



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

4949-A Cox Road, Glen Allen, Virginia 23060

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www.deq.virginia.gov

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

Gerard Seeley, Jr.
Regional Director

March 23, 2007

Mr. Daniel L. Rettig
Health, Safety, and Environmental Specialist
Corporate Office Properties, LP
6711 Columbia Gateway Drive, Suite 300
Columbia, MD 21046-2104

Location Chesterfield County
Registration No. 52173

Dear Mr. Rettig,

Attached is a permit to construct and operate three (3) emergency generators in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on March 14, 2007.

This permit approval to construct and operate shall not relieve Corporate Office Properties, LP of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-200 provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

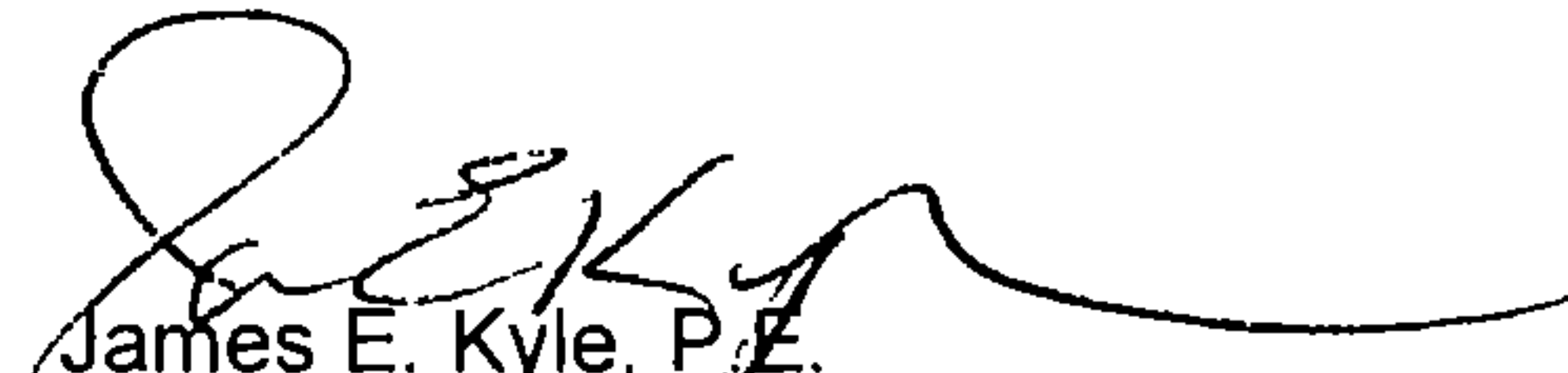
As provided by Rule 2A.2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the regional office at 804-527-5020.

Sincerely,



James E. Kyle, P.E.
Air Permit Manager

JEK/RJR/521730107 NSR

Attachments: Permit
NSPS, Subpart IIII

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Manager/Inspector, Air Compliance



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STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

**This permit includes designated equipment subject to
New Source Performance Standards (NSPS).**

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Corporate Office Properties, LP
6711 Columbia Gateway Drive, Suite 300
Columbia, MD 21046-2104
Registration No : 52173

is authorized to construct and operate

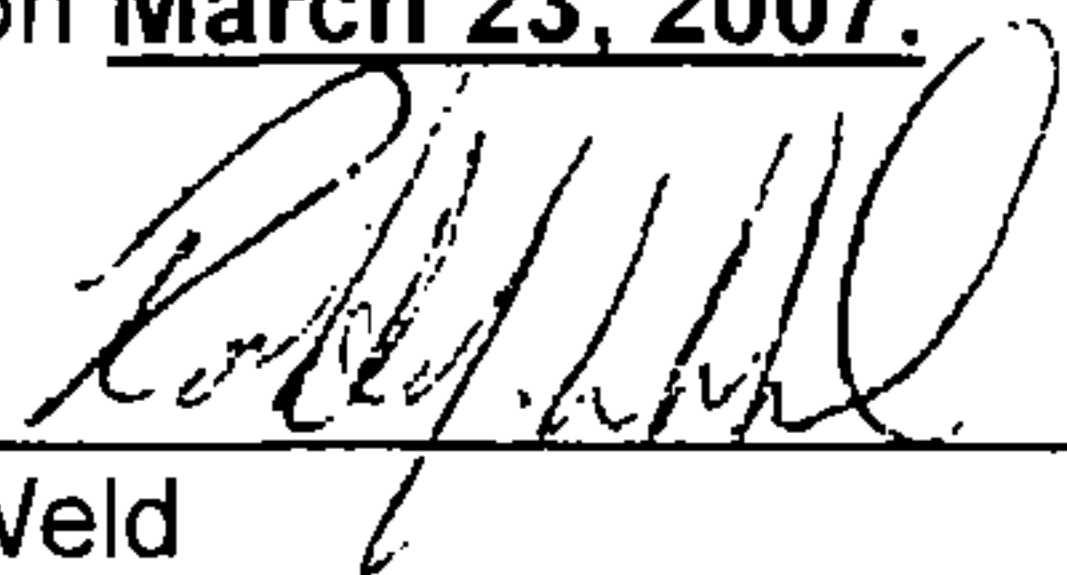
three (3) emergency generators

located at

11751 Meadowville Lane
Chester, Virginia 23836

in accordance with the Conditions of this permit

Approved on **March 23, 2007.**


Robert J. Weld
Deputy Regional Director

Permit consists of 6 pages
Permit Conditions 1 to 20

INTRODUCTION

This permit approval is based on the permit application dated December 29, 2006, including amendment information dated March 5, 2007 and March 14, 2007. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate, process and production data, changes in control equipment, and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

- 1 **Equipment List** - Equipment at this facility consists of the following.

Equipment to be Constructed			
Reference No	Equipment Description	Rated Capacity	Federal Requirements
G-1	Emergency Generator	2,500 KW	NSPS, Subpart IIII
G-2	Emergency Generator	2,500 KW	NSPS, Subpart IIII
G-3	Emergency Generator	2,500 KW	NSPS, Subpart IIII

(9 VAC 80-1180 D 3)

OPERATING LIMITATIONS

- 2 **Operating Hours** - The emergency generators shall each not operate more than 500 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)
- 3 **Fuel** - The approved fuel for the emergency generators is #2 distillate oil. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1180)
- 4 **Fuel** - The distillate oil shall meet the specifications below.

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil.
Maximum sulfur content per shipment **0.5%**

(9 VAC 5-80-1180 and 9 VAC 5-50-260)

- 5 **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
- a The name of the fuel supplier,
 - b The date on which the distillate oil was received,
 - c The quantity of distillate oil delivered in the shipment;
 - d A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil,
 - e The sulfur content of the distillate oil;

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 4. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-1180)

- 6 **Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the NSPS equipment as described in Condition 1 shall be operated in compliance with the requirements of 40 CFR 60, Subpart IIII.
(9 VAC 5-80-1180)

EMISSION LIMITS

- 7 **Process Emission Limits** – Combined emissions from the operation of the emergency generators shall not exceed the limits specified below:

Particulate Matter	7.0 lbs/hr	1.8 tons/yr
PM-10	7.0 lbs/hr	1.8 tons/yr
Sulfur Dioxide	40.7 lbs/hr	10.2 tons/yr
Nitrogen Oxides (as NO ₂)	241.3 lbs/hr	60.3 tons/yr
Carbon Monoxide	55.3 lbs/hr	13.8 tons/yr
Volatile Organic Compounds	6.5 lbs/hr	1.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2, 3, and 4.
(9 VAC 5-80-1180)

- 8 **Visible Emission Limit** - Visible emissions from each emergency generator shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

RECORDS

- 9 **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to
- a Annual hours of operation of each emergency generator, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months
 - b All fuel supplier certifications with each shipment
 - c Results of all stack tests, visible emission evaluations and performance evaluations
 - d Scheduled and unscheduled maintenance and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years
(9 VAC 5-80-1180 and 9 VAC 5-50-50)

- 10 **Emissions Testing** - The facility shall be constructed/modified/installed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided
(9 VAC 5-50-30 F and 9 VAC 5-80-1180)

NOTIFICATIONS

- 11 **Initial Notifications** - The permittee shall furnish written notification to the Director, Piedmont Region of
- a. The actual date on which construction of the emergency generators commenced within 30 days after such date
 - b. The anticipated start-up date of the emergency generators postmarked not more than 60 days nor less than 30 days prior to such date
 - c. The actual start-up date of the emergency generators within 15 days after such date
- (9 VAC 5-50-50 and 9 VAC 5-80-1180)

GENERAL CONDITIONS

- 12 **Permit Invalidity** - This permit to construct the emergency generators shall become invalid, unless an extension is granted by the DEQ, if
- a A program of continuous construction, reconstruction, or modification is not commenced within the latest of the following
 - i 18 months from the date of this permit,

- ii Nine months from the date that the last permit or other authorization was issued from any other governmental entity,
- iii Nine months from the date of the last resolution of any litigation concerning any such permits or authorization, or
- b A program of construction, reconstruction, or modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.
(9 VAC 5-80-1210)

13 Permit Suspension/Revocation - This permit may be suspended or revoked if the permittee

- a Knowingly makes material misstatements in the permit application or any amendments to it,
- b Fails to comply with the conditions of this permit;
- c Fails to comply with any emission standards applicable to a permitted emissions unit, ,
- d Causes emissions from the stationary source which result in violations of , or interfere with the attainment and maintenance of, any ambient air quality standard, or
- e Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted
(9 VAC 5-80-1210 F)

14 Right of Entry - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials

- a To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit,
- b To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations,
- c To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations, and
- d To sample or test at reasonable times

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency
(9 VAC 5-170-130 and 9 VAC 5-80-1180)

15 Maintenance/Operating Procedures – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to process equipment which affect such emissions

- a Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b Maintain an inventory of spare parts
- c Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum
- d Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

- 16 **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record
(9VAC 5-20-180 J and 9 VAC 5-80-1180 D)
- 17 **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Piedmont Region of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Piedmont Region
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)
- 18 **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated
(9 VAC 5-20-180 I and 9 VAC 5-80-1180)
- 19 **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Piedmont Region of the change of ownership within 30 days of the transfer
(9 VAC 5-80-1240)
- 20 **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies
(9 VAC 5-80-1180)

ENVIRONMENT CODIFIED REGULATIONS**TITLE 40—PROTECTION OF ENVIRONMENT****PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES****SUBPART IIII—STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION
INTERNAL COMBUSTION ENGINES**

**Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal
Combustion Engines**

[Subpart IIII added and reserved at 71 FR 38497, July 6, 2006; added at 71 FR 39173, July 11, 2006]

What This Subpart Covers**40 CFR 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) as specified in paragraphs (a)(1) through (3) 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 stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart.

Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

Emission Standards for Manufacturers**40 CFR 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?**

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify their 2007 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 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.

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

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) Stationary CI internal combustion engine manufacturers must certify their 2007 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 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.

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

40 CFR 60.4203 How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacturer?

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

Emission Standards for Owners and Operators

40 CFR 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?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year 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 must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Reduce nitrogen oxides (NO_x) emissions by 90 percent or more, or limit the emissions of NO_x 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)).

(2) 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).

40 CFR 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 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 that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) Reduce NO_x emissions by 90 percent or more, or limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour).

(2) Reduce 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).

40 CFR 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 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

Fuel Requirements for Owners and Operators

40 CFR 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?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(d) 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 Federal Aid Highway System may petition the Administrator for approval to use any fuels mixed with used lubricating oil that do not meet the fuel requirements of paragraphs (a) and (b) of this section. Owners and operators must demonstrate in their petition to the Administrator that there is no other place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

Other Requirements for Owners and Operators

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

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for

2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) 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 (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) 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.

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

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Compliance Requirements

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

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(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 §60.4202(c) using the certification procedures required in 40 CFR part 94 subpart C, and must test their engines as specified in 40 CFR part 94.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 40 CFR 1039.125, 40 CFR 1039.130, 40 CFR 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 or 40 CFR part 94 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.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) 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 part 89, 94 or 1039, 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 part 89, 94 or 1039, 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.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under parts 89, 94, or 1039 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.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words "and stationary" after the word "nonroad" or "marine," as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as "Fire Pump Applications Only".

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

40 CFR 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 operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

- (3) Keeping records of engine manufacturer data indicating compliance with the standards.
- (4) Keeping records of control device vendor data indicating compliance with the standards.
- (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.
- (d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.
 - (1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.
 - (2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
 - (i) Identification of the specific parameters you propose to monitor continuously;
 - (ii) A discussion of the relationship between these parameters and NO_x and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_x and PM emissions;
 - (iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
 - (iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
 - (v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
 - (3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.
- (e) Emergency stationary ICE may be operated 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. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone 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. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Testing Requirements for Owners and Operators

40 CFR 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 (d) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

"Equation 1"

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

40 CFR 60.4213 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 greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (d) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 2})$$

"Equation 2"

Where:

C_i = concentration of NO_x or PM at the control device inlet,

C_o = concentration of NO_x or PM at the control device outlet, and

R = percent reduction of NO_x or PM emissions.

(2) You must normalize the NO_x or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{\text{adj}} = C_d \frac{5.9}{20.9 - \% \text{O}_2} \quad (\text{Eq. 3})$$

"Equation 3"

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_x or PM, uncorrected.

5.9 = 20.9 percent O_2 - 15 percent O_2 , the defined O_2 correction value, percent.

$\% \text{O}_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 4})$$

"Equation 4"

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2 , percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6 \text{ Btu}$).

F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³ /J (dscf/10⁶ Btu).

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 5})$$

"Equation 5"

Where:

X_{CO_2} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂-15 percent O₂, the defined O₂ correction value, percent.

(iii) Calculate the NO_x and PM gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 6})$$

"Equation 6"

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O₂.

C_d = Measured concentration of NO_x or PM, uncorrected.

$\%CO_2$ = Measured CO₂ concentration, dry basis, percent.

(e) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \quad (\text{Eq. 7})$$

"Equation 7"

Where:

ER = Emission rate in grams per KW-hour.

C_d = Measured NO_x concentration in ppm.

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 8})$$

"Equation 8"

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

Notification, Reports, and Records for Owners and Operators

40 CFR 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Special Requirements

40 CFR 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 that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §60.4205. Non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder, must meet the applicable emission standards in §60.4204(c).

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.

40 CFR 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI engines located in areas of Alaska not accessible by the Federal Aid Highway System should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) The Governor of Alaska may submit for EPA approval, by no later than January 11, 2008, an alternative plan for implementing the requirements of 40 CFR part 60, subpart IIII, for public-sector electrical utilities located in rural areas of Alaska not accessible by the Federal Aid Highway System. This alternative plan must be based on the requirements of section 111 of the Clean Air Act 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 40 CFR part 60, subpart IIII. If EPA approves by rulemaking process an alternative plan, the provisions as approved by EPA under that plan shall apply to the diesel engines used in new stationary internal combustion engines subject to this paragraph.

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

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under §60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of §60.4207, 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 §60.4202 or §60.4203 using such fuels.

(b) [Reserved]

General Provisions

40 CFR 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

40 CFR 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and

sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

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 to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

(1) The calendar year in which the engine was originally produced, or

(2) The annual new model production period of the engine manufacturer if it is different than the calendar year.

This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. 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 originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

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 or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart III.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful 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 useful 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).

Tables to Subpart III of Part 60

Table 1 to Subpart III of Part 60.-- Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of < 10 Liters per Cylinder and 2007-2010 Model Year Engines > 2,237 KW (3,000 HP) and With a Displacement of < 10 Liters per Cylinder [As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power <	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines > 2,237 KW (3,000 HP) and with a displacement of < 10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC +	NO X	HC	CO	PM
	NO X	HC	CO	PM	
KW < 8 (HP < 11).....	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8 £ KW < 19 (11 £ HP < 25).....	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19 £ KW < 37 (25 £ HP < 50).....	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37 £ KW < 56 (50 £ HP < 75).....			9.2 (6.9)		
56 £ KW < 75 (75 £ HP < 100).....			9.2 (6.9)		
75 £ KW < 130 (100 £ HP < 175)....			9.2 (6.9)		
130 £ KW < 225 (175 £ HP < 300)...		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225 £ KW < 450 (300 £ HP < 600)...		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450 £ KW £ 560 (600 £ HP £ 750)...		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW > 560 (HP > 750).....		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart III of Part 60.--

Emission Standards for 2008 Model Year and Later

Emergency Stationary CI ICE < 37 KW(50 HP) With a

Displacement of < 10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE < 37 KW (50 HP) with a displacement of < 10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model	NO _x	CO	PM
	year(s)	+ NMHC		
KW < 8 (HP < 11).....	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8 £ KW < 19 (11 £ HP < 25).....	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19 £ KW < 37 (25 £ HP < 50).....	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part60.--

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 en- gines accord- ing to §60.4202(d)
KW < 75 (HP < 100).....	2011
75 £ KW < 130 (100 £ HP < 175).....	2010
130 £ KW £ 560 (175 £ HP £ 750).....	2009
KW > 560 (HP > 750).....	2008

Table 4 to Subpart IIII of Part 60.--

Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power		Model year(s)		NO _x	CO	PM
KW < 8 (HP < 11)		2010 and earlier	10.5	8.0	1.0	
(0.75)				(7.8)	(6.0)	
0.40		2011+		7.5		
(0.30)				(5.6)		
8 £ KW < 19 (11 £ HP < 25)		2010 and earlier	9.5	6.6	0.80	
(0.60)				(7.1)	(4.9)	
0.40		2011+		7.5		
(0.30)				(5.6)		
19 £ KW < 37 (25 £ HP < 50)		2010 and earlier	9.5	5.5	0.80	
.60)				(7.1)	(4.1)	(0
0.30		2011+		7.5		
(0.22)				(5.6)		
37 £ KW < 56 (50 £ HP < 75)		2010 and earlier	10.5	5.0	0.80	
.60)				(7.8)	(3.7)	(0
0.40		2011+ ¹		4.7		
(0.30)				(3.5)		
56 £ KW < 75 (75 £ HP < 100)		2010 and earlier	10.5	5.0	0.80	
				(7.8)	(3.7)	(0

.60)					
	2011+ ¹		4.7	
0.40			(3.5)		
(0.30)					
75 £ KW <					
130 (100	2009 and earlier.....		10.5	5.0	0.80
£ HP <					
175).....			(7.8)	(3.7)	(0.60)
	2010+ ²		4.0	
0.30			(3.0)		
(0.22)					
130 £ KW <					
225 (175	2008 and earlier.....		10.5	3.5	0.54
£ HP <					
300).....			(7.8)	(2.6)	(0.40)
	2009+ ³		4.0	
0.20			(3.0)		
(0.15)					
225 £ KW <					
450 (300	2008 and earlier.....		10.5	3.5	0.54
£ HP <					
600).....			(7.8)	(2.6)	(0.40)
	2009+ ³		4.0	
0.20			(3.0)		
(0.15)					
450 £ KW £					
560 (600	2008 and earlier.....		10.5	3.5	0.54
£ HP £					
750).....			(7.8)	(2.6)	(0.40)
	2009+.....		4.0	
0.20			(3.0)		
(0.15)					
KW > 560 (HP >					
750).....	2007 and earlier.....		10.5	3.5	0.54
			(7.8)	(2.6)	
(0.40)	2008+.....		6.4	
0.20			(4.8)		
(0.15)					

¹For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI

ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

²For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

³In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60.--
Labeling and Recordkeeping Requirements for New Stationary Emergency
Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19 $\text{KW} < 56$ (25 $\text{HP} < 75$).....	2013
56 $\text{KW} < 130$ (75 $\text{HP} < 175$).....	2012
$\text{KW} \geq 130$ ($\text{HP} \geq 175$).....	2011

Table 6 to Subpart IIII of Part 60.--
Optional 3-Mode Test Cycle for Stationary Fire Pump
Engines

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed ¹	Torque (percent) ²	Weighting factors
1.....	Rated.....	100	0.30
2.....	Rated.....	75	0.50
3.....	Rated.....	50	0.20

¹Engine speed: ± 2 percent of point.

²Torque: NFPA certified nameplate HP for 100 percent point. All points should be ± 2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60.--

Requirements for Performance Tests for Stationary CI ICE With a
Displacement of ³ 30 Liters per Cylinder

[As stated in §60.4213, you must comply with the following requirements for
performance tests for stationary CI ICE with a displacement of ³ 30 liters
per cylinder:]

	Complying with	You must	Using	According to the following requirements
For each	the			
	requirement to			
1. Stationary CI internal combustion engine with a displacement of ³ 30 liters per cylinder.	a. Reduce NOX emissions by 90 percent or more.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.....	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A.	(b) Measurements to determine O ₂ must be made at the same time as the measurements for NO _x concentration.

| | | | iii. If | (3) Method 4 of | (c) Measure-
 | | | | necessary, | 40 CFR part 60, | ments to de-
 | | | | measure | appendix A, | termine mois-
 | | | | moisture con-
 | Method 320 of | ture content | |
 | 40 CFR part 63, | must be made at | tent at the in-
 | | | | let and outlet | appendix A, or | the same time
 | | | | of the control | ASTM D 6348-03 | as the measure-
 | | | | device; and, | (incorporated | ments for NO
 | | | | | by reference, | x
 | | | | | see §60.17). | con-
 | | | | | | | centration.
 | | | | iv. Measure NO | (4) Method 7E of | (d) NO x
 | | | | x | 40 CFR part 60, | con-
 | | | | at the inlet | appendix A, | centration must
 | | | | and outlet of | Method 320 of | be at 15
 | | | | the control de-
 | 40 CFR part 63, | percent O | |
 | | | | vice. | appendix A, or | 2,
 | | | | | ASTM D 6348-03 | dry basis. Re-
 | | | | | (incorporated | sults of this
 | | | | | by reference, | test consist of
 | | | | | see §60.17). | the average of
 | | | | | | | the three
 | | | | | | | 1-
 hour or | | | | | longer runs.
 | | | | b. Limit the | 1. Select the | (1) Method 1 or | (a) If using a
 | | | | concentration | sampling port | 1A of 40 CFR | control de-
 | | | | of NO x | location and | part 60, | vice, the
 | | | | in the | the number of | Appendix A..... | sampling site

stationary CI traverse must be lo-

points; internal com- cated at the

bustion en- outlet of the control de-

gine exhaust. vice.

ii. Determine (2) Method 3, (b) Measure-

the O₂ 3A, or 3B of 40 ments to de-

con-

CFR part 60, termine O appendix A. 2

centration of the stationary concentration

internal com-

must be made at

bustion en-

the same time

gine exhaust at as the measure-

the sampling ment for NO

port lo-

x cation; and, con-

centration.

iii. If (3) Method 4 of (c) Measure-

necessary, 40 CFR part 60, ments to de-

measure appendix A, termine mois-

moisture con-

Method 320 of ture content

tent of the 40 CFR part 63, must be made at

stationary in-

appendix A, or the same time

ternal com- ASTM D 6348-03 as the measure-

bustion en-

(incorporated ment for NO

gine exhaust at by reference, x

the sampling see §60.17). con-

			port lo-			
			centration.			
			cation; and,			
			iv. Measure NO	(4) Method 7E of	(d) NO x	
			x	40 CFR part 60,	con-	
			at the exhaust	appendix A,	centration must	
			of the	Method 320 of	be at 15	
			stationary	40 CFR part 63,	percent O	
			internal com-			
appendix A, or	2,		bustion en-	ASTM D 6348-03	dry basis. Re-	
			gine.	(incorporated	sults of this	
				by reference,	test consist of	
				see §60.17).	the average of	
					the three	
					1-	
hour or					longer runs.	
	c. Reduce PM	1. Select the	(1) Method 1 or	(a) Sampling		
	emissions by 60	sampling port	1A of 40 CFR	sites must be		
	percent or	location and	part 60,	located at the		
	more.	the number of	appendix A.	inlet and out-		
		traverse		let of the		
		points;		control de-		
				vice.		

Table 7 to Subpart IIII of Part 60.--

Requirements for Performance Tests for Stationary CI ICE With a

Displacement of ³ 30 Liters per Cylinder

[As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ³ 30 liters

per cylinder:]--Contd.

					According to the
					following
For each	the	You must	Using		requirements
	requirement to				
		ii. Measure O	(2) Method 3,	(b) Measure-	
		2	3A, or 3B of 40	ments to de-	
		at the inlet	CFR part 60,	termine O	
		and outlet of	appendix A.	2	
		the control de-			
	concentration	vice;			must be made at
					the same time
					as the measure-
					ments for PM
					concentra-
					tion.
		iii. If	(3) Method 4 of	(c) Measure-	
		necessary,	40 CFR part 60,	ments to de-	
		measure	appendix A.	termine and	
		moisture con-		moisture con-	
		tent at the in-			
	tent must be	let and outlet			made at the
		of the control			same time as
		device; and			the measure-
					ments for PM
					concentra-
					tion.

		iv. Measure PM	(4) Method 5 of	(d) PM concen-
		at the inlet	40 CFR part 60,	tration must be
		and outlet of	appendix A.	at 15 percent O
		the control		2,
		device.		dry basis. Re-
				sults of this
				test consist of
				the average of
				the three
				1-
hour or				longer runs.
	d. Limit the	i. Select the	(1) Method 1 or	(a) If using a
	concentration	sampling port	1A of 40 CFR	control de-
	of PM in the	location and	part 60,	vice, the
	stationary CI	the number of	Appendix A.	sampling site
	internal com-	traverse		must be lo-
	bustion en-			
points;	gine exhaust.	cated at the		outlet of the
				control de-
				vice.
		ii. Determine	(2) Method 3,	(b) Measure-
		the O ₂	3A, or 3B of 40	ments to de-
		con-		
	CFR part 60,	termine O	appendix A.	2
		centration of		concentration
		the stationary		
		internal com-		
	must be made at			
		bustion en-		
	the same time			

| gine exhaust at | as the measure-
 | the sampling | ments for PM
 | port lo- | concentra-
 | cation; and | tion.
 | iii. If | (3) Method 4 of | (c) Measure-
 | necessary, | 40 CFR part 60, | ments to de-
 | measure | appendix A. | termine mois-
 | moisture con- |
 | ture content | tent of the | must be made at
 | stationary in- |
 | the same time | ternal com- | as the measure-
 | bustion en- |
 | ments for PM | gine exhaust at | concentra-
 | the sampling | tion.
 | port lo- |
 | cation; and |
 | iv. Measure PM | (4) Method 5 of | (d) PM concen-
 | at the ex- |
 | 40 CFR part 60, | tration must be | appendix A. | at 15 percent O
 | stationary in- |
 | 2, | ternal com- | dry basis. Re-
 | bustion en- |
 | sults of this | gine. | test consist of
 | the average of
 | the three
 | 1-
 hour or | longer runs.

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.	
\$60.2.....	Definitions.....	Yes.....	Additional terms defined in §60.4219.
\$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.....	Except that §60.7 only applies as specified in §60.4214(a).
\$60.8.....	Performance tests.....	Yes.....	Except that §60.8 only applies to stationary CI ICE with a displacement of (³ 30 liters per cylinder and engines that are not certified.
\$60.9.....	Availability of information.....	Yes.	
\$60.10.....	State Authority.....	Yes.	
\$60.11.....	Compliance with standards and maintenance requirements.....	No.....	Requirements are specified in subpart IIII.
\$60.12.....	Circumvention.....	Yes.	
\$60.13.....	Monitoring requirements.....	Yes.....	Except that §60.13 only applies to stationary CI ICE with a displacement of (³ 30 liters per cylinder.
\$60.14.....	Modification.....	Yes.	
\$60.15.....	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	Yes.	

reporting			
requirements.....			

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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE

L Prestoii Bryant, Jr 4949-A Cox Road, Gleii Alleii, Virclinia 23060 Diivi(I K
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Secretary of Natural Resources (804) 527-5020 Fax (804) 527-5106 Director
wwwdeq virgiiiiia gov
Geriird Seeley. Jr
Reiotial Director

March 23, 2007

Mr. Daniel L. Rettig
Health, Safety, and Environmental Specialist
Corporate Office Properties, LP
6711 Columbia Gateway Drive, Suite 300
Columbia, MD 21046-2104

Location Chesterfield County
Registration No- 52173

Dear Mr Rettig,

Aftached is a permit to construct and operate three (3) emergency generators i
n accordance with
the provisions of the Virginia State Air Pollution Control Board Regulations f
or the Control and Abatement
of Air Pollution

This permit contains legally enforceable conditions. Failure to comply may re
sult in a Notice of
Violation and/or civil charges Please read all permit conditions carefully.

In the course of evaluating the application and arriving at a final decision t
o approve the project,
the Department of Environmental Quality (DEQ) deemed the application complete
on March 14, 2007

This permit approval to construct and operate shall not relieve Corporate Offi
ce Properties, LP of
the responsibility to comply with all other local, state, and federal permit r
egulations

The Board's Regulations as contained in Title 9 of the Virginia Administrative
Code 5-170-200
provide that you may request a formal hearing from this case decision by filin
g a petition with the Board
within 30 days after this case decision notice was mailed or delivered to you
9 VAC 5-170-200 provides
that you may request direct consideration of the decision by the Board if the
Director of the DEQ made
the decision Please consult the relevant regulations for additional requiremen
ts for such requests

As provided by Rule 2A-2 of the Supreme Court of Virginia, you have 30 days fr
om the date you
actually received this permit or the date on which it was mailed to you, which
ever occurred first, within
which to initiate an appeal of this decision by filing a Notice of Appeal with

David K Paylor, Director
Department of Environmental Quality

P O Box 1105
Richmond, VA 23218

Mr Daniel L Rettig
March 23, 2007
Page 2

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the regional office at 804-527-5020.

Sincerely,

JEK/RJR/521730107 NSR

Attachments, Permit
NSPS, Subpart IIII

CC' Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Manager/Inspector, Air Compliance

COYMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONAIENT4L QUALITY
PIEDNIONT REGIONAL OFFICE

L. Preston Bryaiit, Jr. 4949-A Cox Road, Gleii Alleii, Viroijjiii 23060 David
K Piylor
Secretary ot 'Nattii-al Resources (804) 527-5020 Fax (804) 527-5106 Director
ww", deq virginia oov
Geriird Seeley, Jr
Reaional Dii-eclor

STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

This permit includes designated equipment subject to
New Source Performance Standards (NSPS).

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia
Regulations for
the Control and Abatement of Air Pollution,

Corporate Office Properties, LP
6711 Columbia Gateway Drive, Suite 300
Columbia, MD 21046-2104
Registration No : 52173

is authorized to construct and operate

three (3) emergency generators

located at

11751 Meadowville Lane
Chester, Virginia 23836

in accordance with the Conditions of this permit

Approved on March 23 2007.

Robert J Weld
[Deputy Regional Director

Permit consists of 6 pages
Permit Conditions 1 to 20

INTRODUCTION

This permit approval is based on the permit application dated December 29, 2006, including amendment information dated March 5, 2007 and March 14, 2007. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses (after each condition).

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate, process and production data; changes in control equipment, and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, 2.2-3700 through 2.2-3714 of the Code of Virginia, 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

1 Equipment List - Equipment at this facility consists of the following.

Equipment to be Constructed	Reference	Equipment Description	Rated Capacity	Federal Requirements
G-1	Emergency Generator	2,500 KW NSPS, Subpart 1111		
G-2	Emergency Generator	2,500 KW NSPS, Subpart 1111		
G-3	Emergency Generator	2,500 KW NSPS, Subpart 1111		

(9 VAC 80-1180 D 3)

OPERATING LIMITATIONS

2 Operating Hours - The emergency generators shall each not operate more than 500 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months (9 VAC 5-80-1180 and 9 VAC 5-50-260).

3 Fuel - The approved fuel for the emergency generators is #2 distillate oil. A change in the fuel may require a permit to modify and operate (9 VAC 5-80-1180)

4 Fuel - The distillate oil shall meet the specifications below

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil.

Maximum sulfur content per shipment 0.5%

(9 VAC 5-80-1180 and 9 VAC 5-50-260)

Corporate Office Properties, LP
Registration Number. 52173
March 23, 2007
Page 3

5 Fuel Certification - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

- a The name of the fuel supplier,
- b The date on which the distillate oil was received,
- c The quantity of distillate oil delivered in the shipment;
- d A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil,
- e The sulfur content of the distillate oil;

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 4. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-1180)

6 Requirements by Reference - Except where this permit is more restrictive than the applicable requirement, the NSPS equipment as described in Condition 1 shall be operated in compliance with the requirements of 40 CFR 60, Subpart 1111.
(9 VAC 5-80-1180)

EMISSION LIMITS

7 Process Emission Limits - Combined emissions from the operation of the emergency generators shall not exceed the limits specified below:

Particulate Matter 7.0 lbs/hr 1.8 tons/yr

PM-10 7.0 lbs/hr 1.8 tons/yr

Sulfur Dioxide 40.7 lbs/hr 10.2 tons/yr

Nitrogen Oxides (as NO₂) 241.3 lbs/hr 60.3 tons/yr

Carbon Monoxide 55.3 lbs/hr 13.8 tons/yr

Volatile Organic Compounds 6.5 lbs/hr 1.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2, 3, and 4.
(9 VAC 5-80-1180)

8 Visible Emission Limit - Visible emissions from each emergency generator shall

ll not exceed 10
percent opacity except during one six-minute period in any one hour in which v
isible emissions shall
not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40
CFR 60, Appendix
A) This condition applies at all times except during startup, shutdown, and ma
lfunction
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

RECORDS

9 On Site Records - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to

a Annual hours of operation of each emergency generator, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months

b All fuel supplier certifications with each shipment

c Results of all stack tests, visible emission evaluations and performance evaluations

d Scheduled and unscheduled maintenance and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years
(9 VAC 5-80-1180 and 9 VAC 5-50-50)

10 Emissions Testing - The facility shall be constructed/modified/installed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided
(9 VAC 5-50-30 F and 9 VAC 5-80-1180)

NOTIFICATIONS

11 Initial Notifications - The permittee shall furnish written notification to the Director, Piedmont Region of

a. The actual date on which construction of the emergency generators commenced within 30 days after such date

b The anticipated start-up date of the emergency generators postmarked not more than 60 days nor less than 30 days prior to such date

c The actual start-up date of the emergency generators within 15 days after such date

(9 VAC 5-50-50 and 9 VAC 5-80-1180)

GENERAL CONDITIONS

12 Permit Invalidation - This permit to construct the emergency generators shall

ll become invalid,
unless an extension is granted by the DEQ, if

a A program of continuous construction, reconstruction, or modification is not
commenced within
the latest of the following

1 18 months from the date of this permit,

ii Nine months from the date that the last permit or other authorization was issued from any other governmental entity,

iii Nine months from the date of the last resolution of any litigation concerning any such permits or authorization, or

b A program of construction, reconstruction, or modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.
(9 VAC 5-80-121 0)

13 Permit Suspension/Revocation - This permit may be suspended or revoked if the permittee

a Knowingly makes material misstatements in the permit application or any amendments to it,

b Fails to comply with the conditions of this permit;

c. Fails to comply with any emission standards applicable to a permitted emissions unit, ,

d Causes emissions from the stationary source which result in violations of , or interfere with the attainment and maintenance of, any ambient air quality standard, or

e Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted
(9 VAC 5-80-121 0 F)

14 Right of Entry - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials

a To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit,

b To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations,

c To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations , and

d To sample or test at reasonable times

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation Nothing contained herein shall make an

inspection time unreasonable during an emergency
(9 VAC 5-170-130 and 9 VAC 5-80-1180)

15 Maintenance/Operating Procedures - At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to process equipment which affect such emissions

a Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

b Maintain an inventory of spare parts

c Have available written operating procedures for equipment These procedures shall be based on the manufacturer's recommendations, at a minimum

d Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

1 6 Record of Malfunctions - The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record
(9VAC 5-20-180 J and 9 VAC 5-80-1180 D)

1 7 Notification for Facility or Control Equipment Malfunction - The permittee shall furnish notification to the Director, Piedmont Region of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Piedmont Region
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

1 8 Violation of Ambient Air Quality Standard - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated
(9 VAC 5-20-180 1 and 9 VAC 5-80-1180)

19 Change of Ownership - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Piedmont Region of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)

20 Permit Copy - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)

ENVIRONMENT CODIFIED REGULATIONS

'FILE 40-PROTECTION OF ENVIRONMENT

PART 60-STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

SUBPART IIII-STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION
INTERNAL COMBUSTION ENGINES

Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal
Combustion Engines

[Subpart 1111 added and reserved at 71 FR 3 8497, July 6, 2006; added at 71 FR
39173, July II, 2006]

What This Subpart Covers

40 CFR 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) as specified in paragraphs (a)(1) through (3) 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 1, 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 stationary CI ICE that modify or reconstruct their stationary CI ICE after July 1, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation

to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under

40 CFR 70.3 (a) or 40 CFR 71.3 (a) for a reason other than your status as an area source under this subpart.

Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40

CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J, and 40 CFR part 94, subpart J,

for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

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Emission Standards for Manufacturers

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

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000

horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for

new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR

1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the

same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year

non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a

displacement of less than 10 liters per cylinder to the emission standards in table I to this subpart, for all

pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-

emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a

displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines

in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR

1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify their 2007 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 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.

40 CFR 60.4202 What emission standards must I meet for emergency engines if I am a

stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later

emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a

displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in

paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum

engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40

CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification

emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR

89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify the
for 2007 model year and later
emergency stationary CI ICE with a maximum engine power greater than 2,237
KW (3,000 HP) and a

displacement of less than 10 liters per cylinder that are not fire pump engines
to the emission standards specified in
paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table I to this
subpart, for all pollutants, for
the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for
new nonroad CI engines for engines
of the same model year and maximum engine power in 40 CFR 89.112 and
40 CFR 89.113 for all pollutants.

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(c.) Stationary CI internal combustion engine manufacturers must certify the 2007 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 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.

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

40 CFR 60.4203 How long must my engines meet the emission standards if I am a stationary

CI internal combustion engine manufacturer?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in 60.41-01 and 60.42-02 during the useful life of the engines.

Emission Standards for Owners and Operators

40 CFR 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?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table I to this subpart. Owners and operators of pre-2007 model year 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 must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Reduce nitrogen oxides (NOX) emissions by 90 percent or more, or limit the emissions of NOX 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) -).

(2) 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).

40 CFR 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?

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 I to this subpart. Owners and operators of pre-2007 model year 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 that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new off-road CI engines in 60.4202, for all pollutants, for the same model year and maximum engine power for the 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

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(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) Reduce NOX emissions by 90 percent or more, or limit the emissions of NOX in the stationary CI internal

combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour).

(2) Reduce 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).

40 CFR 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 according to the manufacturer's written instructions or

procedures developed by the owner or operator that are approved by the engine manufacturer., over the entire life

of the engine.

Fuel Requirements for Owners and Operators

40 CFR 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?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel

fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a

displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements

of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the

Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of

paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel

inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the

owner or operator is required to submit a new petition to the Administrator.

(d) 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 Federal Aid Highway System may petition the Administrator for approval to

use any fuels mixed with used lubricating oil that do not meet the fuel requirements of paragraphs (a) and (b) of

this section. Owners and operators must demonstrate in their petition to the Administrator that there is no other

place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional

time is needed, the owner or operator is required to submit a new petition to the Administrator.

(e) Stationary CI ICE that have a national security exemption under 60.4200(d) are also exempt from the fuel

requirements in this section.

Other Requirements for Owners and Operators

40 CFR 60.4208 What is the deadline for importing or installing stationary CI ICE

produced in the previous model year?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire PLIIIIIP engines.) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire plant engines) that do not meet the applicable requirements for

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2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) 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 (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) 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.

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

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in 60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Compliance Requirements

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

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in 60.4201 (a) through (c) and

60.4202(a), (b) and (d.) following the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this

subpart, engines certified to the standards in table I to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

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(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 60.4202(c) using the certification procedures required in 40 CFR part 94

subpart C. and must test their engines as specified in 40 CFR part 94.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 40

CFR 1039.125, 40 CFR 1039.130, 40 CFR 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 or 40 CFR part 94 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.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart)

must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier I requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier I requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier I requirements of this subpart, or fire pump engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S.

If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs

(c)(3)(i) through (iii) of this section.

(i) 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

r and HP must be labeled according to the provisions in part 89, 94 or 1039, 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 part 89, 94 or 1039, 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.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under parts 89, 94, or 1039 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

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stich family containing stationiary engities in the averaging, bailkiiig and t rading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this sectio n i-nay meet the labeling requirements referred to in paragraph (c) of this section for stationary Cl IC E by either adding a separate label coiitaining the infomiation required in paragraph (c) of this section or by ad ding the words "and stationary" after the word "nonroad" or "marine," as appropriate, to the label.

Starting with the model years shown in table 5 to this subpart, stationary Cl internal combustion engine inanufacturers must add a permanent label stating that the engine is for stati onary emergeiicy use only to each new

emergency stationary Cl intemal conibustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for eniergency engines in 60.4202 but does not meet all th e emission standards for non-emergency engines in 60.4201. The label must be added according to the labeli ng requireinents specified in 40

CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of eniergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to th is subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the eng ine is labeled as "Fire Punip Applications Only".

(h) Engine manufacturers, including importers, may introduce into commerce unc ertified engines or engines certified to earlier standards that were manufactured before the new or change d standards took effect until inventories are depleted, as long as such engines are part of non-nal inventor y. For example, if the engine

manufacturers' nonnal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, th e engine manufacturer may manufacture engines based on the non-nal inventory requirements late in the 20 08 model year, and sell those engines for installation. The engine manufacturer may not circumvent the prov isions of 60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect . Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) Thereplacementengineprovisionsof40CFR89.1003(b)(7'),40CFR94.1103(b>(')),40 CFR94.110')(b)(4)

and 40 CFR 1068.240 are applicable to stationary Cl engines replacing existing equipment that is less than 15 years old.

40 CFR 60.4211 What are my compliance requirements if I am an owner or operato r of a stationary Cl internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standard s specified in tlils subpart. you must operate and maintaiiii the stationary Cl intemal combustion engine and con trol device according to the ii-ianufacttirer's writteii iiiistructions or procedures developed by the owner or operator that are approved by the engine nianufacturer. In addition, owners and operators may only change those settings that are periiiiiitted b the

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iiiantifacttirer. You must also meet the requireiilients of40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in 60.4204(a) or 60.42105(a), or if you are an owner or operator of a CI direct pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in 60.4205(c'), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Porting an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test results must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

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(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 60.4204(b) or 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in

60.4205(c), you must comply by purchasing an engine certified to the emission standards in 60.4204(b), or 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

(d) If you are an owner or operator and must comply with the emission standards specified in 60.4204(c) or

60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in 60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in 60.4213.

(e) Emergency stationary ICE may be operated 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. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone 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. For owners and operators of emergency engines meeting standards under 60.4205 but not 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Testing Requirements for Owners and Operators

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40 CFR 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 (d.) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 103.101 (e) and 40 CFR 103.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable. determined from the following equation:

NTE requirement for each pollutant = $(1.25) \times (STD)$ (Eq. 1

"Equation 1

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in 60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in 60.4204(a), 60.4205(a), or 60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 60.4204(a), 60.4205(a), or 60.4205(c), determined from the equation in paragraph (c.) of this section.

Where:

STD = The standard specified for that pollutant in 60.4204(a), 60.4205(a), or 60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in 60.4204(a), 60.4205(a), or 60.4205(c) may follow the testing procedures specified in 60.4213, as appropriate.

40 CFR 60.4213 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 greater than

or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder

must conduct performance tests according to paragraphs (a) through (d) of this section.

(a) Each performance test must be conducted according to the requirements in 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted

d xwithin IO percent of I 00 percent peak
(or ttie higliest achievable) load.

(b) You iiiiay not condLICT perfort-nance tests during periods of startLIP, sht
itdown, or malfLinctioii. as specified in

60.8(c).

(.c) Yott iiiust conduct tliree separate test rLIItIS for each performiance tes
t required in this sectioii, as specified in

60.8(t). Each test riiii mUSt last at least I hour.

(d) To determine conipliaiee Nwith the percent i-edtictioii requirement, YOLI
lllLISt folloxv the reqtiirenients as
specified in paragraphs (d)(1) tfirotigii Q) of t[iis sectioii.

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(1) You must use Equation 2 of this section to determine conipliance with the percent reduction reqtiirement:

$$C - C_0$$

$$C \times 100 = R \text{ (Eq. 2)}$$

i

"Equation 2"

Where:

C_i = concentration of NOX or PM at the control device inlet,

C_o = concentration of NOX or PM at the control device outlet, and

R = percent reduction of NOX or PM emissions.

(2) You must nomialize the NOX or PM concentrations at the inlet and outlet of the control device to a dry basis

and to 15 percent oxygen (O₂) using Equation 3 of this section, or an equival ent percent carbon dioxide (CO₂)

using the procedures described in paragraph (d)(3) of this section.

5.9

$$C_{adj} = C_d \text{ (Eq. 3)}$$

20.9-% O₂

"Equation 3"

Where:

C_{adi} = Calculated NOX or PM conceitration adjusted to 15 percent O₂).

C_d Measured concentration of NOX or PM, uncorrected.

5.9 20.9 percent O₂-15 percent O₂?, the defined O₂ correction value, percent.

%O₂ = Measured O₂ concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O₂) and CO_i concentration is iieasured in lieu of

O₂) coiicentration i-tieasttirement. a CO₂) correction factor is needed. Calct ilate the CO₂) correction factor as described

in paragraphs (d)(3)(i) through (ili) of this section.

(i) Calculate the fuel-specific Fo value for the fuel bumed during the test us ing values obtaiined from Method 19,

Section 5.2, and ttie following equation:

0,209

F

d

q*

"Equation 4"

Wliere:

F_o = Fitel factor based on the ratio of O₂) volume to the ultimate CO₂ volume proditced by the ftiet at zero percent excess air.

0.209 = Fractioti of air that is O₂) , percent/100.

F_d = Ratio of the volunie of di-y efflLtent gas to the gross calorific value o f the fLiel froiii Metliod 19, dsm3 /j

(dscf/I 06 Btu).

<http://www.biaa.com/corp/itidex.html#V10>

Fc = Ratio of the volume Of CO₂ produced to the gross calorific value of the fuel from Method 19, dsM3 /j
(.dscf/106 Btti).

(ii) Calculate the CO₂ correction factor for correcting i-measurement data to 15 percent O₂, as follows:

5.9

x q. 5
CO₂

"Equation 5"

Where:

XCO₂ = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂ - 15 percent O₂, the defined O₂ correction value, percent.

(iii) Calculate the NOX and PM gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

x CO₂

c c (Eq. 6)

adj d %CO

2

"Equation 6"

Where:

Cadi = Calculated NOX or PM concentration adjusted to 15 percent O₂.

Cd = Measured concentration of NOX or PM, uncorrected.

%CO₂ = Measured CO₂ concentration, dry basis., percent.

(e) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 7 of this section:

X 1.91, X 10⁻³

Cd x Q x T

ER (Eq. 7)

KW-hour

"Equation 7"

Where:

ER Emission rate in grams per KW-hour.

Cd Measured NOX concentration in ppm.

1.91, X 10⁻³ = Conversion constant for ppm NOX to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(t) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of

PM in the engine exhaust using Equation 8 of this section:

C - xQxT

U'D adj

KW-hour (Eq. 8)

"Equation 8"

Where:

ER = Emission rate in grams per KW-hour.

Cadi = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

Notification, Reports, and Records for Owners and Operators

40 CFR 60.4214 What are my notification, reporting, and recordkeeping requirements if I

am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in 60.7(a)(1). The notification must include the information in

paragraphs (a)(1)(i) through (v) of this section. ,

(i) Name and address of the owner or operator,

(h) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(J.) All notifications submitted to comply with this subpart and all documentation supporting notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the

owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this

subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the

applicable model year, the owner or operator must keep records of the operation of the engine in emergency and

non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of

operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is - I I

equipped with a diesel particulate filter, the owner or

operator must keep records of any corrective action taken after the backpressure indicator has notified the owner or

operator tiiat the high backpreSSLire Iiiiiilt of the engitie is approached.

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Special Requirements

40 CFR 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 that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in 60.4205. No non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder, must meet the applicable emission standards in 60.4204(c).

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in 60.4207.

40 CFR 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI engines located in areas of Alaska not

able by the Federal Aid Highway System should refer to 40 CFR part 69 to determine the diesel fuel access requirements applicable to such engines.

(b) The Governor of Alaska may submit for EPA approval, by no later than January 11, 2008, an alternative plan

for implementing the requirements of 40 CFR part 60, subpart 1111, for public-sector electrical utilities located in

rural areas of Alaska not accessible by the Federal Aid Highway System. This alternative plan must be based on

the requirements of section 111 of the Clean Air Act 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 40 CFR part 60, subpart 1111. If EPA

approves by rulemaking process an alternative plan, the provisions as approved by EPA under that plan shall apply

to the diesel engines used in new stationary internal combustion engines subject to this paragraph.

40 CFR 60.4217 What emission standards must I meet if I am an owner or operator of a

stationary internal combustion engine using special fuels?

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by

the Administrator under 60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of

paragraphs (a) and (b) of 60.4207, 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 60.42202 or 60.4203 using such fuels.

(b) [Reserved]

General Provisions

40 CFR 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in 60.1 through 60.19 apply to you.

Definitions

40 CFR 60.4219 What definitions apply to this subpart?

As listed in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in

subpart A of this part.

Combustion includes all equipment, including but not limited to the turbine, fuel, air, fabrication and exhaust systems, control systems (except emission control equipment), and any ancillary components and

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sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

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 non-nuclear 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 ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

- (1) The calendar year in which the engine was originally produced, or
- (2) The annual new model production period of the engine manufacturer if it is different than the calendar year.

This must begin on 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. 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 next model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert

heat energy), into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar

to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to

control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for

and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts

diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

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 differs from mobile ICE in that a

stationary internal combustion engine is not a motor as defined at 40 CFR 1068.3 (b) (excluding paragraph

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displacement of 41.6 liters per cylinder
[As stated in 60 4202(a)(1), you must coin-ply with the following eniission
standards]

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Emission standards for 2008 model year and later

emergency stationary CI ICE < 37 KW (50 HP) with a
displacement of < 10 liters per cylinder in g/KW-hr
Engine power I (g/HP-hr) I

Model NO x PM
year(s) + co
NMHC

KW< 8 (HP < 11)12008+ 1 7.5 (5.6)1 8.0 (6.0)1 0.40 (0.30)1
8 E KW < 19 (11 E HP < 25)1 2008+ 1 7.5 (5.6)1 6.6 (4.9)1 0.40 (0.30)1
19 E KW < 37 (25 E HP < 50)1 2008+ 1 7.5 (5.6) 1 5.5 (4.1)1 0.30 (0.22)1

Table 3 to Subpart IIII of Part60.--
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:]

I SEarting model
I year engine
I rnanufacr-urers
I must certify I
new stationary I
fire pump en- I
gines accord- I
ing to
EFIGine power 560.4202(d)

K,W < 75 (HP < 100) 1 2011 1
75 KW < 130 (100 HP < 175) I 21010 1
130 KW f 5-GO (175 ilP P 750) 1 /1-009 1
KW > 560 (HP > 750) 1 20C8

Table 4 to Subpart IIIT of Part 60.--

Emission Standards for Stationary Fire Pump Engines

[As stated in 60.4202(d) and 60.4205(c), you must comply with the following

emission standards for stationary fire pump engines]

NMHC + I

Maximum engine power Model year(s) NO_x CO PM

X

----- I
KW < 8 (HP <
11) 1 2010 and earlier 1 10.5 1 8.0 1.0
(7.8) 1 (6.0)
(0.75) 1
1 2011 7.5 1 j
0 . 4 01
"S-6)
(0.30) 1
8 f KW < 19 (11 P HP <
25) ... 1 2010 and earlier 1 9.5 1 6.6 1 0.80 1
(7.1) 1 (4.9) 1
(0.60) 1
1 2011 1 7.5 1
0.40
(5.6)
(0.30)
I 9 E_{ww} < -7
HP 1 2010 and earlier 1 9.5 1 5.5 1 0.80

50) I (7.1) 1 (4.1) 1 (C)
.60) 1
1 Z'Oil @.5
0.30 1
(5.6)
(0.22) 1
37 f- KW < 56 (50 P
h 2 20 1"- ' a n c i e a r i e r 5: 0 C.80 1

75) I (7.8) (3.7) (O
60) 1
2011+ 1 4.7 j 1
u.40 1
(3-5)
(.0.30)
56 E HW < 7EJ (75
HP 1 2010 and earlier C) . 5 1 :).0

.....

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60) 1
oil+ I 4.7 1 I
0 . 4 0
(3.5) 1

75 P KW <
130 (100 1 2009 and earlier 1 10.5 1 C.0
0.80 1
HP <
175) I (7.8) 1 (3.-7) 1 (0.60)

2010+ 2 4.0
0 . 30
(3.0)
(0.22)
130 E KW <
225 (175 1 2008 and earlier 1 10.5 3.5 0.54
p HP <
300) I (@-8) 1 (2.6) 1 (0.40)

2009+ 3 4.0 1 1
0.20 1
(3.0) 1
(0.15) 1
225 f- KW <
450 (300 2008 and earlier 10.5 1 3.5 1 0.54
f- HP <
600) I (7.8) 1 (2.6) 1 (0.40)

@009+ 3 4.0
0 . 2 0
(3.0)
(0.15)
450 E I-,W
560 (600 1 2008 and earlier 1 10.5 1 3.5 1 0.54
E H E' f'
750) I (7.8) 1 (2.6) 1 (0.40)

21009 1 4.0 1 I
0.210 I
(3.0)
(0.15)
KW > 560 (HP >
750) 1 200@ and earlier j 10.5 1 3.5 1 U.54 I
(7 . 8) 1 (2 . (5)
(0.40) 1
'2008 1 6.4 i
2 0 1
(4 . 08)
(0 . 1 5)

b- o - rr, c, ci e l. y e a r s 20 I 1 - 20 1 3 , m a E -a c r e c s , o , , v r -
- . e r s a n d c , -) e E r i r s C) f f I - , - e p P . , C , s : a 7 , a

ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

In Model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60.--

Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in 60.4210(f) and the recordkeeping requirements in 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

I Starting model i

Engine power i year

19 KW < 56 (25 HP < 75) 2013 1
56 KW < 130 (75 HP < 175) 2012 1
130 KW < 175 (95 HP < 238) 2011 1

Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

As specified in 60.421G(q), manufacturers of fire pump engines may use the

following test cycle for testing fire pump engines:j

----- f-----

I Torque I weight I

Node No. Engine speed I (percent) I factors

1 I Rated 100 1 0.30

-1 -7 5 1

..... I Rated 1 0.50 1

3 I Rated I E:0 (@.7'0

'Engine speed: --) percent of point.

Torque: IJFP.,@ certi Fieci naTi-ieplat-@ HP for 100 perc-@nt@ prl-inl- .3ji F
)-)- n@s sho'-lld be @-" Percent
of engine @,ercent load vaiue.

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Table 7 to Subpart IIII of Part 60.--

Requirements for Performance Tests for Stationary CI ICE With a Displacement of 30 Liters per Cylinder

[As stated in 60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of 30 liters per cylinder:1

According to the

I Complying with the following

For each the You must Using requirements

requirement to

I
1. Stationary CI a. Reduce NOX i. Select the (1) Method 1 or (a) Sampling internal combustion emissions by 90 sampling port IA of 40 CFR sites must be combustion engine percent or location and part 60, 1 located at the engine with a percent or the number of appendix A inlet and out-

displacement of more. traverse let of the

30 liters I points; I control de-

per cylinder. vice.

-Li. Measure 0 1 (2) Method 3, (b) Measure-

3A, or 1_1B of 40 CFR parts 60.4213 and 60.4214

at the inlet I CFR part 60, terminate 0

1 and outlet of appendix A.

the control de-

concentration I

I vice; I must be made at

the same time

as the measure-

ments for NO

v

centTir@71C;r).

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1 ili. If 1 (3) Method 4 of I (c) Measure-

I necessary, I '10 CFR part 60, 1 rrLenLs c-o de-

I measure appendix A, I zermine mois-

inoisture con-

I Method 320 of I ture conLent I

I I Lenr- at fte 4 n-

40 CFP, part 63, musc be made at I

I i Let ard ow:iet appendix A, or I the saute time

of the control ASTM D 6348-03 1 as the rmeasure-

cievice; and, (incorporated I menr-s for NO

I by reference, I X

I see 60.17). 1 con-

centration.

I iv. Measure NO 1 (4) Method 7E of I (d) NO X

i X 40 CFR part 60, 1 con-

I at the inlet I appendix A, I ceritration must

I and cuLlet- of I Method 320 of I be at 15

1 the control de-

40 CFR part 63, percent 0 1

1 1 vice. I appendix A, or I

I ASTM D 6348-03 1 dry basis. Re-

I (incorporazed I sulus of this

1 lcy referen--, I test coiisist oF

1 1 see 60.17). tl-ie average of

I I the three

hour or-

I loi-iger ruris.

I b. Liinit the selecZ: rhe (1) Methcd 1 oi- I (a) If using -a

concenZ:ratlon samplin-q porL A o f 4 0 C- EP, I cor-itrol de-

o f NC) lncaT:iDn ana p_@rr_ (.0, ViCe, Lhe

-in Lhe I che numbe-r- of I AP p e n (J ix a..... I sampling Sir@_

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<http://www.bn,i.com/corp/index.htmlgV> 2 1

stationary Cl traverse miisL be lo-

internal com-
I points; I I car-ed at the I
bustion en-
I I outlet of rhe I
I gine exhaust. control de-
vice.

I ii. Determine 1 (2) Method 3, (b) Measure-
rhe 0 2 3A, or 3B of 40 ments to de-

con-
CFR part 60, termine 0
centration of appendix A. 2

rhe stationary concentration

internal com-
must be made at I
I bustion en-
the same time I
I gine exhaust at as the measure-

the sampling ment for NO

port lo-
X I
cation; and, con-

cencraLion.

i-11. if (3) MeLhod 4 of (c) Measure-

I necessary, 40 CFR part 60, ments to de-

measure I appendix A, termire mois-

moistiire con-
I Method 320 of I Ture content I
tenL of the 40 CFR part 63, 1 must be made a-,

staLionafy in-
I appendix A, o r- rhe same time i
r-efnai com- i ASTM D 6348-03 1 as the measure-

I busLion en-
I (inccrporaEed rcLent Eor NO I
I gine exhaust at I by reference,

I rhe sainplinq see- 60.1-7). 1 con-

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1 port 10-
centration. I
I cation; and,

I iv. Measi-ire NO (4) Method 7E of I (d) NO v

X 40 CFP, part 60, 1 con-

at the exhaust appendix A, centration must

of the Method 320 of be at 15

stationary 40 CFP, part 63, perceiit 0

internal com-
appendix A, or 2, 1
busr-ion en- I ASTM D 6348-03 dry basis. Re-

gine. (incorporated sults of this

by reference, test consist of

see 60.17). the average of

the three

1-
hour or
longer runs.

c. Reduce PM I 1. Select the (1) Method I or (a) Sampling

emissinns by 6F) 1 sampling port I 1A of 4(-) CE-R siT:es musL be

percent or location and part 60, located at the

more. I the number of aopendix A. inleE and ouc-

i @-raverse let of the

poinLs; i control .2ie-

vice.

Table r-o Subpart 1EII of Part: 60.--

Requirements for Performance Tests for Stat@-Lnary CT ICE With d

Displacement (DC ' 330 Lir@@-r-S Per CVlir-ider

[As stated iri 60.4-213, you must: comply t"--e requirerrien-,S L,-D-f'

performance Les-.s L',--r s--aLi(--,nafy Cl TCE @,jir-h -a displauemlenr of '
3c; ilLers

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per cylinder:]--Contd.

----- t -----

I AccordLng to the

I Complying with I foilowing

For each the You must Using cequirements

requirement to

ii. Measure 0 1 (2) Method 3, 1 (b) 14easure-

2 3A, or 3B of 40 1 ments r-o de-

at the inlet I CFR part 60, 1 termine 0

and outlet of I appenciix A. 2

the control de-

concentration I

I vice; must be made at

the same time

as the measure-

ments for FM

concentra-

tion.

iii. Tf 1 (3) Methoci 4 of (c) Measure-

necessary, 1 40 CFR part 60, ments to de-

measure I appendix A. terniine and

moisture con- I rnoislrtufe con-

LenL ar- Lhe in-

cent must be I

I let and ouclet I I made at the

i of uhe corirrol. i same Lime as

I device; and the measure-

n-tenLs f(Dr PH

C'D r-i C r-- 1-1 t r -a -

Lion.

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<http://ivww.bna.com/corp/index.html#V 2 4>

iv. Measure PM 1 (4) Method 5 of I (d) PM concen-
I at the inlet 1 40 CFR part 60, 1 tration must be
and our-let of I appendix A. I at 15 percent 0
the control 2,
device. I dry basis. Re-
I sults of this
I test consist of
I the average of
I the three
1-
hour or
longer runs.

Id. Limit the I i. Select the (1) Method 1 or I (a) If using a
I concentration I sampling port I 1A of 40 CFR I control cle-
of PM in the I location and I part 60, vice, the
I stationary CI I the number of I Appendix A. I sampling site
I internal com- I traverse must be lo-
I biistion en-
I points; I I cated at the
I gine exhaust. I outlet of the
control de-

ii. Der-ermine I (.2) Method 3, (b) Measure-
I Llie 0 I 3A, or 3B of 40 ments to de-
con-
CFR part 60, 1 cermine 0
I cenrration of aopen(jix A.

I the sLaLlonary crDncentLation

I _Internal c_om-
i rnust -be macie at I
I bustion en-
Lnr@. same zime I

1 gii-ie exhaust ac I I as the measure-

I che sampling I inents for PM

I port lo- I concentra-

I cation; and I tion.

I iii. if 1 (3) Method 4 of I (c) Measure-

1 necessary, 1 40 CFR part 60, 1 ments Lo cie-

I measure I appenciix A. termine mois-

I moisture con-

ture content I

tent of the I rnust be made at

stationary in-

the same time I

I ternal com- I as the measure-

I bustion en-

ments for PM I

I gine exhaust at I I concentra-

the sampling tion.

port lo-

i cation; and

Iiv. Measure PM 1 (4) Method 5 of I (d) PM concen-

I at the ex-

1 40 CFR part 60, craLion must be I

I haust of the I appendix A. I at 15 percent 0

1 stacionary in-

I Lernal com- dry basis. Re-

I bustion en-

sulzs of this I

I gine. test consist of

I r-he average of

I the three

hOUr 'Dr

lon-Aer runs.

Table R of Subpart IIII of Flar1: 60.--

Applicability of General ProVLsionS to Subpart ITII

[As staued iri 60.4218, you musE comply with Lhe following applicable General Provisions:]

General Provi- I I Applies I I
sions Subjecc of citation I ro I I
citation I subpart I Explana@ion

60.1 I General applicability of I Yes. I
I the General
I Provisions
60.2 Definitioris I Yes I Additional terms defined I
I I in 60.4219.
60.3 Units and Yes.
I abbreviations I
60.4 I Address I Yes.
60.5 I Determination of I Yes.
I construction or
I modification
60.6 I Review of plans I Yes.
60.7 I Notification and Record- I Yes I Except that 60.7 only I
I keeping I I applies as specified in I
I I 1 60.4214 (a) . 1
60.8 I Performance tests I Yes I Except that 60.8 only I
applies to stationary CI I
ICE with a displacement I
of (' 30 liters per I
cylinder and engines
r-hat are not certified.
60.9 I Availability of I Yes.
I inforrnation I
60.10 I State AuthoriTy Yes.
60.11 I Compliance wirh No I Requirements are
I standards and I specified in subpart
maintenance reqi__e-
menr-s
60.122. I Ciccur[ivenLion Yes.
60.13 I Monitoring 'fes I Except chat- 60.13 only i
I requiremenLs I applies co sr:azionary CI I
I ICE wiLh a displacement I
I of (' 30 lirers per I
I cvlinrler.
60.14 I MudificaLion Y@-_ s .
60.15 I Reconsiiruct-_ion Yes.
60.16 I PrioriLy iisL Yes.
60.1@ I IncorporationS bv 'Yes.
reference
6U. 19 C-enefai control device Mo.
requiremerliLS
6 U-1 . I 1j (7--neral ro,:i[icarir@r, and I YeS.

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