliable when such conditions exist.

(iv) *EGR system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(4) *Cold start emission reduction strategy monitoring.*

(i) *General.* If an engine incorporates a specific engine control strategy to reduce cold start emissions, the OBD system must monitor the key components (e.g., idle air control valve), other than secondary air, while the control strategy is active to ensure proper operation of the control strategy.

(ii) *Cold start strategy malfunction criteria.*

(A) The OBD system must detect a malfunction prior to any failure or deterioration of the individual components associated with the cold start emission reduction control strategy that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h). The manufacturer must establish the malfunction criteria based on data from one or more representative engine(s) and provide an engineering evaluation for establishing the malfunction criteria for the remainder of the manufacturer's product line.

(B) Where no failure or deterioration of a component used for the cold start emission reduction strategy could result in an engine's emissions exceeding the applicable emissions thresholds, the individual component must be monitored for proper functional response while the control strategy is active in accordance with the malfunction criteria in paragraphs (i)(3)(ii) and (i)(3)(iii) of this section.

(iii) *Cold start strategy monitoring conditions.* The manufacturer must define monitoring conditions for malfunctions identified in paragraph (h)(4)(ii) of this section in accordance with paragraphs (c) and (d) of this section.

(iv) *Cold start strategy MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(5) *Secondary air system monitoring.*

(i) *General.* The OBD system on engines equipped with any form of secondary air delivery system must monitor the proper functioning of the secondary air delivery system including all air switching valves(s). The individual electronic components (e.g., actuators, valves, sensors) that are used in the secondary air system must be monitored in accordance with the comprehensive component requirements in paragraph (i)(3) of this section. For purposes of this paragraph (h)(5), ''air flow'' is defined as the air flow delivered by the secondary air system to the exhaust system. For engines using secondary air systems with multiple air flow paths/distribution points, the air flow to each bank (i.e., a group of cylinders that share a common exhaust manifold, catalyst, and control sensor) must be monitored in accordance with the malfunction criteria in paragraph (h)(5)(ii) of this section. Also for purposes of this paragraph (h)(5), ''normal operation'' is defined as the condition when the secondary air system is activated during catalyst and/or engine warm-up following engine start. ''Normal operation'' does not include the condition when the secondary air system is turned on intrusively for the sole purpose of monitoring.

(ii) *Secondary air system malfunction criteria.*

(A) Except as provided in paragraph (h)(5)(ii)(C) of this section, the OBD system must detect a secondary air system malfunction prior to a decrease from the manufacturer's specified air

flow during normal operation that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h).

(B) Except as provided in paragraph (h)(5)(ii)(C) of this section, the OBD system must detect a secondary air system malfunction prior to an increase from the manufacturer's specified air flow during normal operation that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h).

(C) For engines in which no deterioration or failure of the secondary air system would result in an engine's emissions exceeding the applicable emissions thresholds, the OBD system must detect a malfunction when no detectable amount of air flow is delivered by the secondary air system during normal operation.

(iii) *Secondary air system monitoring conditions.* The manufacturer must define monitoring conditions for malfunctions identified in paragraph (h)(5)(ii) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required by paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (h)(5)(ii) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(iv) *Secondary air system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(6) *Catalyst system monitoring.*

(i) *General.* The OBD system must monitor the catalyst system for proper conversion capability.

(ii) *Catalyst system malfunction criteria.* The OBD system must detect a catalyst system malfunction when the catalyst system's conversion capability decreases to the point that emissions exceed the emissions thresholds for the catalyst system as shown in Table 2 of this paragraph (h).

(iii) *Catalyst system monitoring conditions.* The manufacturer must define monitoring conditions for malfunctions identified in paragraph (h)(6)(ii) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required by paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (h)(6)(ii) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(iv) *Catalyst system MIL activation and DTC storage.*

(A) The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(B) The monitoring method for the catalyst system must be capable of detecting when a catalyst DTC has been erased (except OBD system self erasure), but the catalyst has not been replaced (e.g., catalyst overtemperature histogram approaches are not acceptable).

(7) *Evaporative system monitoring.*

(i) *General.* The OBD system must verify purge flow from the evaporative system and monitor the complete evaporative system, excluding the tubing and connections between the purge valve and the intake manifold, for vapor leaks to the atmosphere. Individual components of the evaporative system (e.g., valves, sensors) must be monitored in accordance with the comprehensive components requirements in paragraph (i)(3) of this section.

(ii) *Evaporative system malfunction criteria.*

(A) *Purge monitor.* The OBD system must detect an evaporative system malfunction when no purge flow from the evaporative system to the engine can be detected by the OBD system.

(B) *Leak monitor.* The OBD system must detect an evaporative system malfunction when the complete evaporative system contains a leak or leaks that cumulatively are greater than or equal to a leak caused by a 0.150 inch diameter hole.

(C) The manufacturer may demonstrate that detection of a larger hole is more appropriate than that specified in paragraph (h)(7)(ii)(B) of this section. To do so, the manufacturer must demonstrate through data and/or engineering analyses that holes smaller than the proposed detection size would not result in evaporative or running loss emissions that exceed 1.5 times the applicable evaporative emissions standards. Upon such a demonstration, the proposed detection size could be substituted for the requirement of paragraph (h)(7)(ii)(B) of this section.

(iii) *Evaporative system monitoring conditions.*

(A) The manufacturer must define monitoring conditions for malfunctions identified in paragraph (h)(7)(ii)(A) of this section in accordance with paragraphs (c) and (d) of this section.

(B) The manufacturer must define monitoring conditions for malfunctions identified in paragraph (h)(7)(ii)(B) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required by paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (h)(7)(ii)(B) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(C) The manufacturer may disable or abort an evaporative system monitor when the fuel tank level is over 85 percent of nominal tank capacity or during a refueling event.

(D) The manufacturer may request Administrator approval to run the evaporative system monitor during only those drive cycles characterized as cold starts provided such a condition is needed to ensure reliable monitoring. In making the request, the manufacturer must demonstrate through data and/or engineering analyses that a reliable monitor can only be run on drive cycles that begin with a specific set of cold start criteria. A set of cold start criteria based solely on ambient temperature exceeding engine coolant temperature will not be acceptable.

(E) The OBD system may disable temporarily the evaporative purge system to run an evaporative system leak monitor.

(iv) *Evaporative system MIL activation and DTC storage.*

(A) Except as provided for in paragraph (h)(7)(iv)(B) of this section, the MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(B) If the OBD system is capable of discerning that a system leak is being caused by a missing or improperly secured gas cap, the OBD system need not activate the MIL or store a DTC provided the vehicle is equipped with an alternative indicator for notifying the operator of the gas cap problem. The alternative indicator must be of sufficient illumination and location to be readily visible under all lighting conditions. If the vehicle is not equipped with such an alternative indicator, the MIL must activate and a DTC be stored as required in paragraph (h)(7)(iv)(A) of this section; however, these may be deactivated and erased, respectively, if the OBD system determines that the gas cap problem has been corrected and the MIL has not been activated for any other malfunction. The Administrator may approve other strategies that provide equivalent assurance that a vehicle operator will be notified promptly of a missing or improperly secured gas cap and that corrective action will be undertaken.

(8) *Exhaust gas sensor monitoring.*

(i) *General.*

(A) The OBD system must monitor for malfunctions the output signal,

response rate, and any other parameter that can affect emissions of all primary (i.e., fuel control) exhaust gas sensors (e.g., oxygen, wide-range air/fuel). Both the lean-to-rich and rich-to-lean response rates must be monitored.

(B) The OBD system must also monitor all secondary exhaust gas sensors (those used for secondary fuel trim control or as a monitoring device) for proper output signal, activity, and response rate.

(C) For engines equipped with heated exhaust gas sensor, the OBD system must monitor the heater for proper performance.

(ii) *Primary exhaust gas sensor malfunction criteria.*

(A) The OBD system must detect a malfunction prior to any failure or deterioration of the exhaust gas sensor output voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) (including drift or bias corrected for by secondary sensors) that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h).

(B) The OBD system must detect malfunctions of the exhaust gas sensor caused by either a lack of circuit continuity or out-of-range values.

(C) The OBD system must detect a malfunction of the exhaust gas sensor when a sensor failure or deterioration causes the fuel system to stop using that sensor as a feedback input (e.g., causes default or open-loop operation).

(D) The OBD system must detect a malfunction of the exhaust gas sensor when the sensor output voltage, resistance, impedance, current, amplitude, activity, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst monitoring).

(iii) *Secondary exhaust gas sensor malfunction criteria.*

(A) The OBD system must detect a malfunction prior to any failure or deterioration of the exhaust gas sensor voltage, resistance, impedance, current, response rate, amplitude, offset, or other characteristic(s) that would cause an engine's emissions to exceed the emissions thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h).

(B) The OBD system must detect malfunctions of the exhaust gas sensor caused by a lack of circuit continuity.

(C) To the extent feasible, the OBD system must detect a malfunction of the exhaust gas sensor when the sensor output voltage, resistance, impedance, current, amplitude, activity, offset, or other characteristics are no longer sufficient for use as an OBD system monitoring device (e.g., for catalyst monitoring).

(D) The OBD system must detect malfunctions of the exhaust gas sensor caused by out-of-range values.

(E) The OBD system must detect a malfunction of the exhaust gas sensor when a sensor failure or deterioration causes the fuel system (e.g., fuel control) to stop using that sensor as a feedback input (e.g., causes default or open-loop operation).

(iv) *Exhaust gas sensor heater malfunction criteria.*

(A) The OBD system must detect a malfunction of the heater performance when the current or voltage drop in the heater circuit is no longer within the manufacturer's specified limits for normal operation (i.e., within the criteria required to be met by the component vendor for heater circuit performance at high mileage). Other malfunction criteria for heater performance malfunctions may be used upon demonstrating via data or engineering analyses that the monitoring reliability and timeliness is equivalent to the stated criteria in this paragraph (h)(8)(iv)(A).

(B) The OBD system must detect malfunctions of the heater circuit including open or short circuits that conflict with the commanded state of the heater (e.g., shorted to 12 Volts when commanded to 0 Volts (ground)).

(v) *Primary exhaust gas sensor monitoring conditions.*

(A) The manufacturer must define monitoring conditions for malfunctions identified in paragraphs (h)(8)(ii)(A) and (h)(8)(ii)(D) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required by paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraphs (h)(8)(ii)(A) and (h)(8)(ii)(D) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(B) Except as provided for in paragraph (h)(8)(v)(C) of this section, monitoring for malfunctions identified in paragraphs (h)(8)(ii)(B) and (h)(8)(ii)(C) of this section must be conducted continuously.

(C) The manufacturer may disable continuous primary exhaust gas sensor monitoring when a primary exhaust gas sensor malfunction cannot be distinguished from other effects (e.g., disable out-of-range low monitoring during fuel cut conditions). To do so, the manufacturer must demonstrate via data or engineering analyses that a properly functioning sensor cannot be distinguished from a malfunctioning sensor and that the disablement interval is limited only to that necessary for avoiding false detection.

(vi) *Secondary exhaust gas sensor monitoring conditions.*

(A) The manufacturer must define monitoring conditions for malfunctions identified in paragraphs (h)(8)(iii)(A) through (h)(8)(iii)(C) of this section in accordance with paragraphs (c) and (d) of this section.

(B) Except as provided for in paragraph (h)(8)(vi)(C) of this section, monitoring for malfunctions identified in paragraphs (h)(8)(iii)(D) and (h)(8)(iii)(E) of this section must be conducted continuously.

(C) The manufacturer may disable continuous secondary exhaust gas sensor monitoring when a secondary exhaust gas sensor malfunction cannot be distinguished from other effects (e.g., disable out-of-range low monitoring during fuel cut conditions). To do so, the manufacturer must demonstrate via data or engineering analyses that a properly functioning sensor cannot be distinguished from a malfunctioning sensor and that the disablement interval is limited only to that necessary for avoiding false detection.

(vii) *Exhaust gas sensor heater monitoring conditions.*

(A) The manufacturer must define monitoring conditions for malfunctions identified in paragraph (h)(8)(iv)(A) of this section in accordance with paragraphs (c) and (d) of this section.

(B) Monitoring for malfunctions identified in paragraph (h)(8)(iv)(B) of this section must be conducted continuously.

(viii) *Exhaust gas sensor MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(9) *Variable valve timing (VVT) system monitoring.*

(i) *General.* The OBD system must monitor the VVT system on engines so equipped for target error and slow response malfunctions. The individual electronic components (e.g., actuators, valves, sensors) that are used in the VVT system must be monitored in accordance with the comprehensive components requirements in paragraph (i)(3) of this section.

(ii) *VVT system malfunction criteria.*

(A) *VVT system target error.* The OBD system must detect a malfunction prior to any failure or deterioration in the capability of the VVT system to achieve the commanded valve timing and/or control within a crank angle and/or lift tolerance that would cause an engine's emissions to exceed the emission

thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h).

(B) *VVT slow response.* The OBD system must detect a malfunction prior to any failure or deterioration in the capability of the VVT system to achieve the commanded valve timing and/or control within a manufacturer-specified time that would cause an engine's emissions to exceed the emission thresholds for ''other monitors'' as shown in Table 2 of this paragraph (h).

(C) For engines in which no failure or deterioration of the VVT system could result in an engine's emissions exceeding the applicable emissions thresholds of paragraphs (h)(9)(ii)(A) and (h)(9)(ii)(B) of this paragraph (h), the OBD system must detect a malfunction of the VVT system when proper functional response of the system to computer commands does not occur.

(iii) *VVT system monitoring conditions.* Manufacturers must define the monitoring conditions for VVT system malfunctions identified in paragraph (h)(9)(ii) of this section in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in paragraph (c)(2) of this section. For purposes of tracking and reporting as required in paragraph (d)(1) of this section, all monitors used to detect malfunctions identified in paragraph (h)(9)(ii) of this section must be tracked separately but reported as a single set of values as specified in paragraph (e)(1)(iii) of this section.

(iv) *VVT MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(i) *OBD monitoring requirements for all engines.*

(1) *Engine cooling system monitoring.*

(i) *General.*

(A) The OBD system must monitor the thermostat on engines so equipped for proper operation.

(B) The OBD system must monitor the engine coolant temperature (ECT) sensor for electrical circuit continuity, out-of-range values, and rationality malfunctions.

(C) For engines that use a system other than the cooling system and ECT sensor (e.g., oil temperature, cylinder head temperature) to determine engine operating temperature for emission control purposes (e.g., to modify spark or fuel injection timing or quantity), the manufacturer may forego cooling system monitoring and instead monitor the components or systems used in their approach. To do so, the manufacturer must to submit data and/or engineering analyses that demonstrate that their monitoring plan is as reliable and effective as the monitoring required in this paragraph (i)(1).

(ii) *Malfunction criteria for the thermostat.*

(A) The OBD system must detect a thermostat malfunction if, within the manufacturer specified time interval following engine start, any of the following conditions occur: the coolant temperature does not reach the highest temperature required by the OBD system to enable other diagnostics; and, the coolant temperature does not reach a warmed-up temperature within 20 degrees Fahrenheit of the manufacturer's nominal thermostat regulating temperature. For the second of these two conditions, the manufacturer may use a lower temperature for this criterion provided the manufacturer can demonstrate that the fuel, spark timing, and/or other coolant temperature-based modification to the engine control strategies would not cause an emissions increase greater than or equal to 50 percent of any of the applicable emissions standards.

(B) The manufacturer may use alternative malfunction criteria to those of paragraph (i)(1)(ii)(A) of this section and/or alternative monitoring conditions to those of paragraph (i)(1)(iv) of this section that are a function of temperature at engine start on engines that do not reach the temperatures specified in the malfunction criteria when the thermostat is functioning properly. To do so, the manufacturer is required to submit data and/or engineering analyses that demonstrate that a properly operating system does not reach the specified temperatures and that the possibility is minimized for cooling system malfunctions to go undetected thus disabling other OBD monitors.

(C) The manufacturer may request Administrator approval to forego monitoring of the thermostat if the manufacturer can demonstrate that a malfunctioning thermostat cannot cause a measurable increase in emissions during any reasonable driving condition nor cause any disablement of other OBD monitors.

(iii) *Malfunction criteria for the ECT sensor.*

(A) *Circuit integrity.* The OBD system must detect malfunctions of the ECT sensor related to a lack of circuit continuity or out-of-range values.

(B) *Time to reach closed-loop/feedback enable temperature.* The OBD system must detect if, within the manufacturer specified time interval following engine start, the ECT sensor does not achieve the highest stabilized minimum temperature that is needed to initiate closed-loop/feedback control of all affected emission control systems (e.g., fuel system, EGR system). The manufacturer specified time interval must be a function of the engine coolant temperature and/or intake air temperature at startup. The manufacturer time interval must be supported by data and/or engineering analyses demonstrating that it provides robust monitoring and minimizes the likelihood of other OBD monitors being disabled. The manufacturer may forego the requirements of this paragraph (i)(1)(iii)(B) provided the manufacturer does not use engine coolant temperature or the ECT sensor to enable closed-loop/feedback control of any emission control systems.

(C) *Stuck in range below the highest minimum enable temperature.* To the extent feasible when using all available information, the OBD system must detect a malfunction if the ECT sensor inappropriately indicates a temperature below the highest minimum enable temperature required by the OBD system to enable other monitors (e.g., an OBD system that requires ECT to be greater than 140 degrees Fahrenheit to enable a diagnostic must detect malfunctions that cause the ECT sensor to inappropriately indicate a temperature below 140 degrees Fahrenheit). The manufacturer may forego this requirement for temperature regions in which the monitors required under paragraphs (i)(1)(ii) or (i)(1)(iii)(B) of this section will detect ECT sensor malfunctions as defined in this paragraph (i)(1)(iii)(C).

(D) *Stuck in range above the lowest maximum enable temperature.* The OBD system must detect a malfunction if the ECT sensor inappropriately indicates a temperature above the lowest maximum enable temperature required by the OBD system to enable other monitors (e.g., an OBD system that requires an engine coolant temperature less than 90 degrees Fahrenheit at startup prior to enabling an OBD monitor must detect malfunctions that cause the ECT sensor to indicate inappropriately a temperature above 90 degrees Fahrenheit). The manufacturer may forego this requirement within temperature regions in which the monitors required under paragraphs (i)(1)(ii), (i)(1)(iii)(B), and (i)(1)(iii)(C) of this section will detect ECT sensor malfunctions as defined in this paragraph (i)(1)(iii)(D) or in which the MIL will be activated according to the provisions of paragraph (b)(2)(v) of this

section. The manufacturer may also forego this monitoring within temperature regions where a temperature gauge on the instrument panel indicates a temperature in the ''red zone'' (engine overheating zone) and displays the same temperature information as used by the OBD system.

(iv) *Monitoring conditions for the thermostat.*

(A) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (i)(1)(ii)(A) of this section in accordance with paragraph (c) of this section. Additionally, except as provided for in paragraphs (i)(1)(iv)(B) and (i)(1)(iv)(C) of this section, monitoring for malfunctions identified in paragraph (i)(1)(ii)(A) of this section must be conducted once per drive cycle on every drive cycle in which the ECT sensor indicates, at engine start, a temperature lower than the temperature established as the malfunction criteria in paragraph (i)(1)(ii)(A) of this section.

(B) The manufacturer may disable thermostat monitoring at ambient engine start temperatures below 20 degrees Fahrenheit.

(C) The manufacturer may request Administrator approval to suspend or disable thermostat monitoring if the engine is subjected to conditions that could lead to false diagnosis. To do so, the manufacturer must submit data and/or engineering analyses that demonstrate that the suspension or disablement is necessary. In general, the manufacturer will not be allowed to suspend or disable the thermostat monitor on engine starts where the engine coolant temperature at engine start is more than 35 degrees Fahrenheit lower than the thermostat malfunction threshold temperature determined under paragraph (i)(1)(ii)(A) of this paragraph (i)(1).

(v) *Monitoring conditions for the ECT sensor.*

(A) Except as provided for in paragraph (i)(1)(v)(E) of this section, the OBD system must monitor continuously for malfunctions identified in paragraph (i)(1)(iii)(A) of this section (i.e., circuit integrity and out-of-range).

(B) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (i)(1)(iii)(B) of this section in accordance with paragraph (c) of this section. Additionally, except as provided for in paragraph (i)(1)(v)(D) of this section, monitoring for malfunctions identified in paragraph (i)(1)(iii)(B) of this section must be conducted once per drive cycle on every drive cycle in which the ECT sensor indicates a temperature lower than the closed-loop enable temperature at engine start (i.e., all engine start temperatures greater than the ECT sensor out-of-range low temperature and less than the closed-loop enable temperature).

(C) The manufacturer must define the monitoring conditions for malfunctions identified in paragraphs (i)(1)(iii)(C) and (i)(1)(iii)(D) of this section in accordance with paragraphs (c) and (d) of this section.

(D) The manufacturer may suspend or delay the monitor for the time to reach closed-loop enable temperature if the engine is subjected to conditions that could lead to false diagnosis (e.g., vehicle operation at idle for more than 50 to 75 percent of the warm-up time).

(E) The manufacturer may request Administrator approval to disable continuous ECT sensor monitoring when an ECT sensor malfunction cannot be distinguished from other effects. To do so, the manufacturer must submit data and/or engineering analyses that demonstrate a properly functioning sensor cannot be distinguished from a malfunctioning sensor and that the disablement interval is limited only to that necessary for avoiding false detection.

(vi) *Engine cooling system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(2) *Crankcase ventilation (CV) system monitoring.*

(i) *General.* The OBD system must monitor the CV system on engines so equipped for system integrity. Engines not required to be equipped with CV systems are exempt from monitoring the CV system. For diesel engines, the manufacturer must submit a plan for Administrator prior to OBD certification. That plan must include descriptions of the monitoring strategy, malfunction criteria, and monitoring conditions for CV system monitoring. The plan must demonstrate that the CV system monitor is of equivalent effectiveness, to the extent feasible, to the malfunction criteria and the monitoring conditions of this paragraph (i)(2).

(ii) *Crankcase ventilation system malfunction criteria.*

(A) For the purposes of this paragraph (i)(2), ''CV system'' is defined as any form of crankcase ventilation system, regardless of whether it utilizes positive pressure. ''CV valve'' is defined as any form of valve or orifice used to restrict or control crankcase vapor flow. Further, any additional external CV system tubing or hoses used to equalize crankcase pressure or to provide a ventilation path between various areas of the engine (e.g., crankcase and valve cover) are considered part of the CV system ''between the crankcase and the CV valve'' and subject to the malfunction criteria in paragraph (i)(2)(ii)(B) of this section.

(B) Except as provided for in paragraphs (i)(2)(ii)(C) through (i)(2)(ii)(E) of this section, the OBD system must detect a malfunction of the CV system when a disconnection of the system occurs between either the crankcase and the CV valve, or between the CV valve and the intake manifold.

(C) The manufacturer may forego monitoring for a disconnection between the crankcase and the CV valve provided the CV system is designed such that the CV valve is fastened directly to the crankcase such that it is significantly more difficult to remove the CV valve from the crankcase than to disconnect the line between the CV valve and the intake manifold (taking aging effects into consideration). To do so, the manufacturer must be able to provide data and/or an engineering evaluation demonstrating that the CV system is so designed.

(D) The manufacturer may forego monitoring for a disconnection between the crankcase and the CV valve provided the CV system is designed such that it uses tubing connections between the CV valve and the crankcase that are: resistant to deterioration or accidental disconnection; significantly more difficult to disconnect than is the line between the CV valve and the intake manifold; and, not subject to disconnection per the manufacturer's repair procedures for any non-CV system repair. To do so, the manufacturer must be able to provide data and/or engineering evaluation demonstrating that the CV system is so designed.

(E) The manufacturer may forego monitoring for a disconnection between the CV valve and the intake manifold provided the CV system is designed such that any disconnection either causes the engine to stall immediately during idle operation, or is unlikely to occur due to a CV system design that is integral to the induction system (e.g., machined passages rather than tubing or hoses). To do so, the manufacturer must be able to provide data and/or an engineering evaluation demonstrating that the CV system is so designed.

(iii) *Crankcase ventilation system monitoring conditions.* The manufacturer must define the monitoring conditions for malfunctions identified in paragraph (i)(2) of this section in accordance with paragraphs (c) and (d) of this section.

(iv) *Crankcase ventilation system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section. The stored DTC need not identify specifically the CV system (e.g., a DTC for idle speed control or fuel system monitoring can be stored) if the manufacturer can demonstrate that additional monitoring hardware is necessary to make such an identification and provided the manufacturer's diagnostic and repair procedures for the detected malfunction include directions to check the integrity of the CV system.

(3) *Comprehensive component monitoring.*

(i) *General.* Except as provided for in paragraph (i)(4) of this section, the OBD system must detect a malfunction of any electronic engine component or system not otherwise described in paragraphs (g), (h), (i)(1), and (i)(2) of this section that either provides input to (directly or indirectly, such components may include the crank angle sensor, knock sensor, throttle position sensor, cam position sensor, intake air temperature sensor, boost pressure sensor, manifold pressure sensor, mass air flow sensor, exhaust temperature sensor, exhaust pressure sensor, fuel pressure sensor, fuel composition sensor of a flexible fuel vehicle, etc.) or receives commands from (such components or systems may include the idle speed control system, glow plug system, variable length intake manifold runner systems, supercharger or turbocharger electronic components, heated fuel preparation systems, the wait-to-start lamp on diesel applications, the MIL, etc.) the onboard computer(s) and meets either of the criteria described in paragraphs (i)(3)(i)(A) and/or (i)(3)(i)(B) of this section. Note that, for the purposes of this paragraph (i)(3), ''electronic engine component or system'' does not include components that are driven by the engine and are not related to the control of the fueling, air handling, or emissions of the engine (e.g., power take-off (PTO) components, air conditioning system components, and power steering components).

(A) It can affect emissions during any reasonable in-use driving condition. The manufacturer must be able to provide emission data showing that the component or system, when malfunctioning and installed on a suitable test engine, does not have an emission effect.

(B) It is used as part of the monitoring strategy for any other monitored system or component.

(ii) *Comprehensive component malfunction criteria for input components.*

(A) The OBD system must detect malfunctions of input components caused by a lack of circuit continuity and out-of-range values. In addition, where feasible, rationality checks must also be done and shall verify that a sensor output is neither inappropriately high nor inappropriately low (i.e., ''two-sided'' monitoring).

(B) To the extent feasible, the OBD system must separately detect and store different DTCs that distinguish rationality malfunctions from lack of circuit continuity and out-of-range malfunctions. For lack of circuit continuity and out-of-range malfunctions, the OBD system must, to the extent feasible, separately detect and store different DTCs for each distinct malfunction (e.g., out-of-range low, out-of-range high, open circuit). The OBD system is not required to store separate DTCs for lack of circuit continuity malfunctions that cannot be distinguished from other out-of-range circuit malfunctions.

(C) For input components that are used to activate alternative strategies that can affect emissions (e.g., AECDs, engine shutdown systems), the OBD system must conduct rationality checks to detect malfunctions that cause the system to activate erroneously or deactivate the alternative strategy. To the extent feasible when using all available information, the rationality check must detect a malfunction if the input component inappropriately indicates a value that activates or deactivates the alternative strategy. For example, for an alternative strategy that activates when the intake air temperature is greater than 120 degrees Fahrenheit, the OBD system must detect malfunctions that cause the intake air temperature sensor to indicate inappropriately a temperature above 120 degrees Fahrenheit.

(D) For engines that require precise alignment between the camshaft and the crankshaft, the OBD system must monitor the crankshaft position sensor(s) and camshaft position sensor(s) to verify proper alignment between the camshaft and crankshaft in addition to monitoring the sensors for circuit continuity and proper rationality. Proper alignment monitoring between a camshaft and a crankshaft is required only in cases where both are equipped with position sensors. For engines equipped with VVT systems and a timing belt or chain, the OBD system must detect a malfunction if the alignment between the camshaft and crankshaft is off by one or more cam/crank sprocket cogs (e.g., the timing belt/chain has slipped by one or more teeth/cogs). If a manufacturer demonstrates that a single tooth/cog misalignment cannot cause a measurable increase in emissions during any reasonable driving condition, the OBD system must detect a malfunction when the minimum number of teeth/cogs misalignment has occurred that does cause a measurable emission increase.

(iii) *Comprehensive component malfunction criteria for output components/systems.*

(A) The OBD system must detect a malfunction of an output component/system when proper functional response does not occur in response to computer commands. If such a functional check is not feasible, the OBD system must detect malfunctions of output components/systems caused by a lack of circuit continuity or circuit malfunction (e.g., short to ground or high voltage). For output component lack of circuit continuity malfunctions and circuit malfunctions, the OBD system is not required to store different DTCs for each distinct malfunction (e.g., open circuit, shorted low). Manufacturers are not required to activate an output component/system when it would not normally be active for the sole purpose of performing a functional check of it as required in this paragraph (i)(3).

(B) For gasoline engines, the idle control system must be monitored for proper functional response to computer commands. For gasoline engines using monitoring strategies based on deviation from target idle speed, a malfunction must be detected when either of the following conditions occurs: the idle speed control system cannot achieve the target idle speed within 200 revolutions per minute (rpm) above the target speed or 100 rpm below the target speed; or, the idle speed control system cannot achieve the target idle speed within the smallest engine speed tolerance range required by the OBD system to enable any other monitors. Regarding the former of these conditions, the manufacturer may use larger engine speed tolerances. To do so, the manufacturer must be able to provide data and/or engineering analyses that demonstrate that the tolerances can be exceeded without a malfunction being present.

(C) For diesel engines, the idle control system must be monitored for proper functional response to computer commands. For diesel engines, a malfunction must be detected when either of the following conditions occurs: the idle fuel control system cannot achieve the target idle speed or fuel injection quantity within ±50 percent of the manufacturer-specified fuel quantity and engine speed

tolerances; or, the idle fuel control system cannot achieve the target idle speed or fueling quantity within the smallest engine speed or fueling quantity tolerance range required by the OBD system to enable any other monitors.

(D) Glow plugs/intake air heater systems must be monitored for proper functional response to computer commands and for circuit continuity malfunctions. The glow plug/intake air heater circuit(s) must be monitored for proper current and voltage drop. The manufacturer may use other monitoring strategies but must be able to provide data and/or engineering analyses that demonstrate reliable and timely detection of malfunctions. The OBD system must also detect a malfunction when a single glow plug no longer operates within the manufacturer's specified limits for normal operation. If a manufacturer can demonstrate that a single glow plug malfunction cannot cause a measurable increase in emissions during any reasonable driving condition, the OBD system must instead detect a malfunction when the number of glow plugs needed to cause an emission increase is malfunctioning. To the extent feasible, the stored DTC must identify the specific malfunctioning glow plug(s).

(E) The wait-to-start lamp circuit and the MIL circuit must be monitored for malfunctions that cause either lamp to fail to activate when commanded to do so (e.g., burned out bulb).

(iv) *Monitoring conditions for input components.*

(A) The OBD system must monitor input components continuously for out-of-range values and circuit continuity. The manufacturer may disable continuous monitoring for circuit continuity and out-of-range values when a malfunction cannot be distinguished from other effects. To do so, the manufacturer must be able to provide data and/or engineering analyses that demonstrate that a properly functioning input component cannot be distinguished from a malfunctioning input component and that the disablement interval is limited only to that necessary for avoiding false malfunction detection.

(B) For input component rationality checks (where applicable), the manufacturer must define the monitoring conditions for detecting malfunctions in accordance with paragraphs (c) and (d) of this section, with the exception that rationality checks must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in paragraph (c)(2) of this section.

(v) *Monitoring conditions for output components/systems.*

(A) The OBD system must monitor output components/systems continuously for circuit continuity and circuit malfunctions. The manufacturer may disable continuous monitoring for circuit continuity and circuit malfunctions when a malfunction cannot be distinguished from other effects. To do so, the manufacturer must be able to provide data and/or engineering analyses that demonstrate that a properly functioning output component/system cannot be distinguished from a malfunctioning one and that the disablement interval is limited only to that necessary for avoiding false malfunction detection.

(B) For output component/system functional checks, the manufacturer must define the monitoring conditions for detecting malfunctions in accordance with paragraphs (c) and (d) of this section. Specifically for the idle control system, the manufacturer must define the monitoring conditions for detecting malfunctions in accordance with paragraphs (c) and (d) of this section, with the exception that functional checks must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in paragraph (c)(2) of this section.

(vi) *Comprehensive component MIL activation and DTC storage.*

(A) Except as provided for in paragraphs (i)(3)(vi)(B) and (i)(3)(vi)(C) of this section, the MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(B) The MIL need not be activated in conjunction with storing a MIL-on DTC for any comprehensive component if: the component or system, when malfunctioning, could not cause engine emissions to increase by 15 percent or more of the applicable FTP standard during any reasonable driving condition; or, the component or system is not used as part of the monitoring strategy for any other system or component that is required to be monitored.

(C) The MIL need not be activated if a malfunction has been detected in the MIL circuit that prevents the MIL from activating (e.g., burned out bulb or light-emitting diode, LED). Nonetheless, the electronic MIL status (see paragraph (k)(4)(ii) of this section) must be reported as MIL commanded-on and a MIL-on DTC must be stored.

(4) *Other emission control system monitoring.*

(i) *General.* For other emission control systems that are either not addressed in paragraphs (g) through (i)(3) of this section (e.g., hydrocarbon traps, homogeneous charge compression ignition control systems), or addressed in paragraph (i)(3) of this section but not corrected or compensated for by an adaptive control system (e.g., swirl control valves), the manufacturer must submit a plan for Administrator approval of the monitoring strategy, malfunction criteria, and monitoring conditions prior to introduction on a production engine. The plan must demonstrate the effectiveness of the monitoring strategy, the malfunction criteria used, the monitoring conditions required by the monitor, and, if applicable, the determination that the requirements of paragraph (i)(4)(ii) of this section are satisfied.

(ii) For engines that use emission control systems that alter intake air flow or cylinder charge characteristics by actuating valve(s), flap(s), etc., in the intake air delivery system (e.g., swirl control valve systems), the manufacturer, in addition to meeting the requirements of paragraph (i)(4)(i) of this section, may elect to have the OBD system monitor the shaft to which all valves in one intake bank are physically attached rather than performing a functional check of the intake air flow, cylinder charge, or individual valve(s)/flap(s). For non-metal shafts or segmented shafts, the monitor must verify all shaft segments for proper functional response (e.g., by verifying that the segment or portion of the shaft farthest from the actuator functions properly). For systems that have more than one shaft to operate valves in multiple intake banks, the manufacturer is not required to add more than one set of detection hardware (e.g., sensor, switch) per intake bank to meet this requirement.

(5) *Exceptions to OBD monitoring requirements.*

(i) The Administrator may revise the PM filtering performance malfunction criteria for DPFs to exclude detection of specific failure modes such as partially melted substrates, if the most reliable monitoring method developed requires it.

(ii) The manufacturer may disable an OBD system monitor at ambient engine start temperatures below 20 degrees Fahrenheit (low ambient temperature conditions may be determined based on intake air or engine coolant temperature at engine start) or at elevations higher than 8,000 feet above sea level. To do so, the manufacturer must submit data and/or engineering analyses that demonstrate that monitoring is

unreliable during the disable conditions. A manufacturer may request that an OBD system monitor be disabled at other ambient engine start temperatures by submitting data and/or engineering analyses demonstrating that misdiagnosis would occur at the given ambient temperatures due to their effect on the component itself (e.g., component freezing).

(iii) The manufacturer may disable an OBD system monitor when the fuel level is 15 percent or less of the nominal fuel tank capacity for those monitors that can be affected by low fuel level or running out of fuel (e.g., misfire detection). To do so, the manufacturer must submit data and/or engineering analyses that demonstrate that monitoring at the given fuel levels is unreliable, and that the OBD system is still able to detect a malfunction if the component(s) used to determine fuel level indicates erroneously a fuel level that causes the disablement.

(iv) The manufacturer may disable OBD monitors that can be affected by engine battery or system voltage levels.

(A) For an OBD monitor affected by low vehicle battery or system voltages, manufacturers may disable monitoring when the battery or system voltage is below 11.0 Volts. The manufacturer may use a voltage threshold higher than 11.0 Volts to disable monitors but must submit data and/or engineering analyses that demonstrate that monitoring at those voltages is unreliable and that either operation of a vehicle below the disablement criteria for extended periods of time is unlikely or the OBD system monitors the battery or system voltage and will detect a malfunction at the voltage used to disable other monitors.

(B) For an OBD monitor affected by high engine battery or system voltages, the manufacturer may disable monitoring when the battery or system voltage exceeds a manufacturer-defined voltage. To do so, the manufacturer must submit data and/or engineering analyses that demonstrate that monitoring above the manufacturer-defined voltage is unreliable and that either the electrical charging system/alternator warning light will be activated (or voltage gauge would be in the ''red zone'') or the OBD system monitors the battery or system voltage and will detect a malfunction at the voltage used to disable other monitors.

(v) The manufacturer may also disable affected OBD monitors in systems designed to accommodate the installation of power take off (PTO) units provided monitors are disabled only while the PTO unit is active and the OBD readiness status (see paragraph (k)(4)(i) of this section) is cleared by the onboard computer (i.e., all monitors set to indicate ''not complete'' or ''not ready'') while the PTO unit is activated. If monitors are so disabled and when the disablement ends, the readiness status may be restored to its state prior to PTO activation.

(6) *Feedback control system monitoring.* If the engine is equipped with feedback control of any of the systems covered in paragraphs (g), (h) and (i) of this section, then the OBD system must detect as malfunctions the conditions specified in this paragraph (i)(6) for each of the individual feedback controls.

(i) The OBD system must detect when the system fails to begin feedback control within a manufacturer specified time interval.

(ii) When any malfunction or deterioration causes open loop or limp-home operation.

(iii) When feedback control has used up all of the adjustment allowed by the manufacturer.

(iv) A manufacturer may temporarily disable monitoring for malfunctions specified in paragraph (i)(6)(iii) of this section during conditions that the specific monitor cannot distinguish robustly between a malfunctioning system and a properly operating system. To do so, the manufacturer is required to submit data and/or engineering analyses demonstrating that the individual feedback control system, when operating as designed on an engine with all emission controls working properly, routinely operates during these conditions while having used up all of the adjustment allowed by the manufacturer. In lieu of detecting, with a system specific monitor, the malfunctions specified in paragraphs (i)(6)(i) and (i)(6)(ii) of this section the OBD system may monitor the individual parameters or components that are used as inputs for individual feedback control systems provided that the monitors detect all malfunctions that meet the criteria of paragraphs (i)(6)(i) and (i)(6)(ii) of this section.

(a) *Production evaluation testing.*

(1) [Reserved.]

(2) *Verification of monitoring requirements.*

(i) Within either the first six months of the start of engine production or the first three months of the start of vehicle production, whichever is later, the manufacturer must conduct a complete evaluation of the OBD system of one or more production vehicles (test vehicles) and submit the results of the evaluation to the Administrator.

(ii) *Selection of test vehicles.*

(A) For each engine selected for monitoring system demonstration in paragraph (l) of this section, the manufacturer must evaluate one production vehicle equipped with an engine from the same engine family and rating as the demonstration engine. The vehicle selection must be approved by the Administrator.

(B) If the manufacturer is required to test more than one test vehicle, the manufacturer may test an engine in lieu of a vehicle for all but one of the required test vehicles.

(C) The requirement for submittal of data from one or more of the test vehicles may be waived if data have been submitted previously for all of the engine ratings and variants.

(iii) *Evaluation requirements.*

(A) The evaluation must demonstrate the ability of the OBD system on the selected test vehicle to detect a malfunction, activate the MIL, and, where applicable, store an appropriate DTC readable by a scan tool when a malfunction is present and the monitoring conditions have been satisfied for each individual monitor required by this section.

(B) The evaluation must verify that the malfunction of any component used to enable another OBD monitor but that does not itself result in MIL activation (e.g., fuel level sensor) will not inhibit the ability of other OBD monitors to detect malfunctions properly.

(C) The evaluation must verify that the software used to track the numerator and denominator for the purpose of determining in-use monitoring frequency increments as required by paragraph (d)(2) of this section.

(D) Malfunctions may be implanted mechanically or simulated electronically, but internal onboard computer hardware or software changes shall not be used to simulate malfunctions. For monitors that are required to indicate a malfunction before emissions exceed an emission threshold, manufacturers are not required to use malfunctioning components/systems set exactly at their malfunction criteria limits. Emission testing is not required to confirm that the malfunction is detected before the appropriate emission thresholds are exceeded.

(E) The manufacturer must submit a proposed test plan for approval prior to performing evaluation testing. The test plan must identify the method used to induce a malfunction for each monitor.

(F) If the demonstration of a specific monitor cannot be reasonably performed without causing physical damage to the test vehicle (e.g., onboard computer internal circuit malfunctions), the

manufacturer may omit the specific demonstration.

(G) For evaluation of test vehicles selected in accordance with paragraph (j)(2)(ii) of this section, the manufacturer is not required to demonstrate monitors that were demonstrated prior to certification as required in paragraph (l) of this section.

(iv) The manufacturer must submit a report of the results of all testing conducted as required by paragraph (j)(2) of this section. The report must identify the method used to induce a malfunction in each monitor, the MIL activation status, and the DTC(s) stored.

(3) *Verification of in-use monitoring performance ratios.*

(i) The manufacturer must collect and report in-use monitoring performance data representative of production vehicles (i.e., engine rating and chassis application combination). The manufacturer must collect and report the data to the Administrator within 12 months after the first production vehicle was first introduced into commerce.

(ii) The manufacturer must separate production vehicles into the monitoring performance groups and submit data that represents each of these groups. The groups shall be based on the following criteria:

(A) Emission control system architecture. All engines that use the same or similar emissions control system architecture (e.g., EGR with DPF and SCR; EGR with DPF and NO_X adsorber; EGR with DPF-only) and associated monitoring system would be in the same emission architecture category.

(B) Vehicle application type. Within an emission architecture category, engines shall be separated into one of three vehicle application types: engines intended primarily for line-haul chassis applications, engines intended primarily for urban delivery chassis applications, and all other engines.

(iii) The manufacturer may use an alternative grouping method to collect representative data. To do so, the manufacturer must show that the alternative groups include production vehicles using similar emission controls, OBD strategies, monitoring condition calibrations, and vehicle application driving/usage patterns such that they are expected to have similar in-use monitoring performance. The manufacturer will still be required to submit one set of data for each of the alternative groups.

(iv) For each monitoring performance group, the data must include all of the in-use performance tracking data (i.e., all numerators, denominators, the general denominator, and the ignition cycle counter), the date the data were collected, the odometer reading, the VIN, and the calibration ID.

(v) The manufacturer must submit a plan to the Administrator that details the types of production vehicles in each monitoring performance group, the number of vehicles per group to be sampled, the sampling method, the timeline to collect the data, and the reporting format. The plan must provide for effective collection of data from, at least, 15 vehicles per monitoring performance group and provide for data that represent a broad range of temperature conditions. The plan shall not, by design, exclude or include specific vehicles in an attempt to collect data only from vehicles expected to have the highest in-use performance ratios.

(vi) The 12 month deadline for reporting may be extended to 18 months if the manufacturer can show that the delay is justified. In such a case, an interim report of progress to date must be submitted within the 12 month deadline.

(k) *Standardization requirements.*

(1) *Reference materials.* The OBD system must conform with the following Society of Automotive Engineers (SAE) standards and/or the following International Standards Organization (ISO) standards. The following documents are incorporated by reference, see § 86.1:

(i) SAE material. Copies of these materials may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096–0001.

(A) SAE J1930 ''Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms—Equivalent to ISO/TR 15031–2:April 30, 2002,'' April 2002.

(B) SAE J1939 ''Recommended Practice for a Serial Control and Communications Vehicle Network'' and the associated subparts included in SAE HS–1939, ''Truck and Bus Control and Communications Network Standards Manual,'' 2006 Edition.

(C) [Reserved.]

(D) SAE J1978 ''OBD II Scan Tool—Equivalent to ISO/DIS 15031–4: December 14, 2001,'' April 2002.

(E) SAE J1979 ''E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031–5:April 30, 2002,'' April 2002.

(F) SAE J2012 ''Diagnostic Trouble Code Definitions—Equivalent to ISO/DIS 15031–6:April 30, 2002,'' April 2002.

(G) SAE J2403 ''Medium/Heavy-Duty E/E Systems Diagnosis Nomenclature,'' August 2004.

(H) SAE J2534 ''Recommended Practice for Pass-Thru Vehicle Reprogramming,'' February 2002.

(ii) ISO materials. Copies of these materials may be obtained from the International Organization for Standardization, Case Postale 56, CH–1211 Geneva 20, Switzerland.

(A) ISO 15765–4:2001 ''Road Vehicles-Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems,'' December 2001.

(2) The manufacturer defined data link connector must be accessible to a trained service technician.

(3) [Reserved.]

(4) *Required emission related functions.* The following functions must be implemented and must be accessible by, at a minimum, a manufacturer scan tool:

(i) *Ready status.* The OBD system must indicate ''complete'' or ''not complete'' for each of the installed monitored components and systems identified in paragraphs (g), (h) with the exception of (h)(4), and (i)(3) of this section. All components or systems identified in paragraphs (h)(1), (h)(2), or (i)(3) of this section that are monitored continuously must always indicate ''complete.'' Components or systems that are not subject to being monitored continuously must immediately indicate ''complete'' upon the respective monitor(s) being executed fully and determining that the component or system is not malfunctioning. A component or system must also indicate ''complete'' if, after the requisite number of decisions necessary for determining MIL status has been executed fully, the monitor indicates a malfunction of the component or system. The status for each of the monitored components or systems must indicate ''not complete'' whenever diagnostic memory has been cleared or erased by a means other than that allowed in paragraph (b) of this section. Normal vehicle shut down (i.e., key-off/engine-off) shall not cause the status to indicate ''not complete.''

(A) The manufacturer may request that the ready status for a monitor be set to indicate ''complete'' without the monitor having completed if monitoring is disabled for a multiple number of drive cycles due to the continued presence of extreme operating conditions (e.g., cold ambient temperatures, high altitudes). Any such request must specify the conditions for monitoring system disablement and the number of drive cycles that would pass without monitor completion before ready status would be indicated as ''complete.''

(B) For the evaporative system monitor, the ready status must be set in accordance with this paragraph (k)(4)(i) when both the functional check of the purge valve and, if applicable, the leak detection monitor of the hole size specified in paragraph (h)(7)(ii)(B) of this section indicate that they are complete.

(C) If the manufacturer elects to indicate ready status through the MIL in the key-on/engine-off position as provided for in paragraph (b)(1)(iii) of this section, the ready status must be indicated in the following manner: If the ready status for all monitored components or systems is ''complete,'' the MIL shall remain continuously activated in the key-on/engine-off position for at least 10–20 seconds. If the ready status for one or more of the monitored components or systems is ''not complete,'' after at least 5 seconds of operation in the key-on/engine-off position with the MIL activated continuously, the MIL shall blink once per second for 5–10 seconds. The data stream value for MIL status as required in paragraph (k)(4)(ii) of this section must indicate ''commanded off'' during this sequence unless the MIL has also been ''commanded on'' for a detected malfunction.

(ii) *Data stream.* The following signals must be made available on demand through the data link connector. The actual signal value must always be used instead of a limp home value.

(A) *For gasoline engines.*

(1) Calculated load value, engine coolant temperature, engine speed, vehicle speed, and time elapsed since engine start.

(2) Absolute load, fuel level (if used to enable or disable any other monitors), barometric pressure (directly measured or estimated), engine control module system voltage, and commanded equivalence ratio.

(3) Number of stored MIL-on DTCs, catalyst temperature (if directly measured or estimated for purposes of enabling the catalyst monitor(s)), monitor status (i.e., disabled for the rest of this drive cycle, complete this drive cycle, or not complete this drive cycle) since last engine shut-off for each monitor used for ready status, distance traveled (or engine run time for engines not using vehicle speed information) while MIL activated, distance traveled (or engine run time for engines not using vehicle speed information) since DTC memory last erased, and number of warm-up cycles since DTC memory last erased, OBD requirements to which the engine is certified (e.g., California OBD, EPA OBD, European OBD, non-OBD) and MIL status (i.e., commanded-on or commanded-off).

(B) *For diesel engines.*

(1) Calculated load (engine torque as a percentage of maximum torque available at the current engine speed), driver's demand engine torque (as a percentage of maximum engine torque), actual engine torque (as a percentage of maximum engine torque), reference engine maximum torque, reference maximum engine torque as a function of engine speed (suspect parameter numbers (SPN) 539 through 543 defined by SAE J1939 within parameter group number (PGN) 65251 for engine configuration), engine coolant temperature, engine oil temperature (if used for emission control or any OBD monitors), engine speed, and time elapsed since engine start.

(2) Fuel level (if used to enable or disable any other monitors), vehicle speed (if used for emission control or any OBD monitors), barometric pressure (directly measured or estimated), and engine control module system voltage.

(3) Number of stored MIL-on DTCs, monitor status (i.e., disabled for the rest of this drive cycle, complete this drive cycle, or not complete this drive cycle) since last engine shut-off for each monitor used for ready status, distance traveled (or engine run time for engines not using vehicle speed information) while MIL activated, distance traveled (or engine run time for engines not using vehicle speed information) since DTC memory last erased, number of warm-up cycles since DTC memory last erased, OBD requirements to which the engine is certified (e.g., California OBD, EPA OBD, European OBD, non-OBD), and MIL status (i.e., commanded-on or commanded-off).

(4) NO_X NTE control area status (i.e., inside control area, outside control area, inside manufacturer-specific NO_X NTE carve-out area, or deficiency active area) and PM NTE control area status (i.e., inside control area, outside control area, inside manufacturer-specific PM NTE carve-out area, or deficiency active area).

(5) For purposes of the calculated load and torque parameters in paragraph (k)(4)(ii)(B)(1) of this section, manufacturers must report the most accurate values that are calculated within the applicable electronic control unit (e.g., the engine control module). Most accurate, in this context, must be of sufficient accuracy, resolution, and filtering to be used for the purposes of in-use emission testing with the engine still in a vehicle (e.g., using portable emission measurement equipment).

(C) *For all engines so equipped.*

(1) Absolute throttle position, relative throttle position, fuel control system status (e.g., open loop, closed loop), fuel trim, fuel pressure, ignition timing advance, fuel injection timing, intake air/manifold temperature, engine intercooler temperature, manifold absolute pressure, air flow rate from mass air flow sensor, secondary air status (upstream, downstream, or atmosphere), ambient air temperature, commanded purge valve duty cycle/position, commanded EGR valve duty cycle/position, actual EGR valve duty cycle/position, EGR error between actual and commanded, PTO status (active or not active), redundant absolute throttle position (for electronic throttle or other systems that utilize two or more sensors), absolute pedal position, redundant absolute pedal position, commanded throttle motor position, fuel rate, boost pressure, commanded/target boost pressure, turbo inlet air temperature, fuel rail pressure, commanded fuel rail pressure, DPF inlet pressure, DPF inlet temperature, DPF outlet pressure, DPF outlet temperature, DPF delta pressure, exhaust pressure sensor output, exhaust gas temperature sensor output, injection control pressure, commanded injection control pressure, turbocharger/turbine speed, variable geometry turbo position, commanded variable geometry turbo position, turbocharger compressor inlet temperature, turbocharger compressor inlet pressure, turbocharger turbine inlet temperature, turbocharger turbine outlet temperature, waste gate valve position, and glow plug lamp status.

(2) Oxygen sensor output, air/fuel ratio sensor output, NO_X sensor output, and evaporative system vapor pressure.

(iii) *Freeze frame.*

(A) ''Freeze frame'' information required to be stored pursuant to paragraphs (b)(2)(iv), (h)(1)(iv)(D), and (h)(2)(vi) of this section must be made available on demand through the data link connector.

(B) ''Freeze frame'' conditions must include the DTC that caused the data to be stored along with all of the signals required in paragraphs (k)(4)(ii)(A)(*1*) or (k)(4)(ii)(B)(*1*) of this section. Freeze frame conditions must also include all of the signals required on the engine in paragraphs (k)(4)(ii)(A)(*2*) and (k)(4)(ii)(B)(*2*) of this section, and paragraph (k)(4)(ii)(C)(*1*) of this section that are used for diagnostic or control purposes in the specific monitor or emission-critical powertrain control unit that stored the DTC.

(C) Only one frame of data is required to be recorded. The manufacturer may choose to store additional frames provided that at least the required frame

can be read by, at a minimum, a manufacturer scan tool.

(iv) *Diagnostic trouble codes.*

(A) For all monitored components and systems, any stored pending, MIL-on, and previous-MIL-on DTCs must be made available through the diagnostic connector.

(B) The stored DTC must, to the extent possible, pinpoint the probable cause of the malfunction or potential malfunction. To the extent feasible, the manufacturer must use separate DTCs for every monitor where the monitor and repair procedure or probable cause of the malfunction is different. In general, rationality and functional checks must use different DTCs than the respective circuit integrity checks. Additionally, input component circuit integrity checks must use different DTCs for distinct malfunctions (e.g., out-of-range low, out-of-range high, open circuit).

(C) The manufacturer must use appropriate standard-defined DTCs whenever possible. With Administrator approval, the manufacturer may use manufacturer-defined DTCs in accordance with the applicable standard's specifications. To do so, the manufacturer must be able to show a lack of available standard-defined DTCs, uniqueness of the monitor or monitored component, expected future usage of the monitor or component, and estimated usefulness in providing additional diagnostic and repair information to service technicians. Manufacturer-defined DTCs must be used in a consistent manner (i.e., the same DTC shall not be used to represent two different failure modes) across a manufacturer's entire product line.

(D) A pending or MIL-on DTC (as required in paragraphs (g) through (i) of this section) must be stored and available to, at a minimum, a manufacturer scan tool within 10 seconds after a monitor has determined that a malfunction or potential malfunction has occurred. A permanent DTC must be stored and available to, at a minimum, a manufacturer scan tool no later than the end of an ignition cycle in which the corresponding MIL-on DTC that caused MIL activation has been stored.

(E) Pending DTCs for all components and systems (including those monitored continuously and non-continuously) must be made available through the diagnostic connector. A manufacturer using alternative statistical protocols for MIL activation as allowed in paragraph (b)(2)(iii) of this section must submit the details of their protocol for setting pending DTCs. The protocol must be, overall, equivalent to the requirements of this paragraph (k)(4)(iv)(E) and provide service technicians with a quick and accurate indication of a potential malfunction.

(F) Permanent DTC for all components and systems must be made available through the diagnostic connector in a format that distinguishes permanent DTCs from pending DTCs, MIL-on DTCs, and previous-MIL-on DTCs. A MIL-on DTC must be stored as a permanent DTC no later than the end of the ignition cycle and subsequently at all times that the MIL-on DTC is commanding the MIL on. Permanent DTCs must be stored in non-volatile random access memory (NVRAM) and shall not be erasable by any scan tool command or by disconnecting power to the on-board computer. Permanent DTCs must be erasable if the engine control module is reprogrammed and the ready status described in paragraph (k)(4)(i) of this section for all monitored components and systems are set to ''not complete.'' The OBD system must have the ability to store a minimum of four current MIL-on DTCs as permanent DTCs in NVRAM. If the number of MIL-on DTCs currently commanding activation of the MIL exceeds the maximum number of permanent DTCs that can be stored, the OBD system must store the earliest detected MIL-on DTC as permanent DTC. If additional MIL-on DTCs are stored when the maximum number of permanent DTCs is already stored in NVRAM, the OBD system shall not replace any existing permanent DTC with the additional MIL-on DTCs.

(v) *Test results.*

(A) Except as provided for in paragraph (k)(4)(v)(G) of this section, for all monitored components and systems identified in paragraphs (g) and (h) of this section, results of the most recent monitoring of the components and systems and the test limits established for monitoring the respective components and systems must be stored and available through the data link.

(B) The test results must be reported such that properly functioning components and systems (e.g., ''passing'' systems) do not store test values outside of the established test limits. Test limits must include both minimum and maximum acceptable values and must be defined so that a test result equal to either test limit is a ''passing'' value, not a ''failing'' value.

(C) [Reserved.]

(D) The test results must be stored until updated by a more recent valid test result or the DTC memory of the OBD system computer is cleared. Upon DTC memory being cleared, test results reported for monitors that have not yet completed with valid test results since the last time the fault memory was cleared must report values of zero for the test result and test limits.

(E) All test results and test limits must always be reported and the test results must be stored until updated by a more recent valid test result or the DTC memory of the OBD system computer is cleared.

(F) The OBD system must store and report unique test results for each separate monitor.

(G) The requirements of this paragraph (k)(4)(v) do not apply to continuous fuel system monitoring, cold start emission reduction strategy monitoring, and continuous circuit monitoring.

(vi) *Software calibration identification (CAL ID).* On all engines, a single software calibration identification number (CAL ID) for each monitor or emission critical control unit(s) must be made available through the data link connector. A unique CAL ID must be used for every emission-related calibration and/or software set having at least one bit of different data from any other emission-related calibration and/or software set. Control units coded with multiple emission or diagnostic calibrations and/or software sets must indicate a unique CAL ID for each variant in a manner that enables an off-board device to determine which variant is being used by the vehicle. Control units that use a strategy that will result in MIL activation if the incorrect variant is used (e.g., control units that contain variants for manual and automatic transmissions but will activate the MIL if the selected variant does not match the type of transmission mated to the engine) are not required to use unique CAL IDs.

(vii) *Software calibration verification number (CVN).*

(A) All engines must use an algorithm to calculate a single calibration verification number (CVN) that verifies the on-board computer software integrity for each monitor or emission critical control unit that is electronically reprogrammable. The CVN must be made available through the data link connector. The CVN must indicate whether the emission-related software and/or calibration data are valid and applicable for the given vehicle and CAL ID.

(B) The CVN algorithm used to calculate the CVN must be of sufficient complexity that the same CVN is difficult to achieve with modified calibration values.

(C) The CVN must be calculated at least once per drive cycle and stored until the CVN is subsequently updated. Except for immediately after a

reprogramming event or a non-volatile memory clear or for the first 30 seconds of engine operation after a volatile memory clear or battery disconnect, the stored value must be made available through the data link connector to, at a minimum, a manufacturer scan tool. The stored CVN value shall not be erased when DTC memory is erased or during normal vehicle shut down (i.e., key-off/engine-off).

(D) [Reserved.]

(viii) *Vehicle identification number (VIN).*

(A) All vehicles must have the vehicle identification number (VIN) available through the data link connector to, at a minimum, a manufacturer scan tool. Only one electronic control unit per vehicle may report the VIN to a scan tool.

(B) If the VIN is reprogrammable, all emission-related diagnostic information identified in paragraph (k)(4)(ix)(A) of this section must be erased in conjunction with reprogramming of the VIN.

(ix) *Erasure of diagnostic information.*

(A) For purposes of this paragraph (k)(4)(ix), ''emission-related diagnostic information'' includes all of the following: ready status as required by paragraph (k)(4)(i) of this section; data stream information as required by paragraph (k)(4)(ii) of this section including the number of stored MIL-on DTCs, distance traveled while MIL activated, number of warm-up cycles since DTC memory last erased, and distance traveled since DTC memory last erased; freeze frame information as required by paragraph (k)(4)(iii) of this section; pending, MIL-on, and previous-MIL-on DTCs as required by paragraph (k)(4)(iv) of this section; and, test results as required by paragraph (k)(4)(v) of this section.

(B) For all engines, the emission-related diagnostic information must be erased if commanded by any scan tool and may be erased if the power to the on-board computer is disconnected. If any of the emission-related diagnostic information is commanded to be erased by any scan tool, all emission-related diagnostic information must be erased from all diagnostic or emission critical control units. The OBD system shall not allow a scan tool to erase a subset of the emission-related diagnostic information (e.g., the OBD system shall not allow a scan tool to erase only one of three stored DTCs or only information from one control unit without erasing information from the other control unit(s)).

(5) *In-use performance ratio tracking requirements.*

(i) For each monitor required in paragraphs (g) through (i) of this section to separately report an in-use performance ratio, manufacturers must implement software algorithms to report a numerator and denominator.

(ii) For the numerator, denominator, general denominator, and ignition cycle counters required by paragraph (e) of this section, the following numerical value specifications apply:

(A) Each number shall have a minimum value of zero and a maximum value of 65,535 with a resolution of one.

(B) Each number shall be reset to zero only when a non-volatile random access memory (NVRAM) reset occurs (e.g., reprogramming event) or, if the numbers are stored in keep-alive memory (KAM), when KAM is lost due to an interruption in electrical power to the control unit (e.g., battery disconnect). Numbers shall not be reset to zero under any other circumstances including when a scan tool command to clear DTCs or reset KAM is received.

(C) To avoid overflow problems, if either the numerator or denominator for a specific component reaches the maximum value of 65,535 ±2, both numbers shall be divided by two before either is incremented again.

(D) To avoid overflow problems, if the ignition cycle counter reaches the maximum value of 65,535 ±2, the ignition cycle counter shall roll over and increment to zero on the next ignition cycle.

(E) To avoid overflow problems, if the general denominator reaches the maximum value of 65,535 ±2, the general denominator shall roll over and increment to zero on the next drive cycle that meets the general denominator definition.

(F) If a vehicle is not equipped with a component (e.g., oxygen sensor bank 2, secondary air system), the corresponding numerator and denominator for that specific component shall always be reported as zero.

(iii) For the ratio required by paragraph (e) of this section, the following numerical value specifications apply:

(A) The ratio shall have a minimum value of zero and a maximum value of 7.99527 with a resolution of 0.000122.

(B) The ratio for a specific component shall be considered to be zero whenever the corresponding numerator is equal to zero and the corresponding denominator is not zero.

(C) The ratio for a specific component shall be considered to be the maximum value of 7.99527 if the corresponding denominator is zero or if the actual value of the numerator divided by the denominator exceeds the maximum value of 7.99527.

(6) *Engine run time tracking requirements.*

(i) For all gasoline and diesel engines, the manufacturer must implement software algorithms to track and report individually the amount of time the engine has been operated in the following conditions:

(A) Total engine run time.

(B) Total idle run time (with ''idle'' defined as accelerator pedal released by the driver, vehicle speed less than or equal to one mile per hour, engine speed greater than or equal to 50 to 150 rpm below the normal, warmed-up idle speed (as determined in the drive position for vehicles equipped with an automatic transmission), and power take-off not active).

(C) Total run time with power take off active.

(ii) For each counter specified in paragraph (k)(6)(i) of this section, the following numerical value specifications apply:

(A) Each number shall be a four-byte value with a minimum value of zero, a resolution of one second per bit, and an accuracy of ± ten seconds per drive cycle.

(B) Each number shall be reset to zero only when a non-volatile memory reset occurs (e.g., reprogramming event). Numbers shall not be reset to zero under any other circumstances including when a scan tool (generic or enhanced) command to clear fault codes or reset KAM is received.

(C) To avoid overflow problems, if any of the individual counters reach the maximum value, all counters shall be divided by two before any are incremented again.

(D) The counters shall be made available to, at a minimum, a manufacturer scan tool and may be rescaled when transmitted from a resolution of one second per bit to no more than three minutes per bit.

(l) *Monitoring system demonstration requirements for certification.*

(1) *General.*

(i) The manufacturer must submit emissions test data from one or more durability demonstration test engines (test engines).

(ii) The Administrator may approve other demonstration protocols if the manufacturer can provide comparable assurance that the malfunction criteria are chosen based on meeting the malfunction criteria requirements and that the timeliness of malfunction detection is within the constraints of the applicable monitoring requirements.

(iii) For flexible fuel engines capable of operating on more than one fuel or

fuel combinations, the manufacturer must submit a plan for providing emission test data. The plan must demonstrate that testing will represent properly the expected in-use fuel or fuel combinations.

(2) *Selection of test engines.*

(i) Prior to submitting any applications for certification for a model year, the manufacturer must notify the Administrator regarding the planned engine families and engine ratings within each family for that model year. The Administrator will select the engine family(ies) and the specific engine rating within the engine family(ies) that the manufacturer shall use as demonstration test engines. The selection of test vehicles for production evaluation testing as specified in paragraph (j)(2) of this section may take place during this selection process.

(ii) The manufacturer must provide emissions test data from the OBD parent rating as defined in paragraph (o)(1) of this section.

(iii) For the test engine, the manufacturer must use an engine aged for a minimum of 125 hours fitted with exhaust aftertreatment emission controls aged to be representative of useful life aging. The manufacturer is required to submit a description of the accelerated aging process and/or supporting data. The process and/or data must demonstrate assurance that deterioration of the exhaust aftertreatment emission controls is stabilized sufficiently such that it represents emission control performance at the end of the useful life.

(3) *Required testing.* Except as otherwise described in this paragraph (l)(3), the manufacturer must perform single malfunction testing based on the applicable test with the components/systems set at their malfunction criteria limits as determined by the manufacturer for meeting the emissions thresholds required in paragraphs (g), (h), and (i) of this section.

(i) *Required testing for diesel-fueled/compression ignition engines.*

(A) *Fuel system.* The manufacturer must perform a separate test for each malfunction limit established by the manufacturer for the fuel system parameters (e.g., fuel pressure, injection timing) specified in paragraphs (g)(1)(ii)(A) through (g)(1)(ii)(C) of this section. When performing a test for a specific parameter, the fuel system must be operating at the malfunction criteria limit for the applicable parameter only. All other parameters must be operating with normal characteristics. In conducting the fuel system demonstration tests, the manufacturer may use computer modifications to cause the fuel system to operate at the malfunction limit if the manufacturer can demonstrate that the computer modifications produce test results equivalent to an induced hardware malfunction.

(B) [Reserved.]

(C) *EGR system.* The manufacturer must perform a separate test for each malfunction limit established by the manufacturer for the EGR system parameters (e.g., low flow, high flow, slow response) specified in paragraphs (g)(3)(ii)(A) through (g)(3)(ii)(C) of this section and in (g)(3)(ii)(E) of this section. In conducting the EGR system slow response demonstration tests, the manufacturer may use computer modifications to cause the EGR system to operate at the malfunction limit if the manufacturer can demonstrate that the computer modifications produce test results equivalent to an induced hardware malfunction.

(D) *Turbo boost control system.* The manufacturer must perform a separate test for each malfunction limit established by the manufacturer for the turbo boost control system parameters (e.g., underboost, overboost, response) specified in paragraphs (g)(4)(ii)(A) through (g)(4)(ii)(C) of this section and in (g)(4)(ii)(E) of this section.

(E) *NMHC catalyst.* The manufacturer must perform a separate test for each monitored NMHC catalyst(s). The catalyst(s) being evaluated must be deteriorated to the applicable malfunction limit established by the manufacturer for the monitoring required by paragraph (g)(5)(ii)(A) of this section and using methods established by the manufacturer in accordance with paragraph (l)(7) of this section. For each monitored NMHC catalyst(s), the manufacturer must also demonstrate that the OBD system will detect a catalyst malfunction with the catalyst at its maximum level of deterioration (i.e., the substrate(s) completely removed from the catalyst container or ''empty'' can). Emissions data are not required for the empty can demonstration.

(F) *NO_X catalyst.* The manufacturer must perform a separate test for each monitored NO_X catalyst(s) (e.g., SCR catalyst). The catalyst(s) being evaluated must be deteriorated to the applicable malfunction criteria established by the manufacturer for the monitoring required by paragraphs (g)(6)(ii)(A) and (g)(6)(ii)(B) of this section and using methods established by the manufacturer in accordance with paragraph (l)(7) of this section. For each monitored NO_X catalyst(s), the manufacturer must also demonstrate that the OBD system will detect a catalyst malfunction with the catalyst at its maximum level of deterioration (i.e., the substrate(s) completely removed from the catalyst container or ''empty'' can). Emissions data are not required for the empty can demonstration.

(G) *NO_X adsorber.* The manufacturer must perform a test using a NO_X adsorber(s) deteriorated to the applicable malfunction limit established by the manufacturer for the monitoring required by paragraph (g)(7)(ii)(A) of this section. The manufacturer must also demonstrate that the OBD system will detect a NO_X adsorber malfunction with the NO_X adsorber at its maximum level of deterioration (i.e., the substrate(s) completely removed from the container or ''empty'' can). Emissions data are not required for the empty can demonstration.

(H) *Diesel particulate filter.* The manufacturer must perform a separate test using a DPF deteriorated to the applicable malfunction limits established by the manufacturer for the monitoring required by paragraphs (g)(8)(ii)(A), (g)(8)(ii)(B), and (g)(8)(ii)(D) of this section. The manufacturer must also demonstrate that the OBD system will detect a DPF malfunction with the DPF at its maximum level of deterioration (i.e., the filter(s) completely removed from the filter container or ''empty'' can). Emissions data are not required for the empty can demonstration.

(I) *Exhaust gas sensor.* The manufacturer must perform a separate test for each malfunction limit established by the manufacturer for the monitoring required in paragraphs (g)(9)(ii)(A), (g)(9)(iii)(A), and (g)(9)(iv)(A) of this section. When performing a test, all exhaust gas sensors used for the same purpose (e.g., for the same feedback control loop, for the same control feature on parallel exhaust banks) must be operating at the malfunction criteria limit for the applicable parameter only. All other exhaust gas sensor parameters must be operating with normal characteristics.

(J) *VVT system.* The manufacturer must perform a separate test for each malfunction limit established by the manufacturer for the monitoring required in paragraphs (g)(10)(ii)(A) and (g)(10)(ii)(B) of this section. In conducting the VVT system demonstration tests, the manufacturer may use computer modifications to cause the VVT system to operate at the malfunction limit if the manufacturer can demonstrate that the computer modifications produce test results equivalent to an induced hardware malfunction.

(K) For each of the testing requirements of this paragraph (l)(3)(i), if the manufacturer has established that only a functional check is required because no failure or deterioration of the specific tested system could result in an engine's emissions exceeding the applicable emissions thresholds, the manufacturer is not required to perform a demonstration test; however, the manufacturer is required to provide the data and/or engineering analysis used to determine that only a functional test of the system(s) is required.

(ii) *Required testing for gasoline-fueled/spark-ignition engines.*

(A) *Fuel system.* For engines with adaptive feedback based on the primary fuel control sensor(s), the manufacturer must perform a test with the adaptive feedback based on the primary fuel control sensor(s) at the rich limit(s) and a test at the lean limit(s) established by the manufacturer as required by paragraph (h)(1)(ii)(A) of this section to detect a malfunction before emissions exceed applicable emissions thresholds. For engines with feedback based on a secondary fuel control sensor(s) and subject to the malfunction criteria in paragraph (h)(1)(ii)(A) of this section, the manufacturer must perform a test with the feedback based on the secondary fuel control sensor(s) at the rich limit(s) and a test at the lean limit(s) established by the manufacturer as required by paragraph (h)(1)(ii)(A) of this section to detect a malfunction before emissions exceed the applicable emissions thresholds. For other fuel metering or control systems, the manufacturer must perform a test at the criteria limit(s). For purposes of fuel system testing as required by this paragraph (l)(3)(ii)(A), the malfunction(s) induced may result in a uniform distribution of fuel and air among the cylinders. Non uniform distribution of fuel and air used to induce a malfunction shall not cause misfire. In conducting the fuel system demonstration tests, the manufacturer may use computer modifications to cause the fuel system to operate at the malfunction limit. To do so, the manufacturer must be able to demonstrate that the computer modifications produce test results equivalent to an induced hardware malfunction.

(B) *Misfire.* The manufacturer must perform a test at the malfunction criteria limit specified in paragraph (h)(2)(ii)(B) of this section.

(C) *EGR system.* The manufacturer must perform a test at each flow limit calibrated to the malfunction criteria specified in paragraphs (h)(3)(ii)(A) and (h)(3)(ii)(B) of this section.

(D) *Cold start emission reduction strategy.* The manufacturer must perform a test at the malfunction criteria for each component monitored according to paragraph (h)(4)(ii)(A) of this section.

(E) *Secondary air system.* The manufacturer must perform a test at each flow limit calibrated to the malfunction criteria specified in paragraphs (h)(5)(ii)(A) and (h)(5)(ii)(B) of this section.

(F) *Catalyst.* The manufacturer must perform a test using a catalyst system deteriorated to the malfunction criteria specified in paragraph (h)(6)(ii) of this section using methods established by the manufacturer in accordance with paragraph (l)(7)(ii) of this section. The manufacturer must also demonstrate that the OBD system will detect a catalyst system malfunction with the catalyst system at its maximum level of deterioration (i.e., the substrate(s) completely removed from the catalyst container or ''empty'' can). Emission data are not required for the empty can demonstration.

(G) *Exhaust gas sensor.* The manufacturer must perform a test with all primary exhaust gas sensors used for fuel control simultaneously possessing a response rate deteriorated to the malfunction criteria limit specified in paragraph (h)(8)(ii)(A) of this section. The manufacturer must also perform a test for any other primary or secondary exhaust gas sensor parameter under parargraphs (h)(8)(ii)(A) and (h)(8)(iii)(A) of this section that can cause engine emissions to exceed the applicable emissions thresholds (e.g., shift in air/fuel ratio at which oxygen sensor switches, decreased amplitude). When performing additional test(s), all primary and secondary (if applicable) exhaust gas sensors used for emission control must be operating at the malfunction criteria limit for the applicable parameter only. All other primary and secondary exhaust gas sensor parameters must be operating with normal characteristics.

(H) *VVT system.* The manufacturer must perform a test at each target error limit and slow response limit calibrated to the malfunction criteria specified in (h)(9)(ii)(A) and (h)(9)(ii)(B) of this section. In conducting the VVT system demonstration tests, the manufacturer may use computer modifications to cause the VVT system to operate at the malfunction limit. To do so, the manufacturer must be able to demonstrate that the computer modifications produce test results equivalent to an induced hardware malfunction.

(I) For each of the testing requirements of this paragraph (l)(3)(ii), if the manufacturer has established that only a functional check is required because no failure or deterioration of the specific tested system could cause an engine's emissions to exceed the applicable emissions thresholds, the manufacturer is not required to perform a demonstration test; however the manufacturer is required to provide the data and/or engineering analyses used to determine that only a functional test of the system(s) is required.

(iii) *Required testing for all engines.*

(A) Other emission control systems. The manufacturer must conduct demonstration tests for all other emission control components (e.g., hydrocarbon traps, adsorbers) designed and calibrated to a malfunction limit based on an emissions threshold based on the requirements of paragraph (i)(4) of this section.

(B) For each of the testing requirements of paragraph (l)(3)(iii)(A) of this section, if the manufacturer has established that only a functional check is required because no failure or deterioration of the specific tested system could result in an engine's emissions exceeding the applicable emissions thresholds, the manufacturer is not required to perform a demonstration test; however, the manufacturer is required to provide the data and/or engineering analysis used to determine that only a functional test of the system(s) is required.

(iv) The manufacturer may electronically simulate deteriorated components but shall not make any engine control unit modifications when performing demonstration tests unless approved by the Administrator. All equipment necessary to duplicate the demonstration test must be made available to the Administrator upon request.

(4) *Testing protocol.*

(i) *Preconditioning.* The manufacturer must use an applicable cycle for preconditioning test engines prior to conducting each of the emission tests required by paragraph (l)(3) of this section. The manufacturer may perform a single additional preconditioning cycle, identical to the initial one, after a 20 minute hot soak but must demonstrate that such an additional cycle is necessary to stabilize the emissions control system. A practice of requiring a cold soak prior to conducting preconditioning cycles is not permitted.

(ii) *Test sequence.*

(A) The manufacturer must set individually each system or component on the test engine at the malfunction

criteria limit prior to conducting the applicable preconditioning cycle(s). If a second preconditioning cycle is permitted in accordance with paragraph (l)(4)(i) of this section, the manufacturer may adjust the system or component to be tested before conducting the second preconditioning cycle. The manufacturer shall not replace, modify, or adjust the system or component after the last preconditioning cycle has been completed.

(B) After preconditioning, the test engine must be operated over the applicable cycle to allow for the initial detection of the tested system or component malfunction. This test cycle may be omitted from the testing protocol if it is unnecessary. If required by the monitoring strategy being tested, a cold soak may be performed prior to conducting this test cycle.

(C) The test engine must then be operated over the applicable exhaust emissions test.

(iii) [Reserved.]

(iv) The manufacturer may request approval to use an alternative testing protocol for demonstration of MIL activation if the engine dynamometer emission test cycle does not allow all of a given monitor's enable conditions to be satisfied. The manufacturer may request the use of an alternative engine dynamometer test cycle or the use of chassis testing to demonstrate proper MIL activation. To do so, the manufacturer must demonstrate the technical necessity for using an alternative test cycle and the degree to which the alternative test cycle demonstrates that in-use operation with the malfunctioning component will result in proper MIL activation.

(5) *Evaluation protocol.* Full OBD engine ratings, as defined by paragraph (o)(1) of this section, shall be evaluated according to the following protocol:

(i) For all tests conducted as required by paragraph (l) of this section, the MIL must activate before the end of the first engine start portion of the applicable test.

(ii) If the MIL activates prior to emissions exceeding the applicable malfunction criteria limits specified in paragraphs (g) through (i) of this section, no further demonstration is required. With respect to the misfire monitor demonstration test, if the manufacturer has elected to use the minimum misfire malfunction criteria of one percent as allowed in paragraph (h)(2)(ii)(B) of this section, no further demonstration is required provided the MIL activates with engine misfire occurring at the malfunction criteria limit.

(iii) If the MIL does not activate when the system or component is set at its malfunction criteria limit(s), the criteria limit(s) or the OBD system is not acceptable.

(A) Except for testing of the catalyst or DPF system, if the MIL first activates after emissions exceed the applicable malfunction criteria specified in paragraphs (g) through (i) of this section, the test engine shall be retested with the tested system or component adjusted so that the MIL will activate before emissions exceed the applicable malfunction criteria specified in paragraphs (g) through (i) of this section. If the component cannot be so adjusted because an alternative fuel or emission control strategy is used when a malfunction is detected (e.g., open loop fuel control used after an oxygen sensor malfunction is detected), the test engine shall be retested with the component adjusted to the worst acceptable limit (i.e., the applicable OBD monitor indicates that the component is performing at or slightly better than the malfunction criteria limit). When tested with the component so adjusted, the MIL must not activate during the test and the engine emissions must be below the applicable malfunction criteria specified in paragraphs (g) through (i) of this section.

(B) In testing the catalyst or DPF system, if the MIL first activates after emissions exceed the applicable emissions threshold(s) specified in paragraphs (g) and (h) of this section, the tested engine shall be retested with a less deteriorated catalyst or DPF system (i.e., more of the applicable engine out pollutants are converted or trapped). For the OBD system to be approved, testing shall be continued until the MIL activates with emissions below the applicable thresholds of paragraphs (g) and (h) of this section, or the MIL activates with emissions within a range no more than 20 percent below the applicable emissions thresholds and 10 percent or less above those emissions thresholds.

(iv) If an OBD system is determined to be unacceptable by the criteria of this paragraph (l)(5) of this section, the manufacturer may recalibrate and retest the system on the same test engine. In such a case, the manufacturer must confirm, by retesting, that all systems and components that were tested prior to the recalibration and are affected by it still function properly with the recalibrated OBD system.

(6) *Confirmatory testing.*

(i) The Administrator may perform confirmatory testing to verify the emission test data submitted by the manufacturer as required by this paragraph (l) of this section comply with its requirements and the malfunction criteria set forth in paragraphs (g) through (i) of this section. Such confirmatory testing is limited to the test engine required by paragraph (l)(2) of this section.

(ii) To conduct this confirmatory testing, the Administrator may install appropriately deteriorated or malfunctioning components (or simulate them) in an otherwise properly functioning test engine of an engine rating represented by the demonstration test engine in order to test any of the components or systems required to be tested by paragraph (l) of this section. The manufacturer shall make available, if requested, an engine and all test equipment (e.g., malfunction simulators, deteriorated components) necessary to duplicate the manufacturer's testing. Such a request from the Administrator shall occur within six months of reviewing and approving the demonstration test engine data submitted by the manufacturer for the specific engine rating.

(7) *Catalyst aging.*

(i) *Diesel catalysts.* For purposes of determining the catalyst malfunction limits for the monitoring required by paragraphs (g)(5)(ii)(A), (g)(5)(ii)(B), and (g)(6)(ii)(A) of this section, where those catalysts are monitored individually, the manufacturer must use a catalyst deteriorated to the malfunction criteria using methods established by the manufacturer to represent real world catalyst deterioration under normal and malfunctioning engine operating conditions. For purposes of determining the catalyst malfunction limits for the monitoring required by paragraphs (g)(5)(ii)(A), (g)(5)(ii)(B), and (g)(6)(ii)(A) of this section, where those catalysts are monitored in combination with other catalysts, the manufacturer must submit their catalyst system aging and monitoring plan to the Administrator as part of their certification documentation package. The plan must include the description, emission control purpose, and location of each component, the monitoring strategy for each component and/or combination of components, and the method for determining the applicable malfunction criteria including the deterioration/aging process.

(ii) *Gasoline catalysts.* For the purposes of determining the catalyst system malfunction criteria in paragraph (h)(6)(ii) of this section, the manufacturer must use a catalyst system deteriorated to the malfunction criteria using methods established by the manufacturer to represent real world catalyst deterioration under normal and malfunctioning operating conditions. The malfunction criteria must be

established by using a catalyst system with all monitored and unmonitored (downstream of the sensor utilized for catalyst monitoring) catalysts simultaneously deteriorated to the malfunction criteria except for those engines that use fuel shutoff to prevent over-fueling during engine misfire conditions. For such engines, the malfunction criteria must be established by using a catalyst system with all monitored catalysts simultaneously deteriorated to the malfunction criteria while unmonitored catalysts shall be deteriorated to the end of the engine's useful life.

(m) *Certification documentation requirements.*

(1) When submitting an application for certification of an engine, the manufacturer must submit the following documentation. If any of the items listed here are standardized for all of the manufacturer's engines, the manufacturer may, for each model year, submit one set of documents covering the standardized items for all of its engines.

(i) For the required documentation that is not standardized across all engines, the manufacturer may be allowed to submit documentation for certification from one engine that is representative of other engines. All such engines shall be considered to be part of an OBD certification documentation group. To represent the OBD group, the chosen engine must be certified to the most stringent emissions standards and OBD monitoring requirements and cover all of the emissions control devices for the engines in the group and covered by the submitted documentation. Such OBD groups must be approved in advance of certification.

(ii) Upon approval, one or more of the documentation requirements of this paragraph (m) of this section may be waived or modified if the information required is redundant or unnecessarily burdensome to generate.

(iii) To the extent possible, the certification documentation must use SAE J1930 or J2403 terms, abbreviations, and acronyms.

(2) Unless otherwise specified, the following information must be submitted as part of the certification application and prior to receiving a certificate.

(i) A description of the functional operation of the OBD system including a complete written description for each monitoring strategy that outlines every step in the decision-making process of the monitor. Algorithms, diagrams, samples of data, and/or other graphical representations of the monitoring strategy shall be included where necessary to adequately describe the information.

(ii) A table including the following information for each monitored component or system (either computer-sensed or computer-controlled) of the emissions control system:

(A) Corresponding diagnostic trouble code.

(B) Monitoring method or procedure for malfunction detection.

(C) Primary malfunction detection parameter and its type of output signal.

(D) Malfunction criteria limits used to evaluate output signal of primary parameter.

(E) Other monitored secondary parameters and conditions (in engineering units) necessary for malfunction detection.

(F) Monitoring time length and frequency of monitoring events.

(G) Criteria for storing a diagnostic trouble code.

(H) Criteria for activating a malfunction indicator light.

(I) Criteria used for determining out-of-range values and input component rationality checks.

(iii) Whenever possible, the table required by paragraph (m)(2)(ii) of this section shall use the following engineering units:

(A) Degrees Celsius for all temperature criteria.

(B) KiloPascals (KPa) for all pressure criteria related to manifold or atmospheric pressure.

(C) Grams (g) for all intake air mass criteria.

(D) Pascals (Pa) for all pressure criteria related to evaporative system vapor pressure.

(E) Miles per hour (mph) for all vehicle speed criteria.

(F) Relative percent (%) for all relative throttle position criteria (as defined in SAE J1979/J1939).

(G) Voltage (V) for all absolute throttle position criteria (as defined in SAE J1979/J1939).

(H) Per crankshaft revolution (/rev) for all changes per ignition event based criteria (e.g., g/rev instead of g/stroke or g/firing).

(I) Per second (/sec) for all changes per time based criteria (e.g., g/sec).

(J) Percent of nominal tank volume (%) for all fuel tank level criteria.

(iv) A logic flowchart describing the step-by-step evaluation of the enable criteria and malfunction criteria for each monitored emission related component or system.

(v) Emissions test data, a description of the testing sequence (e.g., the number and types of preconditioning cycles), approximate time (in seconds) of MIL activation during the test, diagnostic trouble code(s) and freeze frame information stored at the time of detection, corresponding test results (e.g. SAE J1979 Mode/Service $06, SAE J1939 Diagnostic Message 8 (DM8)) stored during the test, and a description of the modified or deteriorated components used for malfunction simulation with respect to the demonstration tests specified in paragraph (l) of this section. The freeze frame data are not required for engines subject to paragraph (o)(2) of this section.

(vi) For gasoline engines, data supporting the misfire monitor, including:

(A) The established percentage of misfire that can be tolerated without damaging the catalyst over the full range of engine speed and load conditions.

(B) Data demonstrating the probability of detection of misfire events by the misfire monitoring system over the full engine speed and load operating range for the following misfire patterns: random cylinders misfiring at the malfunction criteria established in paragraph (h)(2)(ii)(B) of this section, one cylinder continuously misfiring, and paired cylinders continuously misfiring.

(C) Data identifying all disablement of misfire monitoring that occurs during the FTP. For every disablement that occurs during the cycles, the data shall identify: when the disablement occurred relative to the driver's trace, the number of engine revolutions during which each disablement was present, and which disable condition documented in the certification application caused the disablement.

(D) Manufacturers are not required to use the durability demonstration engine to collect the misfire data required by paragraph (m)(2)(vi) of this section.

(vii) Data supporting the limit for the time between engine starting and attaining the designated heating temperature for after-start heated catalyst systems.

(viii) Data supporting the criteria used to detect a malfunction of the fuel system, EGR system, boost pressure control system, catalyst, NO_X adsorber, DPF, cold start emission reduction strategy, secondary air, evaporative system, VVT system, exhaust gas sensors, and other emission controls that causes emissions to exceed the applicable malfunction criteria specified in paragraphs (g) through (i) of this section. For diesel engine monitors required by paragraphs (g) and (i) of this section that are required to indicate a malfunction before emissions exceed an emission threshold based on any applicable standard (e.g., 2.5 times any

of the applicable standards), the test cycle and standard determined by the manufacturer to be the most stringent for each applicable monitor in accordance with paragraph (f)(1) of this section.

(ix) A list of all electronic powertrain input and output signals (including those not monitored by the OBD system) that identifies which signals are monitored by the OBD system. For input and output signals that are monitored as comprehensive components, the listing shall also identify the specific diagnostic trouble code for each malfunction criteria (e.g., out-of-range low, out-of-range high, open circuit, rationality low, rationality high).

(x) A written description of all parameters and conditions necessary to begin closed-loop/feedback control of emission control systems (e.g., fuel system, boost pressure, EGR flow, SCR reductant delivery, DPF regeneration, fuel system pressure).

(xi) A written identification of the communication protocol utilized by each engine for communication with a scan tool.

(xii) Reserved.

(xiii) A written description of the method used by the manufacturer to meet the requirements of paragraph (i)(2) of this section (crankcase ventilation system monitoring) including diagrams or pictures of valve and/or hose connections.

(xiv) Build specifications provided to engine purchasers or chassis manufacturers detailing all specifications or limitations imposed on the engine purchaser relevant to OBD requirements or emissions compliance (e.g., cooling system heat rejection rates). A description of the method or copies of agreements used to ensure engine purchasers or chassis manufacturers will comply with the OBD and emissions relevant build specifications (e.g., signed agreements, required audit/evaluation procedures).

(xv) Any other information determined by the Administrator to be necessary to demonstrate compliance with the requirements of this section.

(n) *Deficiencies.*

(1) Upon application by the manufacturer, the Administrator may accept an OBD system as compliant even though specific requirements are not fully met. Such compliances without meeting specific requirements, or deficiencies, will be granted only if compliance is infeasible or unreasonable considering such factors as, but not limited to: technical feasibility of the given monitor and lead time and production cycles including phase-in or phase-out of engines or vehicle designs and programmed upgrades of computers. Unmet requirements shall not be carried over from the previous model year except where unreasonable hardware or software modifications are necessary to correct the deficiency, and the manufacturer has demonstrated an acceptable level of effort toward compliance as determined by the Administrator. Furthermore, EPA will not accept any deficiency requests that include the complete lack of a major diagnostic monitor (''major'' diagnostic monitors being those for exhaust aftertreatment devices, oxygen sensor, air-fuel ratio sensor, NO_X sensor, engine misfire, evaporative leaks, and diesel EGR, if equipped), with the possible exception of the special provisions for alternative fueled engines. For alternative fueled heavy-duty engines (e.g. natural gas, liquefied petroleum gas, methanol, ethanol), manufacturers may request the Administrator to waive specific monitoring requirements of this section for which monitoring may not be reliable with respect to the use of the alternative fuel. At a minimum, alternative fuel engines must be equipped with an OBD system meeting OBD requirements to the extent feasible as approved by the Administrator.

(2) In the event the manufacturer seeks to carry-over a deficiency from a past model year to the current model year, the manufacturer must re-apply for approval to do so. In considering the request to carry-over a deficiency, the Administrator shall consider the manufacturer's progress towards correcting the deficiency. The Administrator may not allow manufacturers to carry over monitoring system deficiencies for more than two model years unless it can be demonstrated that substantial engine hardware modifications and additional lead time beyond two years are necessary to correct the deficiency.

(3) A deficiency shall not be granted retroactively (i.e., after the engine has been certified).

(o) *Implementation schedule.* Except as provided for in paragraphs (o)(4) and (o)(5) of this section, the requirements of this section must be met according to the following provisions:

(1) *Full OBD.* The manufacturer must implement an OBD system meeting the requirements of this section on one engine rating within one engine family of the manufacturer's product line. This ''full OBD'' rating will be known as the ''OBD parent'' rating. The OBD parent rating must be chosen as the rating having the highest weighted projected U.S. sales within the engine family having the highest weighted projected U.S. sales, with U.S. sales being weighted by the useful life of the engine rating.

(2) *Extrapolated OBD.* For all other engine ratings within the engine family from which the OBD parent rating has been selected, the manufacturer must implement an OBD system meeting the requirements of this section except that the OBD system is not required to detect a malfunction prior to exceeding the emission thresholds shown in Table 1 of paragraph (g) of this section and Table 2 of paragraph (h) of this section. These extrapolated OBD engines will be known as the ''OBD child'' ratings. On these OBD child ratings, rather than detecting a malfunction prior to exceeding the emission thresholds, the manufacturer must submit a plan for Administrator review and approval that details the engineering evaluation the manufacturer will use to establish the malfunction criteria for the OBD child ratings. The plan must demonstrate both the use of good engineering judgment in establishing the malfunction criteria, and robust detection of malfunctions, including consideration of differences of base engine, calibration, emission control components, and emission control strategies.

(3) Engine families other than those from which the parent and child ratings have been selected are not subject to the requirements of this section.

(4) Small volume manufacturers, as defined in § 86.094–14(b)(1) and (2), are exempt from the requirements of § 86.010–18.

(5) Engines certified as alternative fueled engines are exempt from the requirements of § 86.010–18.

(p) *In-use compliance standards.* For monitors required to indicate a malfunction before emissions exceed a certain emission threshold (e.g., 2.5 times any of the applicable standards):

(1) On the full OBD rating (i.e., the parent rating) as defined in paragraph (o)(1) of this section, separate in-use emissions thresholds shall apply. These thresholds are determined by doubling the applicable thresholds as shown in Table 1 of paragraph (g) and Table 2 of paragraph (h) of this section. The resultant thresholds apply only in-use and do not apply for certification or selective enforcement auditing.

(2) The extrapolated OBD ratings (i.e., the child ratings) as defined in paragraph (o)(2) of this section shall not be evaluated against emissions levels for purposes of OBD compliance in-use.

(3) Only the test cycle and standard determined and identified by the manufacturer at the time of certification in accordance with paragraph (f) of this section as the most stringent shall be

used for the purpose of determining OBD system noncompliance in-use.

(4) An OBD system shall not be considered noncompliant solely due to a failure or deterioration mode of a monitored component or system that could not have been reasonably foreseen to occur by the manufacturer.

8. Section 86.010–30 is added to Subpart A to read as follows:

§ 86.010–30 Certification.

Section 86.010–30 includes text that specifies requirements that differ from §§ 86.094–30, 86.095–30, 86.096–30, 86.098–30, 86.001–30, 86.004–30 or 86.007–30. Where a paragraph in § 86.094–30, § 86.095–30, § 86.096–30, § 86.098–30, § 86.001–30, § 86.004–30 or § 86.007–30 is identical and applicable to § 86.010–30, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.094–30.'' or ''[Reserved]. For guidance see § 86.095–30.'' or ''[Reserved]. For guidance see § 86.096–30.'' or ''[Reserved]. For guidance see § 86.098–30.'' or ''[Reserved]. For guidance see § 86.001–30.'' or ''[Reserved]. For guidance see § 86.004–30.'' or ''[Reserved]. For guidance see § 86.007–30.''

(a)(1) and (a)(2) [Reserved]. For guidance see § 86.094–30.

(a)(3)(i) through (a)(4)(ii) [Reserved]. For guidance see § 86.004–30.

(a)(4)(iii) introductory text through (a)(4)(iii)(C) [Reserved]. For guidance see § 86.094–30.

(a)(4)(iv) introductory text [Reserved]. For guidance see § 86.095–30.

(a)(4)(iv)(A)–(a)(9) [Reserved]. For guidance see § 86.094–30.

(a)(10) and (a)(11) [Reserved]. For guidance see § 86.004–30.

(a)(12) [Reserved]. For guidance see § 86.094–30.

(a)(13) [Reserved]. For guidance see § 86.095–30.

(a)(14) [Reserved]. For guidance see § 86.094–30.

(a)(15)–(18) [Reserved]. For guidance see § 86.096–30.

(a)(19) [Reserved]. For guidance see § 86.098–30.

(a)(20) [Reserved]. For guidance see § 86.001–30.

(a)(21) [Reserved]. For guidance see § 86.004–30.

(b)(1) introductory text through (b)(1)(ii)(A) [Reserved]. For guidance see § 86.094–30.

(b)(1)(ii)(B) [Reserved]. For guidance see § 86.004–30.

(b)(1)(ii)(C) [Reserved]. For guidance see § 86.094–30.

(b)(1)(ii)(D) [Reserved]. For guidance see § 86.004–30.

(b)(1)(iii) and (b)(1)(iv) [Reserved]. For guidance see § 86.094–30.

(b)(2) [Reserved]. For guidance see § 86.098–30.

(b)(3)–(b)(4)(i) [Reserved]. For guidance see § 86.094–30.

(b)(4)(ii) introductory text [Reserved]. For guidance see § 86.098–30.

(b)(4)(ii)(A) [Reserved]. For guidance see § 86.094–30.

(b)(4)(ii)(B)–(b)(4)(iv) [Reserved]. For guidance see § 86.098–30.

(b)(5)–(e) [Reserved]. For guidance see § 86.094–30.

(f) For engine families required to have an OBD system and meant for applications less than or equal to 14,000 pounds GVWR, certification will not be granted if, for any test vehicle approved by the Administrator in consultation with the manufacturer, the malfunction indicator light does not activate under any of the following circumstances, unless the manufacturer can demonstrate that any identified OBD problems discovered during the Administrator's evaluation will be corrected on production vehicles.

(f)(1)(i) *Otto-cycle.* [Reserved]. For guidance see § 86.004–30.

(f)(1)(ii) *Diesel.*

(A) If monitored for emissions performance—a reduction catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust NO_X emissions exceeding the applicable NO_X FEL+0.3 g/bhp-hr. Also if monitored for emissions performance—an oxidation catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust NMHC emissions exceeding 2.5 times the applicable NMHC standard.

(B) If monitored for performance—a particulate trap is replaced with a deteriorated or defective trap, or an electronic simulation of such, resulting in either exhaust PM emissions exceeding the applicable FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, exhaust NMHC emissions exceeding 2.5 times the applicable NMHC standard. Also, if monitored for performance—a particulate trap is replaced with a catastrophically failed trap or a simulation of such.

(f)(2) [Reserved]. For guidance see § 86.004–30.

(f)(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices.*

(f)(3)(i)(A) [Reserved]. For guidance see § 86.007–30.

(f)(3)(i)(B) *Diesel.* If so equipped, any oxygen sensor or air-fuel ratio sensor located downstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2.5 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices.*

(f)(3)(ii)(A) [Reserved]. For guidance see § 86.007–30.

(f)(3)(ii)(B) *Diesel.* If so equipped, any oxygen sensor or air-fuel ratio sensor located upstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.02 g/bhp-hr or 0.03 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(iii) *NO_X sensors.*

(f)(3)(iii)(A) [Reserved]. For guidance see § 86.007–30.

(f)(3)(iii)(B) *Diesel.* If so equipped, any NO_X sensor is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr.

(f)(4) [Reserved]. For guidance see § 86.004–30.

(f)(5)(i) [Reserved]. For guidance see § 86.007–30.

(f)(5)(ii) *Diesel.* A malfunction condition is induced in any emission-related engine system or component, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.02 g/bhp-hr or 0.03 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(f)(6) [Reserved]. For guidance see § 86.004–30.

9. Section 86.010–38 is added to subpart A to read as follows:

§ 86.010–38 Maintenance instructions.

This Section 86.010–38 includes text that specifies requirements that differ from those specified in § 86.007–38. Where a paragraph in § 86.096–38, or § 86.004–38, or § 86.007–38 is identical and applicable to § 86.010–38, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.096–38,'' ''[Reserved]. For guidance

see or § 86.004–38, '' or ''[Reserved]. For guidance see § 86.007–38.''

(a)–(f) [Reserved]. For guidance see § 86.004–38.

(g) [Reserved]. For guidance see § 86.096–38. For incorporation by reference see §§ 86.1 and 86.096–38.

(h) [Reserved]. For guidance see § 86.004–38.

(i) [Reserved]. For guidance see § 86.007–38.

(j) Emission control diagnostic service information for heavy-duty engines used in vehicles over 14,000 pounds gross vehicle weight (GVW)

(1) Manufacturers of heavy-duty engines used in applications weighing more than 14,000 pounds gross vehicle weight (GVW) that are subject to the applicable OBD requirements of this subpart A are subject to the provisions of this paragraph (j) beginning in the 2010 model year. The provisions of this paragraph (j) apply only to those heavy-duty engines subject to the applicable OBD requirements.

(2) Upon Administrator approval, manufacturers may alternatively comply with all service information and tool provisions found in § 86.096–38 that are applicable to 1996 and subsequent vehicles weighing less than 14,000 pounds gross vehicle weight (GVW).

(3) *General Requirements*

(i) Manufacturers shall furnish or cause to be furnished to any person engaged in the repairing or servicing of heavy-duty engines, or the Administrator upon request, any and all information needed to make use of the on-board diagnostic system and such other information, including instructions for making emission-related diagnosis and repairs, including but not limited to service manuals, technical service bulletins, recall service information, bi-directional control information, and training information, unless such information is protected by section 208(c) as a trade secret. No such information may be withheld under section 208(c) of the Act if that information is provided (directly or indirectly) by the manufacturer to franchised dealers or other persons engaged in the repair, diagnosing, or servicing of heavy-duty engines.

(ii) *Definitions.* The following definitions apply for this paragraph (j):

(A) Aftermarket service provider means any individual or business engaged in the diagnosis, service, and repair of a heavy-duty engine, who is not directly affiliated with a manufacturer or manufacturer franchised dealership.

(B) Bi-directional control means the capability of a diagnostic tool to send messages on the data bus that temporarily overrides the module's control over a sensor or actuator and gives control to the diagnostic tool operator. Bi-directional controls do not create permanent changes to engine or component calibrations.

(C) Data stream information means information (i.e., messages and parameters) originated within the engine by a module or intelligent sensors (i.e., a sensor that contains and is ontrolled by its own module) and transmitted between a network of modules and/or intelligent sensors connected in parallel with either one or more communication wires. The information is broadcast over the communication wires for use by the OBD system to gather information on emissions-related components or systems and from other engine modules that may impact emissions. For the purposes of this section, data stream information does not include engine calibration related information, or any data stream information from systems or modules that do not impact emissions.

(D) Emissions-related information means any information related to the diagnosis, service, and repair of emissions-related components. Emissions-related information includes, but is not limited to, information regarding any system, component or part of an engine that controls emissions and any system, component and/or part associated with the engine, including, but not limited to: the engine, the fuel system and ignition system; information for any system, component or part that is likely to impact emissions, and any other information specified by the Administrator to be relevant to the diagnosis and repair of an emissions-related problem; any other information specified by the Administrator to be relevant for the diagnosis and repair of an emissions-related failure found through an evaluation of vehicles in-use and after such finding has been communicated to the affected manufacturer(s).

(E) Emissions-related training information means any information related training or instruction for the purpose of the diagnosis, service, and repair of emissions-related components.

(F) Enhanced service and repair information means information which is specific for an original equipment manufacturer's brand of tools and equipment. This includes computer or anti-theft system initialization information necessary for the completion of any emissions-related repair on engines that employ integral security systems.

(G) Equipment and Tool Company means a registered equipment or software company either public or private that is engaged in, or plans to engage in, the manufacture of scan tool reprogramming equipment or software.

(H) Generic service and repair information means information which is not specific for an original equipment manufacturer's brand of tools and equipment.

(I) Indirect information means any information that is not specifically contained in the service literature, but is contained in items such as tools or equipment provided to franchised dealers (or others). This includes computer or anti-theft system initialization information necessary for the completion of any emissions-related repair on engines that employ integral security systems.

(J) Intermediary means any individual or entity, other than an original equipment manufacturer, which provides service or equipment to aftermarket service providers.

(K) Manufacturer franchised dealership means any service provider with which a manufacturer has a direct business relationship.

(L) Third party information provider means any individual or entity, other than an original equipment manufacturer, who consolidates manufacturer service information and makes this information available to aftermarket service providers.

(M) Third party training provider means any individual or entity, other than an original equipment manufacturer who develops and/or delivers instructional and educational material for training courses.

(4) *Information dissemination.* By July 1, 2010 each manufacturer shall provide or cause to be provided to the persons specified in paragraph (j)(3)(i) of this section and to any other interested parties a manufacturer-specific World Wide Web site containing the information specified in paragraph (j)(3)(i) of this section for 2010 and later model year engines which have been certified to the OBD requirements specified in § 86.010–18 and are offered for sale; this requirement does not apply to indirect information, including the information specified in paragraphs (j)(13) through (j)(17) of this section. Upon request and approval of the Administrator, manufacturers who can demonstrate significant hardship in complying with this provision within four months after the effective date may request an additional six months lead time to meet this requirement. Each manufacturer Web site shall:

(i) Provide access in full-text to all of the information specified in paragraph (j)(5) of this section.

(ii) Be updated at the same time as manufacturer franchised dealership World Wide Web sites.

(iii) Provide users with a description of the minimum computer hardware and software needed by the user to access that manufacturer's information (e.g., computer processor speed and operating system software). This description shall appear when users first log-on to the home page of the manufacturer's Web site.

(iv) Provide Short-Term (24 to 72 hours), Mid-Term (30 day period), and Long-Term (365 day period) Web site subscription options to any person specified in paragraph (j)(2)(i) of this section whereby the user will be able to access the site, search for the information, and purchase, view and print the information at a fair and reasonable cost as specified in paragraph (j)(7) of this section for each of the options. In addition, for each of the tiers, manufacturers are required to make their entire site accessible for the respective period of time and price. In other words, a manufacturer may not limit any or all of the tiers to just one make or one model.

(v) Allow the user to search the manufacturer Web site by various topics including but not limited to model, model year, key words or phrases, etc., while allowing ready identification of the latest calibration. Manufacturers who do not use model year to classify their engines in their service information may use an alternate delineation such as body series. Any manufacturer utilizing this flexibility shall create a cross-reference to the corresponding model year and provide this cross-reference on the manufacturer Web site home page.

(vi) Provide accessibility using common, readily available software and shall not require the use of software, hardware, viewers, or browsers that are not readily available to the general public. Manufacturers shall also provide hyperlinks to any plug-ins, viewers or browsers (e.g. Adobe Acrobat or Netscape) needed to access the manufacturer Web site.

(vii) Allow simple hyper-linking to the manufacturer Web site from Government Web sites and automotive-related Web sites.

(viii) Posses sufficient server capacity to allow ready access by all users and has sufficient capacity to assure that all users may obtain needed information without undue delay.

(ix) Correct or delete broken Web links on a weekly basis.

(x) Allow for Web site navigation that does not require a user to return to the manufacturer home page or a search engine in order to access a different portion of the site.

(xi) Allow users to print out any and all of the materials required to be made available on the manufacturers Web site, including the ability to print it at the user's location.

(5) *Small volume provisions for information dissemination.*

(i) Manufacturers with total annual sales of less than 5,000 engines shall have until July 1, 2011 to launch their individual Web sites as required by paragraph (j)(4) of this section.

(ii) Manufacturers with total annual sales of less than 1,000 engines may, in lieu of meeting the requirement of paragraph (j)(4) of this section, request the Administrator to approve an alternative method by which the required emissions-related information can be obtained by the persons specified in paragraph (j)(3)(i) of this section.

(6) *Required information.* All information relevant to the diagnosis and completion of emissions-related repairs shall be posted on manufacturer Web sites. This excludes indirect information specified in paragraphs (j)(7) and (j)(13) through (j)(17) of this section. To the extent that this information does not already exist in some form for their manufacturer franchised dealerships, manufacturers are required to develop and make available the information required by this section to both their manufacturer franchised dealerships and the aftermarket. The required information includes, but is not limited to:

(i) Manuals, including subsystem and component manuals developed by a manufacturer's third party supplier that are made available to manufacturer franchised dealerships, technical service bulletins (TSBs), recall service information, diagrams, charts, and training materials. Manuals and other such service information from third party suppliers are not required to be made available in full-text on manufacturer Web sites as described in paragraph (j)(3) of this section. Rather, manufacturers must make available on the manufacturer Web site as required by paragraph (j)(3) of this section an index of the relevant information and instructions on how to order such information. In the alternate, a manufacturer can create a link from its Web site to the Web site(s) of the third party supplier.

(ii) OBD system information which includes, but is not limited to, the following:

(A) A general description of the operation of each monitor, including a description of the parameter that is being monitored;

(B) A listing of all typical OBD diagnostic trouble codes associated with each monitor;

(C) A description of the typical enabling conditions (either generic or monitor-specific) for each monitor (if equipped) to execute during engine operation, including, but not limited to, minimum and maximum intake air and engine coolant temperature, speed range, and time after engine startup. In addition, manufacturers shall list all monitor-specific OBD drive cycle information for all major OBD monitors as equipped including, but not limited to, catalyst, catalyst heater, oxygen sensor, oxygen sensor heater, evaporative system, exhaust gas re-circulation (EGR), secondary air, and air conditioning system. Additionally, for diesel engines which also perform misfire, fuel system and comprehensive component monitoring under specific driving conditions (i.e., non-continuous monitoring; as opposed to spark ignition engines that monitor these systems under all conditions or continuous monitoring), the manufacturer shall make available monitor-specific drive cycles for these monitors. Any manufacturer who develops generic drive cycles, either in addition to, or instead of, monitor-specific drive cycles shall also make these available in full-text on manufacturer Web sites;

(D) A listing of each monitor sequence, execution frequency and typical duration;

(E) A listing of typical malfunction thresholds for each monitor;

(F) For OBD parameters for specific engines that deviate from the typical parameters, the OBD description shall indicate the deviation and provide a separate listing of the typical values for those engines;

(G) Identification and scaling information necessary to interpret and understand data available through Diagnostic Message 8 pursuant to SAE Recommended Practice J1939–73, Application Layer—Diagnostics, revised June 2001 or through Service/Mode $06 pursuant to SAE Recommended Practice J1979, E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031–5: April 30, 2002. These documents are Incorporated by Reference in § 86.1.

(H) Algorithms, look-up tables, or any values associated with look-up tables are not required to be made available.

(iii) Any information regarding any system, component, or part of a engine monitored by the OBD system that could in a failure mode cause the OBD system to illuminate the malfunction indicator light (MIL);

(iv) Manufacturer-specific emissions-related diagnostic trouble codes (DTCs)

and any related service bulletins, trouble shooting guides, and/or repair procedures associated with these manufacturer-specific DTCs; and

(v) Information regarding how to obtain the information needed to perform reinitialization of any computer or anti-theft system following an emissions-related repair.

(7) *Anti-theft System Initialization Information.* Computer or anti-theft system initialization information and/or related tools necessary for the proper installation of on-board computers or necessary for the completion of any emissions-related repair on engines that employ integral security systems or the repair or replacement of any other emission-related part shall be made available at a fair and reasonable cost to the persons specified in paragraph (j)(3)(i) of this section.

(i) Except as provided under paragraph (j)(7)(ii) of this section, manufacturers must make this information available to persons specified in paragraph (j)(3)(i) of this section, such that such persons will not need any special tools or manufacturer-specific scan tools to perform the initialization. Manufacturers may make such information available through, for example, generic aftermarket tools, a pass-through device, or inexpensive manufacturer specific cables.

(ii) A manufacturer may request Administrator approval for an alternative means to re-initialize engines for some or all model years through the 2013 model year by 90 days following the effective date of the final rule. The Administrator shall approve the request only after the following conditions have been met:

(A) The manufacturer must demonstrate that the availability of such information to aftermarket service providers would significantly increase the risk of theft.

(B) The manufacturer must make available a reasonable alternative means to install or repair computers, or to otherwise repair or replace an emission-related part.

(C) Any alternative means proposed by a manufacturer cannot require aftermarket technicians to use a manufacturer franchised dealership to obtain information or special tools to re-initialize the anti-theft system. All information must come directly from the manufacturer or a single manufacturer-specified designee.

(D) Any alternative means proposed by a manufacturer must be available to aftermarket technicians at a fair and reasonable price.

(E) Any alternative must be available to aftermarket technicians within twenty-four hours of the initial request.

(F) Any alternative must not require the purchase of a special tool or tools, including manufacturer-specific tools, to complete this repair. Alternatives may include lease of such tools, but only for appropriately minimal cost.

(G) In lieu of leasing their manufacturer-specific tool to meet this requirement, a manufacturer may also choose to release the necessary information to equipment and tool manufacturers for incorporation into aftermarket scan tools. Any manufacturer choosing this option must release the information to equipment and tool manufacturers within 60 days of Administrator approval.

(8) *Cost of required information.*

(i) All information required to be made available by this section, shall be made available at a fair and reasonable price. In determining whether a price is fair and reasonable, consideration may be given to relevant factors, including, but not limited to, the following:

(A) The net cost to the manufacturer franchised dealerships for similar information obtained from manufacturers, less any discounts, rebates, or other incentive programs;

(B) The cost to the manufacturer for preparing and distributing the information, excluding any research and development costs incurred in designing and implementing, upgrading or altering the onboard computer and its software or any other engine part or component. Amortized capital costs for the preparation and distribution of the information may be included;

(C) The price charged by other manufacturers for similar information;

(D) The price charged by manufacturers for similar information prior to the launch of manufacturer Web sites;

(E) The ability of the average aftermarket technician or shop to afford the information;

(F) The means by which the information is distributed;

(G) The extent to which the information is used, which includes the number of users, and frequency, duration, and volume of use; and

(H) Inflation.

(ii) Manufacturers must submit to EPA a request for approval of their pricing structure for their Web sites and amounts to be charged for the information required to be made available under paragraphs (j)(4) and (j)(6) of this section at least 180 days in advance of the launch of the web site. Subsequent to the approval of the manufacturer Web site pricing structure, manufacturers shall notify EPA upon the increase in price of any one or all of the subscription options of 20 percent or more above the previously approved price, taking inflation into account.

(A) The manufacturer shall submit a request to EPA that sets forth a detailed description of the pricing structure and amounts, and support for the position that the pricing structure and amounts are fair and reasonable by addressing, at a minimum, each of the factors specified in paragraph (j)(8)(i) of this section.

(B) EPA will act upon on the request within180 days following receipt of a complete request or following receipt of any additional information requested by EPA.

(C) EPA may decide not to approve, or to withdraw approval for a manufacturer's pricing structure and amounts based on a conclusion that this pricing structure and/or amounts are not, or are no longer, fair and reasonable, by sending written notice to the manufacturer explaining the basis for this decision.

(D) In the case of a decision by EPA not to approve or to withdraw approval, the manufacturer shall within three months following notice of this decision, obtain EPA approval for a revised pricing structure and amounts by following the approval process described in this paragraph.

(9) *Unavailable information.* Any information which is not provided at a fair and reasonable price shall be considered unavailable, in violation of these regulations and section 202(m)(5) of the Clean Air Act.

(10) *Third party information providers.* By January 1, 2011 manufacturers shall, for model year 2010 and later engines, make available to third-party information providers as defined in paragraph (j)(3)(ii) of this section with whom they engage in licensing or business arrangements;

(i) The required emissions-related information as specified in paragraph (j)(6) of this section either:

(A) Directly in electronic format such as diskette or CD–ROM using non-proprietary software, in English; or

(B) Indirectly via a Web site other than that required by paragraph (j)(4) of this section;

(ii) For any manufacturer who utilizes an automated process in their manufacturer-specific scan tool for diagnostic fault trees, the data schema, detail specifications, including category types/codes and engine codes, and data format/content structure of the diagnostic trouble trees.

(iii) Manufacturers can satisfy the requirement of paragraph (j)(10)(ii) of this section by making available

diagnostic trouble trees on their manufacturer Web sites in full-text.

(iv) Manufacturers are not responsible for the accuracy of the information distributed by third parties. However, where manufacturers charge information intermediaries for information, whether through licensing agreements or other arrangements, manufacturers are responsible for inaccuracies contained in the information they provide to third party information providers.

(11) *Required emissions-related training information.* By January 1, 2011, for emissions-related training information, manufacturers shall:

(i) Video tape or otherwise duplicate and make available for sale on manufacturer Web sites within 30 days after transmission any emissions-related training courses provided to manufacturer franchised dealerships via the Internet or satellite transmission;

(ii) Provide on the manufacturer Web site an index of all emissions-related training information available for purchase by aftermarket service providers for 2010 and newer engines. The required information must be made available for purchase within 3 months of model introduction and then must be made available at the same time it is made available to manufacturer franchised dealerships, whichever is earlier. The index shall describe the title of the course or instructional session, the cost of the video tape or duplicate, and information on how to order the item(s) from the manufacturer Web site. All of the items available must be shipped within 24 hours of the order being placed and are to made available at a fair and reasonable price as described in paragraph (j)(8) of this section. Manufacturers unable to meet the 24 hour shipping requirement under circumstances where orders exceed supply and additional time is needed by the distributor to reproduce the item being ordered, may exceed the 24 hour shipping requirement, but in no instance can take longer than 14 days to ship the item.

(iii) Provide access to third party training providers as defined in paragraph (j)(3)(ii) of this section all emission-related training courses transmitted via satellite or Internet offered to their manufacturer franchised dealerships. Manufacturers may not charge unreasonable up-front fees to third party training providers for this access, but may require a royalty, percentage, or other arranged fee based on per-use enrollment/subscription basis. Manufacturers may take reasonable steps to protect any copyrighted information and are not required to provide this information to parties that do not agree to such steps.

(12) *Timeliness and maintenance of information dissemination.*

(i) Subsequent to the initial launch of the manufacturer's Web site, manufacturers must make the information required under paragraph (j)(6) of this section available on their Web site within six months of model introduction, or at the same time it is made available to manufacturer franchised dealerships. After this six month period, the information must be available and updated on the manufacturer Web site at the same time that the updated information is made available to manufacturer franchised dealerships, except as otherwise specified in this section.

(ii) *Archived information.* Manufacturers must maintain the required information on their Web sites in full-text as defined in paragraph (j)(6) of this section for a minimum of 15 years after model introduction. Subsequent to this fifteen year period, manufacturers may archive the information in the manufacturer's format of choice and provide an index of the archived information on the manufacturer Web site and how it can be obtained by interested parties. Manufacturers shall index their available information with a title that adequately describes the contents of the document to which it refers. Manufacturers may allow for the ordering of information directly from their Web site, or from a Web site hyperlinked to the manufacturer Web site. In the alternate, manufacturers shall list a phone number and address where aftermarket service providers can call or write to obtain the desired information. Manufacturers must also provide the price of each item listed, as well as the price of items ordered on a subscription basis. To the extent that any additional information is added or changed for these model years, manufacturers shall update the index as appropriate. Manufacturers will be responsible for ensuring that their information distributors do so within one regular business day of receiving the order. Items that are less than 20 pages (e.g. technical service bulletins) shall be faxed to the requestor and distributors are required to deliver the information overnight if requested and paid for by the ordering party. Archived information must be made available on demand and at a fair and reasonable price.

(13) *Recalibration Information.*

(i) Manufacturers shall make available to the persons specified in paragraph (j)(3)(i) of this section all emissions-related recalibration or reprogramming events (including driveability reprogramming events that may affect emissions) in the format of their choice at the same time they are made available to manufacturer franchised dealerships. This requirement takes effect on July 1, 2010.

(ii) Manufacturers shall provide persons specified in paragraph (j)(3)(i) of this section with an efficient and cost-effective method for identifying whether the calibrations on engines are the latest to be issued. This requirement takes effect on July 1, 2010.

(iii) For all 2010 and later OBD engines equipped with reprogramming capability, manufacturers shall comply with either SAE J2534, ''Recommended Practice for Pass-Thru Vehicle Programming'' , December 2004, or the Technology and Maintenance Council's (TMC) Recommended Practice RP1210A. ''Windows™ Communication API'' , July 1999. These documents are Incorporated by Reference in § 86.1.

(iv) For model years 2010 and later, manufacturers shall make available to aftermarket service providers the necessary manufacturer-specific software applications and calibrations needed to initiate pass-through reprogramming. This software shall be able to run on a standard personal computer that utilizes standard operating systems as specified in either J2534 or RP1210A.

(v) Manufacturers may take any reasonable business precautions necessary to protect proprietary business information and are not required to provide this information to any party that does not agree to these reasonable business precautions. The requirements to make hardware available and to release the information to equipment and tool companies takes effect on July 1, 2010, and within 3 months of model introduction for all new model years.

(14) *Generic and enhanced information for scan tools.* By July 1, 2010, manufacturers shall make available to equipment and tool companies all generic and enhanced service information including bi-directional control and data stream information as defined in paragraph (j)(4)(ii) of this section. This requirement applies for 2010 and later model year engines.

(i) The information required by this paragraph (j)(14) shall be provided electronically using common document formats to equipment and tool companies with whom they have appropriate licensing, contractual, and/or confidentiality arrangements. To the extent that a central repository for this

information (e.g. the TEK–NET library developed by the Equipment and Tool Institute) is used to warehouse this information, the Administrator shall have free unrestricted access. In addition, information required by this paragraph (j)(14) shall be made available to equipment and tool companies who are not otherwise members of any central repository and shall have access if the non-members have arranged for the appropriate licensing, contractual and/or confidentiality arrangements with the manufacturer and/or a central repository.

(ii) In addition to the generic and enhanced information defined in paragraph (j)(3)(ii) of this section, manufacturers shall also make available the following information necessary for developing generic diagnostic scan tools:

(A) The physical hardware requirements for data communication (e.g. system voltage requirements, cable terminals/pins, connections such as RS232 or USB, wires, etc.)

(B) Electronic Control Unit (ECU) data communication (e.g. serial data protocols, transmission speed or baud rate, bit timing requirements, etc),

(C) Information on the application physical interface (API) or layers. (i.e., processing algorithms or software design descriptions for procedures such as connection, initialization, and termination),

(D) Engine application information or any other related service information such as special pins and voltages or additional connectors that require enablement and specifications for the enablement.

(iii) Any manufacturer who utilizes an automated process in their manufacturer-specific scan tool for diagnostic fault trees shall make available to equipment and tool companies the data schema, detail specifications, including category types/codes and codes, and data format/content structure of the diagnostic trouble trees.

(iv) Manufacturers can satisfy the requirement of paragraph (j)(14)(iii) of this section by making available diagnostic trouble trees on their manufacturer Web sites in full-text.

(v) Manufacturers shall make all required information available to the requesting equipment and tool company within 14 days after the request to purchase has been made unless the manufacturer requests Administrator approval to refuse to disclose such information to the requesting company or requests Administrator approval for additional time to comply. After receipt of a request and consultation with the affected parties, the Administrator shall either grant or refuse the petition based on the evidence submitted during the consultation process:

(A) If the evidence demonstrates that the engine manufacturer has a reasonably based belief that the requesting equipment and tool company could not produce safe and functionally accurate tools that would not cause damage to the engine, the petition for non-disclosure will be granted. Engine manufacturers are not required to provide data stream and bi-directional control information that would permit an equipment and tool company's products to modify an EPA-certified engine or transmission configuration.

(B) If the evidence does not demonstrate that the engine manufacturer has a reasonably-based belief that the requesting equipment and tool company could not produce safe and functionally accurate tools that would not cause damage to the engine, the petition for non-disclosure will be denied and the engine manufacturer, as applicable, shall make the requested information available to the requesting equipment and tool company within 2 days of the denial.

(vi) If the manufacturer submits a request for Administrator approval for additional time, and satisfactorily demonstrates to the Administrator that the engine manufacturer is able to comply but requires additional time within which to do so, the Administrator shall grant the request and provide additional time to fully and expeditiously comply.

(vii) Manufacturers may require that tools using information covered under paragraph (j)(14) of this section comply with the Component Identifier message specified in SAE J1939–71 as Parameter Group Number (PGN) 65249 (including the message parameter's make, model, and serial number) and the SAE J1939–81 Address Claim PGN.

(15) *Availability of manufacturer-specific scan tools.* Manufacturers shall make available for sale to the persons specified in paragraph (j)(3)(i) of this section their own manufacturer-specific diagnostic tools at a fair and reasonable cost. These tools shall also be made available in a timely fashion either through the manufacturer Web site or through a manufacturer-designated intermediary. Manufacturers shall ship purchased tools in a timely manner after a request and training, if any, has been completed. Any required training materials and classes must be made available at a fair and reasonable price. Manufacturers who develop different versions of one or more of their diagnostic tools that are used in whole or in part for emission-related diagnosis and repair shall also insure that all emission-related diagnosis and repair information is available for sale to the aftermarket at a fair and reasonable cost. Factors for determining fair and reasonable cost include, but are not limited to:

(i) The net cost to the manufacturer's franchised dealerships for similar tools obtained from manufacturers, less any discounts, rebates, or other incentive programs;

(ii) The cost to the manufacturer for preparing and distributing the tools, excluding any research and development costs;

(iii) The price charged by other manufacturers of similar sizes for similar tools;

(iv) The capabilities and functionality of the manufacturer tool;

(v) The means by which the tools are distributed;

(vi) Inflation;

(vii) The ability of aftermarket technicians and shops to afford the tools. Manufacturers shall provide technical support to aftermarket service providers for the tools described in this section, either themselves or through a third-party of their choice.

(16) *Changing content of manufacturer-specific scan tools.* Manufacturers who opt to remove non-emissions related content from their manufacturer-specific scan tools and sell them to the persons specified in paragraph (j)(3)(i) of this section shall adjust the cost of the tool accordingly lower to reflect the decreased value of the scan tool. All emissions-related content that remains in the manufacturer-specific tool shall be identical to the information that is contained in the complete version of the manufacturer specific tool. Any manufacturer who wishes to implement this option must request approval from the Administrator prior to the introduction of the tool into commerce.

(17) *Reference Materials.* Manufacturers shall conform with the following Society of Automotive Engineers (SAE) standards. These documents are incorporated by reference in § 86.1.

(i) For Web-based delivery of service information, manufacturers shall comply with SAE Recommended Practice J2403, Medium/Heavy-Duty E/E Systems Diagnosis Nomenclature; August 2004. This recommended practice standardizes various terms, abbreviations, and acronyms associated with on-board diagnostics. Manufacturers shall comply with SAE J2403 beginning with the Model Year 2013.

(ii) For identification and scaling information necessary to interpret and understand data available through Diagnostic Message 8, manufacturers shall comply with SAE Recommended Practice J1939–73, Application Layer—Diagnostics, revised June 2001. In the alternate, manufacturers may comply with Service/Mode $06 pursuant to SAE Recommended Practice J1979, E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031–5: April 30, 2002. These recommended practices describe the implementation of diagnostic test modes for emissions related test data. Manufacturers shall comply with either SAE J1939–73 or SAE J1979 beginning with Model Year 2013. These recommended practices describe the implementation of diagnostic test modes for emissions related test data.

(iii) For pass-thru reprogramming capabilities, manufacturers shall comply with Technology and Maintenance Council's (TMC) Recommended Practice RP1210A, ''Windows™ Communication API'' , July 1999. In the alternate, manufacturers may comply with SAE J2534, Recommended Practice for Pass-Thru Vehicle Programming, December 2004. These recommended practices provide technical specifications and information that manufacturers must supply to equipment and tool companies to develop aftermarket pass-thru reprogramming tools. Manufacturers shall comply with either RP1210A or SAE J2534 beginning with Model Year 2013.

(18) *Reporting Requirements.* Performance reports that adequately demonstrate that each manufacturer's Web site meets the information requirements outlined in paragraphs (j)(6)(i) through (j)(6)(vi) of this section shall be submitted to the Administrator annually or upon request by the Administrator. These reports shall indicate the performance and effectiveness of the Web sites by using commonly used Internet statistics (e.g., successful requests, frequency of use, number of subscriptions purchased, etc.) Manufacturers shall provide to the Administrator reports on an annual basis within 30 days of the end of the calendar year. These annual reports shall be submitted to the Administrator electronically utilizing non-proprietary software in the format as agreed to by the Administrator and the manufacturers.

(19) *Prohibited Acts, Liability and Remedies.*

(i) It is a prohibited act for any person to fail to promptly provide or cause a failure to promptly provide information as required by this paragraph (j), or to otherwise fail to comply or cause a failure to comply with any provision of this subsection.

(ii) Any person who fails or causes the failure to comply with any provision of this paragraph (j) is liable for a violation of that provision. A corporation is presumed liable for any violations of this subpart that are committed by any of its subsidiaries, affiliates or parents that are substantially owned by it or substantially under its control.

(iii) Any person who violates a provision of this paragraph (j) shall be subject to a civil penalty of not more than $31,500 per day for each violation. This maximum penalty is shown for calendar year 2002. Maximum penalty limits for later years may be set higher based on the Consumer Price Index, as specified in 40 CFR part 19. In addition, such person shall be liable for all other remedies set forth in Title II of the Clean Air Act, remedies pertaining to provisions of Title II of the Clean Air Act, or other applicable provisions of law.

10. Section 86.013–2 is added to Subpart A to read as follows:

§ 86.013–2 Definitions.

The definitions of § 86.004–2 continue to apply to 2004 and later model year vehicles, and the definitions of § 86.010–2 continue to apply to 2010 and later model year vehicles. The definitions listed in this section apply beginning with the 2013 model year.

Onboard Diagnostics (OBD) group means a combination of engines, engine families, or engine ratings that use the same OBD strategies and similar calibrations.

11. Section 86.013–17 is added to Subpart A to read as follows:

§ 86.013–17 On-board Diagnostics for engines used in applications less than or equal to 14,000 pounds GVWR.

Section 86.013–17 includes text that specifies requirements that differ from § 86.005–17, § 86.007–17, and § 86.010–17. Where a paragraph in § 86.005–17 or § 86.007–17 or § 86.010–17 is identical and applicable to § 86.013–17, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.005–17.'' or ''[Reserved]. For guidance see § 86.007–17.'' or ''[Reserved]. For guidance see § 86.010–17.''

(a) through (b)(1)(i) [Reserved]. For guidance see § 86.010–17.

(b)(1)(ii) *Diesel.*

(A) If equipped, reduction catalyst deterioration or malfunction before it results in exhaust NO_X emissions exceeding the applicable NO_X FEL+0.3 g/bhp-hr. If equipped, oxidation catalyst deterioration or malfunction before it results in exhaust NMHC emissions exceeding 2 times the applicable NMHC standard. These catalyst monitoring requirements need not be done if the manufacturer can demonstrate that deterioration or malfunction of the system will not result in exceedance of the threshold.

(B) If equipped, diesel particulate trap deterioration or malfunction before it results in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, exhaust NMHC emissions exceeding 2 times the applicable NMHC standard. Catastrophic failure of the particulate trap must also be detected. In addition, the absence of the particulate trap or the trapping substrate must be detected.

(b)(2) [Reserved]. For guidance see § 86.005–17.

(b)(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.02 g/bhp-hr or 0.03 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2 times the applicable NMHC standard; or, 2 times the applicable CO standard.

(iii) *NO_X sensors.*

(A) *Otto-cycle.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NMHC, NO_X or CO.

(B) *Diesel.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr.

(b)(4) [Reserved]. For guidance see § 86.005–17.

(b)(5) *Other emission control systems and components.*

(i) *Otto-cycle.* Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, the secondary air system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding 1.5 times the applicable emission standard or FEL for NMHC, NO_X or CO. For engines equipped with a secondary air system, a functional check, as described in §86.005–17(b)(6), may satisfy the requirements of this paragraph (b)(5) provided the manufacturer can demonstrate that deterioration of the flow distribution system is unlikely. This demonstration is subject to Administrator approval and, if the demonstration and associated functional check are approved, the diagnostic system must indicate a malfunction when some degree of secondary airflow is not detectable in the exhaust system during the check. For engines equipped with positive crankcase ventilation (PCV), monitoring of the PCV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the PCV system is unlikely to fail.

(ii) *Diesel.* Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: the applicable PM FEL+0.02 g/bhp-hr or 0.03 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2 times the applicable NMHC standard; or, 2 times the applicable CO standard. A functional check, as described in §86.005–17(b)(6), may satisfy the requirements of this paragraph (b)(5) provided the manufacturer can demonstrate that a malfunction would not cause emissions to exceed the applicable levels. This demonstration is subject to Administrator approval. For engines equipped with crankcase ventilation (CV), monitoring of the CV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the CV system is unlikely to fail.

(b)(6) through (j) [Reserved]. For guidance see § 86.010–17.

(k) [Reserved.]

12. Section 86.013–18 is added to Subpart A to read as follows:

§ 86.013–18 On-board Diagnostics for engines used in applications greater than 14,000 pounds GVWR.

Section 86.013–18 includes text that specifies requirements that differ from § 86.010–18. Where a paragraph in § 86.010–18 is identical and applicable to § 86.013–18, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.010–18.'' However, where a paragraph in § 86.010–18 is identical and applicable to § 86.013–18, and there appears the statement ''[Reserved]. For guidance see § 86.010–18,'' it shall be understood that any referenced tables within § 86.010–18 shall actually refer to the applicable table shown in § 86.013–18.

(a) *General.* All heavy-duty engines intended for use in a heavy-duty vehicle weighing more than 14,000 pounds GVWR must be equipped with an on-board diagnostic (OBD) system capable of monitoring all emission-related engine systems or components during the life of the engine. The OBD system is required to detect all malfunctions specified in paragraphs (g), and (i) of this section and paragraph (h) of § 86.010–18 although the OBD system is not required to use a unique monitor to detect each of those malfunctions.

(a)(1) [Reserved]. For guidance see § 86.010–18.

(a)(2) The OBD system must be equipped with a standardized data link connector to provide access to the stored DTCs as specified in paragraph (k)(2) of this section.

(a)(3) and (a)(4) [Reserved]. For guidance see § 86.010–18.

(b) *Malfunction indicator light (MIL) and Diagnostic Trouble Codes (DTC).* The OBD system must incorporate a malfunction indicator light (MIL) or equivalent and must store specific types of diagnostic trouble codes (DTC).

(1) *MIL specifications.*

(i) The MIL must be located on the driver's side instrument panel and be of sufficient illumination and location to be readily visible under all lighting conditions. The MIL must be amber (yellow) in color; the use of red for the OBD-related MIL is prohibited. More than one general purpose malfunction indicator light for emission-related problems shall not be used; separate specific purpose warning lights (e.g., brake system, fasten seat belt, oil pressure, etc.) are permitted. When activated, the MIL must display the engine symbol designated as F01 by the International Standards Organization (ISO) in ''Road vehicles—Symbols for controls, indicators and tell-tales,'' ISO 2575:2004.

(b)(1)(ii) through (b)(1)(iv) [Reserved]. For guidance see § 86.010–18.

(b)(1)(v) The MIL required by this paragraph (b) must not be used in any other way than is specified in this section.

(b)(2) [Reserved]. For guidance see § 86.010–18.

(b)(3) *MIL deactivation and DTC erasure protocol.*

(i) *Deactivating the MIL.* Except as otherwise provided for in paragraph (g)(2)(iv)(E) of this section and § 86.010–18(g)(6)(iv)(B) for diesel misfire malfunctions and empty reductant tanks, and paragraphs (h)(1)(iv)(F), (h)(2)(viii), and (h)(7)(iv)(B) of § 86.010–18 for gasoline fuel system, misfire, and evaporative system malfunctions, once the MIL has been activated, it may be deactivated after three subsequent sequential drive cycles during which the monitoring system responsible for activating the MIL functions and the previously detected malfunction is no longer present and provided no other malfunction has been detected that would independently activate the MIL according to the requirements outlined in § 86.010–18(b)(2).

(b)(3)(ii) through (b)(4) [Reserved.] For guidance see § 86.010–18.

(c) *Monitoring conditions.* The OBD system must monitor and detect the malfunctions specified in paragraphs (g) and (i) of this section and § 86.010–18(h) under the following general monitoring conditions. The more specific monitoring conditions of paragraph (d) of this section are sometimes required according to the provisions of paragraphs (g) and (i) of this section and §86.010–18(h).

(1) As specifically provided for in paragraphs (g) and (i) of this section and § 86.010–18(h), the monitoring conditions for detecting malfunctions must be technically necessary to ensure robust detection of malfunctions (e.g. avoid false passes and false indications of malfunctions); designed to ensure monitoring will occur under conditions that may reasonably be expected to be encountered in normal vehicle operation and normal vehicle use; and, designed to ensure monitoring will occur during the FTP transient test cycle contained in Appendix I paragraph (f), of this part, or similar drive cycle as approved by the Administrator.

(c)(2) [Reserved]. For guidance see § 86.010–18.

(c)(3) Manufacturers may request approval to define monitoring conditions that are not encountered during the FTP cycle as required in paragraph (c)(1) of this section. In

evaluating the manufacturer's request, the Administrator will consider the degree to which the requirement to run during the FTP transient cycle restricts monitoring during in-use operation, the technical necessity for defining monitoring conditions that are not encountered during the FTP cycle, data and/or an engineering evaluation submitted by the manufacturer that demonstrate that the component/system does not normally function during the FTP, whether monitoring is otherwise not feasible during the FTP cycle, and/or the ability of the manufacturer to demonstrate that the monitoring conditions satisfy the minimum acceptable in-use monitor performance ratio requirement as defined in paragraph (d)(1)(ii) of this section.

(d) through (d)(1)(i) [Reserved]. For guidance see § 86.010–18.

(d)(1)(ii) Manufacturers must define monitoring conditions that, in addition to meeting the criteria in paragraph (c)(1) of this section and § 86.010–18(d) through (d)(1)(i), ensure that the monitor yields an in-use performance ratio (as defined in § 86.010–18(d)(2) that meets or exceeds the minimum acceptable in-use monitor performance ratio of 0.100 for all monitors specifically required in paragraphs (g) and (i) of this section and § 86.010–18(h) to meet the monitoring condition requirements in § 86.010–(18)(d)(1)(i).

(iii) If the most reliable monitoring method developed requires a lower ratio for a specific monitor than that specified in paragraph (d)(1)(ii) of this section, the Administrator may lower the minimum acceptable in-use monitoring performance ratio.

(d)(2) through (d)(3)(iv) [Reserved]. For guidance see § 86.010–18.

(d)(3)(v) Manufacturers that use alternative statistical MIL activation protocols as allowed in § 86.010–18(b)(2)(iii) for any of the monitors requiring a numerator, are required to increment the numerator(s) appropriately. The manufacturer may be required to provide supporting data and/or engineering analyses demonstrating both the equivalence of their incrementing approach to the incrementing specified in this paragraph (d)(3) for monitors using the standard MIL activation protocol, and the overall equivalence of the incrementing approach in determining that the minimum acceptable in-use performance ratio of paragraph (d)(1)(ii) of this section has been satisfied.

(d)(4) through (f) [Reserved]. For guidance see § 86.010–18.

(g) *OBD monitoring requirements for diesel-fueled/compression-ignition engines.* The following table shows the thresholds at which point certain components or systems, as specified in this paragraph (g), are considered malfunctioning.

TABLE 1.—OBD EMISSIONS THRESHOLDS FOR DIESEL-FUELED/COMPRESSION IGNITION ENGINES MEANT FOR ENGINES PLACED IN APPLICATIONS GREATER THAN 14,000 POUNDS GVWR (G/BHP-HR)

Component	§ 86.010–18 reference	NMHC	CO	NO_X	PM
NMHC catalyst system	(g)(5)	2x			
NO_X aftertreatment system	(g)(6) (g)(7)			+0.3	
Diesel particulate filter (DPF) system	(g)(8)	2x			0.05/+0.04
Air-fuel ratio sensors upstream of aftertreatment devices	(g)(9)	2x	2x	+0.3	0.03/+0.02
Air-fuel ratio sensors downstream of aftertreatment devices	(g)(9)	2x		+0.3	0.05/+0.04
NO_X sensors	(g)(9)			+0.3	0.05/+0.04
"Other monitors" with emissions thresholds	(g)(1) (g)(2) (g)(3) (g)(4) (g)(10)	2x	2x	+0.3	0.03/+0.02

Notes: FEL=Family Emissions Limit; 2x std means a multiple of 2 times the applicable emissions standard; +0.3 means the standard or FEL plus 0.3; 0.05/+0.04 means an absolute level of 0.05 or an additive level of the standard or FEL plus 0.04, whichever level is higher; these emissions thresholds apply to the monitoring requirements of paragraph (g) of this § 86.013–18.

(1) *Fuel system monitoring.*

(g)(1)(i) through (g)(1)(iii)(A) [Reserved]. For guidance see § 86.010–18.

(g)(1)(iii)(B) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(1)(ii)(B) and (g)(1)(ii)(C) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section.

(iv) *Fuel system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(2) *Engine misfire monitoring.*

(g)(2)(i) [Reserved]. For guidance see § 86.010–18.

(g)(2)(ii) *Engine misfire malfunction criteria.*

(A) The OBD system must be capable of detecting misfire occurring in one or more cylinders. To the extent possible without adding hardware for this specific purpose, the OBD system must also identify the specific misfiring cylinder. If more than one cylinder is continuously misfiring, a separate DTC must be stored indicating that multiple cylinders are misfiring. When identifying multiple cylinder misfire, the OBD system is not required to identify individually through separate DTCs each of the continuously misfiring cylinders.

(B) On engines equipped with sensors that can detect combustion or combustion quality (e.g., for use in engines with homogeneous charge compression ignition (HCCI) control systems), the OBD system must detect a misfire malfunction causing emissions to exceed the applicable thresholds for ''other monitors'' shown in Table 1 of this paragraph (g). To determine what level of misfire would cause emissions to exceed the applicable emissions thresholds, the manufacturer must determine the percentage of misfire evaluated in 1,000 revolution increments that would cause emissions from an emission durability demonstration engine to exceed the emissions thresholds if the percentage of misfire were present from the beginning of the test. To establish this percentage of misfire, the manufacturer must use misfire events occurring at equally spaced, complete engine cycle intervals, across randomly selected cylinders throughout each 1,000-revolution increment. If this percentage

of misfire is determined to be lower than one percent, the manufacturer may set the malfunction criteria at one percent. Any misfire malfunction must be detected if the percentage of misfire established via this testing is exceeded regardless of the pattern of misfire events (e.g., random, equally spaced, continuous). The manufacturer may employ other revolution increments besides the 1,000 revolution increment. To do so, the manufacturer must demonstrate that the strategy is equally effective and timely in detecting misfire.

(iii) *Engine misfire monitoring conditions.*

(g)(2)(iii)(A) and (g)(2)(iii)(B) [Reserved]. For guidance see § 86.010–18.

(g)(2)(iii)(C) For engines equipped with sensors that can detect combustion or combustion quality the OBD system must monitor continuously for engine misfire under all positive torque engine speed and load conditions. If a monitoring system cannot detect all misfire patterns under all required engine speed and load conditions, the manufacturer may request that the Administrator approve the monitoring system nonetheless. In evaluating the manufacturer's request, the Administrator will consider the following factors: the magnitude of the region(s) in which misfire detection is limited; the degree to which misfire detection is limited in the region(s) (i.e., the probability of detection of misfire events); the frequency with which said region(s) are expected to be encountered in-use; the type of misfire patterns for which misfire detection is troublesome; and demonstration that the monitoring technology employed is not inherently incapable of detecting misfire under required conditions (i.e., compliance can be achieved on other engines). The evaluation will be based on the following misfire patterns: equally spaced misfire occurring on randomly selected cylinders; single cylinder continuous misfire; and, paired cylinder (cylinders firing at the same crank angle) continuous misfire.

(iv) *Engine misfire MIL activation and DTC storage.*

(A) General requirements for MIL activation and DTC storage are set forth in paragraph (b) of this section.

(B) For engines equipped with sensors that can detect combustion or combustion quality, upon detection of the percentage of misfire specified in paragraph (g)(2)(ii)(B) of this section, the following criteria shall apply for MIL activation and DTC storage: A pending DTC must be stored no later than after the fourth exceedance of the percentage of misfire specified in paragraph (g)(2)(ii) of this section during a single drive cycle; if a pending fault code has been stored, the OBD system must activate the MIL and store a MIL-on DTC within 10 seconds if the percentage of misfire specified in paragraph (g)(2)(ii) of this section is again exceeded four times during the drive cycle immediately following storage of the pending DTC, regardless of the conditions encountered during the drive cycle, or on the next drive cycle in which similar conditions are encountered to those that were occurring when the pending DTC was stored. Similar conditions means an engine speed within 375 rpm, engine load within 20 percent, and the same warm up status (i.e., cold or hot). The Administrator may approve other definitions of similar conditions based on comparable timeliness and reliability in detecting similar engine operation. The pending DTC may be erased at the end of the next drive cycle in which similar conditions are encountered to those that were occurring when the pending DTC was stored provided the specified percentage of misfire was not again exceeded. The pending DTC may also be erased if similar conditions are not encountered during the 80 drive cycles immediately following initial detection of the malfunction.

(C) For engines equipped with sensors that can detect combustion or combustion quality, the OBD system must store and erase freeze frame conditions either in conjunction with storing and erasing a pending DTC or in conjunction with storing and erasing a MIL-on DTC. If freeze frame conditions are stored for a malfunction other than a misfire malfunction when a DTC is stored as specified in paragraph (g)(2)(iv)(B) of this section, the stored freeze frame information must be replaced with the freeze frame information regarding the misfire malfunction.

(D) For engines equipped with sensors that can detect combustion or combustion quality, upon detection of misfire according to paragraph (g)(2)(iv)(B) of this section, the OBD system must also store the following engine conditions: engine speed, load, and warm up status of the first misfire event that resulted in the storage of the pending DTC.

(E) For engines equipped with sensors that can detect combustion or combustion quality, the MIL may be deactivated after three sequential drive cycles in which similar conditions have been encountered without an exceedance of the specified percentage of misfire.

(3) *EGR system monitoring.*

(g)(3)(i) and (g)(3)(ii) [Reserved]. For guidance see § 86.010–18.

(g)(3)(iii) *EGR system monitoring conditions.*

(g)(3)(iii)(A) [Reserved]. For guidance see § 86.010–18.

(g)(3)(iii)(B) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(3)(ii)(C) and Table 1 of paragragh (g) of this section in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in § 86.010–18(c)(2). For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(3)(ii)(C) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(e)(1)(iii).

(C) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(3)(ii)(E) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(3)(ii)(E) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(e)(1)(iii).

(g)(3)(iii)(D) [Reserved]. For guidance see § 86.010–18.

(g)(3)(iv) *EGR system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(4) *Turbo boost control system monitoring.*

(g)(4)(i) and (g)(4)(ii) [Reserved]. For guidance see § 86.010–18.

(g)(4)(iii) *Turbo boost control system monitoring conditions.*

(g)(4)(iii)(A) [Reserved]. For guidance see § 86.010–18.

(g)(iii)(3)(B) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(4)(ii)(C) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in § 86.010–18(c)(2). For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect

malfunctions identified in § 86.010–18(g)(4)(ii)(C) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(e)(1)(iii).

(C) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(4)(ii)(E) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(4)(ii)(E) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(e)(1)(iii).

(iv) *Turbo boost system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(5) *NMHC converting catalyst monitoring.*

(g)(5)(i) and (g)(5)(ii) [Reserved]. For guidance see § 86.010–18.

(g)(5)(iii) *NMHC converting catalyst monitoring conditions.* The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(5)(ii)(A) and (g)(5)(ii)(B) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(5)(ii)(A) and (g)(5)(ii)(B) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(e)(1)(iii).

(iv) *NMHC converting catalyst MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section. The monitoring method for the NMHC converting catalyst(s) must be capable of detecting all instances, except diagnostic self-clearing, when a catalyst DTC has been erased but the catalyst has not been replaced (e.g., catalyst over-temperature histogram approaches are not acceptable).

(6) *Selective catalytic reduction (SCR) and lean NO_X catalyst monitoring.*

(g)(6)(i) and (g)(6)(ii) [Reserved]. For guidance see § 86.010–18

(g)(6)(iii) *SCR and lean NO_X* catalyst *monitoring conditions.*

(A) The manufacturers must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(6)(ii)(A) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(6)(ii)(A) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(e)(1)(iii).

(g)(6)(iii)(B) [Reserved]. For guidance see § 86.010–18.

(g)(6)(iv) *SCR and lean NO_X catalyst MIL activation and DTC storage.*

(A) For malfunctions identified in § 86.010–18(g)(6)(ii)(A) and Table 1 of paragraph (g) of this section, the MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(g)(6)(iv)(B) and (g)(6)(iv)(C) [Reserved]. For guidance see § 86.010–18.

(g)(7) *NO_X adsorber system monitoring.*

(g)(7)(i) and (g)(7)(ii) [Reserved]. For guidance see § 86.010–18.

(g)(7)(iii) *NO_X adsorber system monitoring conditions.*

(A) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(7)(ii)(A) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(7)(ii)(A) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in of § 86.010–18(e)(1)(iii).

(g)(7)(iii)(B) [Reserved]. For guidance see § 86.010–18.

(g)(7)(iv) *NO_X adsorber system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(8) *Diesel particulate filter (DPF) system monitoring.*

(g)(8)(i) and (g)(8)(ii) [Reserved]. For guidance see § 86.010–18.

(g)(8)(iii) *DPF monitoring conditions.* The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(8)(ii) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in § 86.010–18(c)(2). For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(8)(ii) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(e)(1)(iii).

(iv) *DPF system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(9) *Exhaust gas sensor and sensor heater monitoring.*

(g)(9)(i) through (g)(9)(vi) [Reserved]. For guidance see § 86.010–18.

(g)(9)(vii) *Monitoring conditions for exhaust gas sensors.*

(A) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(9)(ii)(A), (g)(9)(iii)(A), and (g)(9)(iv)(A) (i.e., sensor performance) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section. For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(9)(ii)(A), (g)(9)(iii)(A), and(g)(9)(iv)(A) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(e)(1)(iii).

(B) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(g)(9)(ii)(D), (g)(9)(iii)(D), and (g)(9)(iv)(D) (i.e., monitoring function) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in § 86.010–18(c)(2).

(g)(9)(vii)(C) and (g)(9)(vii)(D) [Reserved]. For guidance see § 86.010–18.

(g)(9)(viii) *Monitoring conditions for exhaust gas sensor heaters.*

(A) The manufacturer must define monitoring conditions for malfunctions identified in § 86.010–18(g)(9)(A) (i.e., sensor heater performance) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section.

(g)(9)(viii)(B) [Reserved]. For guidance see § 86.010–18.

(g)(9)(ix) *Exhaust gas sensor and sensor heater MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(10) *Variable valve timing (VVT) system monitoring.*

(g)(10)(i) and (g)(10)(vii) [Reserved]. For guidance see § 86.010–18.

(g)(10)(iii) *VVT system monitoring conditions.* Manufacturers must define the monitoring conditions for VVT system malfunctions identified in § 86.010–18(g)(10)(ii) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section, with the exception that monitoring must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in § 86.010–18(c)(2). For purposes of tracking and reporting as required in § 86.010–18(d) through (d)(1)(i), all monitors used to detect malfunctions identified in § 86.010–18(g)(10)(ii) and Table 1 of paragraph (g) of this section must be tracked separately but reported as a single set of values as specified in § 86.010–18(d)(1)(iii).

(iv) *VVT MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(h) [Reserved]. For guidance see § 86.010–18.

(i) *OBD monitoring requirements for all engines.*

(1) *Engine cooling system monitoring.*

(i)(1)(i) through (i)(1)(iii) [Reserved]. For guidance see § 86.010–18.

(i)(1)(iv) *Monitoring conditions for the thermostat.*

(A) The manufacturer must define the monitoring conditions for malfunctions identified in paragraph § 86.010–18(i)(1)(ii)(A) and Table 1 of paragraph (g) of this section in accordance with paragraph (c) of this section. Additionally, except as provided for in § 86.010–18(i)(1)(iv)(B) and (i)(1)(iv)(C), monitoring for malfunctions identified in § 86.010–18(i)(1)(ii)(A) and Table 1 of paragraph (g) of this section must be conducted once per drive cycle on every drive cycle in which the ECT sensor indicates, at engine start, a temperature lower than the temperature established as the malfunction criteria in § 86.010–18(i)(1)(ii)(A) and Table 1 of paragraph (g) of this section.

(i)(1)(iv)(B) and (i)(1)(iv)(C) [Reserved]. For guidance see § 86.010–18.

(i)(1)(v) *Monitoring conditions for the ECT sensor.*

(i)(1)(v)(A) [Reserved]. For guidance see § 86.010–18.

(i)(1)(v)(B) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(i)(1)(iii)(B) and Table 1 of paragraph (g) of this section in accordance with paragraph (c) of this section. Additionally, except as provided for in § 86.010–18(i)(1)(v)(D), monitoring for malfunctions identified in § 86.010–18(i)(1)(iii)(B) and Table 1 of paragraph (g) of this section must be conducted once per drive cycle on every drive cycle in which the ECT sensor indicates a temperature lower than the closed-loop enable temperature at engine start (i.e., all engine start temperatures greater than the ECT sensor out-of-range low temperature and less than the closed-loop enable temperature).

(C) The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(i)(1)(iii)(C) and (i)(1)(iii)(D) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section.

(i)(1)(v)(D) and (i)(1)(v)(E) [Reserved]. For guidance see § 86.010–18.

(i)(1)(vi) *Engine cooling system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section.

(2) *Crankcase ventilation (CV) system monitoring.*

(i)(2)(i) and (i)(2)(ii) [Reserved]. For guidance see § 86.010–18.

(i)(2)(iii) *Crankcase ventilation system monitoring conditions.* The manufacturer must define the monitoring conditions for malfunctions identified in § 86.010–18(i)(2)(ii) and Table 1 of paragraph (g) of this section in accordance with paragraphs (c) and (d) of this section.

(iv) *Crankcase ventilation system MIL activation and DTC storage.* The MIL must activate and DTCs must be stored according to the provisions of paragraph (b) of this section. The stored DTC need not identify specifically the CV system (e.g., a DTC for idle speed control or fuel system monitoring can be stored) if the manufacturer can demonstrate that additional monitoring hardware would be necessary to make such an identification and provided the manufacturer's diagnostic and repair procedures for the detected malfunction include directions to check the integrity of the CV system.

(3) *Comprehensive component monitoring.*

(i) *General.* Except as provided for in paragraph (i)(4) of this section, the OBD system must detect a malfunction of any electronic engine component or system not otherwise described in paragraphs (g), (i)(1), and (i)(2) of this section and § 86.010–18(h) that either provides input to (directly or indirectly, such components may include the crank angle sensor, knock sensor, throttle position sensor, cam position sensor, intake air temperature sensor, boost pressure sensor, manifold pressure sensor, mass air flow sensor, exhaust temperature sensor, exhaust pressure sensor, fuel pressure sensor, fuel composition sensor of a flexible fuel vehicle, etc.) or receives commands from (such components or systems may include the idle speed control system, glow plug system, variable length intake manifold runner systems, supercharger or turbocharger electronic components, heated fuel preparation systems, the wait-to-start lamp on diesel applications, the MIL, etc.) the onboard computer(s) and meets either of the criteria described in § 86.010–18(i)(3)(i)(A) and/or (i)(3)(i)(B). Note that, for the purposes of this paragraph (i)(3), ''electronic engine component or system'' does not include components that are driven by the engine and are not related to the control of the fueling, air handling, or emissions of the engine (e.g., PTO components, air conditioning system components, and power steering components).

(i)(3)(i)(A) through (i)(3)(iii) [Reserved]. For guidance see § 86.010–18.

(i)(3)(iv) *Monitoring conditions for input components.*

(i)(3)(iv)(A) [Reserved]. For guidance see § 86.010–18.

(i)(3)(iv)(B) For input component rationality checks (where applicable), the manufacturer must define the monitoring conditions for detecting malfunctions in accordance with paragraphs (c) and (d) of this section, with the exception that rationality checks must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in § 86.010–18(c)(2).

(v) *Monitoring conditions for output components/systems.*

(i)(3)(v)(A) [Reserved]. For guidance see § 86.010–18.

(i)(3)(v)(B) For output component/system functional checks, the manufacturer must define the monitoring conditions for detecting malfunctions in accordance with paragraphs (c) and (d) of this section. Specifically for the idle control system, the manufacturer must define the monitoring conditions for detecting malfunctions in accordance with paragraphs (c) and (d) of this section, with the exception that functional checks must occur every time the monitoring conditions are met during the drive cycle rather than once per drive cycle as required in § 86.010–18(c)(2).

(vi) *Comprehensive component MIL activation and DTC storage.*

(A) Except as provided for in § 86.010–18(i)(3)(vi)(B) and (i)(3)(vi)(C), the MIL must activate and DTCs must be

stored according to the provisions of paragraph (b) of this section.

(i)(3)(vi)(B) and (i)(3)(vi)(C) [Reserved]. For guidance see § 86.010–18.

(i)(4) *Other emission control system monitoring.*

(i) *General.* For other emission control systems that are either not addressed in § 86.010–18(h) and paragraphs (g) and (i)(1) through (i)(3) of this section (e.g., hydrocarbon traps, homogeneous charge compression ignition control systems), or addressed in paragraph (i)(3) of this section but not corrected or compensated for by an adaptive control system (e.g., swirl control valves), the manufacturer must submit a plan for Administrator approval of the monitoring strategy, malfunction criteria, and monitoring conditions prior to introduction on a production engine. The plan must demonstrate the effectiveness of the monitoring strategy, the malfunction criteria used, the monitoring conditions required by the monitor, and, if applicable, the determination that the requirements of § 86.010–18(i)(4)(ii) are satisfied.

(i)(4)(ii) through (i)(5)(v) [Reserved]. For guidance see § 86.010–18.

(i)(6) *Feedback control system monitoring.* If the engine is equipped with feedback control of any of the systems covered in paragraphs (g) and (i) of this section and § 86.010–18(h), then the OBD system must detect as malfunctions the conditions specified in this paragraph (i)(6) for each of the individual feedback controls.

(i)(6)(i) through (i)(6)(iv) [Reserved]. For guidance see § 86.010–18.

(j) *Production evaluation testing.*

(1) *Verification of standardization requirements.*

(i) The manufacturer must perform testing to verify that production vehicles meet the requirements of paragraphs (k)(3) and (k)(4) of this section relevant to the proper communication of required emissions-related messages to a SAE J1978/J1939 scan tool.

(ii) *Selection of test vehicles.*

(A) The manufacturer must perform this testing every model year on ten unique production vehicles (i.e., engine rating and chassis application combination) per engine family. If there are less than ten unique production vehicles for a certain engine family, the manufacturer must test each unique production vehicle in that engine family. The manufacturer must perform this testing within either three months of the start of engine production or one month of the start of vehicle production, whichever is later. The manufacturer may request approval to group multiple production vehicles together and test one representative vehicle per group. To do so, the software and hardware designed to comply with the standardization requirements of paragraph (k) of this section (e.g., communication protocol message timing, number of supported data stream parameters, engine and vehicle communication network architecture) in the representative vehicle must be identical to all others in the group and any differences in the production vehicles cannot be relevant with respect to meeting the criteria of paragraph (j)(1)(iv) of this section.

(B) For 2016 and subsequent model years, the required number of vehicles to be tested shall be reduced to five per engine family provided zero vehicles fail the testing required by paragraph (j)(1) of this section for two consecutive years.

(C) For 2019 and subsequent model years, the required number of vehicles to be tested shall be reduced to three per engine family provided zero vehicles fail the testing required by paragraph (j)(1) of this section for three consecutive years.

(D) The requirement for submittal of data from one or more of the production vehicles shall be waived if data have been submitted previously for all of the production vehicles. The manufacturer may request approval to carry over data collected in previous model years. To do so, the software and hardware designed to comply with the standardization requirements of paragraph (k) of this section must be identical to the previous model year and there must not have been other hardware or software changes that affect compliance with the standardization requirements.

(iii) *Test equipment.* For the testing required by paragraph (j)(1) of this section, the manufacturer shall use an off-board device to conduct the testing. The manufacturer must be able to show that the off-board device is able to verify that the vehicles tested using the device are able to perform all of the required functions in paragraph (j)(1)(iv) of this section with any other off-board device designed and built in accordance with the SAE J1978/J1939 generic scan tool specifications.

(iv) *Required testing.* The testing must verify that communication can be established properly between all emission-related on-board computers and any SAE J1978/J1939 scan tool designed to adhere strictly to the communication protocols allowed in paragraph (k)(3) of this section. The testing must also verify that all emission-related information is communicated properly between all emission-related on-board computers and any SAE J1978/J1939 scan tool in accordance with the requirements of paragraph (k) of this section and the applicable ISO and SAE specifications including specifications for physical layer, network layer, message structure, and message content. The testing must also verify that the onboard computer(s) can properly respond to any SAE J1978/J1939 scan tool request to clear emissions-related DTCs and reset the ready status in accordance with paragraph (k)(4)(ix) of this section. The testing must further verify that the following information can be properly communicated to any SAE J1978/J1939 scan tool:

(A) The current ready status from all onboard computers required to support ready status in accordance with SAE J1978/J1939–73 and paragraph (k)(4)(i) of this section in the key-on, engine-off position and while the engine is running.

(B) The MIL command status while a deactivated MIL is commanded and while an activated MIL is commanded in accordance with SAE J1979/J1939 and paragraph (k)(4)(ii) of this section in the key-on, engine-off position and while the engine is running, and in accordance with SAE J1979/J1939 and § 86.010–18(b)(1)(ii) during the MIL functional check and, if applicable, (k)(4)(i)(C) of this section during the MIL ready status check while the engine is off.

(C) All data stream parameters required in paragraph (k)(4)(ii) of this section in accordance with SAE J1979/J1939 including, if applicable, the proper identification of each data stream parameter as supported in SAE J1979 (e.g., Mode/Service $01, PID $00).

(D) The CAL ID, CVN, and VIN as required by paragraphs (k)(4)(vi), (k)(4)(vii), and (k)(4)(viii) of this section and in accordance with SAE J1979/J1939.

(E) An emissions-related DTC (permanent, pending, MIL-on, previous-MIL-on) in accordance with SAE J1979/J1939–73 (including the correct indication of the number of stored DTCs (e.g., Mode/Service $01, PID $01, Data A for SAE J1979)) and paragraph (k)(4)(iv) of this section.

(v) *Reporting of results.* The manufacturer must submit to the Administrator the following, based on the results of the testing required by paragraph (j)(1)(iv) of this section:

(A) If a variant meets all the requirements of paragraph (j)(1)(iv) of this section, a statement specifying that the variant passed all the tests. Upon request from the Administrator, the

detailed results of any such testing may have to be submitted.

(B) If any variant does not meet the requirements of paragraph (j)(1)(iv) of this section, a written report detailing the problem(s) identified and the manufacturer's proposed corrective action (if any) to remedy the problem(s). This report must be submitted within one month of testing the specific variant. The Administrator will consider the proposed remedy and, if in disagreement, will work with the manufacturer to propose an alternative remedy. Factors to be considered by the Administrator in considering the proposed remedy will include the severity of the problem(s), the ability of service technicians to access the required diagnostic information, the impact on equipment and tool manufacturers, and the amount of time prior to implementation of the proposed corrective action.

(vi) *Alternative testing protocols.* Manufacturers may request approval to use other testing protocols. To do so, the manufacturer must demonstrate that the alternative testing methods and equipment will provide an equivalent level of verification of compliance with the standardization requirements as is required by paragraph (j)(1) of this section.

(2) *Verification of monitoring requirements.*

(j)(2)(i) through (j)(2)(ii)(C) [Reserved]. For guidance see § 86.010–18.

(j)(2)(iii) *Evaluation requirements.*

(A) The evaluation must demonstrate the ability of the OBD system on the selected test vehicle to detect a malfunction, activate the MIL, and, where applicable, store an appropriate DTC readable by a SAE J1978/J1939 scan tool when a malfunction is present and the monitoring conditions have been satisfied for each individual monitor required by this section.

(j)(2)(iii)(B) through (j)(2)(iv) [Reserved]. For guidance see § 86.010–18.

(j)(3) *Verification of in-use monitoring performance ratios.*

(j)(3)(i) through (j)(3)(iii) [Reserved]. For guidance see § 86.010–18.

(j)(3)(iv) For each monitoring performance group, the data must include all of the in-use performance tracking data reported through SAE J1979/J1939 (i.e., all numerators, denominators, the general denominator, and the ignition cycle counter), the date the data were collected, the odometer reading, the VIN, and the calibration ID.

(j)(3)(v) and (j)(3)(vi) [Reserved]. For guidance see § 86.010–18.

(k) *Standardization requirements.*

(k)(1) through (k)(1)(i)(B) [Reserved]. For guidance see § 86.010–18.

(k)(1)(i)(C) SAE J1962 ''Diagnostic Connector—;Equivalent to ISO/DIS 15031–3: December 14, 2001,'' April 2002.

(k)(1)(i)(D) through (k)(1)(ii)(A) [Reserved]. For guidance see § 86.010–18.

(k)(2) *Diagnostic connector.* A standard data link connector conforming to SAE J1962 or SAE J1939–13 specifications (except as provided for in paragraph (k)(2)(iii) of this section) must be included in each vehicle.

(i) The connector must be located in the driver's side foot-well region of the vehicle interior in the area bound by the driver's side of the vehicle and the driver's side edge of the center console (or the vehicle centerline if the vehicle does not have a center console) and at a location no higher than the bottom of the steering wheel when in the lowest adjustable position. The connector shall not be located on or in the center console (i.e., neither on the horizontal faces near the floor-mounted gear selector, parking brake lever, or cup-holders nor on the vertical faces near the car stereo, climate system, or navigation system controls). The location of the connector shall be capable of being easily identified and accessed (e.g., to connect an off-board tool). For vehicles equipped with a driver's side door, the connector must be identified and accessed easily by someone standing (or ''crouched'') on the ground outside the driver's side of the vehicle with the driver's side door open. The Administrator may approve an alternative location upon request from the manufacturer. In all cases, the installation position of the connector must be both identified and accessed easily by someone standing outside the vehicle and protected from accidental damage during normal vehicle use.

(ii) If the connector is covered, the cover must be removable by hand without the use of any tools and be labeled ''OBD'' to aid technicians in identifying the location of the connector. Access to the diagnostic connector shall not require opening or the removal of any storage accessory (e.g., ashtray, coinbox). The label must clearly identify that the connector is located behind the cover and is consistent with language and/or symbols commonly used in the automobile and/or heavy truck industry.

(iii) If the ISO 15765–4 communication protocol is used for the required OBD standardized functions, the connector must meet the ''Type A'' specifications of SAE J1962. Any pins in the connector that provide electrical power must be properly fused to protect the integrity and usefulness of the connector for diagnostic purposes and shall not exceed 20.0 Volts DC regardless of the nominal vehicle system or battery voltage (e.g., 12V, 24V, 42V).

(iv) If the SAE J1939 protocol is used for the required OBD standardized functions, the connector must meet the specifications of SAE J1939–13. Any pins in the connector that provide electrical power must be properly fused to protect the integrity and usefulness of the connector for diagnostic purposes.

(v) The manufacturer may equip engines/vehicles with additional diagnostic connectors for manufacturer-specific purposes (i.e., purposes other than the required OBD functions). However, if the additional connector conforms to the ''Type A'' specifications of SAE J1962 or the specifications of SAE J1939–13 and is located in the vehicle interior near the required connector as described in this paragraph (k)(2) of this section, the connector(s) must be labeled clearly to identify which connector is used to access the standardized OBD information required by paragraph (k) of this section.

(3) *Communications to a scan tool.* All OBD control modules (e.g., engine, auxiliary emission control module) on a single vehicle must use the same protocol for communication of required emission-related messages from on-board to off-board network communications to a scan tool meeting SAE J1978 specifications or designed to communicate with an SAE J1939 network. Engine manufacturers shall not alter normal operation of the engine emission control system due to the presence of off-board test equipment accessing information required by this paragraph (k). The OBD system must use one of the following standardized protocols:

(i) ISO 15765–4. All required emission-related messages using this protocol must use a 500 kbps baud rate.

(ii) SAE J1939. This protocol may only be used on vehicles with diesel engines.

(4) *Required emission related functions.* The following standardized functions must be implemented in accordance with the specifications in SAE J1979 or SAE J1939 to allow for access to the required information by a scan tool meeting SAE J1978 specifications or designed to communicate with an SAE J1939 network:

(i) *Ready status.* In accordance with SAE J1979/J1939–73 specifications, the OBD system must indicate ''complete'' or ''not complete'' for each of the installed monitored components and

systems identified in paragraphs (g), and (i)(3) of this section, and paragraph (h) with the exception of § 86.010–18(h)(4). All components or systems identified in § 86.010–18(h)(1) or (h)(2), or (i)(3) of this section that are monitored continuously must always indicate ''complete.'' Components or systems that are not subject to being monitored continuously must immediately indicate ''complete'' upon the respective monitor(s) being executed fully and determining that the component or system is not malfunctioning. A component or system must also indicate ''complete'' if, after the requisite number of decisions necessary for determining MIL status has been executed fully, the monitor indicates a malfunction of the component or system. The status for each of the monitored components or systems must indicate ''not complete'' whenever diagnostic memory has been cleared or erased by a means other than that allowed in paragraph (b) of this section. Normal vehicle shut down (i.e., key-off/engine-off) shall not cause the status to indicate ''not complete.''

(k)(4)(i)(A) [Reserved]. For guidance see § 86.010–18.

(k)(4)(i)(B) For the evaporative system monitor, the ready status must be set in accordance with this paragraph (k)(4)(i) when both the functional check of the purge valve and, if applicable, the leak detection monitor of the hole size specified in § 86.010–18(h)(7)(ii)(B) indicate that they are complete.

(C) If the manufacturer elects to indicate ready status through the MIL in the key-on/engine-off position as provided for in § 86.010–18(b)(1)(iii), the ready status must be indicated in the following manner: If the ready status for all monitored components or systems is ''complete,'' the MIL shall remain continuously activated in the key-on/engine-off position for at least 10–20 seconds. If the ready status for one or more of the monitored components or systems is ''not complete,'' after at least 5 seconds of operation in the key-on/engine-off position with the MIL activated continuously, the MIL shall blink once per second for 5–10 seconds. The data stream value for MIL status as required in paragraph (k)(4)(ii) of this section must indicate ''commanded off'' during this sequence unless the MIL has also been ''commanded on'' for a detected malfunction.

(ii) *Data stream.* The following signals must be made available on demand through the standardized data link connector in accordance with SAE J1979/J1939 specifications. The actual signal value must always be used instead of a limp home value.

(k)(4)(ii)(A) through (k)(4)(ii)(C) [Reserved]. For guidance see § 86.010–18.

(k)(4)(iii) *Freeze frame.*

(A) ''Freeze frame'' information required to be stored pursuant to § 86.010–18(b)(2)(iv), (h)(1)(iv)(D), and (h)(2)(vi) must be made available on demand through the standardized data link connector in accordance with SAE J1979/J1939–73 specifications.

(k)(4)(iii)(B) [Reserved]. For guidance see § 86.010–18.

(k)(4)(iii)(C) Only one frame of data is required to be recorded. The manufacturer may choose to store additional frames provided that at least the required frame can be read by a scan tool meeting SAE J1978 specifications or designed to communicate with an SAE J1939 network.

(iv) *Diagnostic trouble codes.*

(A) For all monitored components and systems, any stored pending, MIL-on, and previous-MIL-on DTCs must be made available through the diagnostic connector in a standardized format in accordance with SAE J1939 or ISO 15765–4 specifications. Standardized DTCs conforming to the applicable standardized specifications must be employed.

(k)(4)(iv)(B) and (k)(4)(iv)(C) [Reserved]. For guidance see § 86.010–18.

(k)(4)(iv)(D) A pending or MIL-on DTC (as required in paragraphs (g) and (i) of this section and § 86.010–18(h)) must be stored and available to an SAE J1978 or SAE J1939 scan tool within 10 seconds after a monitor has determined that a malfunction or potential malfunction has occurred. A permanent DTC must be stored and available to an SAE J1978 or SAE J1939 scan tool no later than the end of an ignition cycle in which the corresponding MIL-on DTC that caused MIL activation has been stored.

(E) Pending DTCs for all components and systems (including those monitored continuously and non-continuously) must be made available through the diagnostic connector in accordance with the applicable standard's specifications. A manufacturer using alternative statistical protocols for MIL activation as allowed in § 86.010–18(b)(2)(iii) must submit the details of their protocol for setting pending DTCs. The protocol must be, overall, equivalent to the requirements of this paragraph (k)(4)(iv)(E) and provide service technicians with a quick and accurate indication of a potential malfunction.

(F) Permanent DTC for all components and systems must be made available through the diagnostic connector in a standardized format that distinguishes permanent DTCs from pending DTCs, MIL-on DTCs, and previous-MIL-on DTCs. A MIL-on DTC must be stored as a permanent DTC no later than the end of the ignition cycle and subsequently at all times that the MIL-on DTC is commanding the MIL on. Permanent DTCs must be stored in non-volatile random access memory (NVRAM) and shall not be erasable by any scan tool command or by disconnecting power to the on-board computer. Permanent DTCs must be erasable if the engine control module is reprogrammed and the ready status described in paragraph (k)(4)(i) of this section for all monitored components and systems are set to ''not complete.'' The OBD system must have the ability to store a minimum of four current MIL-on DTCs as permanent DTCs in NVRAM. If the number of MIL-on DTCs currently commanding activation of the MIL exceeds the maximum number of permanent DTCs that can be stored, the OBD system must store the earliest detected MIL-on DTC as permanent DTC. If additional MIL-on DTCs are stored when the maximum number of permanent DTCs is already stored in NVRAM, the OBD system shall not replace any existing permanent DTC with the additional MIL-on DTCs.

(v) *Test results.*

(A) Except as provided for in § 86.010–18(k)(4)(v)(G), for all monitored components and systems identified in paragraph (g) of this section and § 86.010–18(h), results of the most recent monitoring of the components and systems and the test limits established for monitoring the respective components and systems must be stored and available through the data link in accordance with the standardized format specified in SAE J1979 (for engines using the ISO 15765–4 protocol) or SAE J1939.

(k)(4)(v)(B) [Reserved]. For guidance see § 86.010–18.

(k)(4)(v)(C) The test results must be standardized such that the name of the monitored component (e.g., catalyst bank 1) can be identified by a generic scan tool and the test results and limits can be scaled and reported by a generic scan tool with the appropriate engineering units.

(k)(4)(v)(D) through (k)(4)(v)(G) [Reserved]. For guidance see § 86.010–18.

(k)(4)(vi) *Software calibration identification (CAL ID).* On all engines, a single software calibration identification number (CAL ID) for each monitor or emission critical control unit(s) must be made available through the standardized data link connector in accordance with the SAE J1979/J1939

specifications. A unique CAL ID must be used for every emission-related calibration and/or software set having at least one bit of different data from any other emission-related calibration and/or software set. Control units coded with multiple emission or diagnostic calibrations and/or software sets must indicate a unique CAL ID for each variant in a manner that enables an off-board device to determine which variant is being used by the vehicle. Control units that use a strategy that will result in MIL activation if the incorrect variant is used (e.g., control units that contain variants for manual and automatic transmissions but will activate the MIL if the selected variant does not match the type of transmission mated to the engine) are not required to use unique CAL IDs.

(vii) *Software calibration verification number (CVN).*

(A) All engines must use an algorithm to calculate a single calibration verification number (CVN) that verifies the on-board computer software integrity for each monitor or emission critical control unit that is electronically reprogrammable. The CVN must be made available through the standardized data link connector in accordance with the SAE J1979/J1939 specifications. The CVN must indicate whether the emission-related software and/or calibration data are valid and applicable for the given vehicle and CAL ID.

(k)(4)(vii)(B) [Reserved]. For guidance see § 86.010–18.

(k)(4)(vii)(C) The CVN must be calculated at least once per drive cycle and stored until the CVN is subsequently updated. Except for immediately after a reprogramming event or a non-volatile memory clear or for the first 30 seconds of engine operation after a volatile memory clear or battery disconnect, the stored value must be made available through the data link connector to a generic scan tool in accordance with SAE J1979/J1939 specifications. The stored CVN value shall not be erased when DTC memory is erased by a generic scan tool in accordance with SAE J1979/J1939 specifications or during normal vehicle shut down (i.e., key-off/engine-off).

(D) The CVN and CAL ID combination information must be available for all engines/vehicles in a standardized electronic format that allows for off-board verification that the CVN is valid and appropriate for a specific vehicle and CAL ID.

(viii) *Vehicle identification number (VIN).*

(A) All vehicles must have the vehicle identification number (VIN) available in a standardized format through the standardized data link connector in accordance with SAE J1979/J1939 specifications. Only one electronic control unit per vehicle may report the VIN to an SAE J1978/J1939 scan tool.

(k)(4)(viii)(B) [Reserved]. For guidance see § 86.010–18.

(k)(4)(ix) *Erasure of diagnostic information.*

(A) For purposes of this paragraph (k)(4)(ix), ''emission-related diagnostic information'' includes all of the following: ready status as required by paragraph (k)(4)(i) of this section; data stream information as required by paragraph (k)(4)(ii) of this section including the number of stored MIL-on DTCs, distance traveled while MIL activated, number of warm-up cycles since DTC memory last erased, and distance traveled since DTC memory last erased; freeze frame information as required by paragraph (k)(4)(iii) of this section; pending, MIL-on, and previous-MIL-on DTCs as required by paragraph (k)(4)(iv) of this section; and, test results as required by paragraph (k)(4)(v) of this section.

(k)(4)(ix)(B) [Reserved]. For guidance see § 86.010–18.

(k)(5) *In-use performance ratio tracking requirements.*

(i) For each monitor required in paragraphs (g) and (i) of this section and § 86.010–18(h) to separately report an in-use performance ratio, manufacturers must implement software algorithms to report a numerator and denominator in the standardized format specified in this paragraph (k)(5) in accordance with the SAE J1979/J1939 specifications.

(ii) For the numerator, denominator, general denominator, and ignition cycle counters required by § 86.010–18(e), the following numerical value specifications apply:

(A) Each number shall have a minimum value of zero and a maximum value of 65,535 with a resolution of one.

(B) Each number shall be reset to zero only when a non-volatile random access memory (NVRAM) reset occurs (e.g., reprogramming event) or, if the numbers are stored in keep-alive memory (KAM), when KAM is lost due to an interruption in electrical power to the control unit (e.g., battery disconnect). Numbers shall not be reset to zero under any other circumstances including when a scan tool command to clear DTCs or reset KAM is received.

(C) To avoid overflow problems, if either the numerator or denominator for a specific component reaches the maximum value of 65,535 ±2, both numbers shall be divided by two before either is incremented again.

(D) To avoid overflow problems, if the ignition cycle counter reaches the maximum value of 65,535 ±2, the ignition cycle counter shall rollover and increment to zero on the next ignition cycle.

(E) To avoid overflow problems, if the general denominator reaches the maximum value of 65,535 ±2, the general denominator shall rollover and increment to zero on the next drive cycle that meets the general denominator definition.

(F) If a vehicle is not equipped with a component (e.g., oxygen sensor bank 2, secondary air system), the corresponding numerator and denominator for that specific component shall always be reported as zero.

(iii) For the ratio required by § 86.010–18(e), the following numerical value specifications apply:

(A) The ratio shall have a minimum value of zero and a maximum value of 7.99527 with a resolution of 0.000122.

(B) The ratio for a specific component shall be considered to be zero whenever the corresponding numerator is equal to zero and the corresponding denominator is not zero.

(C) The ratio for a specific component shall be considered to be the maximum value of 7.99527 if the corresponding denominator is zero or if the actual value of the numerator divided by the denominator exceeds the maximum value of 7.99527.

(6) *Engine run time tracking requirements.*

(i) For all gasoline and diesel engines, the manufacturer must implement software algorithms to track and report individually in a standardized format the amount of time the engine has been operated in the following conditions:

(A) Total engine run time.

(B) Total idle run time (with ''idle'' defined as accelerator pedal released by the driver, vehicle speed less than or equal to one mile per hour, engine speed greater than or equal to 50 to 150 rpm below the normal, warmed-up idle speed (as determined in the drive position for vehicles equipped with an automatic transmission), and power take-off not active).

(C) Total run time with power take off active.

(ii) For each counter specified in paragraph (k)(6)(i) of this section, the following numerical value specifications apply:

(A) Each number shall be a four-byte value with a minimum value of zero, a resolution of one second per bit, and an accuracy of ± ten seconds per drive cycle.

(B) Each number shall be reset to zero only when a non-volatile memory reset occurs (e.g., reprogramming event). Numbers shall not be reset to zero under any other circumstances including when a scan tool (generic or enhanced) command to clear fault codes or reset KAM is received.

(C) To avoid overflow problems, if any of the individual counters reach the maximum value, all counters shall be divided by two before any are incremented again.

(D) The counters shall be made available to a generic scan tool in accordance with the SAE J1979/J1939 specifications and may be rescaled when transmitted, if required by the SAE specifications, from a resolution of one second per bit to no more than three minutes per bit.

(l) *Monitoring system demonstration requirements for certification.*

(1) *General.*

(l)(1)(i) through (l)(1)(iii) [Reserved]. For guidance see § 86.010–18.

(l)(2) *Selection of test engines.*

(l)(2)(i) [Reserved]. For guidance see § 86.010–18.

(l)(2)(ii) A manufacturer certifying one to five engine families in a given model year must provide emissions test data for a single test engine from one engine rating. A manufacturer certifying six to ten engine families in a given model year must provide emissions test data for a single test engine from two different engine ratings. A manufacturer certifying eleven or more engine families in a given model year must provide emissions test data for a single test engine from three different engine ratings. A manufacturer may forego submittal of test data for one or more of these test engines if data have been submitted previously for all of the engine ratings and/or if all requirements for certification carry-over from one model year to the next are satisfied.

(iii) For a given model year, a manufacturer may elect to provide emissions data for test engines from more engine ratings than required by paragraph (l)(2)(ii) of this section. For each additional engine rating tested in that given model year, the number of engine ratings required for testing in one future model year will be reduced by one.

(iv) For the test engine, the manufacturer must use an engine aged for a minimum of 125 hours fitted with exhaust aftertreatment emission controls aged to be representative of useful life aging. The manufacturer is required to submit a description of the accelerated aging process and/or supporting data. The process and/or data must demonstrate assurance that deterioration of the exhaust aftertreatment emission controls is stabilized sufficiently such that it represents emission control performance at the end of the useful life.

(3) *Required testing.* Except as otherwise described in this paragraph (l)(3) of this section, the manufacturer must perform single malfunction testing based on the applicable test with the components/systems set at their malfunction criteria limits as determined by the manufacturer for meeting the emissions thresholds required in paragraphs (g) and (i) of this section and § 86.010–18(h).

(i) *Required testing for diesel-fueled/compression ignition engines.*

(l)(3)(i)(A) [Reserved]. For guidance see § 86.010–18.

(l)(3)(i)(B) *Engine misfire.* The manufacturer must perform a test at the malfunction limit established by the manufacturer for the monitoring required by paragraph (g)(2)(ii)(B) of this section.

(l)(3)(i)(C) through (l)(3)(i)(K) [Reserved]. For guidance see § 86.010–18.

(l)(3)(ii) *Required testing for gasoline-fueled/spark-ignition engines.*

(l)(3)(ii)(A) through (l)(3)(ii)(I) [Reserved]. For guidance see § 86.010–18.

(l)(3)(iii) *Required testing for all engines.*

(l)(3)(iii)(A) and (l)(3)(iii)(B) [Reserved]. For guidance see § 86.010–18.

(l)(3)(iv) [Reserved]. For guidance see § 86.010–18.

(l)(4) *Testing protocol.*

(l)(4)(i) [Reserved]. For guidance see § 86.010–18.

(l)(4)(ii) *Test sequence.*

(l)(4)(ii)(A) through (l)(4)(ii)(C) [Reserved]. For guidance see § 86.010–18.

(l)(4)(iii) A manufacturer required to test more than one test engine according to paragraph (l)(2)(ii) of this section may use internal calibration sign-off test procedures (e.g., forced cool downs, less frequently calibrated emission analyzers) instead of official test procedures to obtain the emission test data required by this paragraph (l) of this section for all but one of the required test engines. The manufacturer may elect this option if the data from the alternative test procedure are representative of official emissions test results. A manufacturer using this option is still responsible for meeting the malfunction criteria specified in paragraphs (g) and (i) of this section and § 86.010–18(h) if and when emissions tests are performed in accordance with official test procedures.

(l)(4)(iv) [Reserved]. For guidance see § 86.010–18.

(l)(5) *Evaluation protocol.*

(l)(5)(i) [Reserved]. For guidance see § 86.010–18.

(l)(5)(ii) If the MIL activates prior to emissions exceeding the applicable malfunction criteria limits specified in paragraphs (g) and (i) of this section and § 86.010–18(h), no further demonstration is required. With respect to the misfire monitor demonstration test, if the manufacturer has elected to use the minimum misfire malfunction criteria of one percent as allowed in paragraphs (g)(2)(ii)(B) of this section and § 86.010–18(h)(2)(ii)(B), no further demonstration is required provided the MIL activates with engine misfire occurring at the malfunction criteria limit.

(l)(5)(iii) through (l)(5)(iv) [Reserved]. For guidance see § 86.010–18.

(l)(6) *Confirmatory testing.*

(i) The Administrator may perform confirmatory testing to verify the emission test data submitted by the manufacturer as required by paragraph (l) of this section comply with its requirements and the malfunction criteria set forth in paragraphs (g) and (i) of this section and § 86.010–18(h). Such confirmatory testing is limited to the test engine(s) required by paragraph (l)(2) of this section.

(l)(6)(ii) through (l)(7) [Reserved]. For guidance see § 86.010–18.

(m) *Certification documentation requirements.*

(m)(1) through (m)(2)(iv) [Reserved]. For guidance see § 86.010–18.

(m)(2)(v) Emissions test data, a description of the testing sequence (e.g., the number and types of preconditioning cycles), approximate time (in seconds) of MIL activation during the test, diagnostic trouble code(s) and freeze frame information stored at the time of detection, corresponding test results (e.g. SAE J1979 Mode/Service $06, SAE J1939 Diagnostic Message 8 (DM8)) stored during the test, and a description of the modified or deteriorated components used for malfunction simulation with respect to the demonstration tests specified in paragraph (l) of this section. The freeze frame data are not required for engines subject to paragraph (o)(3) of this section.

(m)(2)(vi) through (m)(2)(x) [Reserved]. For guidance see § 86.010–18.

(m)(2)(xi) A written identification of the communication protocol utilized by each engine for communication with a SAE J1978/J1939 scan tool.

(xii) A pictorial representation or written description of the diagnostic

connector location including any covers or labels.

(m)(2)(xiii) [Reserved]. For guidance see § 86.010–18.

(m)(2)(xiv) Build specifications provided to engine purchasers or chassis manufacturers detailing all specifications or limitations imposed on the engine purchaser relevant to OBD requirements or emissions compliance (e.g., allowable MIL locations, connector location specifications, cooling system heat rejection rates). A description of the method or copies of agreements used to ensure engine purchasers or chassis manufacturers will comply with the OBD and emissions relevant build specifications (e.g., signed agreements, required audit/evaluation procedures).

(m)(2)(xv) [Reserved]. For guidance see § 86.010–18.

(n) [Reserved]. For guidance see § 86.010–18.

(o) *Implementation schedule.* Except as provided for in paragraph (o)(4) of this section, the requirements of this section must be met according to the following provisions:

(1) *OBD groups.* The manufacturer shall define one or more OBD groups to cover all engine ratings in all engine families. The manufacturer must submit a grouping plan for Administrator review and approval detailing the OBD groups and the engine families and engine ratings within each group for a given model year.

(2) *Full OBD.*

(i) For all engine ratings subject to § 86.010–18, the manufacturer must implement an OBD system meeting the requirements of this section.

(ii) On one engine rating within each of the manufacturer's OBD groups, the manufacturer must implement an OBD system meeting the requirements of this section. These ''full OBD'' ratings will be known as the ''OBD parent'' ratings. The OBD parent rating for each OBD group must be chosen as the rating having the highest weighted projected U.S. sales within the OBD group, with U.S. sales being weighted by the useful life of the engine rating.

(3) *Extrapolated OBD.* For all other engine ratings within each OBD group, the manufacturer must implement an OBD system meeting the requirements of this section except that the OBD system is not required to detect a malfunction prior to exceeding the emission thresholds shown in Table 1 of paragraph (g) of this section and Table 2 of § 86.010–18(h). These extrapolated OBD engines will be known as the ''OBD child'' ratings. On these OBD child ratings, rather than detecting a malfunction prior to exceeding the emission thresholds, the manufacturer must submit a plan for Administrator review and approval that details the engineering evaluation the manufacturer will use to establish the malfunction criteria for the OBD child ratings. The plan must demonstrate both the use of good engineering judgment in establishing the malfunction criteria, and robust detection of malfunctions, including consideration of differences of base engine, calibration, emission control components, and emission control strategies.

(4) Engines certified as alternative fueled engines shall meet the following requirements:

(i) To the extent feasible, those specified in paragraph (i)(3) of this section.

(ii) Monitor the NO_X aftertreatment system on engines so equipped. A malfunction must be detected if:

(A) The NO_X aftertreatment system has no detectable amount of NO_X aftertreatment capability (i.e., NO_X catalyst conversion or NO_X adsorption).

(B) The NO_X aftertreatment substrate is completely destroyed, removed, or missing.

(C) The NO_X aftertreatment assembly is replaced with a straight pipe.

(p) *In-use compliance standards.* For monitors required to indicate a malfunction before emissions exceed a certain emission threshold (e.g., 2 times any of the applicable standards):

(1) On the full OBD ratings as defined in paragraph (o)(2) of this section, separate in-use emissions thresholds shall apply. These thresholds are determined by doubling the applicable thresholds as shown in Table 1 of paragraph (g) of this section and Table 2 of § 86.010–18(h). The resultant thresholds apply only in-use and do not apply for certification or selective enforcement auditing.

(2) The extrapolated OBD ratings as defined in paragraph (o)(3) of this section shall not be evaluated against emissions levels for purposes of OBD compliance in-use.

(3) Only the test cycle and standard determined and identified by the manufacturer at the time of certification in accordance with § 86.010–18(f) as the most stringent shall be used for the purpose of determining OBD system noncompliance in-use.

(4) For monitors subject to meeting the minimum in-use monitor performance ratio of 0.100 in paragraph (d)(1)(ii) of this section, the OBD system shall not be considered noncompliant unless a representative sample indicates the in-use ratio is below 0.050.

(5) An OBD system shall not be considered noncompliant solely due to a failure or deterioration mode of a monitored component or system that could not have been reasonably foreseen to occur by the manufacturer.

13. Section 86.013–30 is added to Subpart A to read as follows:

§ 86.013–30 Certification.

Section 86.013–30 includes text that specifies requirements that differ from § 86.010–30. Where a paragraph in § 86.010–30 is identical and applicable to § 86.013–30, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.010–30.''

(a) introductory text through (f)(1)(i) [Reserved]. For guidance see § 86.010–30.

(f)(1)(ii) *Diesel.*

(A) If monitored for emissions performance—a reduction catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust NO_X emissions exceeding the applicable NO_X FEL+0.3 g/bhp-hr. Also if monitored for emissions performance—an oxidation catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust NMHC emissions exceeding 2 times the applicable NMHC standard.

(B) If monitored for performance—a particulate trap is replaced with a deteriorated or defective trap, or an electronic simulation of such, resulting in either exhaust PM emissions exceeding the applicable FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, exhaust NMHC emissions exceeding 2 times the applicable NMHC standard. Also, if monitored for performance—a particulate trap is replaced with a catastrophically failed trap or a simulation of such.

(f)(2) [Reserved]. For guidance see § 86.004–30.

(f)(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices.*

(f)(3)(i)(A) [Reserved]. For guidance see § 86.007–30.

(f)(3)(i)(B) *Diesel.* If so equipped, any oxygen sensor or air-fuel ratio sensor located downstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: The applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices.*

(f)(3)(ii)(A) [Reserved]. For guidance see § 86.007–30.

(f)(3)(ii)(B) *Diesel.* If so equipped, any oxygen sensor or air-fuel ratio sensor located upstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: The applicable PM FEL+0.02 g/bhp-hr or 0.03 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2 times the applicable NMHC standard; or, 2 times the applicable CO standard.

(iii) *NO_X sensors.*

(f)(3)(iii)(A) [Reserved]. For guidance see § 86.007–30.

(f)(3)(iii)(B) *Diesel.* If so equipped, any NO_X sensor is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: The applicable PM FEL+0.04 g/bhp-hr or 0.05 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr.

(f)(4) [Reserved]. For guidance see § 86.010–30.

(f)(5)(i) [Reserved]. For guidance see § 86.007–30.

(f)(5)(ii) *Diesel.* A malfunction condition is induced in any emission-related engine system or component, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: The applicable PM FEL+0.02 g/bhp-hr or 0.03 g/bhp-hr PM, whichever is higher; or, the applicable NO_X FEL+0.3 g/bhp-hr; or, 2 times the applicable NMHC standard; or, 2 times the applicable CO standard.

(f)(6) [Reserved]. For guidance see § 86.010–30.

14. Section 86.016–18 is added to Subpart A to read as follows:

§ 86.016–18 On-board Diagnostics for engines used in applications greater than 14,000 pounds GVWR.

Section 86.016–18 includes text that specifies requirements that differ from § 86.013–18. Where a paragraph in § 86.013–18 is identical and applicable to § 86.016–18, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.013–18.''

(a) through (n) [Reserved]. For guidance see § 86.013–18.

(o) *Implementation schedule.* Except as provided for in paragraph (o)(3) of this section, the requirements of this section must be met according to the following provisions:

(1) *OBD groups.* The manufacturer shall define one or more OBD groups to cover all engine ratings in all engine families. The manufacturer must submit a grouping plan for Administrator review and approval detailing the OBD groups and the engine families and engine ratings within each group for a given model year.

(2) *Full OBD.* The manufacturer must implement an OBD system meeting the requirements of this section on all engine ratings in all engine families.

(3) Engines certified as alternative fueled engines shall meet the following requirements:

(i) To the extent feasible, those specified in § 86.013–18(i)(3).

(ii) Monitor the NO_X aftertreatment system on engines so equipped. A malfunction must be detected if:

(A) The NO_X aftertreatment system has no detectable amount of NO_X aftertreatment capability (i.e., NO_X catalyst conversion or NO_X adsorption).

(B) The NO_X aftertreatment substrate is completely destroyed, removed, or missing.

(C) The NO_X aftertreatment assembly is replaced with a straight pipe.

(p) *In-use compliance standards.* For monitors required to indicate a malfunction before emissions exceed a certain emission threshold (e.g., 2 times any of the applicable standards):

(1) On the engine ratings tested according to § 86.013–18(l)(2)(ii), the certification emissions thresholds shall apply in-use.

(2) On the manufacturer's remaining engine ratings, separate in-use emissions thresholds shall apply. These thresholds are determined by doubling the applicable thresholds as shown in Table 1 of § 86.013–18(g) and Table 2 of § 86.010–18(h). The resultant thresholds apply only in-use and do not apply for certification or selective enforcement auditing.

(3) An OBD system shall not be considered noncompliant solely due to a failure or deterioration mode of a monitored component or system that could not have been reasonably foreseen to occur by the manufacturer.

15. Section 86.019–18 is added to subpart A to read as follows:

§ 86.019–18 On-board diagnostics for engines used in applications greater than 14,000 pounds GVWR.

Section 86.019–18 includes text that specifies requirements that differ from §§ 86.013–18 and 86.016–18. Where a paragraph in § 86.013–18 is identical and applicable to § 86.019–18, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.013–18.''

(a) through (k)(6) [Reserved]. For guidance see § 86.013–18.

(k)(7) For 2019 and subsequent model year alternative-fueled engines derived from a diesel-cycle engine, a manufacturer may meet the standardization requirements of § 86.013–18(k) that are applicable to diesel engines rather than the requirements applicable to gasoline engines.

(l) through (n) [Reserved]. For guidance see § 86.013–18.

(o) *Implementation schedule.* The manufacturer must implement an OBD system meeting the requirements of this section on all engines.

(p) *In-use compliance.* An OBD system shall not be considered noncompliant solely due to a failure or deterioration mode of a monitored component or system that could not have been reasonably foreseen to occur by the manufacturer.

16. Section 86.1806–07 is added to Subpart S to read as follows:

§ 86.1806–07 On-board diagnostics for vehicles less than or equal to 14,000 pounds GVWR.

Section 86.1806–07 includes text that specifies requirements that differ from § 86.1806–05. Where a paragraph in § 86.1806–05 is identical and applicable to § 86.1806–07, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.1806–05.''

(a) through (a)(2) [Reserved]. For guidance see § 86.1806–05.

(a)(3) An OBD system demonstrated to fully meet the requirements in § 86.007–17 may be used to meet the requirements of this section, provided that such an OBD system also incorporates appropriate transmission diagnostics as may be required under this section, and provided that the Administrator finds that a manufacturer's decision to use the flexibility in this paragraph (a)(3) is based on good engineering judgement.

(b) through (h) [Reserved]. For guidance see § 86.1806–05.

(i) *Deficiencies and alternative fueled vehicles.* Upon application by the manufacturer, the Administrator may accept an OBD system as compliant even though specific requirements are not fully met. Such compliances without meeting specific requirements, or deficiencies, will be granted only if compliance would be infeasible or unreasonable considering such factors as, but not limited to: technical feasibility of the given monitor and lead time and production cycles including phase-in or phase-out of vehicle designs and programmed upgrades of computers. Unmet requirements should

not be carried over from the previous model year except where unreasonable hardware or software modifications would be necessary to correct the deficiency, and the manufacturer has demonstrated an acceptable level of effort toward compliance as determined by the Administrator. Furthermore, EPA will not accept any deficiency requests that include the complete lack of a major diagnostic monitor (''major'' diagnostic monitors being those for exhaust aftertreatment devices, oxygen sensor, air-fuel ratio sensor, NO_X sensor, engine misfire, evaporative leaks, and diesel EGR, if equipped), with the possible exception of the special provisions for alternative fueled engines. For alternative fueled vehicles (e.g., natural gas, liquefied petroleum gas, methanol, ethanol), manufacturers may request the Administrator to waive specific monitoring requirements of this section for which monitoring may not be reliable with respect to the use of the alternative fuel. At a minimum, alternative fuel engines must be equipped with an OBD system meeting OBD requirements to the extent feasible as approved by the Administrator.

(j) *California OBDII compliance option.* For light-duty vehicles, light-duty trucks, and heavy-duty vehicles weighing 14,000 pounds GVWR or less, demonstration of compliance with California OBD II requirements (Title 13 California Code of Regulations § 1968.2 (13 CCR 1968.2)), as modified and released on August 11, 2006, shall satisfy the requirements of this section, except that compliance with 13 CCR 1968.2(e)(4.2.2)(C), pertaining to 0.02-inch evaporative leak detection, and 13 CCR 1968.2(d)(1.4), pertaining to tampering protection, are not required to satisfy the requirements of this section. Also, the deficiency provisions of 13 CCR 1968.2(k) do not apply. The deficiency provisions of paragraph (i) of this section and the evaporative leak detection requirement of § 86.1806–05(b)(4) apply to manufacturers selecting this paragraph for demonstrating compliance. In addition, demonstration of compliance with 13 CCR 1968.2(e)(15.2.1)(C), to the extent it applies to the verification of proper alignment between the camshaft and crankshaft, applies only to vehicles equipped with variable valve timing.

(k) through (m) [Reserved]. For guidance see § 86.1806–05.

(n) For diesel complete heavy-duty vehicles, in lieu of the malfunction descriptions of § 86.1806–05(b), the malfunction descriptions of this paragraph (n) shall apply. The OBD system must detect and identify malfunctions in all monitored emission-related powertrain systems or components according to the following malfunction definitions as measured and calculated in accordance with test procedures set forth in subpart B of this part (chassis-based test procedures), excluding those test procedures defined as ''Supplemental'' test procedures in § 86.004–2 and codified in §§ 86.158, 86.159, and 86.160.

(1) *Catalysts and particulate traps.*

(i) If equipped, catalyst deterioration or malfunction before it results in exhaust emissions exceeding 3 times the applicable NO_X standard. This requirement applies only to reduction catalysts; monitoring of oxidation catalysts is not required. This monitoring need not be done if the manufacturer can demonstrate that deterioration or malfunction of the system will not result in exceedance of the threshold.

(ii) If equipped with a particulate trap, catastrophic failure of the device must be detected. Any particulate trap whose complete failure results in exhaust emissions exceeding 1.5 times the applicable standard or FEL for NO_X or PM must be monitored for such catastrophic failure. This monitoring need not be done if the manufacturer can demonstrate that a catastrophic failure of the system will not result in exceedance of the threshold.

(2) *Engine misfire.* Lack of cylinder combustion must be detected.

(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, 3 times the applicable NO_X standard; or, 2.5 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, 3 times the applicable NO_X standard; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(iii) NO_X sensors. If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: 5 times the applicable PM standard; or, 4 times the applicable NO_X standard.

(4) [Reserved.]

(5) *Other emission control systems and components.* Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, 3 times the applicable NO_X standard; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard. A functional check, as described in paragraph (n)(6) of this section, may satisfy the requirements of this paragraph (n)(5) provided the manufacturer can demonstrate that a malfunction would not cause emissions to exceed the applicable levels. This demonstration is subject to Administrator approval. For engines equipped with crankcase ventilation (CV), monitoring of the CV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the CV system is unlikely to fail.

(6) *Other emission-related powertrain components.* Any other deterioration or malfunction occurring in an electronic emission-related powertrain system or component not otherwise described in paragraphs (n)(1) through (n)(5) of this section that either provides input to or receives commands from the on-board computer and has a measurable impact on emissions; monitoring of components required by this paragraph (n)(6) must be satisfied by employing electrical circuit continuity checks and rationality checks for computer input components (input values within manufacturer specified ranges based on other available operating parameters), and functionality checks for computer output components (proper functional response to computer commands) except that the Administrator may waive such a rationality or functionality check where the manufacturer has demonstrated infeasibility. Malfunctions are defined as a failure of the system or component to meet the electrical circuit continuity checks or the rationality or functionality checks.

(7) *Performance of OBD functions.* Any sensor or other component deterioration or malfunction which renders that sensor or component incapable of performing its function as part of the OBD system must be detected and identified on engines so equipped.

(o) For diesel complete heavy-duty vehicles, in lieu of the certification provisions of § 86.1806–05(k), the certificate provisions of this paragraph (o) shall apply. For test groups required to have an OBD system, certification will not be granted if, for any test vehicle approved by the Administrator in consultation with the manufacturer, the malfunction indicator light does not

illuminate under any of the following circumstances, unless the manufacturer can demonstrate that any identified OBD problems discovered during the Administrator's evaluation will be corrected on production vehicles.

(1)(i) If monitored for emissions performance—a catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust emissions exceeding 3 times the applicable NO_X standard. This requirement applies only to reduction catalysts.

(ii) If monitored for performance—a particulate trap is replaced with a trap that has catastrophically failed, or an electronic simulation of such.

(2) An engine misfire condition is induced and is not detected.

(3)(i) If so equipped, any oxygen sensor or air-fuel ratio sensor located downstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, 3 times the applicable NO_X standard; or, 2.5 times the applicable NMHC standard.

(ii) If so equipped, any oxygen sensor or air-fuel ratio sensor located upstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, 3 times the applicable NO_X standard; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(iii) If so equipped, any NO_X sensor is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: 5 times the applicable PM standard; or, 4 times the applicable NO_X standard.

(4) [Reserved.]

(5) A malfunction condition is induced in any emission-related engine system or component, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, 3 times the applicable NO_X standard; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(6) A malfunction condition is induced in an electronic emission-related powertrain system or component not otherwise described in this paragraph (o) that either provides input to or receives commands from the on-board computer resulting in a measurable impact on emissions.

17. Section 86.1806–10 is added to Subpart S to read as follows:

§ 86.1806–10 On-board diagnostics for vehicles less than or equal to 14,000 pounds GVWR.

Section 86.1806–10 includes text that specifies requirements that differ from § 86.1806–05 and § 86.1806–07. Where a paragraph in § 86.1806–05 or § 86.1806–07 is identical and applicable to § 86.1806–10, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.1806–05.'' or ''[Reserved]. For guidance see § 86.1806–07.''

(a) *General.*

(1) All light-duty vehicles, light-duty trucks and complete heavy-duty vehicles weighing 14,000 pounds GVWR or less (including MDPVs) must be equipped with an onboard diagnostic (OBD) system capable of monitoring all emission-related powertrain systems or components during the applicable useful life of the vehicle. All systems and components required to be monitored by these regulations must be evaluated periodically, but no less frequently than once per applicable certification test cycle as defined in paragraphs (a) and (d) of Appendix I of this part, or similar trip as approved by the Administrator.

(2) [Reserved.]

(3) An OBD system demonstrated to fully meet the requirements in § 86.010–17 may be used to meet the requirements of this section, provided that such an OBD system also incorporates appropriate transmission diagnostics as may be required under this section, and provided that the Administrator finds that a manufacturer's decision to use the flexibility in this paragraph (a)(3) is based on good engineering judgement.

(b) through (m) [Reserved]. For guidance see § 86.1806–07.

(n) For diesel complete heavy-duty vehicles, in lieu of the malfunction descriptions of § 86.1806–05(b), the malfunction descriptions of this paragraph (n) shall apply. The OBD system must detect and identify malfunctions in all monitored emission-related powertrain systems or components according to the following malfunction definitions as measured and calculated in accordance with test procedures set forth in subpart B of this part (chassis-based test procedures), excluding those test procedures defined as ''Supplemental'' test procedures in § 86.004–2 and codified in §§ 86.158, 86.159, and 86.160.

(1) *Catalysts and particulate traps.*

(i) If equipped, reduction catalyst deterioration or malfunction before it results in exhaust NO_X emissions exceeding the applicable NO_X standard+0.3 g/mi. If equipped, oxidation catalyst deterioration or malfunction before it results in exhaust NMHC emissions exceeding 2.5 times the applicable NMHC standard. These catalyst monitoring requirements need not be done if the manufacturer can demonstrate that deterioration or malfunction of the system will not result in exceedance of the threshold.

(ii) If equipped, diesel particulate trap deterioration or malfunction before it results in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, exhaust NMHC emissions exceeding 2.5 times the applicable NMHC standard. Catastrophic failure of the particulate trap must also be detected. In addition, the absence of the particulate trap or the trapping substrate must be detected.

(2) *Engine misfire.* Lack of cylinder combustion must be detected.

(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, the applicable NO_X standard+0.3 g/mi; or, 2.5 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: The applicable PM standard+0.02 g/mi; or, the applicable NO_X standard+0.3 g/mi; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(iii) *NO_X sensors.* If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, the applicable NO_X standard+0.3 g/mi.

(4) [Reserved.]

(5) *Other emission control systems and components.* Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, the applicable NO_X standard+0.3 g/mi;

or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard. A functional check, as described in paragraph (n)(6) of this section, may satisfy the requirements of this paragraph (n)(5) provided the manufacturer can demonstrate that a malfunction would not cause emissions to exceed the applicable levels. This demonstration is subject to Administrator approval. For engines equipped with crankcase ventilation (CV), monitoring of the CV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the CV system is unlikely to fail.

(6) *Other emission-related powertrain components.* Any other deterioration or malfunction occurring in an electronic emission-related powertrain system or component not otherwise described in paragraphs (n)(1) through (n)(5) of this section that either provides input to or receives commands from the on-board computer and has a measurable impact on emissions; monitoring of components required by this paragraph (n)(6) must be satisfied by employing electrical circuit continuity checks and rationality checks for computer input components (input values within manufacturer specified ranges based on other available operating parameters), and functionality checks for computer output components (proper functional response to computer commands) except that the Administrator may waive such a rationality or functionality check where the manufacturer has demonstrated infeasibility. Malfunctions are defined as a failure of the system or component to meet the electrical circuit continuity checks or the rationality or functionality checks.

(7) *Performance of OBD functions.* Any sensor or other component deterioration or malfunction which renders that sensor or component incapable of performing its function as part of the OBD system must be detected and identified on engines so equipped.

(o) For diesel complete heavy-duty vehicles, in lieu of the certification provisions of § 86.1806–5(k), the certification provisions of this paragraph (o) shall apply. For test groups required to have an OBD system, certification will not be granted if, for any test vehicle approved by the Administrator in consultation with the manufacturer, the malfunction indicator light does not illuminate under any of the following circumstances, unless the manufacturer can demonstrate that any identified OBD problems discovered during the Administrator's evaluation will be corrected on production vehicles.

(1)(i) If monitored for emissions performance—a reduction catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust NO_X emissions exceeding the applicable NO_X standard+0.3 g/mi. Also if monitored for emissions performance—an oxidation catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust NMHC emissions exceeding 2.5 times the applicable NMHC standard.

(ii) If monitored for performance—a particulate trap is replaced with a deteriorated or defective trap, or an electronic simulation of such, resulting in exhaust PM emissions exceeding 4 times the applicable PM standard or exhaust NMHC emissions exceeding 2.5 times the applicable NMHC standard. Also, if monitored for performance—a particulate trap is replaced with a catastrophically failed trap or a simulation of such.

(2) An engine misfire condition is induced and is not detected.

(3)(i) If so equipped, any oxygen sensor or air-fuel ratio sensor located downstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, the applicable NO_X standard+0.3 g/mi; or, 2.5 times the applicable NMHC standard.

(ii) If so equipped, any oxygen sensor or air-fuel ratio sensor located upstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: The applicable PM standard+0.02 g/mi; or, the applicable NO_X standard+0.3 g/mi; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(iii) If so equipped, any NO_X sensor is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, the applicable NO_X standard+0.3 g/mi.

(4) [Reserved.]

(5) A malfunction condition is induced in any emission-related engine system or component, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: 4 times the applicable PM standard; or, the applicable NO_X standard+0.3 g/mi; or, 2.5 times the applicable NMHC standard; or, 2.5 times the applicable CO standard.

(6) A malfunction condition is induced in an electronic emission-related powertrain system or component not otherwise described in this paragraph (o) that either provides input to or receives commands from the on-board computer resulting in a measurable impact on emissions.

18. Section 86.1806–13 is added to Subpart S to read as follows:

§ 86.1806–13 On-board diagnostics for vehicles less than or equal to 14,000 pounds GVWR.

Section 86.1806–13 includes text that specifies requirements that differ from § 86.1806–05, § 86.1806–07 and § 86.1806–10. Where a paragraph in § 86.1806–05 or § 86.1806–07 or § 86.1806–10 is identical and applicable to § 86.1806–13 this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.1806–05.'' or ''[Reserved]. For guidance see § 86.1806–07.'' or ''[Reserved]. For guidance see § 86.1806–10.''

(a)(1) [Reserved]. For guidance see § 86.1806–10.

(a)(2) [Reserved.]

(3) An OBD system demonstrated to fully meet the requirements in § 86.013–17 may be used to meet the requirements of this section, provided that such an OBD system also incorporates appropriate transmission diagnostics as may be required under this section, and provided that the Administrator finds that a manufacturer's decision to use the flexibility in this paragraph (a)(3) is based on good engineering judgement.

(b) through (m) [Reserved]. For guidance see § 86.1806–07.

(n) For diesel complete heavy-duty vehicles, in lieu of the malfunction descriptions of § 86.1806–05(b), the malfunction descriptions of this paragraph (n) shall apply. The OBD system must detect and identify malfunctions in all monitored emission-related powertrain systems or components according to the following malfunction definitions as measured and calculated in accordance with test procedures set forth in subpart B of this part (chassis-based test procedures), excluding those test procedures defined as ''Supplemental'' test procedures in § 86.004–2 and codified in §§ 86.158, 86.159, and 86.160.

(1) *Catalysts and particulate traps.*

(i) If equipped, reduction catalyst deterioration or malfunction before it results in exhaust NO_X emissions exceeding the applicable NO_X

standard+0.3 g/mi. If equipped, oxidation catalyst deterioration or malfunction before it results in exhaust NMHC emissions exceeding 2 times the applicable NMHC standard. These catalyst monitoring requirements need not be done if the manufacturer can demonstrate that deterioration or malfunction of the system will not result in exceedance of the threshold.

(ii) If equipped, diesel particulate trap deterioration or malfunction before it results in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.04 g/mi; or, exhaust NMHC emissions exceeding 2 times the applicable NMHC standard. Catastrophic failure of the particulate trap must also be detected. In addition, the absence of the particulate trap or the trapping substrate must be detected.

(2) *Engine misfire*. Lack of cylinder combustion must be detected.

(3)(i) *Oxygen sensors and air-fuel ratio sensors downstream of aftertreatment devices*. If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.04 g/mi; or, the applicable NO_X standard+0.3 g/mi; or, 2 times the applicable NMHC standard.

(ii) *Oxygen sensors and air-fuel ratio sensors upstream of aftertreatment devices*. If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.02 g/mi; or, the applicable NO_X standard+0.3 g/mi; or, 2 times the applicable NMHC standard; or, 2 times the applicable CO standard.

(iii) *NO_X* sensors. If equipped, sensor deterioration or malfunction resulting in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.04 g/mi; or, the applicable NO_X standard+0.3 g/mi.

(4) [Reserved.]

(5) *Other emission control systems and components*. Any deterioration or malfunction occurring in an engine system or component directly intended to control emissions, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.02 g/mi; or, the applicable NO_X standard+0.3 g/mi; or, 2 times the applicable NMHC standard; or, 2 times the applicable CO standard. A functional check, as described in paragraph (n)(6) of this section, may satisfy the requirements of this paragraph (n)(5) provided the manufacturer can demonstrate that a malfunction would not cause emissions to exceed the applicable levels. This demonstration is subject to Administrator approval. For engines equipped with crankcase ventilation (CV), monitoring of the CV system is not necessary provided the manufacturer can demonstrate to the Administrator's satisfaction that the CV system is unlikely to fail.

(6) *Other emission-related powertrain components*. Any other deterioration or malfunction occurring in an electronic emission-related powertrain system or component not otherwise described in paragraphs (n)(1) through (n)(5) of this section that either provides input to or receives commands from the on-board computer and has a measurable impact on emissions; monitoring of components required by this paragraph (n)(6) must be satisfied by employing electrical circuit continuity checks and rationality checks for computer input components (input values within manufacturer specified ranges based on other available operating parameters), and functionality checks for computer output components (proper functional response to computer commands) except that the Administrator may waive such a rationality or functionality check where the manufacturer has demonstrated infeasibility. Malfunctions are defined as a failure of the system or component to meet the electrical circuit continuity checks or the rationality or functionality checks.

(7) *Performance of OBD functions*. Any sensor or other component deterioration or malfunction which renders that sensor or component incapable of performing its function as part of the OBD system must be detected and identified on engines so equipped.

(o) For diesel complete heavy-duty vehicles, in lieu of the certification provisions of paragraph (k) of this section, the certification provisions of this paragraph (o) shall apply. For test groups required to have an OBD system, certification will not be granted if, for any test vehicle approved by the Administrator in consultation with the manufacturer, the malfunction indicator light does not illuminate under any of the following circumstances, unless the manufacturer can demonstrate that any identified OBD problems discovered during the Administrator's evaluation will be corrected on production vehicles.

(1)(i) If monitored for emissions performance—a reduction catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust NO_X emissions exceeding the applicable NO_X standard+0.3 g/mi. Also if monitored for emissions performance—an oxidation catalyst is replaced with a deteriorated or defective catalyst, or an electronic simulation of such, resulting in exhaust NMHC emissions exceeding 2 times the applicable NMHC standard.

(ii) If monitored for performance—a particulate trap is replaced with a deteriorated or defective trap, or an electronic simulation of such, resulting in exhaust PM emissions exceeding the applicable standard+0.04 g/mi or exhaust NMHC emissions exceeding 2 times the applicable NMHC standard. Also, if monitored for performance—a particulate trap is replaced with a catastrophically failed trap or a simulation of such.

(2) An engine misfire condition is induced and is not detected.

(3)(i) If so equipped, any oxygen sensor or air-fuel ratio sensor located downstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.04 g/mi; or, the applicable NO_X standard+0.3 g/mi; or, 2 times the applicable NMHC standard.

(ii) If so equipped, any oxygen sensor or air-fuel ratio sensor located upstream of aftertreatment devices is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.02 g/mi; or, the applicable NO_X standard+0.3 g/mi; or, 2 times the applicable NMHC standard; or, 2 times the applicable CO standard.

(iii) If so equipped, any NO_X sensor is replaced with a deteriorated or defective sensor, or an electronic simulation of such, resulting in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.04 g/mi; or, the applicable NO_X standard+0.3 g/mi.

(4) [Reserved.]

(5) A malfunction condition is induced in any emission-related engine system or component, including but not necessarily limited to, the exhaust gas recirculation (EGR) system, if equipped, and the fuel control system, singularly resulting in exhaust emissions exceeding any of the following levels: the applicable PM standard+0.02 g/mi; or, the applicable NO_X standard+0.3 g/mi; or, 2 times the applicable NMHC standard; or, 2 times the applicable CO standard.

(6) A malfunction condition is induced in an electronic emission-related powertrain system or component not otherwise described in this

paragraph (o) that either provides input to or receives commands from the on-board computer resulting in a measurable impact on emissions.

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LIST OF PUBLIC LAWS

This is the first in a continuing list of public bills from the current session of Congress which have become Federal laws. It may be used in conjunction with "PLUS" (Public Laws Update Service) on 202–741–6043. This list is also available online at *http://www.archives.gov/federal-register/laws.html*.

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S. 159/P.L. 110–1

To redesignate the White Rocks National Recreation Area in the State of Vermont as the "Robert T. Stafford White Rocks National Recreation Area". (Jan. 17, 2007; 121 Stat. 3)

A cumulative list of Public Laws for the second session of the 109th Congress will be published in the **Federal Register** on January 31, 2007.

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