



# Federal Register

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**Tuesday,  
June 8, 2010**

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## **Part III**

# **Environmental Protection Agency**

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**40 CFR Parts 60, 1039, 1042, et al.  
Standards of Performance for Stationary  
Compression Ignition and Spark Ignition  
Internal Combustion Engines; Proposed  
Rule**

**ENVIRONMENTAL PROTECTION  
AGENCY**
**40 CFR Parts 60, 1039, 1042, 1065, and  
1068**
**[EPA-HQ-OAR-2010-0295, FRL-9156-4]**
**RIN 2060-AP67**
**Standards of Performance for  
Stationary Compression Ignition and  
Spark Ignition Internal Combustion  
Engines**
**AGENCY:** Environmental Protection  
Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing revisions to the standards of performance for new stationary compression ignition internal combustion engines under section 111(b) of the Clean Air Act. The proposed rule would implement more stringent standards for stationary compression ignition engines with displacement greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder, consistent with recent revisions to standards for similar mobile source marine engines. The action also proposes to provide additional flexibility to owners and operators of affected engines, and would correct minor mistakes in the initial standards of performance. In addition, the action proposes revisions to the requirements for engines with displacement at or above 30 liters per cylinder to align more closely with recent standards for similar mobile source marine engines, and for engines in rural portions of Alaska that are not accessible by the Federal Aid Highway System. Finally, the proposal would make minor revisions to the standards of performance for new stationary spark ignition internal combustion engines to mirror certain revisions proposed for compression ignition engines, which would provide consistency where appropriate for the regulation of stationary internal combustion engines. The proposed standards would reduce nitrogen oxides by an estimated 1,100 tons per year, particulate matter by an estimated 38 tons per year, and hydrocarbons by an estimated 18 tons per year by the year 2030.

**DATES:** Comments must be received on or before August 9, 2010.

*Public Hearing.* If anyone contacts us requesting to speak at a public hearing by June 28, 2010, a public hearing will be held beginning at 10 am on July 8, 2010. If you are interested in attending

the public hearing, contact Ms. Pamela Garrett at (919) 541-7966 to verify whether or not a hearing will be held.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2010-0295, by one of the following methods:

- *http://www.regulations.gov:* Follow the on-line instructions for submitting comments.

- *E-mail:* [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov).

- *Fax:* (202) 566-1741.

- *Mail:* Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 6102T, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Please include a total of two copies. EPA requests a separate copy also be sent to the contact person identified below (*see FOR FURTHER INFORMATION CONTACT*). 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, Attn: Desk Officer for EPA, 735 17th St., NW., Washington, DC 20503.

- *Hand Delivery:* Air and Radiation Docket and Information Center, U.S. EPA, Room B102, 1301 Constitution Avenue, NW., Washington, DC. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

*Instructions:* Direct your comments to Docket ID No. EPA-HQ-OAR-2010-0295. We also rely on documents in Docket ID Nos. EPA-HQ-OAR-2005-0029 and EPA-HQ-OAR-2003-0190 and incorporate those dockets into the record for this proposed rule. EPA's policy is that all comments received will be included in the public 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 <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.

*Public Hearing:* If a public hearing is held, it will be held at EPA's campus located at 109 T.W. Alexander Drive in Research Triangle Park, NC or an alternate site nearby.

*Docket:* EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2010-0295. All documents in the docket are listed in the <http://www.regulations.gov> index. We also rely on documents in Docket ID Nos. EPA-HQ-OAR-2005-0029 and EPA-HQ-OAR-2003-0190, and incorporate those dockets into the record for this proposed rule. 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 and Radiation 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.

**FOR FURTHER INFORMATION CONTACT:** Ms. Melanie King, Energy Strategies Group, Sector Policies and Programs Division (D243-01), U.S. EPA, Research Triangle Park, North Carolina 27711; telephone number (919) 541-2469; facsimile number (919) 541-5450; e-mail address [king.melanie@epa.gov](mailto:king.melanie@epa.gov).

**SUPPLEMENTARY INFORMATION:**

*Regulated Entities.* Categories and entities potentially regulated by this action include:

Category	NAICS <sup>1</sup>	Examples of regulated entities
Any manufacturer that produces or any industry using a stationary internal combustion engine as defined in the proposed rule.	2211	Electric power generation, transmission, or distribution.
	622110	Medical and surgical hospitals.
	335312	Motor and generator manufacturing.
	33391	Pump and compressor manufacturing.
	333992	Welding and soldering equipment manufacturing.

<sup>1</sup> North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your engine is regulated by this action, you should examine the applicability criteria in § 60.4200 of the proposed rule. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

*Worldwide Web (WWW)*. In addition to being available in the docket, an electronic copy of the proposed rule will be available on the WWW through the Technology Transfer Network Web site (TTN). Following signature, EPA will post a copy of the proposed rule on the TTN's policy and guidance page for newly proposed or promulgated rules at <http://www.epa.gov/ttn/oarpg>. The TTN provides information and technology exchange in various areas of air pollution control.

#### What should I consider as I prepare my comments for EPA?

1. *Submitting CBI*. Do not submit this information to EPA through EDOCKET, regulations.gov or e-mail. Send or deliver information identified as CBI to only the following address: Ms. Melanie King, c/o OAQPS Document Control Officer (Room C404-02), U.S. EPA, Research Triangle Park, NC 27711, Attention Docket ID No. EPA-HQ-OAR-2010-0295. 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:

- a. Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- b. Follow directions. The EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- c. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- d. Describe any assumptions and provide any technical information and/or data that you used.
- e. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- f. Provide specific examples to illustrate your concerns, and suggest alternatives.
- g. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- h. Make sure to submit your comments by the comment period deadline identified.

*Docket*. The docket number for the proposed new source performance standards (NSPS) is Docket ID No. EPA-HQ-OAR-2010-0295. We will also rely on documents in Docket Nos. EPA-HQ-OAR-2005-0029 and EPA-HQ-OAR-2003-0190.

*Organization of This Document*. The following outline is provided to aid in locating information in the preamble.

- I. Background
  - A. Initial New Source Performance Standards
  - B. Events Following Promulgation of Initial NSPS
- II. Summary of Proposed Amendments
  - A. Standards for New Engines With Displacement Greater Than or Equal to 10 l/cyl and Less Than 30 l/cyl
  - B. Compliance Requirements for Owners and Operators
  - C. Temporary Replacement Engines
  - D. Standards for Engines With Displacement Greater Than or Equal to 30 l/cyl
  - E. Requirements for Engines Located in Rural Alaska
  - F. Reconstruction
  - G. Minor Corrections and Revisions
- III. Summary of Environmental, Energy and Economic Impacts

- A. What are the air quality impacts?
- B. What are the cost impacts?
- C. What are the economic impacts?
- D. What are the non-air health, environmental and energy impacts?
- IV. Solicitation of Public Comments and Participation
- V. Statutory and Executive Order Reviews
  - A. Executive Order 12866: Regulatory Planning and Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act
  - D. Unfunded Mandates Reform Act of 1995
  - E. Executive Order 13132: Federalism
  - F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
  - G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks
  - H. Executive Order 13211: Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use
  - I. National Technology Transfer and Advancement Act
  - J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

#### I. Background

##### A. Initial New Source Performance Standards

This action proposes revisions to NSPS for new compression ignition (CI) stationary internal combustion engines (ICE). The NSPS were initially published on July 11, 2006 (71 FR 39153). New source performance standards implement section 111(b) of the Clean Air Act (CAA), and are issued for categories of sources which cause, or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare. The standards apply to new stationary sources of emissions, *i.e.*, sources whose construction, reconstruction, or modification begins after a standard for those sources is proposed.

For the first time, the NSPS put Federal restrictions on emissions of particulate matter (PM), oxides of nitrogen (NO<sub>x</sub>), non-methane hydrocarbons (NMHC) and carbon monoxide (CO) from new stationary CI engines. The NSPS also restricted the level of sulfur permitted in diesel fuel used in new stationary CI engines. The

levels in the NSPS were generally based on standards promulgated in previous rules for similar nonroad (*i.e.*, mobile off-highway) engines. For larger engines with displacement greater than or equal to 10 liters per cylinder (l/cyl) and less than 30 l/cyl, the levels were based on standards for similar marine engines. EPA noted in the proposed rule (70 FR 39870) that it was reviewing the possibility of promulgating more stringent standards for such marine engines in the near future and would review whether to revise the standards for stationary engines with displacement greater than or equal to 10 l/cyl and less than 30 l/cyl when the more stringent standards for marine engines with displacement greater than or equal to 10 l/cyl and less than 30 l/cyl were promulgated. For engines with displacement greater than or equal to 30 l/cyl, the standards were based on evidence collected for those specified engines.

The standards for emergency engines were less stringent than those for non-emergency engines, given questions regarding the use of emission reduction aftertreatment technologies for such engines and the fact that such engines are rarely used, except in case of emergency. EPA also promulgated less stringent standards, and no fuel sulfur restrictions, for engines in U.S. Pacific territories where low sulfur fuel may be difficult to receive. However, these less stringent standards did not apply to engines at or above 30 l/cyl. Similarly, EPA delayed the low sulfur fuels requirement until December 1, 2010, for rural areas of Alaska not accessible by the Federal Aid Highway System (FAHS), and allowed the Governor of Alaska to submit an alternative plan for implementing the NSPS for public utilities located in these rural areas of Alaska.

EPA estimated that the NSPS would reduce NO<sub>x</sub> emissions from stationary CI ICE by an estimated 38,000 tons per year (tpy), PM emissions by about 3,000 tpy, NMHC emissions by about 600 tpy, sulfur dioxide (SO<sub>2</sub>) emissions by an estimated 9,000 tpy, and CO emissions by approximately 18,000 tpy in the year 2015. EPA estimated that emissions of hazardous air pollutants would be reduced by approximately 93 tons in the year 2015. EPA estimated the NSPS would reduce NO<sub>x</sub> emissions from stationary CI ICE by an estimated 270,000 tpy, PM emissions by about 17,000 tpy, NMHC emissions by about 8,000 tpy, SO<sub>2</sub> emissions by an estimated 24,000 tpy, and CO emissions

by approximately 95,000 tpy in the year 2030.

For the vast majority of engines, compliance requirements, particularly testing requirements, are primarily geared towards the manufacturers of the engines, not the owners and operators of engines. The engines had to be tested, certified and labeled prior to installation. Owners and operators are, however, required to operate and maintain their engines according to the written instructions of the engine manufacturers or according to procedures developed by the owner/operators and approved by the manufacturer.

#### *B. Events Following Promulgation of Initial NSPS*

Following promulgation of the initial NSPS, EPA received several comments from interested parties regarding aspects of the final rule. In particular, engine manufacturers stated their belief that the standards promulgated for engines with displacement greater than or equal to 30 l/cyl were not feasible, especially those located at areas without requirements for low sulfur diesel fuel. Engine manufacturers also noted some minor errors in the standards as published.

The American Petroleum Institute (API) petitioned for review of the final NSPS, and stated to EPA that, among other concerns, API believed that the compliance requirements did not allow owner and operators enough flexibility to use operation and maintenance procedures, different from those recommended by manufacturers, that would provide good emission control practice for minimizing emissions. API also had other comments regarding the final rule, including concern regarding use of the term "useful life" in the stationary engine context, and concern that temporary portable engines would be treated as subject to NSPS requirements beyond the requirements for nonroad engines.

On January 18, 2008, EPA published a final rule containing separate standards of performance for stationary spark ignition (SI) engines. (73 FR 3567) While these regulations are distinct from the standards of performance for CI engines, certain aspects of these regulations, particularly regarding compliance and definitions, are intended to be consistent with the regulations promulgated for CI engines.

Additionally, on June 30, 2008, EPA published more stringent standards for new locomotives and for new CI marine vessels under 40 CFR parts 1033 and

1042, respectively, including marine vessel engines with displacement greater than or equal to 10 l/cyl and less than 30 l/cyl. (73 FR 37095) The rule promulgated two new tiers of standards for newly manufactured marine CI engines at or above 600 kilowatt (KW) (800 horsepower (HP)), the second of which was based on the application of catalytic aftertreatment technology.

Further, on April 30, 2010, EPA promulgated final fuel requirements and standards regulating emissions from marine engines with displacement above 30 l/cyl. (75 FR 22896) These requirements are equivalent to the limits adopted by the International Maritime Organization (IMO) in October 2008 as an amendment to Annex VI of the International Convention for the Prevention of Pollution from Ships (also called MARPOL Annex VI).

Finally, on October 31, 2008, the State of Alaska, pursuant to the provision in the final rule allowing it to request alternative provisions for rural Alaska, requested that EPA make certain changes in its requirements to account for circumstances in rural Alaska that are different from those in the rest of the United States. Alaska's specific recommendations are discussed below.

## **II. Summary of Proposed Amendments**

### *A. Standards for New Engines With Displacement Greater Than or Equal to 10 l/cyl and Less Than 30 l/cyl*

We are proposing to incorporate the recently-promulgated standards for new marine engines into our standards for new stationary engines with displacement greater than or equal to 10 l/cyl and less than 30 l/cyl. The standards were found to be feasible for the marine engines covered by those requirements. As we discussed in the original NSPS final rule, stationary engines in this displacement range are similar in design to marine CI engines and are generally certified to marine standards. EPA is, therefore, basing the proposed revised standards for non-emergency stationary CI ICE with a displacement between 10 l/cyl and 30 l/cyl on the technologies identified in the recent rulemaking to be used to meet the emission standards for marine CI engines.

The proposed standards would not take effect until 2013, at the earliest. The standards are summarized in the tables in this preamble. The first tier of standards divides these engines by displacement. The second divides the engines by maximum engine power.

TABLE II-1—FIRST TIER STANDARDS FOR STATIONARY CI ENGINES WITH A DISPLACEMENT ≥10 AND <30 LITERS PER CYLINDER <sup>a</sup>

Engine size—liters per cylinder, rated power	PM g/HP-hr (g/KW-hr)	NO <sub>x</sub> + HC <sup>b</sup> g/HP-hr (g/KW-hr)	Year
10.0 ≤ displacement <15.0, <3,700 KW .....	0.10 (0.14)	4.6 (6.2)	2013
15.0 ≤ displacement <20.0, <3,700 KW .....	<sup>c</sup> 0.20 (0.27)	5.2 (7.0)	2014
20.0 ≤ displacement <25.0, <3,700 KW .....	0.20 (0.27)	7.3 (9.8)	2014
25.0 ≤ displacement <30.0, <3,700 KW .....	0.20 (0.27)	8.2 (11.0)	2014

<sup>a</sup> See note (c) of Table II-2 for optional standards.

<sup>b</sup> NO<sub>x</sub> + HC standards do not apply to 2,000 KW to 3,700 KW engines.

<sup>c</sup> For engines below 3,300 KW in this group, the PM standard is 0.25 g/HP-hr (0.34 g/KW-hr).

TABLE II-2—SECOND TIER STANDARDS FOR STATIONARY CI ENGINES WITH A DISPLACEMENT ≥10 AND <30 LITERS PER CYLINDER

Engine size, rated power	PM g/HP-hr (g/KW-hr)	NO <sub>x</sub> + HC <sup>b</sup> g/HP-hr (g/KW-hr)	HC g/HP-hr (g/KW-hr)	Year
≥ 3,700 KW .....	<sup>a</sup> 0.09 (0.12)	1.3 (1.8)	0.14 (0.19)	<sup>c</sup> 2014
2,000 ≤ KW < 3,700 .....	0.04 (0.06)	1.3 (1.8)	0.14 (0.19)	<sup>b,c</sup> 2016
1,400 ≤ KW < 2,000 .....	0.03 (0.04)	1.3 (1.8)	0.14 (0.19)	<sup>c,d</sup> 2014
600 ≤ KW < 1,400 .....	0.03 (0.04)	1.3 (1.8)	0.14 (0.19)	<sup>c</sup> 2016 <sup>b</sup> 2017

<sup>a</sup> This standard is 0.19 g/HP-hr (0.25 g/KW-hr) for engines with 15–30 liter/cylinder displacement.

<sup>b</sup> Optional compliance start dates can be used within these model years.

<sup>c</sup> Option: 1st Tier PM/NO<sub>x</sub> + HC at 0.10/5.8 g/HP-hr (0.14/7.8 g/KW-hr) in 2012, and 2nd Tier in 2015.

<sup>d</sup> The 1st Tier PM standards continue to apply for these engines in model years 2014 and 2015 only.

The first tier of standards is based on engine-based technologies already in use or expected to be used for other mobile and stationary engines (*e.g.*, improved fuel injection, engine mapping, and calibration optimization), as well as the use of ultra low sulfur (*i.e.*, 15 parts per million (ppm) sulfur) diesel (ULSD). The second tier of standards is expected to be met with the use of catalytic exhaust aftertreatment that have already been used for other similar mobile and stationary engines, like catalyzed diesel particulate filters (CDPF) and selective catalytic reduction (SCR).

**B. Compliance Requirements for Owners and Operators**

In the original final NSPS, EPA required all engines to be installed, configured, operated, and maintained according to the specifications and instructions provided by the engine manufacturer. EPA also allowed the option for owners and operators to follow procedures developed by the owner or operator that have been approved by the engine manufacturer for cases where site-specific conditions may require changes to the manufacturer's typical guidelines.

Several parties objected to this requirement. According to the parties, this requirement restricts owners and operators from using the most appropriate methods for installing, operating and maintaining engines in

the field. The parties claim that owners and operators are in the best position to determine the most appropriate method of installing, operating and maintaining engines in the field and have more experience in doing so than engine manufacturers, and that operation and maintenance provisions in manufacturer manuals are often too stringent and inflexible to be required in binding regulations.

Based on the comments and information received during and after the rulemakings for both the CI and SI NSPS, EPA believes it is not appropriate to require owners and operators to follow manufacturer operation and maintenance procedures without allowing alternative options for owners and operators. Therefore, we are proposing to revise the regulations to allow owners and operators to develop their own operation and maintenance plans as an alternative to following manufacturer operation and maintenance procedures. However, if an owner/operator decides to take this approach, EPA will need greater assurance that the engine is meeting emission requirements. Thus, owner/operators using this approach will generally be subject to further testing of their engines and will be required to keep maintenance plans and records. EPA will consider such engines to be operating in a non-certified manner. Engines greater than 500 HP will be

required to conduct a performance test within 1 year of startup (or within 1 year of changing the manufacturer's recommended configuration or settings for the engine) to demonstrate compliance with the emission standards, and will also have to conduct subsequent performance testing every 8,760 hours or 3 years (whichever comes first) thereafter. These engines will in addition be required to keep a maintenance plan and records of conducted maintenance.

Engines greater than or equal to 100 HP and less than or equal to 500 HP will be required to conduct a performance test within 1 year of startup (or within 1 year of changing the manufacturer's recommended configuration or settings for the engine) to demonstrate compliance with the emission standards and will in addition be required to keep a maintenance plan and records of conducted maintenance. Engines below 100 HP operating in a non-certified manner will not have to conduct further performance testing, but are required to keep a maintenance plan and records.

Owners and operators will also have the ability to adjust engine settings outside of manufacturer settings as long as they ensure the engines comply with the standards at those settings with a performance test.

Parties also noted that the operation and maintenance requirements extended beyond emission-related operation and maintenance and

extended to operation and maintenance of all aspects of the engine, which the parties believed should be beyond the scope of the regulation. EPA agrees that the operation and maintenance requirements of the NSPS should be restricted to emission-related operation and maintenance, and is proposing to revise the regulations accordingly.

Finally, one party has reported that owners and operators of engines in marine locations often need to use engines that meet the marine nonroad engine standards, but that the current NSPS requires the engine, if the engine is on a stationary platform rather than a ship, to meet the standards for land-based engines, rather than marine engines. EPA has not proposed to change the current regulation, but requests comment on the need for stationary engines in marine offshore settings to use engines meeting the marine engine standards, rather than land-based engine standards. Based on the comments received, EPA may decide to revise this requirement in the final rule.

#### C. Temporary Replacement Engines

EPA received comments during and after the initial CI NSPS rule and during the SI NSPS rule indicating that there was some confusion regarding the status of temporary engines (*i.e.*, generally engines in one location for less than 1 year) under EPA's regulations. Further, there was concern that for those temporary engines that were considered stationary under the definitions of stationary and nonroad engine, because they replaced other stationary engines during periods when the main engines were off-line (*e.g.*, for maintenance work), owners and operators of major sources would have little or no ability to oversee the operations of these temporary engines, as they were generally owned and maintained by other entities.

EPA notes that except for certain instances (*e.g.*, engines at seasonal sources or engines that replace stationary engines at a site), engines in one location for less than 1 year are generally considered to be mobile nonroad engines under EPA's regulatory definitions of nonroad engine and stationary engine, and, therefore, the NSPS and other regulations applicable to stationary engines are not applicable to such engines. Examples of such nonroad engines are engines that are brought to a major source stationary source for less than 1 year for purposes of general maintenance or construction.

Portable engines that replace existing stationary engines on a temporary basis are considered stationary engines. This

provision allows the permitting authority to count the emissions of the temporary unit in the emissions from the stationary source, as it would for the permanent unit. This prevents sources from avoiding the counting of such units in its projected or actual emissions. EPA agrees with comments that with regard to temporary replacement engines, which are generally portable and moved from place to place, it is most appropriate that these engines, though considered stationary, should be allowed under the NSPS to meet requirements for mobile nonroad engines. These sources are not under the long-term control (or in many cases the short-term control) of the local source, and, therefore, it is appropriate to hold them to the requirements for similar sources that are mobile in character. EPA also notes that under the pre-existing general provisions for 40 CFR part 60, the fact that an engine moves from place to place does not, by the sole basis of that movement, make the engine a "new" engine for the purposes of the NSPS.

#### D. Standards for Engines With Displacement Greater Than or Equal to 30 l/cyl

In the final NSPS, EPA required owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 l/cyl to reduce NO<sub>x</sub> emissions by 90 percent or more, or alternatively they had to limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (g/KW-hr) (1.2 grams per HP-hour (g/HP-hr)). They were also required to reduce PM emissions by 60 percent or more, or alternatively they had to limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr). These standards were applicable in all areas, including areas in the Pacific (*e.g.*, Guam) and rural Alaska that were exempted, at least temporarily, from using low sulfur fuel. The standards were also applicable to all engines in this displacement category, whether they were used for emergency or non-emergency purposes.

Following completion of the original rule, EPA received comments from engine manufacturers stating that the standards would be infeasible in areas where low sulfur fuel was not used. The engine manufacturers recommended less stringent standards for areas where low sulfur fuel is not required. EPA also received later comments indicating that the standards were also infeasible for engines in areas with access to lower sulfur fuel, and that the standards

should instead be harmonized with the IMO standards for similar engines in marine vessels. These comments also requested that EPA take the same approach to emergency engines with displacement greater than or equal to 30 l/cyl as EPA takes for smaller emergency engines. For other emergency engines, EPA promulgated emission standards that do not require the use of aftertreatment, given the limited use of the engines, the ineffectiveness of the aftertreatment during startup, and the need for safe, reliable and immediate operation of the engine during emergencies. The comments state that engines of this size have been used as emergency generators at nuclear power plants in order to assure the safe shutdown of the reactor in case of emergency due to their excellent performance and reliability.

Regarding the NO<sub>x</sub> standard for these engines, EPA agrees that it is appropriate to adjust the stringency of the NO<sub>x</sub> standard to match the worldwide NO<sub>x</sub> standard approved in the IMO's Annex VI and promulgated by EPA for marine engines with displacement above 30 l/cyl. While the technology required by the existing NSPS has been used on other stationary engines, EPA realizes the need to provide lead time for the technology to transfer to the largest of engines. The final IMO NO<sub>x</sub> standard is comparable to the existing NSPS NO<sub>x</sub> standard, but provides more leadtime for final implementation. Revising the standard to match the standard for marine engines allows manufacturers to design a single type of engine for both uses. This standard has been substantially reviewed by EPA and other governments and has been found to be feasible in the time provided. For engines installed prior to January 1, 2012, the standard is proposed to be 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 revolutions per minute (rpm);  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when n (maximum engine speed) is 130 or more but less than 2,000 rpm; 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more. For engines installed after January 1, 2012, we are proposing a more stringent standard of 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and 7.7 g/KW-hr (5.7 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm. For engines installed after January 1, 2016, we are proposing a more stringent

standard that presumes the use of aftertreatment. The levels are proposed to be 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;  $9.0 \cdot n^{-0.20}$  g/KW-hr ( $6.7 \cdot n^{-0.20}$  g/KW-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

For engines installed in Pacific island areas that are not required to use lower sulfur fuel, while EPA believes that SCR can be installed on such engines even where high sulfur fuel is being used, EPA agrees that the use of high sulfur fuel, and the presence of other impurities in this type of fuel (*i.e.*, heavy fuel oil), as well as different density and viscosity, make it difficult to achieve similar results from SCR as would occur with lower sulfur fuel. Maintenance of high NO<sub>x</sub> reduction levels is also more difficult when using high sulfur fuel. The use of higher sulfur heavy fuel oil also increases engine-out NO<sub>x</sub> emissions because of the increased levels of contaminants in the fuel. EPA also notes that the areas in question do not have any significant ozone problem. We, therefore, are proposing not to require the more stringent standards that would otherwise apply beginning in 2016 in these areas.

Similarly, we are proposing not to require the more stringent, aftertreatment-forcing NO<sub>x</sub> standards for emergency engines with displacement at or above 30 l/cyl. As the commenters noted, EPA did not require aftertreatment-forcing requirements for other emergency engines due to the limited use of the engines, the ineffectiveness of the aftertreatment during startup, and the need for safe, reliable and immediate operation of the engine during emergencies. EPA agrees that similar concerns are present for emergency engines in this power category.

EPA is also modifying its fuel requirements for engines with displacement at or above 30 l/cyl. The final rule promulgated by EPA for marine engines with displacement above 30 l/cyl required those engines to use fuel meeting a 1,000 ppm sulfur level beginning in 2014, and also made other revisions to the mobile source fuel requirements that will likely have the effect of making 1,000 ppm sulfur fuel the outlet for diesel fuel that does not meet the 15 ppm sulfur standard generally required for mobile source fuel. Therefore, EPA is revising the fuel sulfur standards for stationary CI engines with displacement at or above 30 l/cyl to a 1,000 ppm sulfur level beginning in 2014.

EPA agrees that the numerical standards for PM promulgated in the final rule would be very difficult, if not impossible, to achieve using high sulfur fuel. EPA therefore agrees that it is appropriate to revise the concentration limit for PM for stationary CI ICE with a displacement of greater than or equal to 30 l/cyl in areas where low sulfur fuel is not required. EPA is proposing a standard of 0.40 g/KW-hr (0.30 g/HP-hr). Given the substantial health concerns associated with diesel PM emissions, EPA believes it is appropriate to require this level for all engines where low sulfur fuel is not required. Similarly, we are proposing to revise the PM standard for emergency engines to 0.40 g/KW-hr (0.30 g/HP-hr), for the reasons provided above regarding NO<sub>x</sub> standards for such engines.

EPA is not proposing to change the PM standard for non-emergency engines in areas where the lower sulfur fuel is available. As EPA explained in the original NSPS, EPA believes this standard is achievable for engines using existing technology and low sulfur fuel. The substantial health risks associated with diesel PM require that these stringent standards remain in place.

#### *E. Requirements for Engines Located in Rural Alaska*

In the initial final NSPS, EPA agreed to delay the sulfur requirements for diesel fuel intended for stationary ICE in rural areas of Alaska not accessible by the FAHS ("rural Alaska") until December 1, 2010, except that any 2011 model year and later stationary CI engines operating in rural Alaska prior to December 1, 2010, would be required to meet the 15 parts per million (ppm) sulfur requirement for diesel fuel. This approach was consistent with the approach that was used for nonroad and highway engines in rural Alaska. EPA also included a special section in the final rule that specified that until December 1, 2010, owners and operators of stationary CI engines located in Alaska should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

In addition, the final regulations included language that allows Alaska to submit for EPA approval through rulemaking process an alternative plan for implementing the requirements of this regulation for public-sector electrical utilities located in rural areas of Alaska not accessible by the FAHS. The alternative plan must be based on the requirements of section 111 of the CAA including any increased risks to human health and the environment and must also be based on the unique

circumstances related to remote power generation, climatic conditions, and serious economic impacts resulting from implementation of the final NSPS.

EPA also included an option in the final rule for owners and operators of pre-2011 model year engines located in remote areas of Alaska to petition the Administrator to use any fuels mixed with used oil that do not meet the fuel requirements in § 60.4207 of the final rule beyond the required fuel deadlines. The owner or operator must show that there is no other place to burn the used oil. Each petition, if approved, is valid for a period of up to 6 months.

EPA communicated with officials from the State of Alaska on several occasions following the promulgation of the final rule, and gave the State of Alaska an extension from the original deadline of January 11, 2008, to provide its alternative plan for rural Alaska to EPA. On October 31, 2008, EPA received Alaska's request for several revisions to the NSPS as it pertains to engines located in the rural part of Alaska not served by the FAHS.

In particular, the State of Alaska requested the following:

- Allow NSPS owner-operator requirements to apply only to model year 2011 and later engines.
- Maintain a December 1, 2010 deadline for transition of regulated engines to ULSD.
- Authorize continued use of single circuit jacketwater marine diesel engines for prime power applications.
- Remove limitations on using fuels mixed with used lubricating oil that do not meet the fuel requirements of 40 CFR part 60, subpart IIII.
- Review emission control design requirements needed to meet new NSPS emission standards, including the possibility of removing or delaying emissions standards requiring advanced exhaust gas emissions aftertreatment technologies until the technology is proven for remote and arctic applications.

EPA agrees that the circumstances in rural Alaska require special rules. EPA is, therefore, proposing several amendments for engines used in rural Alaska:

1. Exempting all pre-2011 model year engines from diesel fuel sulfur requirements;
2. Allowing owners and operators of stationary CI engines located in rural areas of Alaska to use engines certified to marine engine standards, rather than land-based nonroad engine standards;
3. Removing requirements to use aftertreatment devices for NO<sub>x</sub>, in particular, SCR, for engines used in rural Alaska.

In proposing these revisions, EPA notes the following information provided by the State of Alaska. In general, the State notes that over 180 rural communities in Alaska that are not accessible by the FAHS rely on diesel engines and fuel for electricity. These communities are scattered over long distances in remote areas and are not connected to population centers by road or power grid. These communities are located in the most severe arctic environments in the United States.

Regarding the request that owners and operator requirements apply only to model year 2011 and later engines, the State of Alaska focused on two particular requirements for pre-2011 engines: the requirement that pre-2011 engines that are manufactured after April 1, 2006 use ULSD beginning on December 1, 2010; and the requirement that after December 31, 2008, owners and operators may not install engines that do not meet the applicable requirements for 2007 model year engines.

The State of Alaska noted that Alaska village power plants are typically operated by a single part-time operator with an alternate, that there is a high rate of turnover among plant operators, and that operators have limited training, expertise or resources. The State of Alaska notes that pre-2011 engines will all be fueled, prior to December 1, 2011, with the same fuel. The State of Alaska believes that it would greatly simplify operations to coordinate the fuel requirements with the introduction of 2011 model year engines, rather than retroactively requiring some, but not all, earlier engines to meet the fuel requirements. It would also facilitate the smoother transition to ULSD fuel, rather than requiring numerous engines to all meet the requirements at the same time. The State of Alaska noted that there is no technological requirement for pre-model year 2011 engines to use aftertreatment, and thus no technological need to use ULSD. EPA agrees that the requested revision will reduce the complexity of the regulations and that ULSD is not technologically necessary prior to model year 2011. EPA also notes that the requirement to use ULSD for 2011 and later model year engines will eventually lead to a complete turnover of the fuel used in the remote villages. Therefore, EPA is proposing this revision.

The State of Alaska notes that the planning, construction and operation of engines in rural Alaska is complex. The timeframe for these projects, which are coordinated among several governmental entities, typically exceeds 3 years. The State of Alaska notes that

several projects that were designed and funded based on pre-2007 model year engines will not be installed prior to December 31, 2008. Therefore, the State of Alaska requests that the deadline be moved to December 2010. While EPA understands that some extra time may be needed to allow for these pre-existing projects to go forward with pre-2007 engines, EPA does not believe the State of Alaska has justified a 2-year extension, beyond the 2 years already provided in the regulations. However, EPA believes that a 1-year extension would be appropriate. EPA is, therefore, proposing a 1-year extension for owners and operators in rural Alaska to install pre-2007 model year engines.

Regarding its request for continued use of single circuit jacketwater marine diesel engines for prime power applications, the State of Alaska notes that rural villages in Alaska use combined heat and power cogeneration plants, which are vital to their economy, given the high cost of fuel and the substantial need for heat in that climate. Heat recovery systems are used with diesel engines in rural communities to provide heat to community facilities and schools. Marine-jacketed diesel engines are used wherever possible because of their superior heat recovery and thermal efficiency. The State of Alaska has noticed great reductions in heat recovery when using Tier 3 non-marine engines. The State notes that reductions in fuel efficiency will lead to greater fuel use and greater emissions from burning extra heating oil. EPA agrees with the State that there are significant benefits from using marine engines, and is proposing a revision that will allow engines in rural Alaska to use marine-certified engines. However, as the State of Alaska notes, marine-certified engines, particularly those below 800 HP, are not required to meet more stringent requirements for reduction of PM emissions, which is the most significant pollutant of concern in these areas. Therefore, EPA is proposing to require that owners and operators of engines manufactured in model years that would otherwise be certified to Tier 4 PM standards (*e.g.*, model years 2011 and later for engines greater than or equal to 130 KW (175 HP) and less than or equal to 560 KW (750 HP)) must either be certified to Tier 4 standards (whether land-based nonroad or marine) or must install PM reduction technologies on their engines to achieve at least 85 percent reduction in PM.

Regarding the issue of using aftertreatment technologies that the State of Alaska says has not been tested in remote arctic climates, EPA notes that the State of Alaska is particularly

concerned with NO<sub>x</sub> standards that would likely entail the use of SCR in rural Alaska. NO<sub>x</sub> reductions are particularly important in areas where ozone is a concern, because NO<sub>x</sub> is a precursor to ozone. However, the State of Alaska, and rural Alaska in particular, does not have any significant ozone problems. Moreover, the use of SCR entails the supply, storage and use of a chemical reductant, usually urea, that needs to be used properly in order to achieve the expected emissions reductions, and that may have additional operational problems in remote arctic climates. As noted above, these villages are not accessible by the Federal Aid Highway System and are scattered over long distances in remote areas and are not connected to population centers by road or power grid. They are located in the most severe arctic environments in the United States and they rely on stationary diesel engines and fuel for electricity and heating, and these engines need to be in working condition, particularly in the winter. While the availability of reductant is not a problem in the areas on the highway system, its availability in remote villages, particularly in the early years of the Tier 4 program, may be an issue, which is notable given the importance of the stationary engines in these villages. Furthermore, the costs for the acquisition, storage and handling of the chemical reductant would be greater than for engines located elsewhere in the United States due to the remote location and severe arctic climate of the villages. In order to maintain proper availability of the chemical reductant during the harsh winter months, new heated storage vessels may be needed at each engine facility, further increasing the compliance costs for these remote villages. Given the issues that would need to be addressed if SCR were required, and the associated costs of this technology when analyzed under NSPS guidelines, EPA understands the State of Alaska's argument that it is inappropriate to require such standards for stationary engines in rural Alaska.<sup>1</sup> Therefore, EPA is proposing not to require owners and operators of new stationary engines to meet the Tier 4 standards for NO<sub>x</sub> in these areas and is soliciting comment on this decision. However, owners and operators of 2011 and later model year engines that do not

<sup>1</sup> Note that this action applies to stationary engines only; it is unlikely that such an approach would be appropriate for mobile engines, given that they are less permanent in a village and can move in and out of areas as work requires, and because EPA has less ability to enforce such an approach for mobile sources, where EPA does not regulate the owner or operator directly.

meet the Tier 4 PM standards would be required to use PM aftertreatment, as discussed above. The use of PM aftertreatment will also achieve reductions in CO and hydrocarbons.

Finally, regarding allowing owners and operators to blend up to 1.75 percent used oil into the fuel system, the State notes that there are no permitted used oil disposal facilities in rural Alaskan communities. The State believes that it has developed a cost-effective and reliable used-oil blending system that is currently being used in many rural Alaskan communities, disposing of the oil in an environmentally beneficial manner and capturing the energy content of the used oil. The absence of allowable blending would, according to the State, necessitate the shipping out of the used oil and would risk improper disposal and storage, as well as spills.

According to the State, blending waste oil at 1.75 percent or less will keep the fuel within American Society for Testing and Materials (ASTM) specifications if the sulfur content of the waste oil is below 200 ppm. The State acknowledges the need for engines equipped with aftertreatment devices to use fuel meeting the sulfur requirements.

EPA agrees that the limited blending of used oil into the diesel fuel used by stationary engines can be an environmentally beneficial manner of disposing of such oil and may be of little to no concern when kept within appropriate limits. In fact, in EPA's highway diesel regulations (40 CFR 80.522), we allow for the blending of used motor oil into fuel burned in highway engines if the engine was certified to the emission standards with the addition of the used oil, and if the oil is added in a manner consistent with the engine certificate. Nevertheless, EPA believes that there are certain issues that need to be further reviewed if EPA is to include in the final rule a provision allowing used oil to be mixed with diesel fuel in remote areas of Alaska. First, while any provision allowing used oil to be mixed with diesel fuel would need to be carefully circumscribed (*e.g.*, the used oil could be no more than 1.75 percent of mixture and could not have a sulfur level above 200 ppm), EPA would like to have further information on whether, even at such circumscribed levels, mixing used oil into the fuel will have an effect on the operation or maintenance requirements for such engines, particularly engines using PM aftertreatment, and if so, how such changes will be managed by the operators.

Second, on April 29, 2010, EPA proposed a set of regulatory actions under the CAA that address emissions from boilers, process heaters, and certain solid waste incinerators. On the same day, in a related action under the Resource Conservation and Recovery Act (RCRA), EPA proposed to define which non-hazardous secondary materials are "solid waste" for purposes of subtitle D (non-hazardous waste) of RCRA when burned in a combustion unit, since section 129(g)(5) of the CAA provides that "solid waste" shall have the meaning established by the Administrator under RCRA. Under the proposed solid waste rule, used oil that does not meet the on-specification ("on-spec") levels and properties of 40 CFR 279.11 ("off-spec used oil") would be considered a solid waste, unless it is processed to meet the on-spec used oil limits specified in 40 CFR 279.11, and a combustion unit that burns off-spec used oil would be a solid waste incineration unit and would be subject to emission standards under section 129 of the CAA.

Due to these issues, EPA believes that it would not be appropriate at this time to propose to allow the blending of used oil for stationary diesel engines under the NSPS. EPA solicits comment on whether to allow the blending of used oil into diesel fuel under the NSPS in rural areas of Alaska.

#### F. Reconstruction

EPA is proposing to add a definition for "reconstruct" that is specific for the NSPS for stationary CI ICE and stationary SI ICE. EPA is also proposing to add provisions to the NSPS that require reconstructed engines to meet the emission standards for the model year in which the reconstruction occurs if the reconstructed engine meets any of the following criteria:

- The crankshaft is removed as part of the reconstruction; or
- The fixed capital cost of the new and refurbished components exceeds 50 percent of the fixed capital cost of a comparable new engine; or
- The serial number of the engine is removed as part of the reconstruction; or
- The reconstructed engine consists of a previously used engine block with all new components.

The proposed rule also clarifies that the provisions for modified and reconstructed engines apply to anyone who modifies or reconstructs an engine, including engine owners/operators, engine manufacturers, and anyone else. The proposed rule also adds additional clarification regarding what standards are applicable for modified or reconstructed engines.

#### G. Minor Corrections and Revisions

EPA is proposing several minor revisions in this rule to correct mistakes in the initial rule or to clarify the rule. The revisions being proposed are listed below:

- Replacing the term "useful life" with "certified emissions life," for purposes of clarity;
- Revising Table 3 in the in 40 CFR part 60, subpart IIII to account for a mistake in how Table 3 characterized the certification requirements for high speed fire pump engines in the initial final rule;
- Revising the definition of "emergency stationary internal combustion engine," and the allowance for maintenance checks and readiness testing for such engines, to be consistent with the provisions promulgated in the recently completed requirements for existing stationary engines in 40 CFR part 63, subpart ZZZZ;
- Revising the requirement for emergency engines to install non-resettable hour meters such that emergency engines that meet the requirements for non-emergency engines do not have to install the hour meters;
- Revising the applicability provisions to make clearer EPA's requirement that all owners and operators of new sources must meet the deadlines for installation of compliant stationary engines;
- Revising certain provisions of the NSPS for stationary SI engines, particularly concerning definitions and compliance by owners and operators of such engines, to ensure consistency where appropriate for the regulation of stationary ICE; and
- Adding a definition of "installed" to provide clarity to the provisions regarding installing engines produced in previous model years.

### III. Summary of Environmental, Energy and Economic Impacts

#### A. What are the air quality impacts?

The proposed rule would reduce NO<sub>x</sub> emissions from stationary CI ICE between 10 and 30 l/cyl by an estimated 300 tpy, PM emissions by about 8 tpy, and NMHC emissions by about 4 tpy, in the year 2018. EPA estimated emissions reductions for the year 2018 because the year 2018 is the first year the emission standards would be fully implemented for stationary CI engines between 10 and 30 l/cyl. In the year 2030, the proposed rule would reduce NO<sub>x</sub> emissions from stationary CI ICE between 10 and 30 l/cyl by an estimated 1,100 tpy, PM emissions by about 38 tpy, and NMHC emissions by about 18 tpy. Emissions

reductions were estimated for the year 2030 to provide an estimate of what the reductions would be once there has been substantial turnover in the engine fleet. EPA expects very few stationary CI ICE with a displacement of 30 l/cyl or more to be installed per year, and no emissions or emissions reductions have been estimated for these engines.

#### B. What are the cost impacts?

The total costs of the proposed rule are mostly based on the cost associated with purchasing and installing controls on non-emergency stationary CI ICE. The costs of aftertreatment were based on information developed for CI marine engines. Further information on how EPA estimated the total costs of the proposed rule can be found in a memorandum included in the docket (Docket ID. No. EPA-HQ-OAR-2010-0295).

The total national capital cost for the proposed rule is estimated to be approximately \$236,000 in the year 2018, with a total national annual cost of \$142,000 in the year 2018. The year 2018 is the first year the emission standards would be fully implemented for stationary CI engines between 10 and 30 l/cyl. The total national capital cost for the proposed rule in the year 2030 is \$235,000, with a total national annual cost of \$711,000.

#### C. What are the economic impacts?

EPA expects that there will be less than a 0.03 percent increase in price and a similar decrease in product demand associated with this proposal for producers and consumers in 2018. For more information, please refer to the economic impact analysis for this rulemaking in the docket.

#### D. What are the non-air health, environmental and energy impacts?

EPA does not anticipate any significant non-air health, environmental or energy impacts as a result of this proposed rule.

### IV. Solicitation of Comments and Public Participation

EPA seeks full public participation in arriving at its final decisions, and strongly encourages comments on all aspects of this proposed rule from all interested parties. Whenever applicable, full supporting data and detailed analysis should be submitted to allow EPA to make maximum use of the comments. The Agency invites all parties to coordinate their data collection activities with EPA to facilitate mutually beneficial and cost effective data submissions. A redline/strikeout version of the complete

standards of performance for stationary compression ignition engines and for stationary spark ignition engines which shows the changes that are being proposed in this action is available from the rulemaking docket.

EPA is seeking specific comment on the appropriate test method for measuring PM emissions from stationary engines with a displacement greater than or equal to 30 l/cyl. Currently, the NSPS for stationary CI engines requires these engines to be tested using EPA Method 5, which requires the cooling of the engine flue gas to 120 degrees C (248 degrees F). In a letter from the Engine Manufacturers Association (EMA) to EPA dated December 4, 2008 (*see* docket number EPA-HQ-OAR-2010-0295), EMA stated that cooling the flue gas for large stationary engines to the filter holder temperature required by EPA Method 5 will result in measurement results that are non-reproducible. The letter stated that the condensation of semi-volatile organic components from the exhaust gas on the cold surfaces needed to cool the gas will lead to results that are not repeatable. The letter from EMA recommended that engine owners and operators be allowed to use EPA Method 17 or EPA Method 5B in lieu of EPA Method 5. EPA does not believe that the use of EPA Method 5 will lead to non-reproducible results because the particulate deposited on the internal walls of the sampling probe are recovered for weighing; the recovery and inclusion of the particulate deposited in the probe addresses the issue of variations in the deposition location of the condensed semi-volatile compounds. EPA seeks comment on whether EPA Method 5 is the appropriate test method for stationary CI engines with a displacement greater than or equal to 30 l/cyl, and any data to support the claim that the use of Method 5 to test these engines results in large uncertainties and non-reproducible emissions data.

### V. 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.

#### B. Paperwork Reduction Act

This action does not impose any new information collection burden. This action does not impose an information collection burden because the Agency is

not requiring any additional recordkeeping, reporting, notification or other requirements in this proposed rule. The changes being proposed in this action do not affect information collection, but include revisions to emission standards and other minor issues. However, the Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing regulations (40 CFR part 60 subpart A) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2060-0590. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

#### C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this proposed rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. The companies owning facilities with affected stationary ICE can be grouped into small and large categories using Small Business Administration (SBA) general size standard definitions. Size standards are based on industry classification codes (*i.e.*, North American Industrial Classification System, or NAICS) that each company uses to identify the industry or industries in which they operate in. The SBA defines a small business in terms of the maximum employment, annual sales, or annual energy-generating capacity (for electricity generating units—EGUs) of the owning entity. These thresholds vary by industry and are evaluated based on the primary industry classification of the affected companies. In cases where companies are classified by multiple NAICS codes, the most conservative SBA definition

(i.e., the NAICS code with the highest employee or revenue size standard) was used.

In addition, for the electric power generation industry, the small business size standard is an ultimate parent entity defined as having a total electric output of 4 million megawatt-hours (MW-hr) in the previous fiscal year. The specific SBA size standard is identified for each affected industry within the economic impact analysis for the proposal. In this case, we presume the affected engines will all be located in the electric power generation industry.

After considering the economic impacts of this proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities (SISNOSE). We estimate that only one small entity is expected to incur costs associated with this proposed rule, and the annualized costs are less than 0.02 percent of their sales. Hence, we conclude that there is no SISNOSE for this rule.

For more information on the small entity impacts associated with the proposed rule, please refer to the Economic Impact Analysis in the public docket. Although the proposed rule would not have a significant economic impact on a substantial number of small entities, EPA nonetheless tried to reduce the impact of the proposed rule on small entities. When developing the revised standards, EPA took special steps to ensure that the burdens imposed on small entities were minimal. EPA conducted several meetings with industry trade associations to discuss regulatory options and the corresponding burden on industry, such as recordkeeping and reporting. The proposed rule requires the minimum level of testing, monitoring, recordkeeping, and reporting to affected stationary ICE sources necessary to ensure compliance. We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

#### *D. Unfunded Mandates Reform Act of 1995*

This rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any 1 year. Only minimal changes are being proposed by the Agency in this action and where compliance costs are incurred, only a nominal number of stationary CI engines will experience a compliance cost expense. Thus, this

rule is not subject to the requirements of sections 202 or 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. The changes being proposed in this action by the Agency are minimal and mostly affect stationary CI engine manufacturers and will not affect small governments.

#### *E. Executive Order 13132: Federalism*

This action 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 action primarily affects private industry, and does not impose significant economic costs on State or local governments. Thus, Executive Order 13132 does not apply to this action. 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 action from State and local officials.

#### *F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

This proposed rule does not have Tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). It 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 proposed rule. EPA specifically solicits additional comment on this proposed action from Tribal officials.

#### *G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks*

EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. This proposed rule is not subject to Executive Order 13045 because it is based solely on technology performance.

#### *H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This action is not subject to Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not a significant regulatory action under Executive Order 12866.

#### *I. National Technology Transfer and Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This proposed rulemaking does not involve technical standards. Therefore, EPA is not considering the use of any voluntary consensus standards.

#### *J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*

Executive Order 12898 (59 FR 7629, Feb. 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. The changes the Agency is proposing in this action will reduce emissions from certain stationary CI engines, which were previously not controlled as stringently as now. Other changes the Agency is proposing to make have minimal effect on emissions.

List of Subjects

40 CFR Part 60

Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping.

40 CFR Part 1039

Administrative practice and procedure, Air pollution control.

40 CFR Part 1042

Administrative practice and procedure, Air pollution control.

40 CFR Part 1065

Administrative practice and procedure, Air pollution control, Reporting and recordkeeping requirements, Research.

40 CFR Part 1068

Administrative practice and procedure, Air pollution control, Imports, Motor vehicle pollution, Penalties, reporting and recordkeeping requirements, Warranties.

Dated: May 21, 2010.

Lisa P. Jackson, Administrator.

For the reasons stated in the preamble, title 40, chapter I, of the Code of Federal Regulations is proposed to be amended as follows:

PART 60—[AMENDED]

1. The authority citation for part 60 continues to read as follows:

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

Subpart IIII—[AMENDED]

2. Section 60.4200 is amended by revising paragraph (a) and adding paragraph (e) to read as follows:

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

- (i) 2007 or later, for engines that are not fire pump engines;
(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

- (i) Manufactured after April 1, 2006, and are not fire pump engines, or
(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of § 60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

\* \* \* \* \*

(e) Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

3. Section 60.4201 is amended by revising paragraph (d) and adding paragraphs (e) and (f) to read as follows:

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

\* \* \* \* \*

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

- (1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;
(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;
(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the

following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (e) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however they may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

4. Section 60.4202 is amended by removing and reserving paragraph (c) and adding paragraphs (e) through (g) to read as follows:

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

\* \* \* \* \*

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

- (1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;
(2) Their 2013 model year emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and
(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per

cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however they may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

5. Section 60.4203 is revised to read as follows:

**§ 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?**

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§ 60.4201 and 60.4202 during the certified emissions life of the engines.

6. Section 60.4204 is amended by revising paragraph (c) and adding paragraphs (d) and (e) to read as follows:

**§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?**

\* \* \* \* \*

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:

(i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii)  $9.0 \cdot n^{-0.20}$  g/KW-hr ( $6.7 \cdot n^{-0.20}$  g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and

(iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in use must meet the not-to-exceed (NTE) standards as indicated in § 60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

7. Section 60.4205 is amended by revising paragraphs (a) and (d) and adding paragraphs (e) and (f) to read as follows:

**§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?**

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart.

Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

\* \* \* \* \*

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in use must meet the NTE standards as indicated in § 60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards

applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

8. Section 60.4206 is revised to read as follows:

**§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?**

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.

9. Section 60.4207 is amended by revising paragraph (d) to read as follows:

**§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?**

(d) Beginning January 1, 2014, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are not subject to the requirements of paragraph (a) of this section and must use fuel that meets a maximum per-gallon sulfur content of 1,000 ppm.

10. Section 60.4208 is amended by revising paragraphs (g) and (h) and adding paragraph (i) to read as follows:

**§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?**

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not

apply to engines that were removed from one existing location and reinstalled at a new location.

11. Section 60.4209 is amended by revising paragraph (a) to read as follows:

**§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

12. Section 60.4210 is amended by:

- a. Revising paragraph (b);
- b. Revising paragraph (c) introductory text;
- c. Revising paragraph (c)(3)(i);
- d. Revising paragraph (c)(3)(ii); and
- e. Revising paragraph (d) to read as follows:

**§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?**

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in § 60.4201(d) and (e) and § 60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(3) Stationary CI internal combustion engines that meet the requirements of

this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

13. Section 60.4211 is amended:
- a. By revising paragraph (a);
  - b. By revising the second sentence in paragraph (c);
  - c. By redesignating paragraph (e) as paragraph (f);
  - d. By adding a new paragraph (e);
  - e. By revising newly redesignated paragraph (f); and
  - f. By adding paragraph (g) to read as follows:

**§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (f) of this section:

- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(c) \* \* \* The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (f) of this section.

\* \* \* \* \*

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(e) or § 60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4204(e) or § 60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4212. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) If you own or operate an emergency stationary ICE, you must operate the engine according to the conditions described in paragraphs (f)(1) through (4) of this section.

(1) For owners and operators of emergency ICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(2) There is no time limit on the use of emergency stationary ICE in emergency situations.

(3) You may operate your emergency stationary ICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.

(4) You may operate your emergency stationary ICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to

generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(4), as long as the power provided by the financial arrangement is limited to emergency power.

(g) Unless you operate, maintain, install and configure your engine and control device according to the manufacturer's emission-related written instructions and change only those emission-related settings that are permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but performance testing is required only if you do not install and configure your engine and control device according to the manufacturer's emission-related written instructions or if you change emission-related settings in a way that is not permitted by the manufacturer, in either of which case you must conduct an initial performance test within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and

must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup, or within 1 year following the change in emission-related settings or configuration indicated in this paragraph (g)(1)(ii), to demonstrate compliance.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance.

14. Section 60.4212 is amended by revising the introductory text and paragraph (a) and adding paragraph (e) to read as follows:

**§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?**

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

\* \* \* \* \*

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c)(i).

15. Section 60.4215 is amended by revising paragraph (a) and adding paragraph (c) to read as follows:

**§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?**

(a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§ 60.4202 and 60.4205.

\* \* \* \* \*

(c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:

- (1) For engines installed prior to January 1, 2012, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:
  - (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
  - (ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
  - (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:

- (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
- (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

16. Section 60.4216 is amended by revising paragraph (b) and adding paragraphs (c) through (e) to read as follows:

**§ 60.4216 What requirements must I meet for engines used in Alaska?**

\* \* \* \* \*

(b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI engines located in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) with a displacement of

less than 10 liters per cylinder may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise applicable requirements of 40 CFR parts 89 and 1039. Except as indicated in paragraph (c) of this section, the requirements of 40 CFR parts 94 and 1042 that are applicable to manufacturers, owners and operators of stationary CI engines located in areas of Alaska not accessible by the FAHS with a displacement of less than 10 liters per cylinder are the same as the requirements of 40 CFR parts 94 and 1042 indicated in this subpart that are applicable to manufacturers, owners and operators of engines with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(c) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are located in areas of Alaska not accessible by the FAHS may choose to meet the applicable emission standards for emergency engines in § 60.4202 and § 60.4205, and not those for non-emergency engines in § 60.4201 and § 60.4204, except that for all of the following engines, the owner or operator of any such engine that was not certified as meeting Tier 4 PM standards, must meet the applicable requirements for PM in § 60.4201 and § 60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent compared to engine-out emissions:

- (1) Model year 2011 and later model year non-emergency engines with a maximum engine power greater than or equal to 130 KW (175 HP) and less than or equal to 560 KW (750 HP);
- (2) Model year 2012 and later model year non-emergency engines with a maximum engine power greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP);
- (3) Model year 2013 and later model year non-emergency engines with a maximum engine power greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP);
- (4) Model year 2015 and later model year non-emergency engines with a maximum engine power greater than 560 KW (750 HP).

(d) The provisions of § 60.4207 do not apply to owners and operators of pre-2011 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS.

(e) The provisions of § 60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not

accessible by the FAHS until after December 31, 2009.

17. Section 60.4217 is revised to read as follows:

**§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?**

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in § 60.4204 or § 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

18. Section 60.4219 is amended by:

- a. Adding definitions of “Certified emissions life” and “Date of manufacture” in alphabetical order;
- b. Revising the definition of “Emergency stationary internal combustion engine”;
- c. Adding a definition of “Freshly manufactured engine” in alphabetical order;
- d. Adding a definition of “Installed” in alphabetical order;
- e. Revising the definition of “Model year”;
- f. Adding a definition of “Reconstruct” in alphabetical order;
- g. Revising the definition of “Stationary internal combustion engine”; and
- h. Removing the definition of “Useful life”.

The revisions and additions read as follows.

**§ 60.4219 What definitions apply to this subpart?**

\* \* \* \* \*

*Certified emissions life* means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

\* \* \* \* \*

*Date of manufacture* means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the crankshaft is removed as part of the reconstruction or if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable new engine (see the definition of “reconstruct”). An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine serial number was removed (or the engine otherwise loses its identity), or the engine is produced using all new components except for the engine block. In all these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

\* \* \* \* \*

*Emergency stationary internal combustion engine* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or

stationary ICE used to pump water in the case of fire or flood, *etc.* Stationary CI ICE used for peak shaving are not considered emergency stationary ICE. Stationary CI ICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under § 60.4211(e).

\* \* \* \* \*

*Freshly manufactured engine* means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced. Note that this includes an engine that is produced using some previously used parts if it does not retain its original identity.

*Installed* means the engine is placed and secured at the location where it is intended to be operated; piping and wiring for exhaust, fuel, controls, *etc.*, is installed and all connections are made; and the engine is capable of being started.

\* \* \* \* \*

*Model year* means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed

into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

\* \* \* \* \*

*Reconstruct* means to replace or refurbish components of an existing engine to such an extent that the fixed capital cost of the new and refurbished components exceeds 50 percent of the fixed capital cost of a comparable new engine. The fixed capital cost of the new and refurbished components includes the capital cost of each component plus the labor cost for the replacement or refurbishment. For purposes of reconstruction, an existing stationary engine is defined as including those components mounted to or within the cylinder block, the engine housings, and engine mounted components, but excluding ancillary components such as external cooling for fuel supply.

\* \* \* \* \*

*Stationary internal combustion engine* means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

\* \* \* \* \*

19. Table 3 to Subpart III of Part 60 is revised to read as follows:

TABLE 3 TO SUBPART III OF PART 60—CERTIFICATION REQUIREMENTS FOR STATIONARY FIRE PUMP ENGINES

[As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years]

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d) <sup>1</sup>
KW < 75 (HP < 100) .....	2011
75 ≤ KW < 130 (100 ≤ HP < 175) .....	2010
130 ≤ KW ≤ 560 (175 ≤ HP ≤ 750) .....	2009
KW > 560 (HP > 750) .....	2008

<sup>1</sup> Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 KW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

20. Table 8 to subpart III of part 60 is revised to read as follows:

TABLE 8 TO SUBPART IIII OF PART 60—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART IIII  
 [As stated in § 60.4218, you must comply with the following applicable General Provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	Yes.	Additional terms defined in § 60.4219.
§ 60.2	Definitions	Yes	
§ 60.3	Units and abbreviations	Yes.	
§ 60.4	Address	Yes.	
§ 60.5	Determination of construction or modification	Yes.	
§ 60.6	Review of plans	Yes.	
§ 60.7	Notification and Record-keeping	Yes	
§ 60.8	Performance tests	Yes	Except that § 60.7 only applies as specified in § 60.4214(a). § 60.8 only applies to stationary CI ICE in the specific instances, and with the specific timing, that performance tests are contemplated under this subpart IIII.
§ 60.9	Availability of information	Yes.	Requirements are specified in subpart IIII.
§ 60.10	State Authority	Yes.	
§ 60.11	Compliance with standards and maintenance requirements.	No	
§ 60.12	Circumvention	Yes.	Except that § 60.13 only applies to stationary CI ICE with a displacement of ≥30 liters per cylinder.
§ 60.13	Monitoring requirements	Yes	
§ 60.14	Modification	Yes.	For purposes of this subpart, reconstruct is defined in § 60.4219.
§ 60.15(a)	Reconstruction	Yes.	
§ 60.15(b)–(c)	Reconstruction	No	
§ 60.15(d)–(g)	Reconstruction	Yes.	
§ 60.16	Priority list	Yes.	
§ 60.17	Incorporations by reference	Yes.	
§ 60.18	General control device requirements	No.	
§ 60.19	General notification and reporting requirements	Yes.	

**Subpart JJJJ—[Amended]**

21. Section 60.4230 is amended by revising paragraphs (a) introductory text and (a)(5) and adding paragraph (a)(6) to read as follows:

**§ 60.4230 Am I subject to this subpart?**

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the

engine is ordered by the owner or operator.

\* \* \* \* \*

(5) Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.

(6) The provisions of § 60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

\* \* \* \* \*

22. Section 60.4231 is amended by revising paragraph (a) and adding paragraph (g) to read as follows:

**§ 60.4231 What emissions standards must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing such engines?**

(a) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008 to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as follows:

If engine displacement is . . .	And manufacturing dates are . . .	The engine must meet emission standards and related requirements for nonhandheld engines under . . .
(1) below 225 cc	July 1, 2008 to December 31, 2011	40 CFR part 90.
(2) below 225 cc	January 1, 2012 or later	40 CFR part 1054.
(3) at or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR part 90.
(4) at or above 225 cc	January 1, 2011 or later	40 CFR part 1054.

\* \* \* \* \*

(g) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary SI internal combustion engine manufacturers are

not required to certify reconstructed engines; however they may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of

this section that are applicable to the model year, maximum engine power and displacement of the reconstructed stationary SI ICE.

23. Section 60.4233 is amended by revising paragraph (f) to read as follows:

**§ 60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

\* \* \* \* \*

(f) Owners and operators of any modified or reconstructed stationary SI ICE subject to this subpart must meet the requirements as specified in paragraphs (f)(1) through (5) of this section.

(1) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with emission standards in § 60.4231(a) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in § 60.4231(a) applicable to engines manufactured on July 1, 2008.

(2) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline engines and are modified or reconstructed after June 12, 2006, must comply with the emission standards in § 60.4231(b) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in § 60.4231(b) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(3) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in § 60.4231(c). Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in § 60.4231(c) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(4) Owners and operators of stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (d) or (e) of this section, except that such owners and operators of non-emergency engines and emergency engines greater than or equal to 130 HP must meet a nitrogen oxides (NO<sub>x</sub>) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than 100

HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO<sub>x</sub> emission standard of 250 ppmvd at 15 percent oxygen (O<sub>2</sub>), a CO emission standard 540 ppmvd at 15 percent O<sub>2</sub> (675 ppmvd at 15 percent O<sub>2</sub> for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O<sub>2</sub>, where the date of manufacture of the engine is:

(i) Prior to July 1, 2007, for non-emergency engines with a maximum engine power greater than or equal to 500 HP;

(ii) Prior to July 1, 2008, for non-emergency engines with a maximum engine power less than 500 HP;

(iii) Prior to January 1, 2009, for emergency engines.

(5) Owners and operators of stationary SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (e) of this section for stationary landfill/digester gas engines. Engines with maximum engine power less than 500 HP and a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power less than 500 HP manufactured on July 1, 2008. Engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) and a date of manufacture prior to July 1, 2007 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) manufactured on July 1, 2007. Lean burn engines greater than or equal to 500 HP and less than 1,350 HP with a date of manufacture prior to January 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE that are lean burn engines greater than or equal to 500 HP and less than 1,350 HP and manufactured on January 1, 2008.

\* \* \* \* \*

24. Section 60.4241 is amended by revising the first sentence in paragraph (b) to read as follows:

**§ 60.4241 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program?**

\* \* \* \* \*

(b) Manufacturers of engines other than those certified to standards in 40 CFR part 90 or 40 CFR part 1054 must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D-1 cycle of International Organization of Standardization 8178-4: 1996(E) (incorporated by reference, *see* 40 CFR 60.17) or the test cycle requirements specified in Table 3 to 40 CFR 1048.505, except that Table 3 of 40 CFR 1048.505 applies to high load engines only. \* \* \*

\* \* \* \* \*

25. Section 60.4243 is amended by:

- Revising paragraph (a) introductory text;
- Revising paragraph (a)(1);
- Revising paragraph (d); and
- Adding paragraph (i) to read as follows:

**§ 60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in § 60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in § 60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

\* \* \* \* \*

(d) If you own or operate an emergency stationary ICE, you must

operate the engine according to the conditions described in paragraphs (d)(1) through (4) of this section.

(1) For owners and operators of emergency ICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(2) There is no time limit on the use of emergency stationary ICE in emergency situations.

(3) You may operate your emergency stationary ICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.

(4) You may operate your emergency stationary ICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial

arrangement is not limited by this paragraph (d)(4), as long as the power provided by the financial arrangement is limited to emergency power.

\* \* \* \* \*

(i) If you are an owner or operator of a modified or reconstructed stationary SI internal combustion engine and must comply with the emission standards specified in § 60.4233(f), you must demonstrate compliance according to one of the methods specified in paragraphs (i)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4233(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4244. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

26. Section 60.4248 is amended by:

a. Revising the definition of "Certified emissions life";

b. Adding a definition for "Date of manufacture" in alphabetical order;

c. Revising the definition of "Emergency stationary internal combustion engine";

d. Adding a definition for "Freshly manufactured engine" in alphabetical order;

e. Adding a definition for "Installed" in alphabetical order;

f. Revising the definition of "Model year";

g. Adding a definition of "Reconstruct" in alphabetical order;

h. Revising the definition of "Stationary internal combustion engine"; and

i. Revising the definition of "Stationary internal combustion engine test cell/stand" to read as follows:

**§ 60.4248 What definitions apply to this subpart?**

\* \* \* \* \*

*Certified emissions life* means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for

stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

(1) 1,000 hours of operation.

(2) Your recommended overhaul interval.

(3) Your mechanical warranty for the engine.

\* \* \* \* \*

*Date of manufacture* means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the crankshaft is removed as part of the reconstruction or if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable new engine (see the definition of "reconstruct"). An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine serial number was removed (or the engine otherwise loses its identity), or the engine is produced using all new components except for the engine block.

In all these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

\* \* \* \* \*

*Emergency stationary internal combustion engine* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, *etc.* Stationary SI ICE used for peak shaving are not considered emergency stationary ICE. Stationary SI ICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under § 60.4243(d).

\* \* \* \* \*

*Freshly manufactured engine* means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced. Note that this includes an engine that is produced using some previously used parts if it does not retain its original identity.

\* \* \* \* \*

*Installed* means the engine is placed and secured at the location where it is intended to be operated; piping and wiring for exhaust, fuel, controls, *etc.*, is installed and all connections are made; and the engine is capable of being started.

\* \* \* \* \*

*Model year* means the calendar year in which an engine is manufactured (*see* “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (*see* “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (*see* “date of manufacture”).

\* \* \* \* \*

*Reconstruct* means to replace or refurbish components of an existing engine to such an extent that the fixed capital cost of the new and refurbished components exceeds 50 percent of the

fixed capital cost of a comparable new engine. The fixed capital cost of the new and refurbished components includes the capital cost of each component plus the labor cost for the replacement or refurbishment. For purposes of reconstruction, an existing stationary engine is defined as including those components mounted to or within the cylinder block, the engine housings, and engine mounted components, but excluding ancillary components such as external cooling for fuel supply.

\* \* \* \* \*

*Stationary internal combustion engine* means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

*Stationary internal combustion engine test cell/stand* means an engine test cell/stand, as defined in 40 CFR part 63 subpart PPPPP, that tests stationary ICE.

\* \* \* \* \*

27. Table 2 to Subpart JJJJ of Part 60 is revised to read as follows:

TABLE 2 TO SUBPART JJJJ OF PART 60—REQUIREMENTS FOR PERFORMANCE TESTS

[As stated in § 60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to § 60.4244.	a. Limit the concentration of NO <sub>x</sub> in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points; ii. Determine the O <sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location; iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust; iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(1) Method 1 or 1A of 40 CFR part 60, Appendix A or ASTM Method D6522–00(2005) <sup>a</sup> . (2) Method 3, 3A, or 3B <sup>b</sup> of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005) <sup>a</sup> . (3) Method 2 or 19 of 40 CFR part 60. (4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, <i>see</i> § 60.17).	(a) If using a control device, the sampling site must be located at the outlet of the control device. (b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for NO <sub>x</sub> concentration. (c) Measurements to determine moisture must be made at the same time as the measurement for NO <sub>x</sub> concentration.

TABLE 2 TO SUBPART JJJJ OF PART 60—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As stated in § 60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
	<p>b. Limit the concentration of CO in the stationary SI internal combustion engine exhaust.</p>	<p>v. Measure NO<sub>x</sub> at the exhaust of the stationary internal combustion engine</p> <p>i. Select the sampling port location and the number of traverse points;</p> <p>ii. Determine the O<sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location;</p> <p>iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust;</p> <p>iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and</p> <p>v. Measure CO at the exhaust of the stationary internal combustion engine</p>	<p>(5) Method 7E of 40 CFR part 60, appendix A, Method D6522–00(2005),<sup>a</sup> Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, <i>see</i> § 60.17).</p> <p>(1) Method 1 or 1A of 40 CFR part 60, Appendix A or ASTM Method D6522–00(2005)<sup>a</sup>.</p> <p>(2) Method 3, 3A, or 3B<sup>b</sup> of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005)<sup>a</sup>.</p> <p>(3) Method 2 or 19 of 40 CFR part 60.</p> <p>(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, <i>see</i> § 60.17).</p> <p>(5) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00(2005),<sup>a</sup> Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, <i>see</i> § 60.17).</p>	<p>(d) Results of this test consist of the average of the three 1-hour or longer runs.</p> <p>(a) If using a control device, the sampling site must be located at the outlet of the control device.</p> <p>(b) Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO concentration.</p> <p>(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.</p> <p>(d) Results of this test consist of the average of the three 1-hour or longer runs.</p>
	<p>c. Limit the concentration of VOC in the stationary SI internal combustion engine exhaust.</p>	<p>i. Select the sampling port location and the number of traverse points;</p> <p>ii. Determine the O<sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location;</p> <p>iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust;</p> <p>iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and</p>	<p>(1) Method 1 or 1A of 40 CFR part 60, Appendix A.</p> <p>(2) Method 3, 3A, or 3B<sup>b</sup> of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005)<sup>a</sup>.</p> <p>(3) Method 2 or 19 of 40 CFR part 60.</p> <p>(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, <i>see</i> § 60.17).</p>	<p>(a) If using a control device, the sampling site must be located at the outlet of the control device.</p> <p>(b) Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for VOC concentration.</p> <p>(c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.</p>

TABLE 2 TO SUBPART JJJJ OF PART 60—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As stated in § 60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
		v. Measure VOC at the exhaust of the stationary internal combustion engine	(5) Methods 25A and 18 of 40 CFR part 60, appendix A, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 or 40 CFR part 60, appendix A <sup>c,d</sup> , Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see § 60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.

28. Table 3 to Subpart JJJJ of Part 60 is revised to read as follows:

TABLE 3 TO SUBPART JJJJ OF PART 60—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART JJJJ

[As stated in § 60.4246, you must comply with the following applicable General Provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions.	Yes.	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4248.
§ 60.3	Units and abbreviations	Yes.	
§ 60.4	Address	Yes.	
§ 60.5	Determination of construction or modification.	Yes.	
§ 60.6	Review of plans	Yes.	Except that § 60.7 only applies as specified in § 60.4245.
§ 60.7	Notification and Recordkeeping	Yes	
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§ 60.9	Availability of information	Yes.	Requirements are specified in subpart JJJJ.
§ 60.10	State Authority	Yes.	
§ 60.11	Compliance with standards and maintenance requirements.	Yes	
§ 60.12	Circumvention	Yes.	
§ 60.13	Monitoring requirements	No.	For purposes of this subpart, reconstruct is defined in § 60.4248
§ 60.14	Modification	Yes.	
§ 60.15(a)	Reconstruction	Yes.	
§ 60.15(b)–(c)	Reconstruction	No	
§ 60.15(d)–(g)	Reconstruction	Yes.	
§ 60.16	Priority list	Yes.	
§ 60.17	Incorporations by reference	Yes.	
§ 60.18	General control device requirements	No.	
§ 60.19	General notification and reporting requirements.	Yes.	

**PART 1039 —[AMENDED]**

29. The authority citation for part 1039 continues to read as follows:

**Authority:** 42 U.S.C. 7401–7671q.

30. Section 1039.20 is amended by revising paragraph (a) introductory text and paragraph (c) to read as follows:

**§ 1039.20 What requirements from this part apply to excluded stationary engines?**

\* \* \* \* \*

(a) You must add a permanent label or tag to each new engine you produce or import that is excluded under § 1039.1(c) as a stationary engine and is not required by 40 CFR part 60, subpart IIII, to meet the requirements of this part 1039, or the requirements of parts 89, 94

or 1042, that are equivalent to the requirements applicable to marine or land-based nonroad engines for the same model year. To meet labeling requirements, you must do the following things:

\* \* \* \* \*

(c) Stationary engines required by 40 CFR part 60, subpart IIII, to meet the requirements of this part 1039, or part

89, 94 or 1042, must meet the labeling requirements of 40 CFR 60.4210.

**PART 1042 —[AMENDED]**

31. The authority citation for part 1042 continues to read as follows:

**Authority:** 42 U.S.C. 7401–7671q.

32. Section 1042.1 is amended by adding paragraph (h) to read as follows:

**§ 1042.1 Applicability**

\* \* \* \* \*

(h) Starting with the model years noted in Table 1 of this section, all of the subparts of this part, except subpart I, apply as specified in 40 CFR part 60, subpart IIII, to freshly manufactured stationary compression-ignition engines subject to the standards of 40 CFR part 60, subpart IIII, that have a per-cylinder displacement at or above 10 liters and below 30 liters per cylinder. Such engines are considered Category 2 engines for purposes of this part 1042.

**PART 1065—[AMENDED]**

33. The authority citation for part 1065 continues to read as follows:

**Authority:** 42 U.S.C. 7401–7671q.

34. Section 1065.1 is amended by revising paragraphs (a)(3) and (a)(4) to read as follows:

**§ 1065.1 Applicability**

(a) \* \* \*

(3) Nonroad diesel engines we regulate under 40 CFR part 1039 and stationary compression-ignition engines that are certified to the standards in 40 CFR part 1039, as specified in 40 CFR part 60, subpart IIII. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 89 according to § 1065.10.

(4) Marine diesel engines we regulate under 40 CFR part 1042 and stationary compression-ignition engines that are certified to the standards in 40 CFR part 1042, as specified in 40 CFR part 60,

subpart IIII. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 94 according to § 1065.10.

\* \* \* \* \*

**PART 1068—[AMENDED]**

35. The authority citation for part 1068 continues to read as follows:

**Authority:** 42 U.S.C. 7401–7671q.

36. Section 1068.1 is amended by revising paragraph (a)(3) to read as follows:

**§ 1068.1 Does this part apply to me?**

(a) \* \* \*

(3) Stationary compression-ignition engines certified using the provisions of 40 CFR parts 1039 or 1042, as indicated in 40 CFR part 60, subpart IIII.

\* \* \* \* \*

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