SONAR Exhibit 3.4

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 60, 63, 85, 90, 1048, 1065, and 1068

[EPA–HQ–OAR–2005–0030, FRL–8512–4]

RIN 2060–AM81

Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is promulgating new source standards of performance for stationary spark ignition internal combustion engines. EPA is also promulgating national emission standards for hazardous air pollutants for new and reconstructed stationary reciprocating internal combustion engines that either are located at area sources of hazardous air pollutant emissions or that have a site rating of less than or equal to 500 brake horsepower and are located at major sources of hazardous air pollutant emissions.

DATES: This final rule is effective on March 18, 2008. The incorporation by reference of certain publications listed in the final rule is approved by the Director of the Federal Register as of March 18, 2008.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2005–0030. EPA also relies on materials in Docket ID No. EPA–HQ–OAR–2005–0029 and incorporates that docket into the record for the final rule. All documents in the docket are listed on the *www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the EPA Headquarters Library, Room Number 3334, EPA West Building, 1301 Constitution Ave., NW., Washington, DC. The EPA/DC Public Reading Room hours of operation will be 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566–1742.

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SUPPLEMENTARY INFORMATION:

Background Information Document. EPA proposed new source performance standards (NSPS) for stationary spark ignition internal combustion engines, and national emission standards for hazardous air pollutants (NESHAP) for stationary reciprocating internal combustion engines that either are located at area sources of hazardous air pollutant emissions or that have a site rating of less than or equal to 500 brake horsepower and are located at major sources of hazardous air pollutant emissions, on June 12, 2006 (71 FR 33803), and received 46 comment letters on the proposal. A background information document BID) ("Response to Public Comments on Proposed Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines") containing EPA's responses to each public comment and the Economic Impact Analysis Report are available in Docket ID No. EPA–HQ–OAR–2005–0030.

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I. General Information

A. Does this action apply to me?

Categories and entities potentially regulated by this action include:

Category	NAICS [1]	Examples of regulated entities
Any manufacturer that produces or any industry using a stationary internal combustion engine as defined in the final rule.	2211	Electric power generation, transmission, or distribution.
	622110	Medical and surgical hospitals.
	335312	Motor and generator manufacturing.
	333912	Pump and compressor manufacturing.
	333992	Welding and soldering equipment manufacturing.
	48621	Natural gas transmission.
	211111	Crude petroleum and natural gas production.
	211112	Natural gas liquids producers.
	92811	National security.

[1] North American Industry Classification System.

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

B. Where can I get a copy of this document?

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

C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of these final rules is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by September 14, 2007. Under section 307(d)(7)(B) of the CAA, only an objection to these final rules that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by these final rules may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

D. Why is EPA not promulgating a final decision for existing stationary reciprocating internal combustion engines?

In the notice of proposed rulemaking for this rule, published on April 12, 2006, EPA proposed maximum achievable control technology (MACT) and generally available control technology (GACT) standards of no emission reductions for existing engines. During the comment period following the proposal, EPA received several comments indicating that the proposed emission standards for existing engines were not appropriate. In addition, since the publication of the proposed rulemaking, the U.S. Court of Appeals for the District of Columbia Circuit issued a ruling on March 13, 2007 involving litigation on the Brick MACT, which set emission standards for major sources. (40 CFR part 63, subpart JJJJJJ) that appears to impact EPA's ability to finalize its proposed "no reduction" MACT standards for existing sources. *Sierra Club* v. *EPA*, 479 F.3d 875 (DC Cir 2007). Among other things, the D.C. Circuit found unlawful EPA's no emission reduction control floors, which EPA established for categories in which the best performers used no emission reduction control technology. Because in the proposed rule EPA used a MACT floor methodology similar to the methodology used in the Brick MACT, EPA intends to re-evaluate the MACT floors for existing major sources that have a site rating of less than or equal to 500 brake horsepower consistent with the Court's decision in the Brick MACT case. EPA also intends to re-evaluate the standards for existing area sources in light of the comments received on the proposed rule.

For these reasons, this final rule does not promulgate any standards with regards to existing engines. EPA's plan is to engage in a separate rulemaking process that will focus on existing sources. EPA intends to gather further information on existing engines and then promulgate standards that will take into account the comments it has received, the intervening court decision, and any new information EPA receives as a part of the rulemaking process. EPA expects to propose standards early in 2009.

II. Background

This action promulgates new source performance standards (NSPS) that would apply to new, modified and reconstructed stationary spark ignition (SI) internal combustion engines (ICE). New source performance standards implement section 111(b) of the CAA, and are issued for categories of sources which cause, or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare. The standards apply to new stationary sources of emissions, i.e., sources whose construction, reconstruction, or modification begins after a standard for those sources is proposed. The NSPS for stationary SI ICE is promulgated under 40 CFR part 60, subpart JJJJ.

This action also promulgates national emission standards for hazardous air pollutants (NESHAP) from new and reconstructed stationary reciprocating internal combustion engines (RICE) with a site rating of less than or equal to 500 horsepower (HP) located at major sources, and new and reconstructed

stationary RICE located at area sources. The NESHAP are promulgated under 40 CFR part 63, subpart ZZZZ.

III. Summary of the Final Rule

A. What is the source category regulated by the final rule?

The final NSPS apply to new stationary SI ICE. A 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, 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. The final NESHAP apply only to stationary RICE. To our knowledge, no rotary or other types of stationary ICE exist at this time.

The SI NSPS address emissions from new, modified and reconstructed stationary SI engines. An SI engine is either a gasoline-fueled engine; or any other type of engine, with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition 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 considered SI engines for purposes of the final rule.

The final NESHAP address emissions from new and reconstructed stationary engines less than or equal to 500 HP located at major sources and all new and reconstructed stationary engines located at area sources. A major source of HAP emissions is a plant site that emits or has the potential to emit any single hazardous air pollutant (HAP) at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site. An area source of HAP emissions is a source that is not a major source.

If you are an owner or operator of an area source subject to the final rule, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 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 the final rule.

1. SI NSPS

New source performance standards for stationary SI engines are issued under section 111(b) of the CAA. All new, modified and reconstructed stationary SI engines are covered regardless of size. The NSPS apply to stationary SI engines combusting any fuel (natural gas, gasoline, liquefied petroleum gas (LPG), compressed natural gas, landfill gas, digester gas, and any other applicable fuel). New source performance standards require these sources to control emissions to the level achievable by best demonstrated technology (BDT), considering costs and any non-air quality health and environmental impacts and energy requirements.

Under section 111 of the CAA, 42 U.S.C. 7411, the Administrator is required to publish, and periodically update, a list of source categories that in his or her judgment cause, or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare. This list appears in 40 CFR 60.16. The list reflects the Administrator's determination that emissions from the listed source categories contribute significantly to air pollution that may reasonably be anticipated to endanger public health or welfare, and it is intended to identify major source categories for which standards of performance are to be promulgated.

EPA has determined that for purposes of NSPS regulations, the stationary internal combustion engine source category should be split into two source categories—SI engines and compression ignition (CI) engines. Final NSPS for stationary CI engines were published on July 11, 2006 (71 FR 39154).

2. NESHAP

The NESHAP portion of this action is a revision to the regulations in 40 CFR part 63, subpart ZZZZ, currently applicable to stationary RICE greater than 500 HP located at major sources, which were promulgated in 2004. When the subpart ZZZZ of 40 CFR part 63 regulations were promulgated in 2004 (69 FR 33474), EPA deferred promulgating regulations with respect to stationary engines 500 HP or less at major sources until further information on the engines could be obtained and analyzed. It was decided to regulate these smaller engines at the same time as EPA regulates engines located at area sources.

This action revises 40 CFR part 63, subpart ZZZZ, in order to address HAP emissions from new and reconstructed stationary RICE less than or equal to 500 HP located at major sources and new and reconstructed stationary RICE located at area sources. For stationary engines less than or equal to 500 HP at major sources, EPA must determine what is the appropriate MACT for those engines under section 112(d)(3) of the CAA.

For stationary engines located at area sources, EPA has the flexibility to promulgate standards based on GACT under CAA section 112(d)(5). EPA listed stationary RICE located at area sources under sections 112(c)(3) and 112(k) of the CAA, and consistent with section 112(c)(3) is establishing standards for the source category in this final rule. The criteria relevant to EPA's listing of this area source category is set forth in the Urban Air Toxics Strategy described in the paragraph below.

On July 19, 1999, EPA announced in the **Federal Register** its plan for addressing exposure to air toxics in urban areas. The strategy addressed sections 112(c)(3) and 112(k)(3)(B)(ii) of the CAA that instruct EPA to identify not less than 30 HAP which, as the result of emissions from area sources, present the greatest threat to public health in the largest number of urban areas, and to list sufficient area source categories or subcategories to ensure that emissions representing 90 percent of the 30 listed HAP are subject to regulation. The strategy included a list of 30 HAP judged to pose the greatest potential threat to public health in the largest number of urban areas (the urban HAP). In the strategy, EPA also listed the area source categories that account for 90 percent of the urban HAP emissions. EPA listed the stationary internal combustion engine source category under section 112(c)(3) and (k) for the following urban HAP: 7 PAH, acetaldehyde, arsenic, benzene, beryllium compounds, cadmium compounds and formaldehyde. Pursuant to section 112(c), the listed area source categories shall be subject to standards under section 112(d) of the CAA.

3. Differentiation by Fuel Type

The final rule differentiates between gasoline, LPG, natural gas, and digester and landfill gas. Gasoline and LPG are fuels more commonly used in nonroad engines than stationary engines. Nonroad SI engines less than or equal to 19 kilowatt (KW) (25 HP) typically use gasoline. It is estimated that about 68 percent of SI nonroad engines above 19 KW (25 HP) use LPG. A smaller

percentage of nonroad SI engines above 19 KW (25 HP) use gasoline (about 23 percent) and even less use compressed natural gas (about 9 percent). Natural gas fuel is more common in larger, stationary applications. Natural gas engines refer to all gaseous-fueled engines except those fueled by landfill and digester gas. Natural gas is primarily composed of methane and typically contains very low levels of sulfur. Other fuels used with stationary SI engines are landfill and digester gases. These gases are by-products of wastewater treatment and land application of municipal reuse. Landfill and digester gases, which are formed through anaerobic decomposition of organic materials, are principally comprised of methane and carbon dioxide, but small quantities of other compounds such as hydrogen sulfide, ammonia, volatile organic compounds, and particulate matter (PM) may also be present. Although similar in composition to natural gas, there are some differences in the emissions from combustion of landfill and digester gases due to e.g., chlorinated compounds are typically not found in natural gas. Both landfill and digester gases contain a family of silicon-based gases collectively called siloxanes. Combustion of siloxanes forms compounds that have been known to foul fuel systems, combustion chambers, and post-combustion catalysts.

B. What are the pollutants regulated by the final rule?

The pollutants to be regulated by the final NSPS for stationary SI engines are nitrogen oxides (NO_X), carbon monoxide (CO), and volatile organic compounds (VOC). In addition, a sulfur limit on gasoline is being finalized.

The final NESHAP regulate HAP (for areas sources, the NESHAP regulates the seven urban HAP listed above) through formaldehyde, CO, or VOC which EPA has established are appropriate surrogates for HAP emissions from certain engine types.

C. What are the final standards?

A description of the final standards is provided in the following sections.

1. SI NSPS

a. Stationary SI Engines ≤19 KW (25 HP). The final standards affect manufacturers, owners, and operators of stationary SI engines. Engine manufacturers must certify their stationary SI engines with a maximum engine power less than or equal to 19 KW (25 HP) that are manufactured after July 1, 2008, to the certification emission standards for new nonroad SI engines in 40 CFR part 90, as applicable. The standards applicable to these engines are summarized in Table 1 of this preamble.

TABLE 1.—NO_X, HC, NMHC, AND CO EMISSION STANDARDS IN G/KW-HR (G/HP-HR) FOR STATIONARY SI ENGINES >19 KW (25 HP)

Engine class [a]	Emission standards in g/KW-hr (g/HP-hr) [b]		
	$HC+NO_X$	$NMHC+NO_X$ [c]	CO
I	16.1 (12.0)	14.8 (11.0)	610 (455)
I–A	50 37	....	
I–B	40 (30)	37 (27.6)	
II	12.1 (9.0)	11.3 (8.4)	

[a] Class I–A: Engines with displacement less than 66 cubic centimeters (cc); Class I–B: Engines with displacement greater than or equal to 66 cc and less than 100 cc; Class I: Engines with displacement greater than or equal to 100 cc and less than 225 cc; Class II: Engines with displacement greater than or equal to 225 cc.

[b] Modified and reconstructed engines manufactured prior to July 1, 2008, must meet the standards applicable to engines manufactured after July 1, 2008.

[c] $NMHC+NO_X$ standards are applicable only to natural gas fueled engines at the option of the manufacturer, in lieu of $HC+NO_X$ standards.

b. Stationary Non-Emergency SI Gasoline Engines >19 KW (25 HP) and Rich Burn LPG Engines >19 KW (25 HP). Engine manufacturers must certify their stationary non-emergency SI engines with a maximum engine power greater than 19 KW (25 HP) and less than 500 HP that use gasoline or rich burn engines greater than 19 KW (25 HP) and less than 500 HP that use LPG that are manufactured after July 1, 2008, to the certification emission standards for new nonroad SI engines in 40 CFR part 1048, as applicable. Engine manufacturers must certify their stationary non-emergency SI engines with a maximum engine power greater than or equal to 500 HP that use gasoline or rich burn engines greater than or equal to 500 HP that use LPG that are manufactured after July 1, 2007, to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. The standards applicable to manufacturers of non-emergency engines greater than 19 KW (25 HP) that are gasoline or rich burn engines that use LPG are summarized in Table 2 of this preamble.

TABLE 2.—NO_X, HC, AND CO EMISSION STANDARDS IN G/KW-HR (G/HP-HR) FOR MANUFACTURERS OF STATIONARY NON-EMERGENCY SI GASOLINE ENGINES >19 KW (25 HP) AND RICH BURN LPG ENGINES >19 KW (25 HP)

Maximum engine power	Manufacture date	Emission requirement in g/KW-hr (g/HP-hr) [a, b]	
		$HC+NO_X$	CO
25<HP<500 [c]	July 1, 2008	2.7 (2.0)	4.4 (3.3)
	July 1, 2008 (severe duty [c])	2.7 (2.0)	130.0 (97.0)

TABLE 2.—NO_X, HC, AND CO EMISSION STANDARDS IN G/KW-HR (G/HP-HR) FOR MANUFACTURERS OF STATIONARY NON-EMERGENCY SI GASOLINE ENGINES >19 KW (25 HP) AND RICH BURN LPG ENGINES >19 KW (25 HP)—Continued

Maximum engine power	Manufacture date	Emission requirement in g/KW-hr (g/HP-hr) [a, b]	
		$HC+NO_X$	CO
HP≥500 [d]	July 1, 2007	2.7 (2.0)	4.4 (3.3)
	July 1, 2007 (severe duty [e])	2.7 (2.0)	130.0 (97.0)

[a] You may optionally certify your engines according to the following formula instead of the standards in Table 2 of this preamble: $(HC+NO_X)CO^{0.784} \leq 8.57$. The $HC+NO_X$ and CO emission levels you select to satisfy this formula, rounded to the nearest 0.1 g/KW-hr, become the emission standards that apply for those engines. You may not select an $HC+NO_X$ emission standard higher than 2.7 g/KW-hr or a CO emission standard higher than 20.6 g/KW-hr.

[b] Provisions in 40 CFR part 1048 allow engines with a maximum engine power at or below 30 KW (40 HP) with a total displacement at or below 1,000 cubic centimeters (cc) to comply with the requirements of 40 CFR part 90.

[c] Modified and reconstructed engines between 25 and 500 HP manufactured prior to July 1, 2008, must meet the standards applicable to engines manufactured after July 1, 2008.

[d] Modified and reconstructed engines greater than or equal to 500 HP manufactured prior to July 1, 2007, must meet the standards applicable to engines manufactured after July 1, 2007.

[e] Severe-duty engines are engines used in, for example, concrete saws, concrete pumps, and similar severe applications where air-cooled engines must be used. There are expected to be very few, if any, severe-duty stationary engines.

In addition to the emission standards shown in Table 2 of this preamble, there are separate field testing standards required under 40 CFR part 1048 that are part of the certification requirements for engine manufacturers.

c. Stationary Non-Emergency SI Natural Gas Engines 19<KW<75 (25<HP<100) and Lean Burn LPG Engines 19<KW<75 (25<HP<100). Engine manufacturers have the option to certify their stationary non-emergency SI natural gas engines between 25 HP and 100 HP and lean burn LPG engines between 25 HP and 100 HP to the certification emission standards in 40 CFR part 1048, as shown in Table 2 of this preamble. However, the certification is only voluntary, and it is up to the manufacturer to decide if it believes certification is feasible and beneficial. Engine manufacturers may certify engines between 19 and 30 KW (25 and 40 HP) with a displacement of 1,000 cc or less to the provisions of 40 CFR part 90 (shown in Table 1 of this preamble), which is consistent with similar provisions applicable to nonroad engines in this displacement and size category. In addition, for engines manufactured prior to January 1, 2011, manufacturers may alternatively certify to the standards summarized in Table 4 of this preamble applicable to engines greater than or equal to 100 HP and less than 500 HP.

Owners and operators who purchase stationary SI engines with a maximum engine power between 19 and 75 KW (25 and 100 HP) that are natural gas engines or lean burn engines using LPG that are manufactured after July 1, 2008, must meet the NO_X, HC, and CO emission standards in 40 CFR 1048.101(c), as summarized in Table 3 of this preamble.

TABLE 3.—NO_X, HC, AND CO EMISSION STANDARDS IN G/KW-HR (G/HP-HR) FOR OWNERS/OPERATORS OF STATIONARY NON-EMERGENCY SI NATURAL GAS ENGINES 19<KW<75 (25<HP<100) AND LEAN BURN LPG ENGINES 19<KW<75 (25<HP<100)

Maximum engine power	Manufacture date	Emission requirement in g/KW-hr (g/HP-hr) [a, b]	
		$HC+NO_X$	CO
25<HP<100 [c]	July 1, 2008	3.8 (2.8)	6.5 (4.8)
	July 1, 2008 (severe duty)	3.8 (2.8)	200.0 (149.2)

[a] You may apply the following formula to determine alternate emission standards that apply to your engines instead of the standards in paragraph in Table 3 of this preamble: $(HC+NO_X) \times CO^{0.791} \leq 16.78$. $HC+NO_X$ emission levels may not exceed 3.8 g/kW-hr and CO emission levels may not exceed 31.0 g/kW-hr.

[b] For natural gas fueled engines, you are not required to measure non-methane hydrocarbon emissions or total hydrocarbon emissions for testing to show that the engine meets the emission standards of Table 3 of this preamble; that is, you may assume HC emissions are equal to zero.

[c] Modified and reconstructed engines between 25 and 100 HP manufactured prior to July 1, 2008, must meet the standards applicable to engines manufactured after July 1, 2008.

d. Stationary Non-Emergency SI Natural Gas Engines ≥100 HP and Lean Burn LPG Engines ≥100 HP. Owners and operators who purchase stationary SI engines with a maximum engine power between 100 HP and 500 HP that are natural gas engines or lean burn engines using LPG that are manufactured between July 1, 2008 and January 1, 2011, must limit their exhaust emissions of NO_X to 2.0 g/HP-hr, emissions of CO to 4.0 g/HP-hr, and emissions of VOC to 1.0 g/HP-hr. Owners and operators may as an alternative limit their exhaust emissions of NO_X to 160 parts per million by volume, dry basis (ppmvd) at 15 percent oxygen (O_2), emissions of CO to 540 ppmvd at 15 percent O_2, and emissions of VOC to 86 ppmvd at 15 percent O_2 instead of the g/HP-hr limits.

Stationary SI engines with a maximum engine power between 100 HP and 500 HP that are natural gas engines or lean burn engines using LPG that are manufactured after January 1, 2011, must limit their exhaust emissions of NO_X to 1.0 g/HP-hr, emissions of CO to 2.0 g/HP-hr, and emissions of VOC to 0.7 g/HP-hr. Again, owners and operators may as an alternative limit their exhaust emissions of NO_X to 82 ppmvd at 15 percent O_2, emissions of CO to 270 ppmvd at 15 percent O_2, and emissions of VOC to 60 ppmvd at 15 percent O_2 instead of the g/HP-hr limits.

Owners and operators who purchase stationary SI engines with a maximum engine power greater than or equal to 500 HP that are natural gas engines or lean burn engines using LPG that are manufactured after July 1, 2007, must limit their exhaust emissions of NO_X to 2.0 g/HP-hr, emissions of CO to 4.0 g/HP-hr, and emissions of VOC to 1.0 g/HP-hr, except that these standards apply to lean burn engines between 500 and 1,350 HP manufactured after January 1, 2008. Instead of complying with limits in terms of g/HP-hr, owners and operators may limit their exhaust emissions of NO_X to 160 ppmvd at 15 percent O_2, emissions of CO to 540 ppmvd at 15 percent O_2, and emissions of VOC to 86 ppmvd at 15 percent O_2.

Stationary SI engines with a maximum engine power greater than or equal to 500 HP that are natural gas engines or lean burn engines using LPG that are manufactured after July 1, 2010, must limit their exhaust emissions of NO_X to 1.0 g/HP-hr, emissions of CO to 2.0 g/HP-hr, and emissions of VOC to 0.7 g/HP-hr. Instead of complying with limits in terms of g/HP-hr, owners and operators may limit their exhaust emissions of NO_X to 82 ppmvd at 15 percent O_2, emissions of CO to 270 ppmvd at 15 percent O_2, and emissions of VOC to 60 ppmvd at 15 percent O_2.

Engine manufacturers may voluntarily certify their stationary non-emergency SI natural gas engines greater than or equal to 100 HP and lean burn LPG engines greater than or equal to 100 HP, but the certification is not required by the rule. Additionally, for natural gas engines below 500 HP manufactured prior to January 1, 2011, and natural gas engines greater than or equal to 500 HP manufactured prior to July 1, 2010, engine manufacturers may choose to certify their engines to the standards for non-severe duty engines in 40 CFR part 1048 (see Table 2 of this preamble).

A summary of the emission standards that apply to stationary non-emergency SI natural gas engines greater than or equal to 100 HP and lean burn LPG engines greater than or equal to 100 HP are shown in Table 4 of this preamble.

For lean burn LPG engines greater than or equal to 100 HP, manufacturers may certify these engines to the certification emission standards in 40 CFR part 1048 instead of the emission standards shown in Table 4 of this preamble.

TABLE 4.—NO_X, CO, AND VOC EMISSION STANDARDS FOR STATIONARY SI ENGINES ≥100 HP (EXCEPT GASOLINE AND RICH BURN LPG), STATIONARY SI LANDFILL/DIGESTER GAS ENGINES, AND STATIONARY EMERGENCY ENGINES >25 HP

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards [a]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC	NO_X	CO	VOC
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG.	100≤HP<500	7/1/2008	2.0	4.0	1.0	160	540	86
		1/1/2011	1.0	2.0	0.7	82	270	60
Non-Emergency SI Lean Burn Natural Gas and LPG.	500≥HP<1,350	1/1/2008	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500≥HP<1,350).	HP≥500	7/1/2007	2.0	4.0	1.0	160	540	86
	HP≥500	7/1/2010	1.0	2.0	0.7	82	270	60
Landfill/Digester Gas (except lean burn 500≥HP<1,350).	HP<500	7/1/2008	3.0	5.0	1.0	220	610	80
		1/1/2011	2.0	5.0	1.0	150	610	80
	HP≥500	7/1/2007	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Landfill/Digester Gas lean burn	500≥HP<1,350	1/1/2008	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Emergency	25>HP<130	1/1/2009	[b] 10	387	N/A	N/A	N/A	N/A
	HP≥130	.....	2.0	4.0	1.0	160	540	86

[a] Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[b] The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_X+HC.

e. Stationary SI Landfill/Digester Gas Engines. Owners and operators who purchase stationary landfill or digester SI engines that are manufactured after July 1, 2007, that are greater than or equal to 500 HP must limit their exhaust emissions of NO_X to 3.0 g/HP-hr, emissions of CO to 5.0 g/HP-hr, and emissions of VOC to 1.0 g/HP-hr, except that these standards apply to lean burn engines between 500 and 1,350 HP manufactured after January 1, 2008. Instead of complying with limits in terms of g/HP-hr, owners and operators may limit their exhaust emissions of NO_X to 220 ppmvd at 15 percent O_2, emissions of CO to 610 ppmvd at 15 percent O_2, and emissions of VOC to 80 ppmvd at 15 percent O_2.

Stationary landfill and digester gas SI engines greater than or equal to 500 HP that are manufactured after July 1, 2010, must limit their exhaust emissions of NO_X to 2.0 g/HP-hr, emissions of CO to 5.0 g/HP-hr, and emissions of VOC to 1.0 g/HP-hr. Instead of complying with limits in terms of g/HP-hr, owners and operators may limit their exhaust emissions of NO_X to 150 ppmvd at 15 percent O_2, emissions of CO to 610 ppmvd at 15 percent O_2, and emissions of VOC to 80 ppmvd at 15 percent O_2.

Stationary SI engines that use landfill or digester gas that are less than 500 HP are given an extra 12 months to comply with the standards. The first stage of limits of 3.0, 5.0, and 1.0 g/HP-hr, for NO_X, CO, and VOC, respectively (or 220, 610, and 80 ppmvd at 15 percent O_2), applies to landfill and digester gas engines manufactured after July 1, 2008. The second stage of limits of 2.0, 5.0, and 1.0 g/HP-hr, for NO_X, CO, and VOC, respectively (or 150, 610, and 80 ppmvd at 15 percent O_2), applies to landfill and digester gas engines manufactured after January 1, 2011. The emission standards applicable to stationary SI landfill and digester gas engines are shown in Table 4 of this preamble.

Engine manufacturers may voluntarily certify their stationary SI landfill and digester gas engines to the emission standards in Table 4 of this preamble, but the certification is not required by the final rule.

f. Stationary Emergency SI Engines >19 KW (25 HP). For stationary SI engines greater than 25 HP that are emergency engines, the final rule sets a single stage of emission limits; however, EPA has determined that it is appropriate to have separate standards for stationary emergency engines above and below 130 HP.

Owners and operators who purchase stationary emergency engines greater than 25 HP and less than 130 HP that are manufactured after January 1, 2009, must limit their exhaust emissions of $HC+NO_X$ to 10.0 g/HP-hr and emissions of CO to 387 g/HP-hr. These standards are consistent with the Phase I emission standards for Class II nonroad engines in 40 CFR part 90.

Owners and operators who purchase stationary emergency engines greater than or equal to 130 HP that are manufactured after January 1, 2009, must limit their exhaust emissions of NO_X to 2.0 g/HP-hr, emissions of CO to 4.0 g/HP-hr, and emissions of VOC to 1.0 g/HP-hr. Instead of complying with limits in terms of g/HP-hr, owners and operators may limit the exhaust emissions from their emergency engines to 160 ppmvd of NO_X at 15 percent O_2, 540 ppmvd of CO at 15 percent O_2, and 86 ppmvd of VOC at 15 percent O_2.

Engine manufacturers may voluntarily certify their stationary emergency SI engines greater than 25 HP, but the certification is not required by the rule, except for manufacturers of gasoline or LPG rich burn emergency engines, who must certify their engines to the standards in 40 CFR part 90 (for engines below 130 HP) or 40 CFR part 1048 (for engines at or above 130 HP—see Table 2 of this preamble).

g. Fuel Requirements. In addition to emission standards, the final rule requires that owners and operators who use gasoline in their stationary SI engine must use gasoline that meets the requirements of 40 CFR 80.195. The requirements include a gasoline sulfur per gallon cap of 80 parts per million (ppm).

2. NESHAP

a. Engines ≤500 HP at Major Sources. Owners and operators of new and reconstructed stationary SI engines with a site rating of equal to or less than 500 HP located at a major source of HAP emissions (except new or reconstructed 4-stroke lean burn (4SLB) stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions), must meet the requirements of the final SI NSPS (40 CFR part 60, subpart JJJJ). Thus, if the owners and operators are in compliance with 40 CFR part 60, subpart JJJJ, they would also be in compliance with 40 CFR part 63, subpart ZZZZ, for engines equal to or less than 500 HP located at a major source (except for 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP located at a major source). The requirements that apply under 40 CFR part 60, subpart JJJJ, were discussed in the previous section of this preamble.

Similarly, owners and operators of new and reconstructed stationary CI engines with a site rating of equal to or less than 500 HP located at a major source of HAP emissions must meet the requirements of the final CI NSPS (40 CFR part 60, subpart IIII). If the owners and operators are in compliance with 40 CFR part 60, subpart IIII, they would also be in compliance with 40 CFR part 63, subpart ZZZZ, for engines equal to or less than 500 HP located at a major source.

Owners and operators of new or reconstructed 4SLB SI stationary engines with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source are required to either reduce CO emissions by 93 percent or more, or limit the concentration of formaldehyde in the stationary engine exhaust to 14 ppmvd or less, at 15 percent O_2. These engines would also be required to meet the requirements in the final SI NSPS, but do not have to comply with the CO emission standards of the SI NSPS if in compliance with the NESHAP.

b. Engines at Area Sources. Owners and operators of new and reconstructed stationary engines located at area sources of HAP emissions must meet the requirements of the final CI NSPS (40 CFR part 60, subpart IIII) or SI NSPS (40 CFR part 60, subpart JJJJ), as appropriate. If the owners and operators are in compliance with either 40 CFR part 60, subpart IIII or JJJJ, as appropriate, they would also be in compliance with 40 CFR part 63, subpart ZZZZ, for new and reconstructed engines located at an area source.

D. What are the requirements for sources that are modified or reconstructed?

1. SI NSPS

The final standards apply to stationary SI engines subject to the SI NSPS that are modified or reconstructed after June 12, 2006. The definitions for modification and reconstruction are given in 40 CFR 60.14 and 40 CFR 60.15, respectively. A stationary engine that is overhauled as part of a maintenance program is not considered a modification if there is no increase in emissions.

Stationary SI ICE less than or equal to 19 KW (25 HP) manufactured prior to July 1, 2008, that are modified or reconstructed after June 12, 2006, are required to meet the standards that apply to engines manufactured after July 1, 2008 (January 1, 2009 for emergency engines).

Stationary SI gasoline and rich burn LPG engines between 25 HP and 500 HP manufactured prior to July 1, 2008, that are modified or reconstructed after June 12, 2006, are required to meet the standards applicable to engines manufactured after July 1, 2008 (January 1, 2009 for emergency engines).

Stationary SI natural gas and lean burn LPG engines greater than 25 HP and less than 100 HP manufactured prior to July 1, 2008, that are modified or reconstructed after June 12, 2006, are required to meet the NO_X, HC, and CO emission standards in 40 CFR 1048.101(c), as summarized in Table 3 of this preamble.

Stationary SI gasoline and rich burn LPG engines greater than or equal to 500 HP manufactured prior to July 1, 2007, that are modified or reconstructed after June 12, 2006, are required to meet the standards applicable to engines manufactured after July 1, 2007.

Stationary SI natural gas and lean burn LPG engines greater than or equal to 100 HP and less than 500 HP manufactured prior to July 1, 2008, that are modified or reconstructed after June 12, 2006, are required to meet a NO_X emission standard of 3.0 g/HP-hr, a CO standard of 4.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr. Instead of meeting emission standards in terms of

g/HP-hr, owners and operators may meet NO_X, CO, and VOC emission standards of 250, 540, and 86 ppmvd at 15 percent O_2, respectively.

Stationary non-emergency SI natural gas and lean burn LPG engines greater than or equal to 500 HP manufactured prior to July 1, 2007, (or January 1, 2008, for lean burn natural gas engines greater than or equal to 500 HP and less than 1,350 HP) that are modified after June 12, 2006, are required to meet a NO_X emission standard of 3.0 g/HP-hr, a CO standard of 4.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr. Again, instead of meeting emission standards in terms of g/HP-hr, owners and operators may meet NO_X, CO, and VOC emission standards of 250, 540, and 86 ppmvd at 15 percent O_2, respectively.

Stationary SI landfill and digester gas engines less than 500 HP manufactured prior to July 1, 2008, that are modified or reconstructed after June 12, 2006, are required to meet a NO_X emission standard of 3.0 g/HP-hr, a CO standard of 5.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr.

Stationary SI landfill and digester gas engines greater than or equal to 500 HP manufactured prior to July 1, 2007, that are modified after June 12, 2006, are required to meet a NO_X emission standard of 3.0 g/HP-hr, a CO standard of 5.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr. For all modified and reconstructed SI landfill and digester gas engines, instead of meeting emission standards in terms of g/HP-hr, owners and operators may meet NO_X, CO, and VOC emission standards of 220, 610, and 80 ppmvd at 15 percent O_2.

Stationary SI emergency engines greater than or equal to 130 HP manufactured prior to January 1, 2009, that are modified or reconstructed after June 12, 2006, are required to meet a NO_X emission standard of 3.0 g/HP-hr, a CO standard of 4.0 g/HP-hr, and a VOC standard of 1.0 g/HP-hr. Instead of meeting emission standards in terms of g/HP-hr, owners and operators may meet NO_X, CO, and VOC emission standards of 250, 540, and 86 ppmvd at 15 percent O_2. Stationary SI emergency engines between 25 HP and 130 HP manufactured prior to January 1, 2009, that are modified or reconstructed after June 12, 2006, are required to meet a $HC+NO_X$ emission standard of 10.0 g/HP-hr and a CO standard of 387 g/HP-hr.

2. NESHAP

Similar concepts as those discussed above apply to engines subject to 40 CFR part 63 regulations; however, the concept of modification is not included in 40 CFR part 63. The final standards apply to stationary engines subject to the NESHAP that commence reconstruction on or after June 12, 2006, and the reconstruction criteria are provided in 40 CFR 63.2.

E. What are the requirements for demonstrating compliance?

The following sections describe the requirements for demonstrating compliance under the stationary SI NSPS and NESHAP.

1. SI NSPS

Owners and operators subject to the emission standards specified in the final rule who use stationary SI engines with a maximum engine power of less than or equal to 19 KW (25 HP) or who use stationary SI engines with a maximum engine power greater than 19 KW (25 HP) and use gasoline or are rich burn engines greater than 19 KW (25 HP) using LPG must demonstrate compliance by using an engine certified to the emission standards specified in 40 CFR part 90 or 1048, as applicable.

Owners and operators subject to the final rule who use stationary SI engines with a maximum engine power greater than 19 KW (25 HP) that use fuels other than gasoline and that are not rich burn engines greater than 19 KW (25 HP) that use LPG, must demonstrate compliance by either using an engine certified to the emission standards specified in Tables 3 or 4 of this preamble, as applicable, or by conducting an initial performance test (and potentially subsequent performance testing depending on the engine size) to demonstrate compliance with the emission standards.

Owners and operators of all stationary engines subject to the requirements of the SI NSPS must keep records of maintenance conducted on the engine. Owners and operators of stationary non-certified engines, which include certified engines operating in a non-certified manner, must keep a maintenance plan. Owners and operators of certified engines may demonstrate compliance by operating and maintaining their stationary engine and aftertreatment control device (if any) according to the manufacturer's emission-related written instructions and do not have to conduct any performance testing.

Owners and operators of certified engines who do not follow the manufacturer's emission-related operation and maintenance procedures will be considered non-certified engines and will be subject to performance testing. Certified engines operating in a non-certified manner that are less than 100 HP do not have to conduct performance testing to demonstrate compliance. Certified engines operating in a non-certified manner that are greater than or equal to 100 HP and less than or equal to 500 HP, however, must conduct an initial performance test within the first year of engine operation to demonstrate compliance with the emission standards. Finally, certified engines operating in a non-certified manner that are greater than 500 HP must conduct a performance test within the first year of operation and every 8,760 hours of operation or 3 years thereafter to demonstrate compliance. Owners and operators of engines that have never been certified that are greater than 25 HP and less than or equal to 500 HP must conduct an initial performance test to demonstrate compliance with the emission standards. As mentioned, all engines are subject to recordkeeping of maintenance, which includes these engines. Owners and operators of engines that have never been certified that are greater than 500 HP must conduct an initial performance test to demonstrate compliance and must test every 8,760 hours of operation or 3 years after that.

Manufacturers of stationary SI engines required to certify their engines must demonstrate compliance by certifying that their stationary SI engines meet the emission standards, as specified in 40 CFR part 60, subpart JJJJ, as applicable, using the certification procedures in subpart B of 40 CFR part 90 or subpart C of 40 CFR part 1048, as applicable, and must test their engines as specified in those parts. Manufacturers who conduct voluntary certification must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D–1 cycle in International Organization for Standardization (ISO) 8178–4: 1996(E) for stationary engines or the test cycle requirements specified in Table 5 to 40 CFR 1048.505, except that Table 5 to 40 CFR 1048.505 applies to high load engines only.

Manufacturers who opt to voluntarily certify their stationary SI engines to the emission standards specified in this subpart must certify their engines using fuel that meets the definition of pipeline-quality natural gas, which according to the definition must be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

If the manufacturer chooses to certify its stationary SI engines to another fuel, the manufacturer must specify the properties of that fuel and what adjustments the owner or operator must make to the engine during installation in the field in order to meet the

emission standards. The manufacturer must also perform certification testing on the engine on that fuel, as it would if it was certifying to pipeline-quality natural gas, in order to assure compliance with the emission standards. Manufacturers who conduct voluntary certification of stationary SI ICE must also provide instructions to the owner and operator for configuring the stationary engine to meet the emission standards on fuels that meet the pipeline-quality natural gas specifications and fuels that do not meet the pipeline-quality natural gas specifications. The manufacturer must provide information to the owner and operator of the certified stationary SI engine regarding the particular fuels to which the engine is certified, and instructions regarding configuring the engine in a manner most appropriate for reducing pollutant emissions for engines operating on such fuels.

EPA allows owners and operators of natural gas engines to use propane as back up fuel for emergency purposes for no more than 100 hours per year. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards.

Owners and operators that operate engines that have been certified by the engine manufacturer are not required to perform any performance testing unless the engine is operated outside of the fuel properties or emission-related operation and maintenance procedures specified by the manufacturer. If the owner or operator uses fuels that are outside of the fuel specifications or does not follow the emission-related adjustments or maintenance requirements specified by the manufacturer, the engine is no longer considered a certified engine and the owner or operator must test the engine to demonstrate compliance.

Regarding stationary rich burn engines operating with three-way catalysts or non-selective catalytic reduction, EPA expects that air-to-fuel ratio controllers will be used in conjunction with the control device. The AFR controller must be operated in an appropriate manner to ensure proper operation of the engine and control device in order to minimize emissions.

2. NESHAP

For most engines (i.e. except those discussed in the following paragraph), owners and operators of new and reconstructed stationary SI RICE equal to or less than 500 HP located at a major source of HAP emissions and stationary RICE located at an area source, will be able to demonstrate compliance with the NESHAP if they meet the requirements of the final SI NSPS (40 CFR part 60, subpart JJJJ). Similarly, owners and operators of new and reconstructed stationary CI engines with a site rating of equal to or less than 500 HP located at a major source of HAP emissions, will be able to demonstrate compliance with the NESHAP if they meet the requirements of the final CI NSPS (40 CFR part 60, subpart IIII). If the owners and operators are in compliance with 40 CFR part 60, subpart JJJJ or IIII, as applicable, they will also be in compliance with 40 CFR part 63, subpart ZZZZ, for engines equal to or less than 500 HP located at a major source. The compliance requirements that apply under 40 CFR part 60, subpart JJJJ, were discussed in the previous section. For the majority of stationary CI engines, all that is required under 40 CFR part 60, subpart IIII, is that the owner or operator purchase a certified stationary CI engine and operate it properly and according to the manufacturer's specifications.

Owners and operators of new or reconstructed 4SLB stationary RICE greater than or equal to 250 HP and less than or equal to 500 brake HP located at major source are required to follow the compliance requirements specified in 40 CFR part 63, subpart ZZZZ, consistent with the compliance requirements for 4SLB stationary RICE greater than 500 HP located at a major source. Those compliance requirements include demonstrating compliance by conducting an initial performance test. These engines must also conduct a subsequent performance test semiannually if they are complying with the requirement to reduce CO emissions and not using a continuous emissions monitoring system, and if they are complying with the requirement to limit the concentration of formaldehyde in the stationary engine exhaust. Under the NESHAP, these engines must either reduce CO emissions or limit the concentration of formaldehyde. In addition, these engines would be required to meet the requirements in the final SI NSPS. However, these engines do not have to comply with the CO emission standards of the SI NSPS if in compliance with the NESHAP.

F. What are the reporting and recordkeeping requirements?

The following sections describe the reporting and recordkeeping requirements that are required under the SI NSPS and the NESHAP.

1. SI NSPS

Owners and operators of all engines (certified and non-certified) are required to maintain records of proper maintenance and non-certified engines must keep a maintenance plan. An initial notification is required for owners and operators of engines greater than 500 HP that are non-certified. Also, owners and operators who conduct performance testing are required to report the test results within 60 days of each performance test.

Owners and operators of emergency engines are required to keep records of their hours of operation. For emergency engines greater than or equal to 130 HP, this requirement starts for engines manufactured after the point when more stringent emission standards take effect for non-emergency engines, either in July 2010 or January 2011, depending on the power rating of the engine. For emergency engines below 130 HP, the requirement to keep records of the hours of operation begins for all engines manufactured after January 1, 2009. Owners and operators of emergency engines must install a non-resettable hour meter on their engines to record the necessary information. Emergency stationary engines may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the 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. Owners and operators can petition the Administrator for additional hours, beyond the allowed 100 hours per year, if such additional hours should prove to be necessary for maintenance and testing reasons. A petition is not required if the hours beyond 100 hours per year for maintenance and testing purposes are mandated by regulation such as State or local requirements. There is no time limit on the use of emergency stationary engines in emergency situations, however, the owner or operator is required to record the length of operation and the reason the engine was in operation during that time. Records must be maintained documenting why the engine was operating to ensure the 100 hours per year limit for maintenance and testing operation is not exceeded. In addition, owners and operators are allowed to operate their emergency engines for non-emergency purposes for 50 hours per year, but those 50 hours are counted towards the total 100 hours provided for operation other than for true emergencies and owners and operators

may not engage in income-generating activities during those 50 hours. The 50 hours per year for non-emergency purposes cannot be used to generate income for a facility, for example, to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

2. NESHAP

In general, owners and operators of new and reconstructed stationary RICE equal to or less than 500 HP located at a major source of HAP emissions and stationary RICE located at an area source of HAP emissions, will be able to demonstrate compliance with the NESHAP if they meet the requirements of the final SI NSPS (40 CFR part 60, subpart JJJJ) or the final CI NSPS (40 CFR part 60, subpart IIII), as appropriate, which includes reporting and recordkeeping requirements. The reporting and recordkeeping requirements that would apply to stationary RICE were discussed in the previous section of this preamble and in the preamble to the final CI NSPS (71 FR 39154). No additional reporting and recordkeeping requirements are required under the 40 CFR part 63.

Owners and operators of new or reconstructed 4SLB stationary RICE greater than or equal to 250 and less than or equal to 500 brake HP located at major source are required to meet the reporting and recordkeeping requirements specified in 40 CFR part 63, subpart ZZZZ, consistent with the compliance requirements for 4SLB stationary RICE greater than 500 HP located at a major source. The recordkeeping and reporting requirements that apply to these engines were discussed in the preamble to the final RICE NESHAP (69 FR 33473).

IV. Summary of Significant Changes Since Proposal

Most of the rationale used to develop the proposed rule remains the same for the final rule. Therefore, the rationale previously provided in the preamble to the proposed rule is not repeated in the final rule, and the rationale sections of the rule, as proposed, should be referred to. Major changes that have been made to the rule since proposal are discussed in this section with rationale following in the Summary of Responses to Major Comments section.

A. Compliance Dates

In the final rule, EPA has extended the compliance dates for all stationary SI ICE that had a compliance date of January 1, 2008, in the proposal, by 6 months. These engines have a compliance date of July 1, 2008. In addition, stationary SI lean burn engines between 500 and 1,350 HP that had a compliance date of July 1, 2007, in the proposed rule, have also been provided with an additional 6 months, *i.e.*, these engines have a compliance date of January 1, 2008.

B. Distinguishing Sources Based on Size

In the final rule, based on the comments received, EPA is adopting a size threshold of 100 HP for non-emergency stationary SI engines to meet nonroad emission standards. That is, non-emergency stationary SI engines less than 100 HP are subject to the nonroad emission standards in 40 CFR part 90 (if less than or equal to 25 HP) or 40 CFR part 1048 (if greater than 25 HP). Certification to 40 CFR part 1048 is voluntary for all stationary SI engines except gasoline and rich burn LPG engines. Stationary SI engines greater than or equal to 100 HP (except gasoline and rich burn LPG) are subject to the emission standards specified in part 60 subpart JJJJ, as shown in Table 4 of this preamble. Stationary SI lean burn LPG engines have the option of meeting 40 CFR part 1048 instead of the emission standards specified in this subpart. EPA has also provided some flexibility on the initial years of the program for manufacturers to certify to standards in either 40 CFR part 1048 or as shown in Table 4 of this preamble.

C. Hydrocarbon Limit

EPA proposed emission limits for NO_X, CO, and NMHC. In the final rule, EPA is adopting a VOC limit in place of the proposed NMHC limit. The stage 1 and stage 2 emission standards remain as proposed at 1.0 g/HP-hr and 0.7 g/HP-hr, but the standards are for VOC. EPA has defined VOC according to 40 CFR part 51, and has noted that emissions of formaldehyde should not be counted for testing purposes. That is, the final stage 1 and stage 2 emission limits for VOC effectively do not include ethane, methane, and formaldehyde. Formaldehyde was excluded because it cannot be measured by the testing method used to determine the standard; however, EPA expects formaldehyde emissions to be reduced using the emission controls expected for other hydrocarbons and CO. Therefore, we expect formaldehyde emissions to be reduced comparably to VOCs and CO, which are used as a surrogate for formaldehyde for the purposes of section 112.

D. Alternative Limits in Concentration Units

EPA proposed NO_X, CO, and NMHC emission limits in terms of exhaust-based units. Based on various comments and concerns with finalizing emission standards in terms of these units, EPA finds it appropriate to include alternative concentration-based emission limits in the final rule. The concentration-based emission limits, provided in terms of ppmvd at 15 percent O_2, are equivalent to the g/HP-hr emission limits. The owners and operators may choose if they wish to comply with the g/HP-hr standards or the ppmvd standards.

E. Emergency Engine Standards

For stationary emergency engines, EPA proposed that these engines meet emissions standards of 2.0, 4.0, and 1.0 g/HP-hr for NO_X, CO, and NMHC, respectively, for all emergency engines. In the final rule, stationary emergency engines between 25 and 130 HP are subject to emission standards of reduced stringency of 10 g/HP-hr for NO_X+HC and 387 g/HP-hr for CO. Stationary emergency engines greater than or equal to 130 HP are subject to the emission standards as proposed. Stationary emergency engines less than or equal to 25 HP are subject to the emission standards in 40 CFR part 90.

F. Emergency Engine Definition

In the final rule, EPA has retained the proposed definition of stationary emergency engine, except that stationary engines greater than 500 HP located at major sources that were built prior to the proposal date of this rule (June 12, 2006), are subject to the emergency engine definition as finalized in 40 CFR part 60, subpart ZZZZ, on June 15, 2004. All stationary engines built after the date of proposal of this rule are subject to the new definition of stationary emergency engine and are limited to 100 hours per year of maintenance and readiness testing. There is no limit on the time allowed for emergency operation. Stationary emergency engines may be operated for non-emergency purposes for up to 50 hours per year, but those 50 hours are counted towards the 100 hours per year allowed for maintenance and readiness testing. The 50 hours per year for non-emergency purposes cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

G. Manufacturer O&M Requirements

The proposed rule required that owners and operators operate and maintain their stationary SI 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. The final rule does not require that owners and operators follow the manufacturer's instructions. Owners and operators who operate and maintain their certified stationary ICE and control device according to the manufacturer's emission-related guidelines are required to keeping records of conducted maintenance and do not have any performance testing requirements under the final rule.

Owners and operators who operate their certified stationary ICE and control device in a manner that is inconsistent with the manufacturer's emission-related guidelines are considered non-certified engines and must keep a maintenance plan, records of conducted maintenance, and must conduct performance testing under the final rule if the engine is greater than or equal to 100 HP. Owners and operators of stationary ICE that have never been certified must keep a maintenance plan, records of conducted maintenance, and must conduct performance testing for all size engines.

H. Streamlined Compliance Requirements

In the final NESHAP, EPA has included a provision that states that owners and operators of new and reconstructed stationary engines less than 500 HP located at major sources and new and reconstructed stationary engines located at area sources (except stationary 4SLB engines between 250 and 500 HP) will be in compliance with the NESHAP requirements if they meet the requirements of the SI NSPS (40 CFR part 60, subpart JJJJ) or the CI NSPS (40 CFR part 60, subpart IIII), as applicable.

V. Summary of Responses to Major Comments

A more detailed summary of comments and EPA's responses can be found in the Summary of Public Comments document, which is available from the rulemaking docket (see **ADDRESSES** section).

A. Compliance Dates

Comment: Several commenters stated that more time is needed to comply with the final rule for owners, operators, and manufacturers. Two commenters said that because there are no existing Federal requirements affecting the vast majority of stationary SI engines and due to the complexity of the regulation, more time is needed to develop the testing and compliance systems for the proposed requirements. Also, two commenters added, that the first compliance date of July 1, 2007, actually occurs prior to the anticipated publication date of the final rule. One commenter expressed that such a regulatory mandate is impractical and unworkable considering the uncertainty of the final regulatory requirements. One commenter believes that an implementation date of January 1, 2008, is unreasonable. This commenter believes that the engine control technology requires significant changes to meet the proposed standards and recommended the implementation date be January 1, 2009, to allow proper development and application time. This commenter explained that a minimum of 12 months is required for manufacturer development and testing such as catalyst configuration changes and component specification for additional engines and fuel types not certified to 40 CFR part 1048. In addition, any deterioration factor service accumulation time required will take 6 months to complete, according to one commenter. Once the development of the systems are complete, this commenter said that it will take manufacturers a minimum of 6 months to apply, or "roll out," this technology to the equipment manufacturer base. The commenter bases this comment on the experience in implementing the large SI nonroad engine regulations (40 CFR part 1048), which began implementation in January of 2004. One commenter requested that the initial compliance dates be delayed 9 months from the proposed compliance dates. Another commenter recommended that the initial compliance dates be delayed until at least 6 to 9 months following publication of the final rule in the **Federal Register**. Sufficient lead time is required not only for manufacturers, but also to allow the many thousands of owners/operators affected by the regulation to be notified and educated regarding the rule's requirements, according to a commenter. Finally, commenter 154 said that subsequent compliance dates also should be delayed by the same amount to assure that the requisite leadtime and stability periods are preserved for manufacturers.

Response: Based on comments received on the proposed compliance dates as summarized in the above comment and on various discussions post-proposal with engine manufacturers, EPA agrees that it is appropriate to extend the proposed compliance date of January 1, 2008, that affected a variety of different engines, many of which are subject to mandatory certification. In the final rule, EPA has provided an additional 6 months for engines that had a compliance date of January 1, 2008 in the proposal. The compliance date in the final rule is July 1, 2008, for engines less than 500 HP. EPA believes that July 1, 2008, will accommodate engine manufacturers and that 6 months will be sufficient lead-time for both owners/operators and manufacturers. In particular, EPA believes July 1, 2008, will provide manufacturers enough time to prepare and complete the certification of new engines. Although the technology already exists for reducing emissions to the level required in the rule, an appropriate amount of time should be provided in order to make the necessary arrangements for engine manufacturers to obtain certification of their products and otherwise assist affected parties prepare for the new standards. EPA's approach is similar to the approach taken in the CI NSPS where sources were required to comply before the final rule was issued, but some time was provided prior to the requirement for mandatory certification. Sections 111 and 112 of the CAA define new engines to be all engines for which construction is commenced following the date of the proposal and it is routine for sources that commenced construction prior to the final rule to be subject to standards under these provisions. Also note that the certification program for large SI engines is voluntary so manufacturers are not being forced to certify engines by those dates. Only engines that are 25 HP or smaller or are gasoline or rich burn LPG-fueled, which are directly related to nonroad engines that are already subject to certification requirements and are also generally smaller than 500 HP, must certify. This is one reason why EPA does not believe that it is necessary to include additional lead-time for large engines (i.e., those above 500 HP) and the compliance date remains as proposed for these engines, i.e., July 1, 2007, with the exception that EPA has granted a delay for certain engines until January 1, 2008, which EPA discusses below.

Regarding the comparison with the large SI nonroad engine rule, EPA notes that the proposal for that rule was published in October 2001, over 2 years from initiation of a mandatory certification program. EPA believes that the compliance dates provide adequate time for manufacturers of engines and

owners/operators to make the necessary preparations and adjustments to develop engines that comply with the emission standards. Additional lead-time has been provided for certain engines, as discussed above, as well as emergency engines. EPA has also provided additional lead-time in order to meet the Stage 2 emission standards. With that said, EPA notes that in the final rule that it has provided lean burn engines in the size range of 500 HP or greater to less than 1,350 HP additional lead-time. Engine manufacturers have indicated that it would be problematic to meet the proposed compliance date. EPA believes that providing engine manufacturers with a later compliance date will make it possible to complete necessary development and implementation work necessary in order to prepare these engines for compliance. More information on this topic can be found in the docket to this rulemaking.

B. Final Hydrocarbon Emission Limits

Comment: Several commenters expressed some concerns with the proposed non-methane hydrocarbons (NMHC) emission standards. One commenter initially recommended a 1.0 g/HP-hr NMHC emissions limit as being technically achievable for most engine applications. However, several engine manufacturers have clarified that the information submitted to EPA regarding achievable NMHC numbers did not include aldehydes and other oxygenated hydrocarbon compounds in the totals. Three commenters recommended that NMHC limitations exclude aldehydes and other oxygenated HC. One commenter said that if the standard includes aldehydes, then the emission standard of 1.0 g/HP-hr is not achievable for most engines, since the initial recommendation the commenter submitted was based on excluding aldehydes from the NMHC totals.

Three commenters requested that ethane be excluded from the calculation of NMHC. They argue that ethane is not a VOC under 40 CFR 51.100(s)(1) and they say that ethane does not contribute to ozone formation. The commenters also noted that natural gases with a relative high content of ethane are primarily present in the western part of the U.S. and commenter 139 provides information indicating that engines are not able to meet the NMHC standards when using natural gas that is high in ethane. Two commenters recommended that EPA examine alternative standards, indices, and testing methods for hydrocarbon emissions. Three commenters said that the parameter to be used for natural gas fueled engines should exclude methane and ethane and have suitable measurement techniques that are applicable in both factory and field tests. One commenter said, if EPA decides to retain NMHC as the appropriate parameter, then at a minimum, the level of the proposed standards needs to be raised or clarification made that the measured HC do not include aldehydes.

Three commenters recommended that if the NSPS includes an emission limit for HC species, the limit should be for VOC (or non-methane non-ethane (NMNEHC)) and not NMHC. Three commenters stated that VOC, not NMHC, are the National Ambient Air Quality Standards (NAAQS) pollutant regulated as an ozone precursor for stationary sources. The commenters believe that most available data are reported as VOC rather than NMHC, and owners/operators are very limited in their ability to assess whether the data indicate that the proposed NMHC standard is achievable for field performance tests. The commenters also believe that before regulating NMHC for stationary engines, EPA should complete an analysis to identify the potential benefit and cost of regulating ethane or using NMHC as a surrogate for VOC for gas-fired engines, and ensure that emissions data from field tests are available to substantiate the basis for the standard.

Several commenters also expressed concern over the proposed test methods for measuring NMHC. Commenters believe that the emissions test methods should be consistent with the included hydrocarbon species, and EPA Method 25 of 40 CFR part 60, Appendix A, should not be used for determination of NMHC or VOC. The commenters support their claim by saying that NMHC emissions are defined as THC emissions less methane emissions. However, this definition needs further clarification to exclude formaldehyde and oxygenates, because the emissions information provided by manufacturers that serves as the basis of the standard does NOT include aldehydes or other oxygenated HC. Non-methane hydrocarbon measurements are typically conducted using a flame ionization detector (FID) to measure THC and a FID or gas chromatography method to measure methane. EPA Method 25A of 40 CFR part 60, Appendix A, uses a continuous FID analyzer to measure exhaust gas THC. Method 18 separates CH_4 (methane) from other exhaust gas species with a gas chromatograph, and quantifies the methane with an appropriate detector. Method 18 of 40 CFR part 60, Appendix A, allows exhaust gas to be collected in a bag or continuously sampled. A flame ionization detector poorly quantifies oxygenated hydrocarbon species. Formaldehyde, and to a lesser extent acetaldehyde, methanol, and acrolein, have been measured in natural gas-fired engine exhaust. The commenters agree with EPA's conclusion that NMHC test methods are simpler and less costly to implement than formaldehyde test methods and that NMHC testing will reduce the testing burden while maintaining emissions compliance assurance. Recognizing that measuring NMHC with a FID does not directly measure formaldehyde and that the emission limits are based on manufacturer data that do not include formaldehyde and other oxygenates, it is important to understand that NMHC is used as a formaldehyde surrogate, but NMHC, the regulated pollutant, does NOT include formaldehyde under this standard. Thus, it is only appropriate to allow test methods that do NOT measure formaldehyde or other oxygenated hydrocarbons; therefore, EPA Method 25 should be excluded from the final rule.

Response: We agree that the composition of certain western gas (i.e. the high concentration of ethane) may make compliance with an NMHC standard more difficult in some cases. As the proposed NMHC standards were intended to ensure compliance with VOC and HAP reduction requirements, and pursuant to 51.100(s) ethane is not a VOC, (nor is it a HAP under CAA section 112(c)) we agree that expressing the standard in terms of VOC, rather than NMHC is appropriate in this case. EPA's final hydrocarbon standards for gaseous fueled and lean burn LPG engines above 100 HP are presented as VOC standards, instead of NMHC standards. For natural gas engines below 100 HP meeting the NMHC standards in 40 CFR part 1048, the regulations do not require measurement of ethane for testing in the field. EPA agrees that EPA Method 25A does not measure formaldehyde and that all data gathered to support the emission limit using this method would not have included formaldehyde. However, EPA Method 25A would measure all other aldehydes and other oxygenated organic compounds although the measured results would be less than the actual concentrations in the gas stream. Even though EPA Method 25A measurements for the other aldehydes and oxygenated organic compounds would have been less than their true values, EPA believes that in all cases the measured values would represent substantially greater than 50 percent of the true value for these compounds. Because these

compounds are accounted for to a significant extent in the database supporting the emission limit it would not be appropriate to exclude them from the definition of VOC. If EPA Method 25A is used to determine compliance with the emission limit, the reduced response of the aldehydes and other oxygenated organics will automatically be taken into account, and the compliance demonstration will be consistent with the procedures used to establish the emission limit. However, if one of the alternative methods, such as EPA Method 18 or EPA Method 320 of 40 CFR part 60, Appendix A, is used, these methods will measure 100 percent of the aldehydes and other oxygenated organic compounds. The results from these methods should be adjusted to account for the bias in EPA Method 25A by multiplying the measured values of the aldehydes and other oxygenated organics by the EPA Method 25A response factor for each measured compound. In addition, when adding the masses of all of the measured VOC from either of these two methods, the actual mass of the aldehydes and oxygenated organics should be reported as the equivalent mass on a propane basis. This will ensure that the results from these two methods are reported on a basis that is consistent with the procedures used to establish the emission limit.

EPA agrees that it is not appropriate to allow EPA Method 25 in the final rule, and EPA has made this clear in the regulatory text. Since the final emission standards are based on data that does not include formaldehyde, it would not be appropriate to include Method 25 since that method may capture that compound.

Further, the emission standards for VOC are based on data that does not include formaldehyde and EPA agrees that it is appropriate to specify that formaldehyde is not included in the final VOC emission standard. EPA has made this clarification in the testing requirements for VOC. In the final rule, EPA has replaced the proposed NMHC limits in g/HP-hr with VOC limits in the same units. In addition, EPA has specified VOC limits in terms of concentration (ppmvd at 15 percent O_2). EPA believes, based on evidence, that a final standard of 1.0 g/HP-hr and 0.7 g/HP-hr for VOC will be achievable for most engines. (Certain engines, like engines burning landfill gases, are subject to less stringent final standards.) The proposed NMHC emission limits are essentially the same as the final VOC emission limits based on how VOC is defined in the final rule. EPA has defined VOC according to the definition provided in 40 CFR part 51, and has noted that formaldehyde is, as discussed, excluded from calculation of VOC emissions. The magnitude of the final VOC limits is the same as the proposed NMHC limits and remain unchanged because the test methods used to capture pollutants are essentially the same.

EPA recognizes that there may be variability in the ethane content in natural gas and believes it would be appropriate to exclude ethane from the final standard. Since EPA has replaced the proposed NMHC standards with VOC standards in the final rule, and since VOC by definition excludes ethane, this comment is resolved.

As discussed, EPA is finalizing emission standards in terms of VOC not as NMHC, as proposed. Based on review of the emissions information used to set the proposed standards for NMHC, comments received on the proposal from industry, and meetings with various stakeholders post-proposal, EPA believes it is more appropriate finalize a VOC standard than an NMHC standard as a measure for HC compounds. Many State regulations affecting stationary sources use VOC and VOC is a more familiar term than NMHC to the regulated community. Emissions of NMHC might be difficult to measure in the field and is a pollutant that has typically been regulated through the manufacturer. Also, because of the variability of ethane in natural gas fuel, VOC, since it excludes ethane, it is more appropriate than NMHC.

C. Emergency Engine Standards

Comment: Several commenters were of the opinion that stationary emergency engines should be exempt from the rule; at a minimum they should be exempt from the emission standards. Two commenters were of the opinion that a size-based exemption threshold or alternative emission limits should be defined for emergency engines. One commenter believes that the proposed NSPS notifications and reporting for small emergency engines will be a cumbersome activity with little environmental benefit. The commenter noted that in most cases emergency engines operated less than 500 hours are not permitted or are considered insignificant due to the limited potential to emit emissions. The commenter requested that EPA consider exempting all emergency engines less than 500 HP from the proposed NSPS and NESHAP regulations. One commenter added that there is little data that show that by regulating these small emergency engines there will be significant environmental improvement. This commenter was of the opinion that as long as hour records are kept to show the engines are being operated in the manner addressed in the EPA white paper mentioned above these engines should be considered insignificant emitters. One commenter requested that EPA exempt stationary emergency engines from the proposed requirements, other than monitoring and recording annual operating hours by owners/operators to demonstrate the engines meet the 100-hour annual operating limitation.

One commenter recommended that emergency engines be exempted from the NSPS and NESHAP. The commenter said that emergency SI engines provide essential and needed services to owners/operators when the normal supply of electricity is disrupted and often serve life-critical functions in times of emergency. The proper operation and function of emergency engines is an essential service, according to the commenter. In addition, because emergency engines operate only during times of emergencies and are limited in hours of operation for maintenance or testing operation, emergency SI engines add minimal emissions to the inventory of criteria or HAP emissions, the commenter added. Commenter 154 believes that there will be negligible emission reductions or environmental benefits from fully applying the requirements of the proposed rule to emergency SI engines. In addition, the commenter said that including emergency engines within the regulations adds a significantly large number of owners/operators to the affected regulatory community, and thus significantly increases the reporting, recordkeeping, and compliance costs of the proposed regulation. Since emissions from emergency SI engines are small and the cost of regulatory compliance and reporting are large, the imposition of NSPS and NESHAP controls on emergency SI engines is not cost-effective, according to the commenter.

Two commenters believe that a 400 HP exemption threshold or alternative emission limits should be defined for emergency engines. The commenters said that 4SLB engines are not available below 400 HP, a size range that comprises the majority of emergency units in the oil and gas industry. The proposed rules would require non-selective catalytic reduction (NSCR) to be applied to these small engines; however NSCR application to an emergency engine has inherent complications, costs, and reliability issues, according to the commenters.

The proposed rule requires controls for emergency engines, whereas the existing RICE MACT concluded controls for emergency units were not necessary and the commenters believe that the proposed rule is therefore more stringent than the existing RICE MACT.

Some commenters also requested that EPA provide an exemption for reconstructed or modified rich burn emergency engines, which would also require post-combustion control to meet the standards.

Two commenters said that if a size-based exemption is not included in the rule, separate subcategories will be needed for emergency engines based on size with emission limits for smaller units commensurate with an uncontrolled rich burn engine, as well as an exemption for existing rich burn emergency engines that are reconstructed or modified.

Response: EPA disagrees that stationary emergency engines should be completely exempted from the rule and also does not agree that emergency engines should be exempt from emission standards. Emergency engines are part of the source category and stationary internal combustion engines and they represent a significant portion of the engines being regulated under these combined rules, and their aggregate emissions are not insignificant. EPA believes that their emissions can be regulated in a manner that is cost-effective and not disruptive. Moreover, given that EPA has already promulgated standards for stationary CI emergency engines, failure to regulate SI emergency engines may create a loophole in regulation. However, as discussed below, EPA believes that a distinction in emission standards based on size is appropriate to include for stationary emergency engines to account for what types of engines and emission controls are available. In addition, EPA agrees that alternative emission limits should be finalized for emergency engines, consistent with the proposal that recognizes a need for different emission standards for emergency engines. The final standards do not require a second stage of more stringent standards for emergency engines. For emergency engines equal to or greater than 130 HP, the standards remain as proposed at 2.0, 4.0, and 1.0 g/HP-hr for NO_X, CO and VOC, respectively. As discussed elsewhere in this document, EPA is also including the option for owners and operators to meet these emission standards in terms of concentration. However, for emergency engines below 130 HP, EPA has found it appropriate to adopt less stringent emission standards in the final rule. Based on information received post-proposal, EPA has learned that there are lean burn engines currently in the market down to 130 HP, and EPA, therefore, disagrees with the commenters who requested a 400 HP exemption threshold or alternative emission limit for emergency engines claiming that 4SLB engines are not available below 400 HP. Information on these engines can be found in the docket. The final emission standards for emergency engines below 130 HP are commensurate with the emission standards that are achievable for rich burn engines without aftertreatment and represent the maximum level of control that is attainable for small emergency engines without using aftertreatment. EPA agrees that requiring NSCR for these engines raises complications and reliability issues that are inappropriate for this subcategory. The final rule requires emergency engines greater than 25 HP and below 130 HP to meet a NO_X+HC standard of 10.0 g/hp-hr and a CO standard of 387 g/HP-hr. These emission standards are consistent with the Phase II standards that apply to Class II nonroad engines.

EPA does not believe that the recordkeeping requirements for emergency engines will be significantly burdensome. Emergency engines have to maintain records hours of operation (of emergency and non-emergency use) to ensure they are not operated beyond the 100-hour limit of the rule. Small emergency engines, i.e., those less than 130 HP will be required to begin recordkeeping immediately. However, since there is no difference between the emission standards for emergency and non-emergency engines above 130 HP until the stage 2 emission standards become effective for non-emergency engines, these larger emergency engines do not have to begin recording hours of operation and keep records of total hours of operation until July 1, 2010 or January 1, 2011, depending on whether the emergency engine is greater than or equal to 500 HP or below 500 HP, respectively.

EPA has made simplifications in the final rule that would affect emergency engine compliance requirements. In the final NESHAP, EPA has included a provision that allows emergency engines subject to the NESHAP that are new or reconstructed and equal to or less than 500 brake HP located at a major source of HAP emissions or located at an area source of HAP emissions to meet the requirements of the NESHAP by demonstrating compliance with the SI NSPS. EPA believes that this provision greatly reduces the compliance burden for owners and operators of emergency engines and overall simplifies the compliance process. Further, under the final SI NSPS, engines less than 100 HP that are certified or that were certified, but are operated in a non-certified manner will not be subject to any performance testing. This would include emergency engines.

EPA recognizes that this final rule is more stringent than the existing RICE NESHAP covering stationary engines greater than 500 HP at major sources, but EPA sees nothing improper about adopting more stringent standards affecting emergency engines under this rule. EPA often promulgates more stringent requirements in rules subsequent to initial rules regulating a source category. Emergency engines covered by the previous NESHAP are not subject to this rule. Only new, modified or reconstructed engines installed after the publication date of the notice of proposed rulemaking for this rule are subject to the more stringent requirements, except that EPA has added explicit limitations on use of emergency engines for peak shaving and supplying power to an electric grid or that supply power as part of a financial arrangement with another entity.

Regarding the request for an exemption for modified and reconstructed rich burn emergency engines, EPA disagrees that an exemption should be provided. The overall goal of the statute for modified and reconstructed engines is that older engines that are being modified or reconstructed should be subject to relatively the same standards as new engines. This reduces the incentive for owners and operators to continue to use older dirtier engines for very long periods beyond their normal life. It is not impossible to apply add-on controls to emergency engines.

D. Emergency Engine Definition

Comment: One commenter stated that the proposal sets separate standards for new emergency engines, but fails to impose enforceable limits so that these engines will be used only in clearly defined emergencies. The commenter strongly supports EPA's specification of emissions standards for emergency engines and to require that emergency engines be equipped with non-resettable meters. In addition to these requirements, the commenter said that EPA must require that emergency engines that do not meet otherwise applicable emissions limits be labeled as such. Additionally the commenter said that EPA must tighten the definition of a stationary emergency engine. According to the commenter, by

allowing emergency engines to run for an unlimited number of hours during emergency situations, but failing to provide a clear definition of what constitutes an emergency situation or emergency operation, the proposed rule leaves a highly problematic loophole. The commenter further noted that since the requirements for emergency engines are not as stringent as those for non-emergency engines, there could be a positive economic incentive for consumers to purchase an emergency engine even if that is not the engine's intended use. To close this loophole and effectuate the rule's intent, the commenter said that EPA must provide an unequivocal definition of what constitutes an emergency situation and emergency operation. The commenter advocated that a clear and stringent definition is needed to prevent operators of emergency engines from running these engines for an unlimited number of hours without triggering the more stringent Phase 2 controls required of non-emergency engines.

EPA's proposed definition does preclude one specific activity from being classified as an emergency situations (i.e., peak shaving), but it is otherwise far too general. According to the commenter, by including only examples of what constitutes an emergency engine, EPA is leaving the definition open to too much interpretation. The commenter recommended that at the least, the definition of an emergency engine should replicate the language used for stationary CI engines in stating that "Stationary (CI) ICE used to supply power to an electric grid or that supply power as part of a financial agreement with another entity are not considered to be emergency engines."

The commenter further suggested that the following elements be incorporated into the definition of an emergency stationary internal combustion engine:

- The definition should require that the situation be truly unforeseeable, beyond the control of the owner or operator, and not part of any contractual obligation. In particular, the definition should exclude operation for purposes of supplying power for distribution to the electric grid and operation for training purposes.
- The definition should exclude equipment failure or other failure to comply with any environmental law caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. This will ensure the proper incentives are in place for care and maintenance of non-backup engines.

The commenter also said that if EPA finalizes its intent to allow natural gas-fired stationary SI engines to operate on propane fuel for up to 100 hours per year for emergency operations; a comprehensive analysis should be undertaken to evaluate the full emissions implications of what appears to be a somewhat arbitrary relaxation of the proposed standards.

Response: EPA agrees that requiring emission standards for stationary emergency engines and requiring that emergency engines be equipped with non-resettable hour meters, but disagrees that the definition of emergency engine creates a loophole. EPA believes it proposed an adequate definition and it is not possible to include every possible situation that might constitute an emergency in the definition. EPA agrees that it is important to provide language that minimizes the possibility of affected sources avoiding more stringent requirements. EPA believes the definition is clear, and furthermore, believes that the requirement to keep records of the hours of operation of the engine in emergency and non-emergency situations will prevent misuse. EPA does agree with the commenter that it is appropriate to tighten the definition as far as precluding certain activities and has included in the definition of emergency engine that stationary SI 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. This language is consistent with the final CI NSPS. As for the comment related to labeling of emergency engines, EPA proposed in § 60.4242(d) that manufacturers label their emergency engines that only meet the emergency engine emission standards as such and that the engine is for emergency use only. This requirement has been retained in the final rule, and EPA believes this satisfies the commenter's concern on this topic.

Regarding the comment on EPA's provision allowing natural gas-fired stationary SI engines to operate on propane fuel for up to 100 hours per year for emergency operations, EPA included that provision to provide flexibility in emergency situations when the main fuel may not be available. EPA believes such an allowance is appropriate and does not expect that emissions will be significantly affected by including a provision to operate on propane for 100 hours per year for emergency purposes. Numbers EPA has available, which are presented in information included in the docket to the proposed rule, show that regulated pollutant emissions (NO_X, CO, and VOC/NMHC/THC) from engines running on propane are the same or lower than emissions from engines running on natural gas (rich burn and lean burn), with a few exceptions. Therefore, for the reasons provided, it is not expected that the propane allowance will significantly affect emissions and EPA has retained the propane use allowance in the final rule.

Comment: Two commenters believe that the emergency engine requirements in the proposed NSPS/NESHAP are more restrictive than the requirements in the RICE NESHAP. The commenters believe the proposed rules should be amended to be consistent with the emergency engine definition and exemption provided in the RICE NESHAP. Two commenters said that the emergency engine definition in the existing RICE MACT that was developed based on input and review from a broad stakeholder group should be retained. The commenters believe that the proposed rule substantially and materially alters the definition as follows:

- Maintenance and readiness testing limited to 100 hours per year versus no time limit on the use of emergency stationary RICE for routine testing and maintenance.
- Elimination of an additional 50 hours per year in non-emergency situations.
- Requirement to maintain documentation for maintenance and testing operation to ensure the 100 hour per year limit is not exceeded.
- Maintenance and readiness testing operation provisions as recommended by third party Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine has been introduced.

The commenters believe that the current NESHAP places no restriction on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. In addition, it offers an additional 50 hours per year in non-emergency situations. This clause was included as an outcome of the industrial combustion coordinated rulemaking (ICCR) process to provide adequate time to tests systems related to the emergency unit. For example, firewater systems where engine checks are necessary, and a systems check is also required and may be completed as part of a safety exercise. Commenter 150 believes that EPA has confused the additional non-emergency allocation with a perceived hour restriction for

annual maintenance and readiness checks.

Also, the commenter stated that in consideration relative to the RICE MACT, the proposed NESHAP amendments broaden the category of affected equipment to include units that are less than or equal to 500 HP and area sources. With more stringent criteria in the proposed rule, the commenter believes that EPA is requiring more stringency for small engines and area sources than what was deemed necessary for larger engines under the existing RICE MACT. Further, the added burden and cost associated with documenting and maintaining records describing why the engine was operating must be assessed and the benefit for this requirement rationalized. As an alternative to continuing with the revised definition in the proposed rule, the commenters recommend that the current definition be retained.

Response: It is true that EPA proposed a more stringent emergency engine definition and requirements as compared to the existing RICE MACT emergency engine definition. Regarding the commenters' request to retain the existing RICE MACT definition, EPA believes that keeping the proposed definition is appropriate for the most part. EPA recognizes that the existing definition was based on input and review from industry, and EPA is not ignoring the products of the ICCR process nor the extensive participation and commitment of industry members. However, EPA has learned a lot since the ICCR process from 10 years ago and knows now that there are health consequences for failing to regulate emergency engines and for having a broad definition that allows engines that are used for more than emergencies to emit at higher levels. EPA feels the existing RICE MACT definition of emergency engines was not given appropriate restrictions and would unintentionally allow significant operation of an engine in non-emergency situations such as the unlimited maintenance allowance.

Based on vast information received since the time of the ICCR process and the RICE MACT rulemaking, EPA has concluded that it is appropriate to limit the hours of operation during maintenance and testing to 100 hours per year. The issue of allowable hours for maintenance and testing was discussed extensively under the CI NSPS rulemaking and more information can be found in the final CI NSPS rule (71 FR 39153) and Responses to Comments (RTC) document (see EPA–HQ–OAR–2005–0029–0324). EPA recognizes that the existing RICE MACT places no restriction on the use of emergency engines in emergency situations and for routine maintenance and testing. EPA agrees that is appropriate to retain a no time limit on the use of emergency stationary engines in emergency situations; however, does not agree that routine maintenance and testing should be unlimited. Again, EPA has gained much information regarding emergency engine operation since the ICCR process a decade ago and must consider environmental and health consequences for failing to regulate the operation of emergency engines appropriately and prevent loop-holes. Numerous comments received during the public comment period for NSPS for stationary CI engines argued that EPA should allow 100 hours per year for emergency engines to conduct necessary maintenance and testing. Based on those comments, EPA continues to believe that it is appropriate to finalize a 100 hours per year limit for maintenance and testing operation for emergency engines under the NSPS. EPA disagrees that maintenance and testing should be unrestricted. However, EPA believes it is crucial to allow sufficient hours for maintenance and readiness testing to ensure that the emergency engine will respond as expected in the event of an emergency, and EPA believes that 100 hours per year is adequate.

The commenters expressed particular concern over the elimination of the additional 50 hours per year for non-emergency situations included in the original RICE MACT emergency engine definition, but excluded from the proposed requirements affecting emergency engines in this rule and EPA understands the commenters' concerns. It is true that in the preamble to the proposed rule, EPA confused the existing 50 hours per year currently allowed for non-emergency operation in the RICE MACT with the 100 hours per year for maintenance and readiness checks, and may be, as the commenters indicated, a result of comparing the SI NSPS too closely to the CI NSPS that was recently promulgated. Industry has expressed that it might be forced to use portable emergency engines instead of stationary emergency engines to avoid certain requirements of the rule and indicated that the portable engines will be dirtier than the stationary engines. EPA certainly does not wish to create such outcome of the rulemaking and therefore believes it is appropriate to allow owners/operators to operate their engines for 50 hours per year for non-emergency purposes and has made that clarification in § 60.4243(d) of the final rule. However, EPA is concerned that if stationary emergency engines are allowed to operate in non-emergency situations they may be inappropriately used for peaking power. In response to EPA's concern, industry has noted that its intent is not to use stationary emergency engines for peaking purposes. Even so, EPA has specified that the 50 hours allowed for non-emergency situations cannot be used to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. If this happens, the engine is no longer considered to be an emergency engine and the engine would be required to meet the non-emergency engine emission standards, which are more stringent. In addition, the allowed 50 hours of operation for non-emergency situations must be within the currently allowable 100-hour total for purposes of maintenance and testing. In other words, the total hours of operation per year cannot exceed 100 hours for purposes of maintenance and testing and for running the engine for non-emergency purposes.

Regarding the requirement to maintain records to ensure the 100-hour limit is not exceeded for emergency engines as specified in § 60.4245(b) of the proposed rule, EPA feels this requirement is necessary and appropriate. This requirement is consistent with the final CI NSPS (see 40 CFR 60.4214(b)). To ensure compliance with the 100-hour limit, EPA must require recordkeeping for all operation of emergency engines, emergency situations as well as required testing. This is a reasonable way to enforce this limit to ensure that the non-emergency hours of operation are not exceeded beyond allowable limits. Clearly, this requirement yields environmental benefits since it will limit the likelihood that sources subject to the rule that operate emergency engines would exceed the 100-hour annual non-emergency limit. As noted in the RTC document for the final CI NSPS, many States require reporting of both emergency and non-emergency use, e.g., the California ATCM requires a monthly log of all operation by emergency engines. Also, certain facilities already maintain such documentation, e.g., operating hours and operating conditions are currently maintained at hospitals. EPA wishes to prevent owners/operators from operating emergency engines illegally and circumventing the regulation and believes the additional recordkeeping requirements will greatly enhance EPA's ability to enforce this requirement. The

requirement will ensure that there is documentation that the engine was operating in emergency situations when it was running beyond the annual limits permitted for maintenance and testing. There is no annual cap on the hours of operation during an emergency situation, but it is important to have documentation that such operation was indeed for emergency purposes. As noted, owners/operators of emergency engines already keep documentation of when and why such engines were operated so EPA feels the recordkeeping requirement is no significant additional burden.

However, EPA does believe it is necessary to clarify that emergency engines above 500 HP at major sources that were installed prior to the proposal date for this rule (June 12, 2006), but after the proposal date (December 19, 2002) for the previous RICE MACT (and thus, new emergency engines under 40 CFR part 63, subpart ZZZZ, and subject to the old rule) should be governed by the old definition of emergency engines, except that the definition includes the clarification that emergency engines do not include engines used for peaking power or to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. This clarification has been made to the definition of emergency stationary RICE in section 63.6675 of the final rule. EPA believes this clarification addresses some of the commenters' concerns on this issue.

Comment: One commenter stated that by reducing the scope of engines that qualify as "emergency engines," the proposed revision could expand the universe of engines that are subject to more stringent NESHAP requirements. Commenter 145 believes that its member utilities would be directly affected, since they deploy emergency engines to support their obligation to deliver energy to customers safely and reliably. In addition, this revision would impact utility customers who deploy emergency engines, such as hospitals and nursing homes, since there is no minimal size threshold on the engines affected by the proposal.

Response: EPA disagrees that the rule necessarily expands the universe of engines that are subject to the standards applicable to non-emergency engines. Operation of engines during emergencies is not restricted by the rule and if an engine is truly an emergency engine, it would not be subject to more stringent requirements. Available information indicates that emergency engines operate on average about 50 hours per year, which includes the hours spent for maintenance and testing purposes. EPA recognizes that there may be stationary emergency engine applications that operate beyond 50 hours per year for maintenance and testing purposes, which is why EPA proposed a 100-hour allowance for such purposes. EPA received numerous comments on the testing and maintenance allowance on the proposed CI NSPS. Based on the number of commenters who indicated that the proposed maintenance and testing allowance of 30 hours per year was not enough, EPA chose to increase the number to 100 hours per year, which was consistent with what commenters recommended. Even though the original RICE NESHAP covering stationary engines greater than 500 HP located at major sources did not have a time limit on the use of emergency stationary engines for routine testing and maintenance, EPA believes that providing 100 hours per year is more than sufficient. In those few cases where 100 hours is not sufficient, EPA has included the provision allowing owners/operators to petition for additional hours (unless the owner/operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year, in which case, a petition is not necessary.) Note, however, that in the final rule, EPA has made it clear that "new" engines affected by the NESHAP that are installed prior to the proposal of the NSPS would be covered by the old definition included in the original NESHAP at 40 CFR part 63, subpart ZZZZ. In addition, EPA has specified that 50 of the 100 hours allowed for maintenance and testing can be use for non-emergency purposes.

E. Manufacturer O&M Requirements

Comment: Several commenters expressed concern over the proposed requirements requiring owners/operators to operate and maintain SI ICE according to the manufacturer's written instructions or procedures developed by the owners/operators that are approved by the engine manufacturer. One commenter believes that compliance requirements should reflect best practices developed by the owners/operators with experience with using the engines in the field. Another commenter felt that the manufacturers do not have the long-term experience in operating and maintaining these engines in the field and recommended that the proposed NESHAP allow owners/operators to use the existing maintenance requirements of the General Provisions of both the NSPS (40 CFR part 60, subpart A) and the NESHAP (40 CFR part 63, subpart A) rules to meet the requirements of this rule.

One commenter recommended for voluntarily certified engines, the owners/operators be given a choice of either accepting the manufacturers certification or opting for a "verification program" modeled after the performance testing of § 60.4243(d)(2) of the proposal.

One commenter expressed that it is in general agreement that owners/operators should maintain their SI ICE in accordance to the original manufacturer's specifications for larger engines. However, the commenter had concerns about imposing these requirements on limited use and small engines. The commenter believes that this requirement does not appear to be commensurate with the environmental impact.

One commenter expressed that the operation and maintenance (O&M) requirements in manufacturer's manuals is too stringent and inflexible and needs to be changed and stated that engine manufacturers do not want to become involved in approving or reviewing procedures developed by owners/operators. The commenter added that in many cases, owners/operators of stationary engines have developed and follow their own O&M procedures and have extensive experience in operating their engines to optimize performance and life in their specific applications within regulatory emissions limits. Further, the commenter said, owners/operators of non-certified engines are required to conduct performance testing to assure compliance. Therefore, since these owners/operators will use other means to assure compliance, there should not be a regulatory requirement to follow manufacturer's procedures, the commenter expressed. However, if EPA includes the requirement to follow engine manufacturer's procedures in the final rule, the referenced procedures should be limited to those required to maintain emissions control, the commenter said, and recommended that EPA develop a suite of options and requirements to assure compliance as follows:

- For certified engines, owners/operators should be required to set up the engine and follow manufacturers' recommended maintenance, but only for systems or components that affect emissions.
- For non-certified engines, appropriate emissions testing and monitoring should be all that is required.
- In addition, owners/operators should be able to purchase a certified

engine but operate it according to their own procedures. In that case, appropriate emissions testing and monitoring should be all that is required.

One commenter's objection to the proposed requirement to follow the manufacturer's procedures was based on the assertion that most operators of these engines have developed proprietary procedures for their engines, varying from region to region and across the broad spectrum of applications of these engines; that reviewing procedures would subject engine manufacturers to an administrative burden. This requirement is unnecessary, the commenter noted, because owners/operators bear responsibility for compliance, and are already required to demonstrate such compliance through extensive testing.

Two commenters requested that EPA allow owners/operators to define O&M requirements for gas-fired engines, rather than the manufacturer O&M. These two commenters stated that owners/operators have developed and refined O&M practices to address the specific challenges, rigor, and accessibility of their application. However, if EPA chooses to mandate manufacturer O&M, then the commenters requested that the manufacturers be required to reasonably review and approve alternatives, and the cost of the program be borne by the manufacturer. One commenter stated that allowing owners/operators to follow their own O&M procedures is consistent with the requirements of the subpart A General Provisions. The commenter stated that the EPA should clearly indicate that owners/operators of gas-fired engines can choose compliance monitoring based on owners/operators defined O&M and periodic tests even if a certified engine is available.

Response: EPA agrees with some of the comments received on the issue of operating the engine according to manufacturer O&M procedures. EPA agrees that any requirement to operate and maintain engines according to manufacturer instructions should be limited to emission-related operation and maintenance. In addition, in the final rule, EPA has not included the requirement for owners/operators of non-certified engines to operate and maintain their engines according to the manufacturer's written instructions or procedures developed by the owners/operators that are approved by the engine manufacturer. Instead, owners/operators will be required to operate and maintain their engines in a proper manner, consistent with their own maintenance plan. Owners and operators of non-certified engines will be required to keep records of the maintenance performed on the engine. In addition, EPA is requiring performance testing of non-certified engines to demonstrate compliance with the emission standards, consistent with the proposal.

Based on information received during the final rulemaking and in public comments, EPA does not believe it is appropriate to require manufacturer O&M procedures for all owners/operators of certified engines without allowing alternative procedures and is therefore providing an alternative option to owners/operators. However, if an owner/operator has a certified engine that it wishes to operate according to its own well-established procedures based on its own experience with operating that engine (or engines), that particular engine that was originally certified will no longer be considered certified and the engine must be tested. EPA will consider that engine to be operating in a non-certified manner, and will require testing if the engine is greater than or equal to 100 HP. Engines below 100 HP operating in a non-certified manner will be exempt from performance testing, but are required to keep a maintenance plan and records. EPA wishes to encourage the certified route for smaller engines and expects that the majority of engines in this size group will be certified. Engines greater than or equal to 100 HP and less than or equal to 500 HP will be required to conduct a performance within 1 year of startup to demonstrate compliance with the emission standards. These engines will in addition be required to keep a maintenance plan and records of conducted maintenance. Engines greater than 500 HP will in addition to conducting a performance testing within 1 year of startup, also have to conduct subsequent performance testing every 8,760 hours or 3 years (whichever comes first) thereafter.

F. Streamlined Compliance Requirements

Comment: Commenters asserted that the proposed rule is complex partly due to having a combined rulemaking. One commenter stated that the proposed rule is too complex for most small oil and gas operators to be able to fully understand and evaluate. The commenter also believed that the proposed rule requires a person with significant knowledge and experience with CAA rules and requirements to understand it. One commenter stated that the proposed rulemaking added much complexity to the 2004 rulemaking for stationary RICE greater than 500 HP located at major sources, as it combined the adoption of a new NSPS, the expansion of the 2004 requirements to smaller sources, and the addition of the section 112(k) of the CAA requirements covering HAP emissions at area sources. The commenter believed that this complex interweaving of the area source requirements with the major source requirements make the rule very difficult to follow relative to area sources. This commenter recommended that EPA separate the major source from the area source requirements and suggested that one way of doing this would be to establish two separate subparts in 40 CFR part 63 for stationary RICE; one to cover area sources and another to cover major sources. According to the commenter, this approach would simplify and clarify the rule for small businesses and the various State and local agencies. In addition, the commenter recommended that EPA avoid similar interweaving of requirements, and strive to create simpler, easier to understand area source rulemakings under section 112(k) of the CAA in the future.

Two commenters were concerned that there are conflicting or duplicate requirements between the proposed NSPS, existing nonroad regulations, the RICE NESHAP, and the currently proposed NESHAP. Specifically, the existing RICE NESHAP requirements for formaldehyde and the currently proposed emission limit for non-methane hydrocarbons (NMHC) to control HAP are duplicative and may lead to conflicting or impractical reduction requirements for some engines, or may be technically infeasible, the commenters said. Other commenters noted that stationary natural gas engines greater than 500 HP located at a major source are required to comply with 40 CFR part 63, subpart ZZZZ, and the NSPS NMHC limits. According to one commenter, it also creates confusion, since it may not be technically feasible to meet the various standards required in the NSPS and the NESHAP simultaneously. Three commenters recommended that all engines greater than 500 HP and all 4SLB engines greater than 250 HP located at major sources be exempt from meeting the NMHC NSPS standards. The emissions controls needed to meet the NESHAP standards applicable to those engines are sufficient to reduce HAP and other HC emissions. Elimination of the NMHC standard for that group of engines in the NSPS will simplify the rules, eliminate confusing, redundant, and possibly conflicting

requirements, and will relieve owners/operators from unnecessary testing and monitoring requirements, according to commenters.

Response: EPA believes that the approach taken to have a combined rulemaking is more effective than having separate rules for the same types of facilities and will help reduce burden and EPA also believes that having a combined rulemaking, as well as regulations that refer to one another and are promulgated concurrently, actually simplifies compliance for affected sources. Commenters are reminded that Congress requires EPA to promulgate standards under both sections 111 and 112 of the CAA, which requires that owners and operators of sources covered under both sections are required to meet standards under both sections. However, EPA has made a major simplification in the final rule and has included a provision in section 63.6590 of the final NESHAP that owners/operators of new and reconstructed engines less than 500 HP located at major sources (except new and reconstructed 4SLB engines between 250 and 500 HP) and engines located at area sources will be in compliance with the NESHAP if they are in compliance with the NSPS. This approach is substantively the same as the approach in the notice of proposed rulemaking, at least in terms of emission requirements, but EPA believes this approach more clearly streamlines and simplifies compliance and greatly reduces the complexity that may be associated with demonstrating compliance for owners/operators and makes the rule easy to understand for all parties affected, including small business owners and State and local agencies. Additionally, for the most part the only thing required from small engine owners/operators is that they purchase a certified engine, which EPA believes will be available for most, if not all, of the smaller engines, and operate the engine according to the manufacturer's specifications. EPA further notes that even for non-certified engines, requirements are reduced, especially for smaller engines. However, EPA appreciates the commenters' concerns and has made changes to the proposed rule that will further help affected parties understand and evaluate the requirements, as discussed above.

EPA understands the commenters' concerns and agrees that there may be some duplication in the proposed rule and has taken steps in the final rule to simplify the compliance process for owners/operators by removing potential duplicative and/or conflicting requirements. Specifically, EPA realizes that certain engines will be subject to two sets of emission standards and regulations. New engines over 500 HP located at major sources would be subject to the NESHAP as well as the NSPS. Stationary 4SLB engines between 250 and 500 HP located at major sources would also be subject to the NESHAP and NSPS. EPA does not agree with the commenters that recommend that EPA exempt all engines greater than 500 HP and 4SLB above 250 HP at major sources from meeting the NSPS NMHC (now VOC) standard. These stationary engines will be required to comply with both regulations. One regulation addresses HAP emissions and the other regulation addresses criteria pollutants. The commenters provide no data or analysis indicating that it would be infeasible to meet both regulations, and EPA has shown that the standards under both regulations are feasible.

For the current 40 CFR part 63, subpart ZZZZ, EPA did not find that there is a good relationship between CO emission concentration or CO emission reductions and HAP emission concentrations or HAP emission reductions from rich burn engines equipped with NSCR. Therefore, in that rule, EPA could not use CO as a surrogate for HAP for rich burn engines. For that reason, EPA cannot exempt stationary rich burn engines from either regulation, and rich burn engines greater than 500 HP located at major sources have to comply with the formaldehyde emission standard in the RICE NESHAP (percent reduction or concentration limit) and the NO_X, CO, and VOC emission standards in the SI NSPS.

However, for SI lean burn engines, under the existing RICE NESHAP, EPA established a good relationship between CO emission reductions and HAP emission reductions from 4SLB engines with oxidation catalyst systems. Therefore, EPA concluded that CO emission reductions could serve as a surrogate for HAP emission reductions for SI lean burn engines with oxidation catalysts. Since the existing RICE NESHAP contains emission standards for CO and formaldehyde that are based on the application of oxidation catalysts, it makes sense to exempt these engines from the CO emission standard under the SI NSPS, which would be less stringent than the NESHAP CO standard. For this group of engines, and for 4SLB engines between 250 and 500 HP located at major sources, EPA believes it is more appropriate and reasonable to exempt the engines from the CO standard in the NSPS, since that is the same pollutant that they are testing for in the NESHAP, rather than the VOC standard. Based on comments received and other information analyzed post-proposal, EPA believes that CO is a more appropriate surrogate for formaldehyde than VOC for SI lean burn engines and EPA does not believe VOC should be used as a surrogate for HAP. EPA recognizes that it proposed exempting 4SLB engines between 250 and 500 HP at major sources from the NSPS NMHC standard, but based on new information comments submitted by EUROMOT (EPA–HQ–OAR–2005–0030–0039), EPA now believes that CO is more appropriate and consistent with the NESHAP for 4SLB engines. Therefore, SI lean burn engines greater than or equal to 250 HP located at major sources that comply with the RICE NESHAP only have to comply with the NO_X and VOC standard in the SI NSPS. EPA has included this provision in Table 1 to the final NSPS.

VI. Summary of Environmental, Energy and Economic Impacts

A. What are the air quality impacts?

The final rule is estimated to reduce NO_X emissions from stationary SI ICE by an estimated 77,000 tons per year (tpy), CO emissions by about 45,000 tpy, VOC emissions by about 2,000 tpy, and HAP emissions by approximately 800 tpy in the year 2015. Of the 800 tpy of HAP reduced in 2015, it is expected that about 86 tpy will be the result of requirements under the RICE NESHAP. The final rule is estimated to reduce NO_X emissions by 84,000 tpy, CO emissions by 49,000 tpy, VOC emissions by 2,400 tpy, and HAP emissions by 900 tpy in the year 2020. Of the 900 tpy of HAP reduced in 2020, it is expected that about 100 tpy will be the result of requirements under the RICE NESHAP. The final rule is estimated to reduce NO_X emissions by 99,000 tpy, CO emissions by 56,000 tpy, VOC emissions by 3,000 tpy, and HAP emissions by 1,000 tpy in the year 2030. Of the 1,000 tpy of HAP reduced in 2030, it is expected that about 120 tpy will be the result of requirements under the RICE NESHAP.

EPA estimates that a total of about 150,000 stationary SI engines will be affected by the final rule by the year 2015. A total of 433,000 stationary SI engines will be affected by the year 2030. An estimated 623,000 stationary CI engines will be affected by the final rule by the year 2015. However, stationary CI engines affected by the final rule would also be subject to the CI NSPS. Further information regarding the estimated reductions of the final rule can be found in the memorandum entitled "Cost Impacts and Emission Reductions Associated with Proposed NSPS for Stationary SI ICE and

NESHAP for Stationary RICE," which is available in the docket.

B. What are the cost impacts?

The total national capital cost for the final rule is estimated to be approximately $44 million in the year 2015, with a total national annual cost of $19 million in the year 2015. Total national capital cost for the RICE NESHAP portion of the final rule are $3 million in 2015 with a total annual cost of also $3 million in 2015. In the year 2020, the total national capital and annual costs for the final rule are estimated to be $47 million and $20 million, respectively. Total national capital cost for the RICE NESHAP portion of the final rule are $3.5 million in 2020 with a total annual cost of $3.5 million in 2020. In the year 2030, the total national capital and annual costs for the final rule are estimated to be $54 million and $22 million, respectively. Total national capital cost for the RICE NESHAP portion of the final rule are $4.2 million in 2030 with a total annual cost of $4.3 million in 2030.

C. What are the benefit estimates?

EPA estimates the monetized benefits of this final rule to be about $220 million (2005$). This estimate of benefits reflects the use of the Pope *et al.* (2002) $PM_{2.5}$ mortality estimate. EPA recognizes the uncertainty associated with this estimate and readers may refer to the benefits chapter of the Regulatory Impacts Analysis for a discussion of the range of benefits estimated for this rule. To estimate the human health benefits of NO_X emission reductions from stationary SI engines, EPA followed an approach and methodology described in the Technical Support Document (TSD) accompanying EPA's 2007 benefits analysis of the proposed changes to the National Ambient Air Quality Standards for Ozone. In this analysis, EPA applied dollar per ton benefit transfer coefficients. These benefit per ton estimates relate a one-ton reduction in a given $PM_{2.5}$ precursor, such as NO_X emitted by stationary sources, to an estimate of the total monetized human health benefits of reduced exposure to $PM_{2.5}$. EPA chose these transfer coefficients as the basis for estimating the benefits from emission reductions of these two pollutants because the coefficients were derived for sources that share many of the same key attributes as those covered here. These elements include the stack height and the pollutant affected-NO_X. Thus EPA believes that it can generate a reasonable estimate of benefits for this final rule using a benefits transfer approach. Specifically, these estimates are based on application of the benefits scaling approach derived from the benefits analyses completed for these rulemakings. Readers interested in the methodology followed to generate these estimates may consult the Technical Support Document supporting the Proposed Ozone NAAQS RIA.[1] A summary of the benefits estimates is in Table 5 of this preamble.

TABLE 5.—ESTIMATE OF MONETIZED BENEFITS BY 2015 ($2005) [a]

$ Benefits/ ton	Amount of NO_X emissions reduced (tons)	Monetized benefits (millions of 2005$) [b]
$2,800	77,362	$220

[a] The results are presented assuming a discount rate of three percent.
[b] Estimate rounded to two significant figures.

The specific estimates of benefits per ton of pollutant reductions included in this analysis are largely driven by the concentration response function for premature mortality, which is based on the American Cancer Society cohort (ACS) (Pope, C.A. III, *et al.*, "Lung Cancer, Cardiopulmonary Mortality, and Long-Term Exposure to Fine Particulate Air Pollution," JAMA, 2002).

Since the publication of Clean Air Interstate Rulemaking (CAIR), the EPA's Office of Air and Radiation has adopted a different format for its benefits analysis in which characterization of the uncertainty in the concentration response function is integrated into the main benefits analysis. The PM NAAQS RIA analysis prepared last year provides an indication of the sensitivity of our results to the use of alternative concentration response functions, including those derived from the recently completed expert elicitation study. Specifically, compared to the final PM NAAQS estimate of the mean mortality from the ACS cohort, the expert-based premature mortality incidence ranged from 50 percent of the mean ACS estimate to more than five times the size of the ACS mean estimate. The Agency intends to consider using information to update our benefits estimates as part of an approach similar to that used in the PM NAAQS Regulatory Impact Analysis (RIA) in the benefits analyses for future rulemakings.

EPA estimates the annualized benefits of this rulemaking (the NSPS and NESHAP together) to be about $220 million (2005$) and annualized costs to be $22 million (2005$). Thus, benefits exceed cost by about to $200 million in 2015. EPA believes that the benefits are likely to exceed the costs by a significant margin under this rulemaking even when taking into account uncertainties in the cost and benefit estimates. For more information, please refer to the RIA for this final rule that is available in the docket.

D. What are the economic impacts?

The impacts to producers and consumers affected by this final rule are higher product prices and outputs. Prices for affected engines that are larger than 175 HP may increase from 5 to 7 percent, and prices for engines smaller than 175 HP may increase by 17 to 33 percent. Production of affected engines, however, should only fall by between 0.5 and 3.3 percent since previous analyses by EPA of engine markets done for the Final Nonroad Diesel Engine Rule suggest a small reaction in output due to a large price increase. Hence, the overall economic impact on affected industries should be small.

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

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

VII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under section 3(f)(1) of Executive Order 12866 (58 FR 51735, October 4, 1993), this action is an "economically significant regulatory action" because it is likely to have an annual affect on the economy of $100 million or more. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Order 12866, and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

The information collection requirements in this final rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The information collection requirements are not enforceable until OMB approves them.

The information requirements are based on notification, recordkeeping, and reporting requirements in the NSPS General Provisions (40 CFR part 60, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically

[1] Technical Support Document: Calculating Benefit per-Ton Estimates. EPA–HQ–OAR–2006–0834.

authorized by section 114 of the CAA (42 U.S.C. 7414). All information submitted to EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to Agency policies set forth in 40 CFR part 2, subpart B.

This final rule will require notifications from certain engines and compliance reports. The recordkeeping requirements require only the specific information needed to determine compliance.

The annual monitoring, reporting, and recordkeeping burden for this collection (averaged over the first 3 years after the effective date of this final rule) is estimated to be 132,164 labor hours per year at a total annual cost of $17,995,722. This estimate includes a one-time notification for engines greater than 500 HP that are non-certified, engine certification, engine performance testing, and recordkeeping. There are no capital/start-up costs associated with the monitoring requirements over the 3-year period of the ICR. The operation and maintenance costs for the monitoring requirements over the 3-year period of the ICR are estimated to be $8,498,888 per year.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the **Federal Register** to display the OMB control number for the approved information collection requirements contained in this final rule. In addition, EPA is amending the table in 40 CFR part 9 of currently approved OMB control numbers for various regulations to list the regulatory citations for the information requirements contained in this final rule.

C. Regulatory Flexibility Act

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

For the purposes of assessing the impacts of this final rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This final rule is expected to affect 21 ultimate parent businesses that are manufacturers of affected SI engines. Five of the parent businesses are small according to the SBA small business size standard. One of these five firms would have an annualized cost of more than one percent of sales associated with meeting the requirements; the estimated cost is about five percent of the annual sales for this small firm. In addition, for the industries in which small firms are found that may be affected by this final rule, either by purchasing a compliant SI engine or by performing the required testing, the estimated cost of this rule is 0.10 percent of sales or less. Also, no other adverse impacts are expected to these affected small businesses.

For more information on the small entity impacts associated with the final rule, please refer to the Economic Impact and Small Business Analyses in the public docket. These analyses can be found in the Regulatory Impact Analysis for this final rule.

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities. When developing the revised standards, EPA took special steps to ensure that the burdens imposed on small entities were minimal. EPA conducted several meetings with industry trade associations to discuss regulatory options and the corresponding burden on industry, such as recordkeeping and reporting.

D. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least-costly, most cost-effective, or least-burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least-costly, most cost-effective, or least-burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. Thus, this final rule is not subject to the requirements of sections 202 and 205 of

the UMRA. EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This final rule primarily affects private industry, and does not impose significant economic costs on State or local governments. Thus, Executive Order 13132 does not apply to the final rule. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicited comment on the proposed rule from State and local officials.

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

Executive Order 13175, entitled "Consultation and Coordination With Indian Tribal Governments" (65 FR 67249, November 9, 2000) requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This final rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. Thus, Executive Order 13175 does not apply to the final rule.

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

Executive Order 13045 "Protection of Children from Environmental Health and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

EPA interprets Executive Order 13045 as applying to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5–501 of the Order has the potential to influence the regulation. This final rule is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks.

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

This rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355 (May 22, 2001)) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. EPA has prepared an analysis of energy impacts that explains this conclusion as follows.

The increase in petroleum product output, which includes increases in fuel production, is estimated at less than 0.03 percent, or 11.1 trillion BTUs as based on 2007 Annual Energy Outlook data provided by the U.S. Energy Information Administration. The reduction in coal production is zero since no coal-fired units will be affected by the requirements of the final rule. The reduction in electricity output is estimated at 0.10 percent, or about 15.1 trillion BTUs per year based on 2007 U.S. electricity production nationwide. Production of natural gas is expected to decrease by 13.83 trillion BTU, a decrease of 0.07 percent from 2007 U.S. production levels. The maximum of all energy price increases, which include increases in natural gas prices as well as those for petroleum products, and electricity, is estimated to be 0.10 percent nationwide. Energy distribution costs may increase by roughly no more than the same amount as electricity rates. EPA expects that there will be no discernable impact on the import of foreign energy supplies, and no other adverse outcomes are expected to occur with regards to energy supplies. The increase in cost of energy production should be minimal given the very small increases in energy prices and outputs shown above. All of the estimates presented above account for some pass-through of costs to consumers as well as the direct cost impact to producers. For more information on these estimated energy effects, please refer to the economic impact analysis for the final rule. This analysis is available in the public docket.

Therefore, EPA concludes that this rule when implemented will not have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act

As noted in the proposed rule, Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Pub. L. 104–113, Section 12(d), 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. The VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies.

The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency does not use available and applicable VCS. These rules involve technical standards. The EPA cites the following standards: EPA Methods 1, 1A, 2, 3, 3A, 3B, 4, 7E, 10, 18, 19, 25A, 320, and 323 (40 CFR part 60, appendix A); and American Society of Testing and Materials (ASTM) methods ASTM D6348–03 and ASTM D6522–00 (2005).

Consistent with the NTTAA, EPA conducted searches to identify voluntary potentially applicable consensus standards in addition to these EPA methods. No applicable voluntary consensus standards were identified for EPA Methods 1A, 19, 320, and 323. The search and review results are in the docket for these rules.

The search identified two voluntary consensus standards as acceptable alternatives to EPA Methods. In addition, the standards, ASTM D6348–03 and ASTM D6522–00 (2005) cited in these rules are also VCS.

The standard ASME PTC 19.10–1981, "Flue and Exhaust Gas Analyses," is cited in this rule for its manual method for measuring the oxygen content of the exhaust gas. This part of ASME PTC 19.10–1981 is an acceptable alternative to EPA Method 3B.

The standard ASTM D6420–99 (2004), "Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry" is cited in this rule as an alternative to EPA Method 18 for measuring total nonmethane organic.

Similar to EPA's performance-based Method 18, ASTM D6420–99 is also a performance-based method for measurement of gaseous organic compounds. However, ASTM D6420–99 was written to support the specific use of highly portable and automated GC/MS. While offering advantages over the traditional Method 18, the ASTM method does allow some less stringent criteria for accepting GC/MS results than required by Method 18. Therefore, ASTM D6420–99 is a suitable alternative to Method 18 only where:

(1) The target compound(s) are those listed in Section 1.1 of ASTM D6420–99, and

(2) The target concentration is between 150 ppbv and 100 ppmv.

For target compound(s) not listed in Section 1.1 of ASTM D6420–99, but potentially detected by mass spectrometry, the regulation specifies that the additional system continuing calibration check after each run, as detailed in Section 10.5.3 of the ASTM method, must be followed, met, documented, and submitted with the data report even if there is no moisture condenser used or the compound is not considered water soluble. For target compound(s) not listed in Section 1.1 of ASTM D6420–99, and not amenable to detection by mass spectrometry, ASTM D6420–99 does not apply.

As a result, EPA will cite ASTM D6420–99 in this rule. The EPA will also cite Method 18 as a gas chromatography (GC) option in addition to ASTM D6420–99. This will allow the continued use of GC configurations other than GC/MS.

The search for emissions measurement procedures identified 13 other voluntary consensus standards. The EPA determined that these 13 standards identified for measuring emissions of the HAP or surrogates subject to emission standards in these rules were impractical alternatives to EPA test methods for the purposes of these rules. Therefore, EPA does not intend to adopt these standards for this purpose. The reasons for the determinations for the 13 methods are discussed in the dockets to the rules.

Under 63.7(f) and 63.8(f) of subpart A of the General Provisions to part 63, a source may apply to EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications, or procedures. In addition, EPA Method 301 describes procedures any source may use to establish the equivalency of alternatives to any EPA reference method.

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

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

EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. This rule promulgates new source performance standards and national emission standards for hazardous air pollutants.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this final rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective on March 18, 2008.

List of Subjects

40 CFR Part 60

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

40 CFR Part 63

Administrative practice and procedure, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

40 CFR Part 85

Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Warranties.

40 CFR Part 90

Administrative practice and procedure, Air pollution control.

40 CFR Part 1048

Administrative practice and procedure, Air pollution control.

40 CFR Part 1065

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

40 CFR Part 1068

Administrative practice and procedure, Imports, Motor vehicle pollution, Penalties, Reporting and recordkeeping requirements, Warranties.

Dated: December 20, 2007.

Stephen L. Johnson,

Administrator.

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

PART 60—[AMENDED]

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

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

Subpart A—[Amended]

■ 2. Section 60.17 is amended as follows:

■ a. By revising paragraph (a)(82);

■ b. By redesignating paragraphs (a)(85) through (a)(90) as paragraphs (a)(87) through (a)(92);

■ c. By redesignating paragraph (a)(84) as (a)(85);

■ d. By adding new paragraph (a)(84);

■ e. By adding new paragraph (a)(86);

■ f. By revising paragraph (h)(4); and
■ g. By adding paragraph (n).

The revisions and additions read as follows:

§ 60.17 Incorporation by Reference

* * * * *

(82) ASTM D6348–03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, IBR approved for table 7 of Subpart IIII of this part and table 2 of subpart JJJJ of this part.

* * * * *

(84) ASTM D6420–99 (Reapproved 2004) Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for table 2 of subpart JJJJ of this part.

* * * * *

(86) ASTM D6522–00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for table 2 of subpart JJJJ of this part.

* * * * *

(h) * * *

(4) ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], IBR approved for Tables 1 and 3 of subpart EEEE, Tables 2 and 4 of subpart FFFF, Table 2 of subpart JJJJ, and §§ 60.4415(a)(2) and 60.4415(a)(3) of subpart KKKK of this part.

* * * * *

(n) This material is available for purchase from IHS Inc., 15 Inverness Way East, Englewood, CO 80112.

(1) International Organization for Standards 8178–4: 1996(E), Reciprocating Internal Combustion Engines—Exhaust Emission Measurement—Part 4: Test Cycles for Different Engine Applications, IBR approved for § 60.4241(b).

(2) [Reserved]

Subpart JJJJ—[Amended]

■ 3. Part 60 is amended by adding subpart JJJJ to read as follows:

Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Sec.

What This Subpart Covers

60.4230 Am I subject to this subpart?

Emission Standards for Manufacturers

60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines?

60.4232 How long must my engines meet the emission standards if I am a manufacturer of stationary SI internal combustion engines?

Emission Standards for Owners and Operators

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

60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Other Requirements for Owners and Operators

60.4235 What fuel requirements must I meet if I am an owner or operator of a stationary SI gasoline fired internal combustion engine subject to this subpart?

60.4236 What is the deadline for importing or installing stationary SI ICE produced in the previous model year?

60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

Compliance Requirements for Manufacturers

60.4238 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤19 KW (25 HP)?

60.4239 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that use gasoline?

60.4240 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that are rich burn engines that use LPG?

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

60.4242 What other requirements must I meet if I am a manufacturer of stationary SI internal combustion engines?

Compliance Requirements for Owners and Operators

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

Testing Requirements for Owners and Operators

60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Notification, Reports, and Records for Owners and Operators

60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

General Provisions

60.4246 What parts of the General Provisions apply to me?

Mobile Source Provisions

60.4247 What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines?

Definitions

60.4248 What definitions apply to this subpart?

Tables to Subpart JJJJ of Part 60

Table 1 to Subpart JJJJ of Part 60—NO_X, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (except gasoline and rich burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP.

Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests.

Table 3 to Subpart JJJJ of Part 60—Applicability of General Provisions to Subpart JJJJ.

Table 4 to Subpart JJJJ of Part 60—Applicability of Mobile Source Provisions for Manufacturers Participating in the Voluntary Certification Program and Certifying Stationary SI ICE to Emission Standards in Table 1 of Subpart JJJJ.

What This Subpart Covers

§ 60.4230 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (5) 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 SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008.

(2) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:

(i) On or after July 1, 2008; or

(ii) On or after January 1, 2009, for emergency engines.

(3) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn

engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) On or after January 1, 2009, for emergency engines.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

(5) Owners and operators of stationary SI ICE that commence modification or reconstruction after June 12, 2006.

(b) The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine 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 as applicable.

(d) For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines.

(e) Stationary SI 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 parts 90 and 1048, 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.

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

Emission Standards for Manufacturers

§ 60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines?

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

(b) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that use gasoline and that are manufactured on or after the applicable date in § 60.4230(a)(2), or manufactured on or after the applicable date in § 60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP that are manufactured on or after the applicable date in § 60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cubic centimeters (cc) to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90.

(c) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that are rich burn engines that use LPG and that are manufactured on or after the applicable date in § 60.4230(a)(2), or manufactured on or after the applicable date in § 60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP that are manufactured on or after the applicable date in § 60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90.

(d) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) under the voluntary manufacturer certification program described in this subpart must certify those engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers who choose to certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP, must certify those engines to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards for new nonroad SI engines in 40 CFR part 90. For stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP)

(except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) manufactured prior to January 1, 2011, manufacturers may choose to certify these engines to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP.

(e) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart must certify those engines to the emission standards in Table 1 to this subpart. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) that are lean burn engines that use LPG to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. For stationary SI ICE with a maximum engine power greater than or equal to 100 HP (75 KW) and less than 500 HP (373 KW) manufactured prior to January 1, 2011, and for stationary SI ICE with a maximum engine power greater than or equal to 500 HP (373 KW) manufactured prior to July 1, 2010, manufacturers may choose to certify these engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048 applicable to engines that are not severe duty engines.

§ 60.4232 How long must my engines meet the emission standards if I am a manufacturer of stationary SI internal combustion engines?

Engines manufactured by stationary SI internal combustion engine manufacturers must meet the emission standards as required in § 60.4231 during the certified emissions life of the engines.

Emission Standards for Owners and Operators

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

(a) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in § 60.4231(a) for their stationary SI ICE.

(b) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in § 60.4230(a)(4) that use gasoline must comply with the emission standards in § 60.4231(b) for their stationary SI ICE.

(c) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in § 60.4230(a)(4) that are rich burn engines that use LPG must comply with the emission standards in § 60.4231(c) for their stationary SI ICE.

(d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards.

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

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

(1) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (a) of this section.

(2) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that use gasoline engines, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (b) of this section.

(3) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (c) of this section.

(4) Owners and operators of stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (d) or (e) of this section, except that such owners and operators of non-emergency engines and emergency engines greater than or equal to 130 HP must meet a nitrogen oxides (NO_X) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than 100 HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO_X emission standard of 250 ppmvd at 15 percent oxygen (O_2), a CO emission standard 540 ppmvd at 15 percent O_2 (675 ppmvd at 15 percent O_2 for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O_2, where the date of manufacture of the engine is:

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

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

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

(5) Owners and operators of stationary SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (e) of this section for stationary landfill/digester gas engines.

(g) Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to

stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to this subpart. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of aftertreatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of aftertreatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel.

(h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

§ 60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in § 60.4233 over the entire life of the engine.

Other Requirements for Owners and Operators

§ 60.4235 What fuel requirements must I meet if I am an owner or operator of a stationary SI gasoline fired internal combustion engine subject to this subpart?

Owners and operators of stationary SI ICE subject to this subpart that use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR 80.195.

§ 60.4236 What is the deadline for importing or installing stationary SI ICE produced in the previous model year?

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in § 60.4233.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in § 60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in § 60.4233 may not be installed after January 1, 2010.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in § 60.4233 after January 1, 2011.

(d) In addition to the requirements specified in §§ 60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

§ 60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

(a) Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(b) Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

Compliance Requirements for Manufacturers

§ 60.4238 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤19 KW (25 HP)?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(a) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, and must test their engines as specified in that part.

§ 60.4239 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that use gasoline?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(b) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, and must test their engines as specified in that part.

§ 60.4240 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that are rich burn engines that use LPG?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(c) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90, and manufacturers of emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, and must test their engines as specified in that part.

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

(a) Manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and

are not rich burn engines that use LPG can choose to certify their engines to the emission standards in § 60.4231(d) or (e), as applicable, under the voluntary certification program described in this subpart. Manufacturers who certify their engines under the voluntary certification program must meet the requirements as specified in paragraphs (b) through (g) of this section. In addition, manufacturers of stationary SI internal combustion engines who choose to certify their engines under the voluntary certification program, must also meet the requirements as specified in § 60.4247.

(b) Manufacturers of engines other than those certified to standards in 40 CFR part 90 must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D–1 cycle of International Organization of Standardization 8178–4: 1996(E) (incorporated by reference, see 40 CFR 60.17) or the test cycle requirements specified in Table 5 to 40 CFR 1048.505, except that Table 5 of 40 CFR 1048.505 applies to high load engines only. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90, and manufacturers of emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, and must test their engines as specified in that part.

(c) Certification of stationary SI ICE to the emission standards specified in § 60.4231(d) or (e), as applicable, is voluntary, but manufacturers who decide to certify are subject to all of the requirements indicated in this subpart with regard to the engines included in their certification. Manufacturers must clearly label their stationary SI engines as certified or non-certified engines.

(d) Manufacturers of natural gas fired stationary SI ICE who conduct voluntary certification of stationary SI ICE to the emission standards specified in § 60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the definition of pipeline-quality natural gas. The fuel used for certifying stationary SI natural gas engines must meet the definition of pipeline-quality natural gas as described in § 60.4248. In addition, the manufacturer must provide information to the owner and operator of the certified stationary SI engine including the specifications of the pipeline-quality natural gas to which the engine is certified and what adjustments the owner or operator must make to the engine when installed in the field to ensure compliance with the emission standards.

(e) Manufacturers of stationary SI ICE that are lean burn engines fueled by LPG who conduct voluntary certification of stationary SI ICE to the emission standards specified in § 60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the specifications in 40 CFR 1065.720.

(f) Manufacturers may certify their engines for operation using gaseous fuels in addition to pipeline-quality natural gas; however, the manufacturer must specify the properties of that fuel and provide testing information showing that the engine will meet the emission standards specified in § 60.4231(d) or (e), as applicable, when operating on that fuel. The manufacturer must also provide instructions for configuring the stationary engine to meet the emission standards on fuels that do not meet the pipeline-quality natural gas definition. The manufacturer must also provide information to the owner and operator of the certified stationary SI engine regarding the configuration that is most conducive to reduced emissions where the engine will be operated on gaseous fuels with different quality than the fuel that it was certified to.

(g) A stationary SI engine manufacturer may certify an engine family solely to the standards applicable to landfill/digester gas engines as specified in § 60.4231(d) or (e), as applicable, but must certify their engines for operation using landfill/digester gas and must add a permanent label stating that the engine is for use only in landfill/digester gas applications. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(h) For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

§ 60.4242 What other requirements must I meet if I am a manufacturer of stationary SI internal combustion engines?

(a) Stationary SI internal combustion engine manufacturers must meet the provisions of 40 CFR part 90 or 40 CFR part 1048, as applicable, as well as 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1048, except that engines certified pursuant to the voluntary certification procedures in § 60.4241 are subject only to the provisions indicated in § 60.4247 and are permitted to provide instructions to owners and operators allowing for deviations from certified configurations, if such deviations are consistent with the provisions of paragraphs § 60.4241(c) through (f). Labels on engines certified to 40 CFR part 1048 must refer to stationary engines, rather than or in addition to nonroad engines, as appropriate.

(b) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 90 or 40 CFR part 1048 for that model year may certify any such family that contains both nonroad 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.

(c) Manufacturers of engine families certified to 40 CFR part 1048 may meet the labeling requirements referred to in paragraph (a) of this section for stationary SI ICE by either adding a separate label containing the information required in paragraph (a) of this section or by adding the words "and stationary" after the word "nonroad" to the label.

(d) For all engines manufactured on or after January 1, 2011, and for all engines with a maximum engine power greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, a stationary SI engine manufacturer that certifies an engine family solely to the standards applicable to emergency engines must add a permanent label stating that the engines in that family are for emergency use only. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(e) All stationary SI engines subject to mandatory certification 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. Stationary SI engines subject to standards in 40 CFR part 90 may use the provisions in 40 CFR 90.909. Manufacturers of stationary engines with a maximum engine power greater than 25 HP that are not certified to standards and other requirements under 40 CFR part 1048 are subject to the

labeling provisions of 40 CFR 1048.20 pertaining to excluded stationary engines.

Compliance Requirements for Owners and Operators

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

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in § 60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in § 60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

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

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

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in § 60.4233(d) or (e) and according to the requirements specified in § 60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

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

(c) If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in § 60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in § 60.4233(f).

(d) 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. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to

demonstrate compliance with the emission standards of § 60.4233.

(f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(h) If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.

(1) Purchasing an engine certified according to 40 CFR part 1048. 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.

Testing Requirements for Owners and Operators

§ 60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in § 60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

(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 be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) 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 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 1)}$$

Where:

ER = Emission rate of NO_X in g/HP-hr.

C_d = Measured NO_X concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 2)}$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per

standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \qquad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{Mi} = Measured concentration of compound i in ppmv as carbon.

C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \qquad \text{(Eq. 5)}$$

Where:

$C_{i\ corr}$ = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

$C_{i\ meas}$ = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \qquad \text{(Eq. 6)}$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

Notification, Reports, and Records for Owners and Operators

§ 60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

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

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to § 60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in § 60.4231 must submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

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

(2) The address of the affected source;

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

(4) Emission control equipment; and

(5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in § 60.4244 within 60 days after the test has been completed.

General Provisions

§ 60.4246 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

Mobile Source Provisions

§ 60.4247 What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines?

(a) Manufacturers certifying to emission standards in 40 CFR part 90, including manufacturers certifying emergency engines below 130 HP, must meet the provisions of 40 CFR part 90.

(b) Manufacturers certifying to emission standards in 40 CFR part 1048 must meet the provisions of 40 CFR part 1048. Manufacturers of stationary SI internal combustion engines that are less than 100 HP participating in the voluntary certification program must meet the requirements in Table 4 to this subpart.

(c) For manufacturers of stationary SI internal combustion engines participating in the voluntary certification program and certifying engines to Table 1 to this subpart, Table 4 to this subpart shows which parts of the mobile source provisions in 40 CFR parts 1048, 1065, and 1068 apply to you. Compliance with the deterioration factor provisions under 40 CFR 1048.205(n) and 1048.240 will be required for engines built new on and after January 1, 2010. Prior to January 1, 2010, manufacturers of stationary internal combustion engines participating in the voluntary certification program have the option to develop their own deterioration factors based on an engineering analysis.

Definitions

§ 60.4248 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.

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

given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90 or 40 CFR part 1048, as appropriate.

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.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO_2).

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary SI ICE used for peak shaving are not considered emergency stationary ICE. Stationary 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.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Manufacturer has the meaning given in section 216(1) of the Clean Air 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 resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

Model year means either: The calendar year in which the engine was originally produced, or 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.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

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.

Pipeline-quality natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline-quality natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NO_X (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

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 either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition 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.

Stationary internal combustion engine test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that test stationary ICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Subpart means 40 CFR part 60, subpart JJJJ.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Volatile organic compounds means volatile organic compounds as defined in 40 CFR 51.100(s).

Voluntary certification program means an optional engine certification program that manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to participate in to certify their engines to the emission standards in § 60.4231(d) or (e), as applicable.

Tables to Subpart JJJJ of Part 60

TABLE 1 TO SUBPART JJJJ OF PART 60.—NO_X, CO, AND VOC EMISSION STANDARDS FOR STATIONARY NON-EMERGENCY SI ENGINES ≥100 HP (EXCEPT GASOLINE AND RICH BURN LPG), STATIONARY SI LANDFILL/DIGESTER GAS ENGINES, AND STATIONARY EMERGENCY ENGINES >25 HP

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards [a]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC [d]	NO_X	CO	VOC [d]
Non-Emergency SI Natural Gas [b] and Non-Emergency SI Lean Burn LPG [b].	100≤HP<500	7/1/2008	2.0	4.0	1.0	160	540	86
		1/1/2011	1.0	2.0	0.7	82	270	60
Non-Emergency SI Lean Burn Natural Gas and LPG.	500≥HP<1,350	1/1/2008	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500=≥HP<1,350).	HP≥500	7/1/2007	2.0	4.0	1.0	160	540	86
	HP≥500	7/1/2010	1.0	2.0	0.7	82	270	60
Landfill/Digester Gas (except lean burn 500≥HP<1,350).	HP<500	7/1/2008	3.0	5.0	1.0	220	610	80
		1/1/2011	2.0	5.0	1.0	150	610	80
	HP≥500	7/1/2007	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Landfill/Digester Gas Lean Burn	500≥HP<1,350	1/1/2008	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Emergency	25>HP<130	1/1/2009	[c] 10	387	N/A	N/A	N/A	N/A
	HP≥130		2.0	4.0	1.0	160	540	86

[a] Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[b] Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR part 63, subpart ZZZZ, Table 2A do not have to comply with the CO emission standards of Table 1 of this subpart.

[c] The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_X+HC.

[d] For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

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

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

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to § 60.4244.	a. limit the concentration of NO_X in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A or ASTM Method D6522–00(2005) [a].	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B [b] of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005) [a].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60.	

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

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

For each	Complying with the requirement to	You must	Using	According to the following requirements
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see § 60.17).	(c) Measurements to determine moisture must be made at the same time as the measurement for NO_X concentration.
		v. Measure NO_X at the exhaust of the stationary internal combustion engine.	(5) Method 7E of 40 CFR part 60, appendix A, Method D6522–00(2005) [a], Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see § 60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	b. limit the concentration of CO in the stationary SI internal combustion engine exhaust.	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) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3Bb of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005) [a].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for CO concentration.
		iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see § 60.17).	(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.
		v. Measure CO at the exhaust of the stationary internal combustion engine.	(5) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00(2005) [a], Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see § 60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust.	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) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B [b] of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005) [a].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for VOC concentration.
		iii. Determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60.	

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

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

For each	Complying with the requirement to	You must	Using	According to the following requirements
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see § 60.17).	(c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.
		v. Measure VOC at the exhaust of the stationary internal combustion engine.	(5) Methods 25A and 18 of 40 CFR part 60, appendix A, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 or 40 CFR part 60, appendix A,[c d] Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see § 60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.

[a] ASTM D6522–00 is incorporated by reference; see 40 CFR 60.17. Also, you may petition the Administrator for approval to use alternative methods for portable analyzer.

[b] You may use ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses, for measuring the O_2 content of the exhaust gas as an alternative to EPA Method 3B.

[c] You may use EPA Method 18 of 40 CFR part 60, appendix A, provided that you conduct an adequate presurvey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (*http://www.epa.gov/ttn/emc/prelim/otm11.pdf*).

[d] You may use ASTM D6420–99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic.

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

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

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions.	Yes.	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4248.
§ 60.3	Units and abbreviations	Yes.	
§ 60.4	Address	Yes.	
§ 60.5	Determination of construction or modification.	Yes.	
§ 60.6	Review of plans	Yes.	
§ 60.7	Notification and Recordkeeping	Yes	Except that § 60.7 only applies as specified in § 60.4245.
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§ 60.9	Availability of information	Yes.	
§ 60.10	State Authority	Yes.	
§ 60.11	Compliance with standards and maintenance requirements.	Yes	Requirements are specified in subpart JJJJ.
§ 60.12	Circumvention	Yes.	
§ 60.13	Monitoring requirements	No.	
§ 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 reporting requirements.	Yes.	

TABLE 4 TO SUBPART JJJJ OF PART 60.—APPLICABILITY OF MOBILE SOURCE PROVISIONS FOR MANUFACTURERS PARTICIPATING IN THE VOLUNTARY CERTIFICATION PROGRAM AND CERTIFYING STATIONARY SI ICE TO EMISSION STANDARDS IN TABLE 1 OF SUBPART JJJJ

[As stated in § 60.4247, you must comply with the following applicable mobile source provisions if you are a manufacturer participating in the voluntary certification program and certifying stationary SI ICE to emission standards in Table 1 of Subpart JJJJ]

Mobile source provisions citation	Subject of citation	Applies to subpart	Explanation
1048 Subpart A	Overview and Applicability	Yes.	
1048 Subpart B	Emission Standards and Related Requirements.	Yes	Except for the specific sections below.
1048.101	Exhaust Emission Standards	No.	
1048.105	Evaporative Emission Standards	No.	
1048.110	Diagnosing Malfunctions	No.	
1048.140	Certifying Blue Sky Series Engines.	No.	
1048.145	Interim Provisions	No.	
1048 Subpart C	Certifying Engine Families	Yes	Except for the specific sections below.
1048.205(b)	AECD reporting	Yes.	
1048.205(c)	OBD Requirements	No.	
1048.205(n)	Deterioration Factors	Yes	Except as indicated in 60.4247(c).
1048.205(p)(1)	Deterioration Factor Discussion	Yes.	
1048.205(p)(2)	Liquid Fuels as they require	No.	
1048.240(b)(c)(d)	Deterioration Factors	Yes.	
1048 Subpart D	Testing Production-Line Engines	Yes.	
1048 Subpart E	Testing In-Use Engines	No.	
1048 Subpart F	Test Procedures	Yes.	
1065.5(a)(4)	Raw sampling (refers reader back to the specific emissions regulation for guidance).	Yes.	
1048 Subpart G	Compliance Provisions	Yes.	
1048 Subpart H	Reserved.		
1048 Subpart I	Definitions and Other Reference Information.	Yes.	
1048 Appendix I and II		Yes.	
1065 (all subparts)	Engine Testing Procedures	Yes	Except for the specific section below.
1065.715	Test Fuel Specifications for Natural Gas.	No.	
1068 (all subparts)	General Compliance Provisions for Nonroad Programs.	Yes	Except for the specific sections below.
1068.245	Hardship Provisions for Unusual Circumstances.	No.	
1068.250	Hardship Provisions for Small-Volume Manufacturers.	No.	
1068.255	Hardship Provisions for Equipment Manufacturers and Secondary Engine Manufacturers.	No.	

PART 63—[AMENDED]

■ 4. The authority citation for part 63 continues to read as follows:

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

Subpart A—[AMENDED]

■ 5. Section 63.14 is amended by revising paragraph (b)(27) and adding paragraph (b)(64) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(b) * * *

(27) ASTM D6522–00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers,[1] IBR approved for § 63.9307(c)(2) and Table 5 to Subpart DDDDD of this part.

* * * * *

(64) ASTM D6522–00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers,[1] IBR approved for Table 4 to Subpart ZZZZ of this part.

* * * * *

■ 6. Section 63.6580 is revised to read as follows:

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

■ 7. Section 63.6585 is amended by:

■ a. Revising the introductory text;

■ b. Adding paragraph (c);

■ c. Adding paragraph (d); and

■ d. Adding paragraph (e).

The revision and additions read as follows:

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

* * * * *

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 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 as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

■ 8. Section 63.6590 is amended by revising paragraphs (a) and (b), and adding paragraph (c), to read as follows:

§ 63.6590 What parts of my plant does this subpart cover?

* * * * *

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraph (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of § 63.6645(h).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; or

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of § 63.6645(h) and the requirements of §§ 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source, an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source, an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP, a stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

■ 9. Section 63.6595 is amended by revising paragraphs (a) and (b)(2) to read as follows:

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected Sources.* (1) If you have an existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the

applicable emission limitations and operating limitations no later than June 15, 2007.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b)* * *

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

* * * * *

■ 10. Section 63.6600 is revised to read as follows:

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a and 2a to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE, an existing 4SLB stationary RICE, or an existing CI stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

■ 11. Section 63.6601 is added to read as follows:

§ 63.6601 What emission limitations must I meet if I own or operate a 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

■ 12. Section 63.6610 is amended by:

■ a. Revising the section heading;

■ b. Adding introductory text; and

■ c. Revising paragraphs (a) through (c).

The revisions and additions read as follows:

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

* * * * *

■ 13. Section 63.6611 is added to read as follows:

§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an

initial performance test within 240 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

■ 14. Section 63.6625 is amended by adding paragraph (d) to read as follows:

§ 63.6625 What are my monitoring, installation, operation, and maintenance requirements?

* * * * *

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

■ 15. Section 63.6640 is amended by revising paragraph (e) to read as follows:

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

* * * * *

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate any stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing emergency stationary RICE, an existing limited use emergency stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

■ 16. Section 63.6645 is revised to read as follows:

§ 63.6645 What notifications must I submit and when?

(a) If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions or a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions, you must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified.

(b) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with § 63.6590(b), your notification should include the information in § 63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to § 63.10(d)(2).

■ 17. Section 63.6665 is revised to read as follows:

§ 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. If you own or operate any stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions: An existing 2SLB RICE, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10

percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

■ 18. Section 63.6675 is amended by:

■ a. Adding definitions of "Compression Ignition," "Gasoline," and "Spark ignition" in alphabetical order;

■ b. Removing the definitions for "Compression ignition engine" and "Spark ignition engine;" and

■ c. Revising the definitions of "Emergency stationary RICE" and "Natural gas;" to read as follows:

§ 63.6675 What definitions apply to this subpart?

* * * * *

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

* * * * *

Emergency stationary RICE means any stationary RICE whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE 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 RICE used to pump water in the case of fire or flood, etc. Stationary RICE used for peak shaving are not considered emergency stationary RICE. 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. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed on or after June 12, 2006, must comply with requirements specified in 40 CFR 60.4243(d).

* * * * *

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

* * * * *

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

* * * * *

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine 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.

* * * * *

■ 19. Table 1a to Subpart ZZZZ of part 63 is revised to read as follows:

TABLE 1A TO SUBPART ZZZZ OF PART 63.—EMISSION LIMITATIONS FOR EXISTING, NEW, AND RECONSTRUCTED SPARK IGNITION, 4SRB STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

[As stated in § 63.6600, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions at 100 percent load plus or minus 10 percent]

For each...	You must meet the following emission limitations...
1. 4SRB stationary RICE	a. reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007; or b. limit the concentration of formaldehyde in the stationary RICE exhaust 350 ppbvd or less at 15 percent O_2.

■ 20. Table 1b to Subpart ZZZZ of Part 63 is revised to read as follows:

TABLE 1B TO SUBPART ZZZZ OF PART 63.—OPERATING LIMITATIONS FOR EXISTING, NEW, AND RECONSTRUCTED SPARK IGNITION, 4SRB STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

[As stated in §§ 63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions]

For each...	You must meet the following operating limitation...
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR;. or	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and

TABLE 1B TO SUBPART ZZZZ OF PART 63.—OPERATING LIMITATIONS FOR EXISTING, NEW, AND RECONSTRUCTED SPARK IGNITION, 4SRB STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS—Continued

[As stated in §§ 63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions]

For each...	You must meet the following operating limitation...
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and using NSCR..	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750°F and less than or equal to 1250°F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR;.	Comply with any operating limitations approved by the Administrator.
or	
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and not using NSCR..	

■ 21. Table 2a to Subpart ZZZZ of Part 63 is revised to read as follows:

TABLE 2A TO SUBPART ZZZZ OF PART 63.—EMISSION LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND COMPRESSION IGNITION STATIONARY RICE >500 HP AND 4SLB STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

[As stated in §§ 63.6600 and 63.6601, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent]

For each...	You must meet the following emission limitation...
1. 2SLB stationary RICE	a. reduce CO emissions by 58 percent or more; or b. limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2 until June 15, 2007.
2. 4SLB stationary RICE	a. reduce CO emissions by 93 percent or more; or b. limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2.
3. CI stationary RICE	a. reduce CO emissions by 70 percent or more; or b. limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2.

■ 22. Table 2b to Subpart ZZZZ of Part 63 is revised to read as follows:

TABLE 2B TO SUBPART ZZZZ OF PART 63.—OPERATING LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND COMPRESSION IGNITION STATIONARY RICE >500 HP AND 4SLB BURN STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

[As stated in §§ 63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary]

For each...	You must meet the following operating limitation...
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst.	Comply with any operating limitations approved by the Administrator.

■ 23. Table 4 to subpart ZZZZ of part 63 is revised to read as follows:

TABLE 4 TO SUBPART ZZZZ OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS

[As stated in §§ 63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE]

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE.	a. Reduce CO emissions ..	i. Measure the O_2 at the inlet and outlet of the control device; and.	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522–00 (2005) [a] (incorporated by reference, see § 63.14). Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device.	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522–00 (2005) [a] (incorporated by reference, see § 63.14) or Method 10 of 40 CFR, appendix A. The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE ..	a. Reduce formaldehyde emissions.	i. Select the sampling port location and the number of traverse points; and.	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i).	(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; and.	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)..	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and.	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device.	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03 [b], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust.	i. Select the sampling port location and the number of traverse points; and.	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i).	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and.	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005).	(a) Measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and.	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

TABLE 4 TO SUBPART ZZZZ OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As stated in §§ 63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE]

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		iv. Measure formaldehyde at the exhaust of the stationary RICE.	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03[b], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[a] You may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). You may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[b] You may obtain a copy of ASTM–D6348–03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

■ 24. Table 8 to subpart ZZZZ of part 63 is revised to read as follows:

TABLE 8 TO SUBPART ZZZZ OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART ZZZZ

[As stated in § 63.6665, you must comply with the following applicable general provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.1	General applicability of the General Provisions.	Yes.	
§ 63.2	Definitions	Yes	Additional terms defined in § 63.6675.
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention.	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources.	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved].		
§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources.	Yes.	
§ 63.6(c)(1)–(2)	Compliance dates for existing sources.	Yes.	
§ 63.6(c)(3)–(4)	[Reserved].		
§ 36.6(c)(5)	Compliance dates for existing area sources that become major sources.	Yes.	
§ 63.6(d)	[Reserved].		
§ 63.6(e)(1)	Operation and maintenance	Yes.	
§ 63.6(e)(2)	[Reserved].		
§ 63.6(e)(3)	Startup, shutdown, and malfunction plan.	Yes.	
§ 63.6(f)(1)	Applicability of standards except during startup shutdown malfunction (SSM).	Yes.	
§ 63.6(f)(2)	Methods for determining compliance.	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards.	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria.	Yes.	
§ 63.6(j)	Presidential compliance exemption.	Yes.	

TABLE 8 TO SUBPART ZZZZ OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART ZZZZ—Continued

[As stated in § 63.6665, you must comply with the following applicable general provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§ 63.6610 and 63.6611.
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes.	
§ 63.7(b)(2)	Notification of rescheduling	Yes.	
§ 63.7(c)	Quality assurance/test plan	Yes.	
§ 63.7(d)	Testing facilities	Yes.	
§ 63.7(e)(1)	Conditions for conducting performance tests.	Yes.	
§ 63.7(e)(2)	Conduct of performance tests and reduction of data.	Yes	Subpart ZZZZ specifies test methods at § 63.6620.
§ 63.7(e)(3)	Test run duration	Yes.	
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA.	Yes.	
§ 63.7(f)	Alternative test method provisions	Yes.	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting.	Yes.	
§ 63.7(h)	Waiver of tests	Yes.	
§ 63.8(a)(1)	Applicability of monitoring requirements.	Yes	Subpart ZZZZ contains specific requirements for monitoring at § 63.6625.
§ 63.8(a)(2)	Performance specifications	Yes.	
§ 63.8(a)(3)	[Reserved].		
§ 63.8(a)(4)	Monitoring for control devices	No.	
§ 63.8(b)(1)	Monitoring	Yes.	
§ 63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems.	Yes.	
§ 63.8(c)(1)	Monitoring system operation and maintenance.	Yes.	
§ 63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan.	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements.	Yes.	
§ 63.8(c)(2)–(3)	Monitoring system installation	Yes.	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements.	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes.	
§ 63.8(e)	CMS performance evaluation	Yes	Except for § 63.8(e)(5)(ii), which applies to COMS.
§ 63.8(f)(1)–(5)	Alternative monitoring method	Yes.	
§ 63.8(f)(6)	Alternative to relative accuracy test.	Yes.	
§ 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640.
§ 63.9(a)	Applicability and State delegation of notification requirements.	Yes.	
§ 63.9(b)(1)–(5)	Initial notifications	Yes	Except that § 63.9(b)(3) is reserved.
§ 63.9(c)	Request for compliance extension	Yes.	
§ 63.9(d)	Notification of special compliance requirements for new sources.	Yes.	
§ 63.9(e)	Notification of performance test	Yes.	
§ 63.9(f)	Notification of visible emission (VE)/opacity test.	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation.	Yes.	
§ 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded.	Yes	If alternative is in use.

TABLE 8 TO SUBPART ZZZZ OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART ZZZZ—Continued

[As stated in § 63.6665, you must comply with the following applicable general provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved.
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.10(a)	Administrative provisions for record keeping/reporting.	Yes.	
§ 63.10(b)(1)	Record retention	Yes.	
§ 63.10(b)(2)(i)–(v)	Records related to SSM	Yes.	
§ 63.10(b)(2)(vi)–(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA.	Yes	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation.	Yes.	
§ 63.10(b)(3)	Records of applicability determination.	Yes.	
§ 63.10(c)	Additional records for sources using CEMS.	Yes	Except that § 63.10(c)(2)–(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations.	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports.	Yes.	
§ 63.10(e)(1) and (2)(i)	Additional CMS reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports.	Yes	Except that § 63.10(e)(3)(i)(C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting.	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	

PART 85—[AMENDED]

■ 25. The authority citation for part 85 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 26. Section 85.2401 is amended by revising paragraph (a)(13) to read as follows:

§ 85.2401 To whom do these requirements apply?

(a) * * *

(13) Stationary internal combustion engines (See 40 CFR part 60, subparts IIII and JJJJ).

* * * * *

■ 27. Section 85.2403 is amended by revising paragraph (b)(11) to read as follows:

§ 85.2403 What definitions apply to this subpart?

* * * * *

(b) * * *

(11) 40 CFR part 60, subparts IIII and JJJJ.

■ 28. Section 85.2405 is amended by adding paragraph (f) to read as follows:

§ 85.2405 How much are the fees?

* * * * *

(f) Fees for stationary SI internal combustion engine certificate requests shall be calculated in the same manner as for NR SI certificate. Fees for certificate requests where the certificate would apply to stationary and mobile engines shall be calculated in the same manner as fees for the certificate requests for the applicable mobile source engines.

PART 90—[AMENDED]

■ 29. The authority citation for part 90 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 30. Section 90.1 is amended by adding paragraph (h) to read as follows:

§ 90.1 Applicability.

* * * * *

(h) This part applies as specified in 40 CFR part 60 subpart JJJJ, to spark-ignition engines subject to the standards of 40 CFR part 60, subpart JJJJ.

■ 31. Section 90.107 is amended by adding paragraph (d)(12) to read as follows:

§ 90.107 Application for certificate.

* * * * *

(d) * * *

(12) A statement indicating whether the engine family contains only nonroad engines, only stationary engines, or both.

* * * * *

■ 32. Section 90.114 is amended by revising paragraph (c)(7) and adding paragraph (g) to read as follows:

§ 90.114 Requirement of certification-engine information label.

* * * * *

(c) * * *

(7) The statement "THIS ENGINE CONFORMS TO U.S. EPA REGS FOR [MODEL YEAR]."; *

* * * * *

(g) Stationary engines required by 40 CFR part 60, subpart JJJJ, to meet the requirements of this part 90 must meet the labeling requirements of 40 CFR 60.4242.

■ 33. Section 90.201 is revised to read as follows:

§ 90.201 Applicability.

The requirements of this subpart C are applicable to all Phase 2 spark-ignition engines subject to the provisions of subpart A of this part except as provided in § 90.103(a). These provisions are not applicable to any Phase 1 engines. Participation in the averaging, banking and trading program is voluntary, but if a manufacturer elects to participate, it must do so in compliance with the regulations set forth in this subpart. The provisions of this subpart are applicable for $HC+NO_X$ ($NMHC+NO_X$) emissions but not for CO emissions. To the extent specified in 40 CFR part 60, subpart JJJJ, stationary engines certified under this part and subject to the standards of 40 CFR part 60, subpart JJJJ, may participate in the averaging, banking, and trading program described in this subpart.

PART 1048—[AMENDED]

■ 34. The authority citation for part 1048 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 35. Section 1048.1 is amended by revising paragraph (c) to read as follows:

§ 1048.1 Does this part apply to me?

* * * * *

(c) The definition of nonroad engine in 40 CFR 1068.30 excludes certain engines used in stationary applications. These engines may be required by 40 CFR part 60, subpart JJJJ, to comply with some of the provisions of this part 1048; otherwise, these engines are only required to comply with the requirements in § 1048.20. In addition, the prohibitions in 40 CFR 1068.101 restrict the use of stationary engines for nonstationary purposes unless they are certified under this part 1048 to the same standards that would apply to nonroad engines for the same model year.

* * * * *

■ 36. Section 1048.20 is amended by revising paragraph (a) introductory text, revising paragraph (b)(4) and adding paragraph (c) to read as follows:

§ 1048.20 What requirements from this part apply to excluded stationary engines?

(a) You must add a permanent label or tag to each new engine you produce or import that is excluded under § 1048.1(c) as a stationary engine and is not required by 40 CFR part 60, subpart JJJJ, to meet the standards and other requirements of this part 1048 that are equivalent to the requirements applicable to nonroad SI engines for the same model year. To meet labeling requirements, you must do the following things:

* * * * *

(b) * * *

(4) State: "THIS ENGINE IS EXCLUDED FROM THE REQUIREMENTS OF 40 CFR PART 1048 AS A "STATIONARY ENGINE" AND THE OWNER/OPERATOR MUST COMPLY WITH THE REQUIREMENTS OF 40 CFR PART 60. INSTALLING OR USING THIS ENGINE IN ANY OTHER APPLICATION MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.".

(c) Stationary engines required by 40 CFR part 60, subpart JJJJ, to meet the requirements of this part 1048 must meet the labeling requirements of 40 CFR 60.4242.

■ 37. Section 1048.101 is amended by adding paragraph (a)(4) to read as follows:

§ 1048.101 What exhaust emission standards must my engines meet?

* * * * *

(a) * * *

(4) For constant-speed engines, the emission standards do not apply for transient testing if you do both of the following things:

(i) Demonstrate that the specified transient duty-cycle is not representative of the way your engines will operate in use.

(ii) Demonstrate that the engine's emission controls will function properly to control emissions during transient operation in use. In most cases, you may do this by showing that you use the same controls as a similar variable-speed engine that is certified as complying with the emission standards during transient testing.

* * * * *

■ 38. Section 1048.205 is amended by revising paragraphs (b) and (w) to read as follows:

§ 1048.205 What must I include in my application?

* * * * *

(b) Explain how the emission control systems operate. Describe the evaporative emission controls, if applicable. Also describe in detail all system components for controlling exhaust emissions, including all auxiliary emission control devices (AECDs) and all fuel-system components you will install on any production or test engine. Identify the part number of each component you describe. For this paragraph (b), treat as separate AECDs any devices that modulate or activate differently from each other. Include sufficient detail to allow us to evaluate whether the AECDs are consistent with the defeat device prohibition of § 1048.115.

* * * * *

(w) State whether your certification is intended to include engines used in stationary applications. Also state whether your certification is limited for certain engines. If this is the case, describe how you will prevent use of these engines in applications for which they are not certified. This applies for engines such as the following:

(1) Constant-speed engines.

(2) Variable-speed engines.

* * * * *

PART 1065—[AMENDED]

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

Authority: 42 U.S.C. 7401–7671q.

■ 40. Section 1065.1 is amended by adding paragraph (a)(6) to read as follows:

§ 1065.1 Applicability.

(a) * * *

(6) Stationary spark-ignition engines certified using provisions in 40 CFR part 1048, as indicated under 40 CFR part 60, subpart JJJJ, the standard-setting part for these engines.

* * * * *

PART 1068—[AMENDED]

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

Authority: 42 U.S.C. 7401–7671q.

■ 42. Section 1068.1 is amended by adding paragraph (a)(5) to read as follows:

§ 1068.1 Does this part apply to me?

(a) * * *

(5) Stationary spark-ignition engines certified using provisions in 40 CFR part

1048, as indicated under 40 CFR part 60, subpart JJJJ.

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[FR Doc. E7–25394 Filed 1–17–08; 8:45 am]

BILLING CODE 6560–50–P