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National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2008–0708, FRL–8778–6]

RIN 2060–AP36

National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing national emission standards for hazardous air pollutants for existing 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. In addition, EPA is proposing national emission standards for hazardous air pollutants for existing stationary compression ignition engines greater than 500 brake horsepower that are located at major sources, based on a new review of these engines following the first RICE NESHAP rulemaking in 2004. In addition, EPA is proposing to amend the previously promulgated regulations regarding operation of stationary reciprocating internal combustion engines during periods of startup, shutdown and malfunction.

DATES: Comments must be received on or before May 4, 2009, or 30 days after date of public hearing if later. Under the Paperwork Reduction Act, comments on the information collection provisions must be received by the Office of Management and Budget (OMB) on or before April 6, 2009.

Public Hearing. If anyone contacts us requesting to speak at a public hearing by March 25, 2009, a public hearing will be held on April 6, 2009. If you are interested in attending the public hearing, contact Ms. Pamela Garrett at (919) 541–7966 to verify that a hearing will be held.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2008–0708, by one of the following methods:

- *http://www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail: a-and-r-docket@epa.gov.*
- *Fax:* (202) 566–1741.
- *Mail:* Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 6102T, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Please include a total of two copies. EPA requests a separate copy also be sent to the contact person identified below (see **FOR FURTHER INFORMATION CONTACT**). In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attn: Desk Officer for EPA, 725 17th St., NW., Washington, DC 20503.
- *Hand Delivery:* Air and Radiation Docket and Information Center, U.S. EPA, Room B102, 1301 Constitution Avenue, NW., Washington, DC. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OAR–2008–0708. EPA's policy is that all comments received will be included in the public docket without change and may be made available on-line at *http://www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *http://www.regulations.gov* or e-mail. The *http://www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *http://www.regulations.gov*, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

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

Docket: All documents in the docket are listed in the *http://www.regulations.gov* index. We also rely on documents in Docket ID Nos. EPA–HQ–OAR–2002–0059, EPA–HQ–OAR–2005–0029, and EPA–HQ–OAR–2005–0030, and incorporate those dockets into the record for this proposed rule. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *http://www.regulations.gov* or in hard copy at the Air and Radiation Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Mrs. Melanie King, Energy Strategies Group, Sector Policies and Programs Division (D243–01), Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number (919) 541–2469; facsimile number (919) 541–5450; e-mail address ''*king.melanie@epa.gov.*''

SUPPLEMENTARY INFORMATION:

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

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I. General Information

A. Does this action apply to me?

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

Category	NAICS[1]	Examples of regulated entities
Any industry using a stationary internal combustion engine as defined in this proposed rule.	2211	Electric power generation, transmission, or distribution.
	622110	Medical and surgical hospitals.
	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 this proposed rule. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. What should I consider as I prepare my comments for EPA?

1. *Submitting CBI.* Do not submit this information to EPA through regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD–ROM that you mail to EPA, mark the outside of the disk or CD–ROM as CBI and then identify electronically within the disk or CD–ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. Send or deliver information identified as CBI to only the following address: Mrs. Melanie King, c/o OAQPS Document Control Officer (Room C404–02), U.S. EPA, Research Triangle Park, NC 27711, Attention Docket ID No. EPA–HQ–OAR–2008–0708.

2. *Tips for Preparing Your Comments.* When submitting comments, remember to:

(a) Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).

(b) Follow directions. EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

(c) Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

(d) Describe any assumptions and provide any technical information and/or data that you used.

(e) If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

(f) Provide specific examples to illustrate your concerns, and suggest alternatives.

(g) Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

(h) Make sure to submit your comments by the comment period deadline identified.

Docket. The docket number for this proposed rule is Docket ID No. EPA–HQ–OAR–2008–0708.

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

II. Background

This action proposes national emission standards for hazardous air pollutants (NESHAP) from existing stationary reciprocating internal combustion engines (RICE) with a site rating of less than or equal to 500 horsepower (HP) located at major sources, existing non-emergency CI engines with a site rating >500 HP at major sources, and existing stationary RICE of any power rating located at area sources. EPA is proposing these requirements to meet its statutory obligation to address hazardous air pollutants (HAP) emissions from these sources under sections 112(d), 112(c)(3) and 112(k) of the CAA. The final NESHAP for stationary RICE would be promulgated under 40 CFR part 63, subpart ZZZZ, which already contains standards applicable to new stationary RICE and some existing stationary RICE.

EPA promulgated NESHAP for existing, new, and reconstructed stationary RICE greater than 500 HP located at major sources on June 15, 2004 (69 FR 33474). EPA promulgated NESHAP for new and reconstructed stationary RICE that are located at area sources of HAP emissions and for new and reconstructed stationary RICE that have a site rating of less than or equal to 500 HP that are located at major sources of HAP emissions on January 18, 2008 (73 FR 3568). At that time, EPA did not promulgate final requirements for existing stationary RICE that are located at area sources of HAP emissions or for existing stationary RICE that have a site rating of less than or equal to 500 HP that are located at major sources of HAP emissions. Although EPA proposed requirements for these sources, EPA did not finalize these

requirements due to comments received indicating that the proposed Maximum Achievable Control Technology (MACT) determinations for existing sources were inappropriate and because of a decision by the U.S. Court of Appeals for the District of Columbia Circuit on March 13, 2007, which vacated EPA's MACT standards for the Brick and Structural Clay Products Manufacturing source category (40 CFR part 63, subpart JJJJJ). *Sierra Club* v. *EPA*, 479 F.3d 875 (DC Cir 2007). Among other things, the D.C. Circuit found that EPA's no emission reduction MACT determination in the challenged rule was unlawful. Because in the proposed stationary RICE rule, EPA had used a MACT floor methodology similar to the methodology used in the Brick MACT, EPA decided to re-evaluate the MACT floors for existing major sources that have a site rating of less than or equal to 500 brake HP consistent with the Court's decision in the Brick MACT case. EPA has also re-evaluated the standards for existing area sources in light of the comments received on the proposed rule.

This proposal initiates a separate rulemaking process that focuses on existing sources. EPA has gathered further information on existing engines and has considered comments it received on the original proposed rule and the intervening court decision in creating this proposed rulemaking. Commenters are advised to provide new comments in response to this proposal and not to rely on any comments they may have provided in previous rulemaking actions.

In addition, stakeholders have encouraged the Agency to review whether there are further ways to reduce emissions of pollutants from existing stationary diesel engines. In its comments on EPA's 2006 proposed rule for new stationary diesel engines,[1] the Environmental Defense Fund (EDF) suggested several possible avenues for the regulation of existing stationary diesel engines, including use of diesel oxidation catalysts or catalyzed diesel particulate filters (CDPF), as well as the use of ultra low sulfur diesel (ULSD) fuel. EDF suggested that such controls can provide significant pollution reductions at reasonable cost. EPA issued an advance notice of proposed rulemaking (ANPRM) in January 2008, where it solicited comment on several issues concerning options to regulate emissions of pollutants from existing stationary diesel engines, generally, and specifically from larger, older stationary diesel engines. EPA solicited comment and collected information to aid decision-making related to the reduction of HAP emissions from existing stationary diesel engines and specifically from larger, older engines under Clean Air Act (CAA) section 112 authorities. The Agency sought comment on the larger, older engines because available data indicate that those engines emit the majority of particulate matter (PM) and toxic emissions from non-emergency stationary engines as a whole. A summary of comments and responses that were received on the ANPRM was added to docket EPA–HQ–OAR–2007–0995.

EPA has taken several actions over the past several years to reduce exhaust pollutants from stationary diesel engines, but believes that further reducing exhaust pollutants from stationary diesel engines, particularly existing stationary diesel engines that have not been subject to Federal standards, is justified. Therefore, EPA is proposing emissions reductions from existing stationary diesel engines.

III. Summary of This Proposed Rule

A. What is the source category regulated by this proposed rule?

This proposed rule addresses emissions from existing stationary engines less than or equal to 500 HP located at major sources and all existing stationary engines located at area sources. A major source of HAP emissions is a stationary source that emits or has the potential to emit any single 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. 42 § 7412(n)(4). An area source of HAP emissions is a source that is not a major source. This proposed rule also addresses emissions from existing compression ignition (CI) engines greater than 500 HP located at major sources.

This action is a revision to the regulations in 40 CFR part 63, subpart ZZZZ, currently applicable to existing, new, and reconstructed stationary RICE greater than 500 HP located at major sources; 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. Subpart ZZZZ does not currently cover existing stationary engines located at area sources of HAP emissions, nor does it apply to existing stationary engines located at major sources with a site rating of 500 HP or less. When the subpart ZZZZ regulations were promulgated (see 69 FR 33474, June 15, 2004), 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. EPA decided to regulate these smaller engines at the same time that it regulated engines located at area sources. EPA issued regulations for new stationary engines located at area sources of HAP emissions and new stationary engines located at major sources with a site rating of 500 HP or less in the rulemaking issued on January 18, 2008 (73 FR 3568), but did not promulgate a final regulation for existing stationary engines.

1. Stationary RICE ≤500 HP at Major Sources

This action proposes to revise 40 CFR part 63, subpart ZZZZ, to address HAP emissions from existing stationary RICE less than or equal to 500 HP located at major 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.

EPA has divided the source category into the following subcategories:

- Stationary RICE less than 50 HP,
- Landfill and digester gas stationary RICE greater than or equal to 50 HP,
- CI stationary RICE greater than or equal to 50 HP,
  - ○ Emergency
  - ○ Non-emergency and
- Spark ignition (SI) stationary RICE greater than or equal to 50 HP
  - ○ Emergency
  - ○ Non-emergency
  - ■ 2-stroke lean burn (2SLB)
    - <250 HP
    - ≥250 HP
  - ■ 4-stroke lean burn (4SLB)
    - <250 HP
    - ≥250 HP
  - ■ 4-stroke rich burn (4SRB).

2. Stationary RICE at Area Sources

This action proposes to revise 40 CFR part 63, subpart ZZZZ, in order to address HAP emissions from existing stationary RICE located at area sources. Section 112(d) of the Clean Air Act (CAA) requires EPA to establish national emission standards for hazardous air pollutants (NESHAP) for both major and area sources of HAP that are listed for regulation under CAA section 112(c). As noted above, an area

[1] ''Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollution for Reciprocating Internal Combustion Engines,'' 71 FR 33803–33855, *http://www.epa.gov/ttn/atw/rice/ricepg.html,* June 12, 2006.

source is a stationary source that is not a major source.

Section 112(k)(3)(B) of the CAA calls for EPA to identify at least 30 HAP that, as a result of emissions of area sources, pose the greatest threat to public health in the largest number of urban areas. EPA implemented this provision in 1999 in the Integrated Urban Air Toxics Strategy (64 FR 38715, July 19, 1999). Specifically, in the Strategy, EPA identified 30 HAP that pose the greatest potential health threat in urban areas, and these HAP are referred to as the ''30 urban HAP.'' Section 112(c)(3) requires EPA to list sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the emissions of the 30 urban HAP are subject to regulation. EPA implemented these requirements through the Integrated Urban Air Toxics Strategy (64 FR 38715, July 19, 1999). The area source stationary engine source category was one of the listed categories. A primary goal of the Strategy is to achieve a 75 percent reduction in cancer incidence attributable to HAP emitted from stationary sources.

Under CAA section 112(d)(5), EPA may elect to promulgate standards or requirements for area sources ''which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants.'' Additional information on generally available control technologies (GACT) or management practices is found in the Senate report on the legislation (Senate report Number 101–228, December 20, 1989), which describes GACT as:

* * * methods, practices and techniques which are commercially available and appropriate for application by the sources in the category considering economic impacts and the technical capabilities of the firms to operate and maintain the emissions control systems.

Consistent with the legislative history, EPA can consider costs and economic impacts in determining GACT, which is particularly important when developing regulations for source categories, like this one, that have many small businesses.

Determining what constitutes GACT involves considering the control technologies and management practices that are generally available to the area sources in the source category. EPA also considers the standards applicable to major sources in the same industrial sector to determine if the control technologies and management practices are transferable and generally available to area sources. In appropriate circumstances, EPA may also consider technologies and practices at area and major sources in similar categories to determine whether such technologies and practices could be considered generally available for the area source category at issue. Finally, as EPA has already noted, in determining GACT for a particular area source category, EPA considers the costs and economic impacts of available control technologies and management practices on that category.

The urban HAP that must be regulated at stationary RICE to achieve the section 112(c)(3) requirement to regulate categories accounting for 90 percent of the urban HAP are: 7 PAH, formaldehyde, acetaldehyde, arsenic, benzene, beryllium compounds, and cadmium compounds. As explained below, EPA chose to select formaldehyde to serve as a surrogate for HAP emissions. Formaldehyde is the hazardous air pollutant present in the highest concentration from stationary engines. In addition, emissions data show that formaldehyde emission levels are related to other HAP emission levels. EPA is proposing standards for area source stationary RICE below.

The subcategories for area sources are the same as those for major sources and are listed in section A.1. above.

3. Stationary CI RICE >500 HP at Major Sources

In addition, EPA is proposing emission standards for non-emergency stationary CI engines greater than 500 HP at major sources under its authority to review and revise emission standards as necessary under section 112(d) of the CAA.

B. What are the pollutants regulated by this proposed rule?

The rule being proposed in this action would regulate emissions of HAP. Available emissions data show that several HAP, which are formed during the combustion process or which are contained within the fuel burned, are emitted from stationary engines. The HAP which have been measured in emission tests conducted on natural gas fired and diesel fired RICE include: 1,1,2,2-tetrachloroethane, 1,3-butadiene, 2,2,4-trimethylpentane, acetaldehyde, acrolein, benzene, chlorobenzene, chloroethane, ethylbenzene, formaldehyde, methanol, methylene chloride, n-hexane, naphthalene, polycyclic aromatic hydrocarbons, polycyclic organic matter, styrene, tetrachloroethane, toluene, and xylene. Metallic HAP from diesel fired stationary RICE that have been measured are: cadmium, chromium, lead, manganese, mercury, nickel, and selenium. Although numerous HAP may be emitted from RICE, only a few account for essentially all of the mass of HAP emissions from stationary RICE. These HAP are: Formaldehyde, acrolein, methanol, and acetaldehyde.

EPA described the health effects of these HAP and other HAP emitted from the operation of stationary RICE in the preamble to 40 CFR part 63, subpart ZZZZ, published on June 15, 2004 (69 FR 33474). These HAP emissions are known to cause, or contribute significantly to air pollution, which may reasonably be anticipated to endanger public health or welfare.

EPA is proposing to limit emissions of HAP through emissions standards for formaldehyde for non-emergency 4SRB engines, emergency SI engines, and engines less than 50 HP, and through emission standards for carbon monoxide (CO) for all other engines. For the RICE NESHAP promulgated in 2004 (69 FR 33474) for engines greater than 500 HP located at major sources, EPA chose to select formaldehyde to serve as a surrogate for HAP emissions. Formaldehyde is the hazardous air pollutant present in the highest concentration in the exhaust from stationary engines. In addition, emissions data show that formaldehyde emission levels are related to other HAP emission levels.

For the NESHAP promulgated in 2004, EPA also found that there is a relationship between CO emissions reductions and HAP emissions reductions from 2SLB, 4SLB, and CI stationary engines. Therefore, because testing for CO emissions has many advantages over testing for formaldehyde, CO emissions were chosen as a surrogate for HAP emissions reductions for 2SLB, 4SLB, and CI stationary engines operating with oxidation catalyst systems for that rule. However, EPA could not confirm the same relationship between CO and formaldehyde for 4SRB engines, so emission standards for such engines were provided in terms of formaldehyde.

For the standards being proposed in this action, EPA believes that previous decisions regarding the appropriateness of using formaldehyde and CO both in concentration (ppm) levels as has been done for stationary sources before as surrogates for HAP are still valid.[2] Consequently, EPA is proposing emission standards for formaldehyde for 4SRB engines and emission standards

[2] In contrast, mobile source emission standards for diesel engines (both nonroad and on-highway) are promulgated on a mass basis rather than concentration.

for CO for lean burn and CI engines in order to regulate HAP emissions. Information EPA has received from stationary engine manufacturers indicate that most SI emergency engines and engines below 50 HP are and will be 4SRB engines. As discussed above, EPA could not confirm a relationship between CO and formaldehyde emissions for 4SRB engines. Therefore, EPA is proposing standards for formaldehyde for those engines. EPA is interested in receiving comments on the use of formaldehyde as a surrogate for HAP and information on any other surrogates that may be better indicators of total HAP emissions and their reductions.

We recognize that stationary diesel engines emit trace amounts of metal HAP that remain in the particle phase. EPA believes that formaldehyde and CO are reasonable surrogates for total HAP. Although metal HAP emissions from existing diesel engines are very small—a total of about 200 tons per year—we are interested in receiving comments and data about more appropriate surrogates, if any, for the metallic HAP emissions.

In addition to reducing HAP and CO, the proposed rule would likely result in the reduction of PM emissions from existing diesel engines. The aftertreatment technologies expected to be used to reduce HAP and CO emissions also reduce emissions of PM from diesel engines. Furthermore, this proposed rule would also result in nitrogen oxides (NO_X) reductions from rich burn engines since these engines would likely need to install non-selective catalytic reduction (NSCR) technology that helps reduce NO_X in addition to CO and HAP emissions. Also, we propose the use of ULSD for diesel-fueled stationary non-emergency CI engines greater than 300 HP with a displacement of less than 30 liters per cylinder. This will result in lower emissions of sulfur oxides (SO_X) and sulfate particulate from these engines by reducing the sulfur content in the fuel.

C. What are the proposed standards?

1. Existing Stationary RICE at Major Sources

The emission standards that are being proposed in this action for stationary RICE less than or equal to 500 HP located at major sources and stationary CI RICE greater than 300 HP located at major sources are shown in Table 1 of this preamble. Note that EPA is also co-proposing that the same standards apply during both normal operation and periods of startup and malfunctions.

TABLE 1—EMISSION STANDARDS FOR EXISTING STATIONARY RICE LOCATED AT MAJOR SOURCES

Subcategory	Emission standards at 15 percent O_2 (parts per million by volume on a dry basis)	
	Except during periods of startup, or malfunction	During periods of startup, or malfunction
Non-Emergency 2SLB 50≥HP≤249	85 ppmvd CO	85 ppmvd CO.
Non-Emergency 2SLB 250≥HP≤500	8 ppmvd CO or 90% CO reduction	85 ppmvd CO.
Non-Emergency 4SLB 50≥HP≤249	95 ppmvd CO	95 ppmvd CO.
Non-Emergency 4SLB 250 ≥HP≤500	9 ppmvd CO or 90% CO reduction	95 ppmvd CO.
Non-Emergency 4SRB 50≥HP≤500	200 ppbvd formaldehyde or 90% formaldehyde reduction.	2 ppmvd formaldehyde.
All CI 50≥HP≤300	40 ppmvd CO	40 ppmvd CO.
Emergency CI 300>HP≤500	40 ppmvd CO	40 ppmvd CO.
Non-Emergency CI >300 HP	4 ppmvd CO or 90% CO reduction	40 ppmvd CO.
<50 HP	2 ppmvd formaldehyde	2 ppmvd formaldehyde.
Landfill/Digester 50≥HP≤500	177 ppmvd CO	177 ppmvd CO.
Emergency SI 50≥HP≤500	2 ppmvd formaldehyde	2 ppmvd formaldehyde.

In addition, certain existing stationary RICE located at major sources are subject to fuel requirements. Owners and operators of existing stationary non-emergency diesel-fueled CI engines greater than 300 HP with a displacement of less than 30 liters per cylinder located at major sources that use diesel fuel must use only diesel fuel meeting the requirements of 40 CFR 80.510(b). This section requires that diesel fuel have a maximum sulfur content of 15 parts per million (ppm) and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

2. Existing Stationary RICE at Area Sources

The emission requirements that we are proposing in this action for existing stationary RICE located at existing area sources are shown in Table 2 of this preamble. Note that EPA is also co-proposing that the same standards apply during both normal operation and periods of startup and malfunctions.

TABLE 2—EMISSION STANDARDS AND REQUIREMENTS FOR EXISTING STATIONARY RICE LOCATED AT AREA SOURCES

Subcategory	Emission standards at 15 percent O_2, as applicable, or management practice	
	Except during periods of startup, or malfunction	During periods of startup, or malfunction
Non-Emergency 2SLB 50≥HP≤249	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.
Non-Emergency 2SLB HP≥250	8 ppmvd CO or 90% CO reduction	85 ppmvd CO.

TABLE 2—EMISSION STANDARDS AND REQUIREMENTS FOR EXISTING STATIONARY RICE LOCATED AT AREA SOURCES—Continued

Subcategory	Emission standards at 15 percent O_2, as applicable, or management practice	
	Except during periods of startup, or malfunction	During periods of startup, or malfunction
Non-Emergency 4SLB 50≥HP≤249	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.
Non-Emergency 4SLB HP≥250	9 ppmvd CO or 90% CO reduction	95 ppmvd CO.
Non-Emergency 4SRB HP≥50	200 ppbvd formaldehyde or 90% formaldehyde reduction.	2 ppmvd formaldehyde.
Emergency CI 50≥HP≤500	Change oil and filter every 500 hours; inspect air cleaner every 1000 hours, inspect all hoses and belts every 500 hours and replace as necessary.	Change oil and filter every 500 hours; inspect air cleaner every 1000 hours, inspect all hoses and belts every 500 hours and replace as necessary.
Emergency CI HP>500	40 ppmvd CO	40 ppmvd CO.
Non-Emergency CI 50≥HP≤300	Change oil and filter every 500 hours; inspect air cleaner every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.
Non-Emergency CI HP>300	4 ppmvd CO or 90% CO reduction	40 ppmvd CO.
HP<50	Change oil and filter every 200 hours; replace spark plugs every 500 hours; and inspect all hoses and belts every 500 hours and replace as necessary.	Change oil and filter every 200 hours; replace spark plugs every 500 hours; and inspect all hoses and belts every 500 hours and replace as necessary.
Landfill/Digester Gas 50≥HP≤500	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.
Landfill/Digester Gas HP>500	177 ppmvd CO	177 ppmvd CO.
Emergency SI 50≥HP≤500	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.	Change oil and filter every 500 hours; replace spark plugs every 1000 hours; and inspect all hoses and belts every 500 hours and replace as necessary.
Emergency SI HP>500	2 ppmvd formaldehyde	2 ppmvd formaldehyde.

3. New or Reconstructed Stationary RICE >500 HP at Major Sources, New or Reconstructed 4SLB Stationary RICE ≥250 HP at Major Sources and Existing 4SRB Stationary RICE >500 HP at Major Sources.

The EPA is co-proposing, in the alternative, as explained below, to amend the existing regulations for new and reconstructed non-emergency 2SLB and CI stationary RICE >500 HP at major sources, new and reconstructed non-emergency 4SLB stationary RICE ≥250 HP at major sources, and existing 4SRB stationary RICE >500 HP at major sources, in order to set limits during periods of startup and malfunction. These emission limitations are shown in Table 3 of this preamble. Note that EPA is also co-proposing that the same standards apply during both normal operation and periods of startup and malfunctions.

TABLE 3—EMISSION STANDARDS FOR NEW OR RECONSTRUCTED NON-EMERGENCY STATIONARY RICE >500 HP AT MAJOR SOURCES AND EXISTING NON-EMERGENCY 4SRB STATIONARY RICE >500 HP AT MAJOR SOURCES DURING PERIODS OF STARTUP OR MALFUNCTION

Subcategory	Emission standards at 15 percent O_2
New or reconstructed non-emergency 2SLB >500 HP located at a major source of HAP emissions.	Limit concentration of CO in the stationary RICE exhaust to 259 ppmvd or less at 15 percent O_2 during periods of startup or malfunction.
New or reconstructed non-emergency 4SLB ≥250 HP located at a major source of HAP emissions.	Limit concentration of CO in the stationary RICE exhaust to 420 ppmvd or less at 15 percent O_2 during periods of startup or malfunction.
Existing non-emergency 4SRB >500 HP located at a major source of HAP emissions; or New or reconstructed non-emergency 4SRB >500 HP located at a major source of HAP emissions.	Limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2 during periods of startup or malfunction.
New or reconstructed non-emergency CI >500 HP located at a major source of HAP emissions.	Limit concentration of CO in the stationary RICE exhaust to 77 ppmvd or less at 15 percent O_2 during periods of startup or malfunction.

4. Operating Limitations

The EPA is proposing operating limitations for existing stationary non-emergency 2SLB, 4SLB, 4SRB, and CI RICE that are greater than 500 HP and are located at an area source, and existing stationary non-emergency CI RICE that are greater than 500 HP and are located at a major source. These are large engines that are subject to proposed standards that would require the use of aftertreatment. Owners and operators of engines that are equipped with oxidation catalyst or NSCR must

maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test. Owners and operators of these engines must also maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is between 450 and 1350 degrees Fahrenheit (°F) for engines with an oxidation catalyst and 750 to 1250 °F for engines with NSCR. Owners and operators of engines that are not using oxidation catalyst or NSCR must comply with any operating limitations approved by the Administrator.

5. Management Practices

As shown in Table 2 above, the EPA is proposing management practices for several subcategories of engines located at area sources. Such management practices include maintenance requirements that are expected to ensure that emission control systems are working properly. EPA asks for comments on these management practices and requests suggestions of additional maintenance requirements that may be needed for some of these engine subcategories.

6. Fuel Requirements

In addition to emission standards and management practices, certain stationary CI RICE located at existing area sources are subject to fuel requirements. These fuel requirements are proposed in order to reduce the potential formation of sulfate compounds that are emitted when high sulfur diesel fuel is used in combination with oxidation catalysts and to assist in the efficient operation of the oxidation catalysts. Thus, owners and operators of stationary non-emergency diesel-fueled CI engines greater than 300 HP with a displacement of less than 30 liters per cylinder located at existing area sources must only use diesel fuel meeting the requirements of 40 CFR 80.510(b), which requires that diesel fuel have a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

D. What are the requirements for demonstrating compliance?

The following sections describe the requirements for demonstrating compliance under the proposed rule.

1. Existing Stationary RICE at Major Sources

Owners and operators of existing stationary non-emergency RICE located at major sources that are less than 100 HP and stationary emergency RICE located at major sources must operate and maintain their stationary RICE and aftertreatment control device (if any) according to the manufacturer's emission-related written instructions or develop their own maintenance plan. Owners and operators of existing stationary non-emergency RICE located at major sources that are less than 100 HP and existing stationary emergency RICE located at major sources do not have to conduct any performance testing.

Owners and operators of existing stationary non-emergency RICE located at major sources that are greater than or equal to 100 HP and less than or equal to 500 HP must conduct an initial performance test to demonstrate that they are achieving the required emission standards.

Owners and operators of existing stationary non-emergency RICE greater than 500 HP located at major sources must conduct an initial performance test and must test every 8,760 hours of operation or 3 years, whichever comes first, to demonstrate that they are achieving the required emission standards.

Owners and operators of stationary non-emergency CI RICE that are greater than 500 HP and are located at a major source must continuously monitor and record the catalyst inlet temperature if an oxidation catalyst is being used on the engine. The pressure drop across the catalyst must also be measured monthly. If an oxidation catalyst is not being used on the engine, the owner or operator must continuously monitor and record the operating parameters (if any) approved by the Administrator.

2. Existing Stationary RICE at Area Sources

Owners and operators of existing stationary RICE located at area sources, that are subject to management practices, as shown in Table 2 of this preamble, must develop a maintenance plan that specifies how the management practices will be met. Owners and operators of existing stationary RICE that are subject to management practices do not have to conduct any performance testing.

Owners and operators of existing stationary RICE subject to numerical emission standards and that are located at area sources, as shown in Table 2 of this preamble, must conduct an initial performance test to demonstrate that they are achieving the required emission standards.

Owners and operators of existing stationary non-emergency RICE that are greater than 500 HP and located at area sources must conduct an initial performance test and must test every 8,760 hours of operation or 3 years, whichever comes first, to demonstrate that they are achieving the required emission standards.

Owners and operators of existing stationary non-emergency 2SLB, 4SLB, 4SRB, and CI RICE that are greater than 500 HP and are located at an area source must continuously monitor and record the catalyst inlet temperature if an oxidation catalyst or NSCR is being used on the engine. The pressure drop across the catalyst must also be measured monthly. If an oxidation catalyst or NSCR is not being used on the engine, the owner or operator must continuously monitor and record the operating parameters (if any) approved by the Administrator.

E. What are the reporting and recordkeeping requirements?

The following sections describe the reporting and recordkeeping requirements that are required under the proposed rule.

Owners and operators of existing stationary emergency RICE that do not meet the requirements for non-emergency engines are required to keep records of their hours of operation. Owners and operators of existing stationary emergency RICE must install a non-resettable hour meter on their engines to record the necessary information. Emergency stationary RICE 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 are 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 engine is mandated by regulation such as State or local requirements to run more than 100 hours per year for maintenance and testing purposes. 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 stationary emergency RICE 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.

Owners and operators of existing stationary RICE located at area sources, that are subject to management practices as shown in Table 2, are required to keep records that show that management practices that are required are being met. Such records are to be kept on-site by owners and operators. These records must include, but may not be limited to: oil and filter change dates, oil amounts added and corresponding hour on the hour meter, fuel consumption rates, air filter change dates, records of repairs and other maintenance performed.

In terms of reporting requirements, owners and operators of existing stationary RICE, except stationary RICE that are less than 100 HP, existing emergency stationary RICE, and existing stationary RICE that are not subject to numerical emission standards, must submit all of the applicable notifications as listed in the NESHAP General Provisions (40 CFR part 63, subpart A), including an initial notification, notification of performance test, and a notification of compliance for each stationary RICE which must comply with the specified emission limitations.

IV. Rationale for Proposed Rule

A. Which control technologies apply to stationary RICE?

EPA reviewed various control technologies applicable to stationary engines. For detailed information on the control technology review that EPA conducted, refer to information in the docket for this proposed rule. The following sections provide general descriptions of currently available controls that can be used to reduce emissions from stationary engines.

Non-selective catalytic reduction has been commercially available for many years and has been widely used on stationary engines. This technology utilizes catalytic material to reduce some pollutants like NO_X , while also oxidizing other pollutants like CO, HAP and VOC. The technology can be applied to rich burn stationary engines and is capable of significantly reducing HAP emissions from stationary RICE. Based on available information, NSCR appears to be technically feasible for rich burn engines down to 25 HP. The NESHAP for stationary rich burn RICE greater than 500 HP located at major sources that were promulgated in 2004 were based upon applying NSCR to meet the emission standards. In order to meet the emission standards promulgated on January 18, 2008 (73 FR 3568), new stationary rich burn engines are also expected to use NSCR.

Oxidation catalysts are another type of aftertreatment that can be applied to stationary engines and are typically used with lean burn engines. The technology can be applied to either diesel or natural gas fired lean burn engines. Significant reductions in HAP and CO are achieved with oxidation catalysts and applying the technology to diesel fired engines also yields PM mass emissions reductions. Oxidation catalyst control has been widely used and has been available for decades for use with lean burn stationary engines. While oxidation catalysts are very effective at reducing HAP and CO emissions, there is some concern about increasing NO_2 emissions as a result of using highly catalyzed devices. Thus, EPA requests comments and information on the potential increase in NO_2 emissions and any strategies to help reduce their formation.

Catalyzed diesel particulate filters are applicable to CI engines using diesel fuel and are primarily used to reduce PM emissions. Applying CDPF can significantly reduce PM emissions, while also significantly reducing emissions of HAP and CO. Catalyzed diesel particulate filters are the basis for EPA's current on-highway diesel PM standards (40 CFR Part 86), the Tier 4 emission standards for PM for most nonroad CI engines regulated by 40 CFR part 1039, the most recent locomotive and marine engine standards and also for most new non-emergency stationary CI engines regulated under 40 CFR part 60, subpart IIII. Recently finalized standards for stationary CI engines in California are also based on the use of particulate filters in some cases.

B. How did EPA determine the basis and level of the proposed standards?

1. Stationary RICE at Major Sources

Section 112 of the CAA requires that EPA establish NESHAP for the control of HAP from new and existing sources in regulated source categories. The CAA requires the NESHAP for major sources to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as the maximum achievable control technology, or MACT.

In promulgating a MACT standard, EPA must first calculate the minimum stringency levels for new and existing sources in a category or subcategory. The minimum level of stringency is called the MACT ''floor,'' and CAA section 112(d)(3) sets forth differing levels of minimum stringency that EPA's standards must achieve, based on whether they regulate new and reconstructed sources, or existing sources. For new and reconstructed sources, CAA section 112(d)(3) provides that the ''degree of reduction in emissions that is deemed achievable [* * *] shall not be less stringent than the emissions control that is achieved in practice by the best controlled similar source, as determined by the Administrator.'' Emissions standards for existing units may be less stringent than standards for new units, but ''shall not be less stringent * * * than the average emissions limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information),'' (or the best performing 5 sources for categories or subcategories with fewer than 30 sources). CAA section 112(d)(3). The MACT standard must be no less stringent than the MACT floor.

In developing MACT, EPA must also determine whether to control emissions ''beyond-the-floor,'' after considering the costs, nonair quality health and environmental impacts, and energy requirements of such more stringent control. Section 112 of the CAA allows EPA to establish subcategories among a group of sources, based on criteria that differentiate such sources. The subcategories that have been developed for stationary RICE were previously listed and are necessary in order to capture the distinct differences, which could affect the emissions of HAP from these engines. The complete rationale explaining the development of these subcategories is provided in the memorandum titled ''Subcategorization and MACT Floor Determination for Stationary Reciprocating Internal Combustion Engines ≤500 HP at Major Sources'' and is available from the docket.

For the MACT floor determination, EPA reviewed the data in its Office of Air Quality Planning and Standards' RICE Population Database (hereafter referred to as the ''Population Database'') and RICE Emissions

Database (hereafter referred to as the ''Emissions Database''). The Population and Emissions Databases represent the best information available to EPA. Information in the Population and Emissions Database was obtained from several sources and is further described in the notice of proposed rulemaking for the RICE NESHAP for engines greater than 500 HP at major sources (67 FR 77830, December 19, 2002) and in the docket for the RICE NESHAP rulemaking (EPA–HQ–OAR–2002–0059). In order to establish the emission standard for each subcategory of stationary existing RICE, EPA referred to the Emissions Database. The following sections describe the MACT floor review and proposed MACT determinations for each subcategory of existing stationary RICE.

a. *Stationary RICE <50 HP.* According to the Population Database there are no existing stationary RICE less than 50 HP using catalyst type controls. In assessing the average of the top twelve percent best performing engines, EPA determined that the MACT floor is 2 ppmvd formaldehyde. EPA is not expecting any stationary CI engines less than 50 HP since such engines are typically considered nonroad mobile engines and regulated under EPA's mobile source requirements. Also, EPA does not expect any lean burn engines in this subcategory as lean burn engines tend to be found in larger engine size segments. Therefore, EPA believes that engines less than 50 HP would be 4SRB engines. Subsequently, EPA reviewed formaldehyde emissions from 4SRB engines and averaged the emissions associated with the best performing 12 percent of sources. As a result, the MACT floor for engines below 50 HP is 2 parts per million by volume, dry basis (ppmvd) of formaldehyde at 15 percent oxygen (O_2).

EPA considered regulatory options more stringent than the MACT floor, in particular, emission standards based on the use of NSCR. The cost per ton of HAP reduced for stationary engines less than 50 HP equipped with NSCR is substantial, particularly when considering the potential HAP reductions that would be expected. Therefore, MACT is equivalent to the MACT floor. For details on the cost per ton analysis, refer to the memorandum entitled ''Above-the-Floor Determination for Stationary RICE,'' included in the docket.

b. *Stationary Landfill/Digester Gas ≥50 HP.* According to the Population Database there are no existing landfill or digester gas engines using catalyst type controls. EPA consulted several sources, including the Emissions Database, in order to determine the level being achieved by the best performing 12 percent of landfill and digester gas engines.

Based on reviewing recently obtained test reports for landfill and digester gas engines, EPA concluded that the latest information obtained on the current levels being achieved by landfill gas engines is the most appropriate and representative information and therefore was used to determine the MACT floor limit. EPA analyzed the CO emissions from landfill and digester gas test reports. EPA has previously discussed the appropriateness of using CO emissions as a surrogate for HAP emissions and therefore reviewed CO emissions from landfill and digester gas engines. EPA selected the best performing 12 percent and averaged those 12 percent to determine the MACT floor. As a result, the MACT floor for landfill and digester gas stationary RICE greater than or equal to 50 HP is 177 ppmvd of CO at 15 percent O_2.

Currently, there are no viable beyond-the-floor options for engines that combust landfill or digester gas. Aftertreatment controls could theoretically be applied to engines burning waste gas; however, numerous studies have shown that a family of silicon-based compounds named siloxanes present in landfill gas can foul add-on catalyst controls. Such fouling can render the catalyst inoperable within short periods of time. Pre-treatment systems could be applied to clean the fuel prior to combustion theoretically allowing catalysts to be used, but has not shown to be a reliable technology at this time. Therefore, MACT is equivalent to the MACT floor.

c. *Stationary Emergency CI 50≥ HP ≤500.* EPA reviewed CO emissions from CI engines and selected the best performing 12 percent. As a result, the MACT floor for CI emergency stationary RICE greater than or equal to 50 HP and less than or equal to 500 HP is 40 ppmvd of CO at 15 percent O_2.

As part of our analysis for the possibility of going beyond the MACT floor, EPA considered requiring add-on controls for emergency engines. However, due to the limited operation of emergency engines (about 50 hours per year on average), the cost per ton of HAP removed by such controls is high. The estimated cost of oxidation catalyst per ton of HAP reduced ranges from $1 million to $2.8 million for emergency CI engines in this size range. For CDPF, the estimated cost per ton of HAP reduced for emergency CI engines between 50 and 500 HP ranges from $3.7 million to $8.7 million. In addition, the total HAP reductions achieved by applying aftertreatment controls would be minimal since stationary emergency engines are operated only an average of about 50 hours per year. Therefore, MACT is equivalent to the MACT floor. A fuller discussion of EPA's analysis of regulatory alternatives above-the-floor is presented in the memorandum entitled ''Above-the-Floor Determination for Stationary RICE.''

d. *Stationary Non-Emergency CI 50≥ HP ≤500.* As a result of our review of the Emissions Database, the MACT floor for CI non-emergency stationary RICE greater than or equal to 50 HP and less than or equal to 500 HP is 40 ppmvd of CO at 15 percent O_2.

As part of our analysis of going beyond the MACT floor, EPA considered the use of add-on controls for this subcategory of engines. The applicable add-on controls that yield significant HAP reductions are oxidation catalyst and CDPF. Diesel oxidation catalysts are capable of reducing HAP emissions by significant amounts in excess of 90 percent in some cases. Diesel oxidation catalysts also reduce emissions of CO as well as PM. Achievable mass reductions of PM are on the order of 30 percent for oxidation catalysts. Catalyzed diesel particulate filters are capable of reducing HAP and CO emissions by similar if not greater amounts, and are more efficient in reducing PM than oxidation catalysts. Achievable PM reductions are on the order of 90 percent or more with CDPF. However, CDPFs are considerably more expensive than diesel oxidation catalysts.

EPA estimated the cost per ton of HAP removal by potentially applying oxidation catalysts and CDPFs to existing non-emergency CI engines. The specific costs associated with add-on controls can be found in memoranda available from the rulemaking docket. The cost per ton of HAP removed for CDPFs is in general significantly higher than the cost per ton of HAP removed for oxidation catalysts, and the cost per ton for both options drastically increases as the size of the engine decreases and is more favorable towards larger size engines. EPA requests data and other information on the ability of oxidation catalysts to remove HAP compared to CDPF. In addition, we request comment on the performance capability of these control devices to remove metallic HAP.

Considering the HAP emission reductions capable from oxidation catalysts, the cost of oxidation catalyst control compared to CDPF, and the low capital costs associated with oxidation catalyst makes oxidation catalysts a

favorable option for reduction of HAP emissions from larger existing non-emergency stationary diesel engines. However, going above-the-floor and requiring oxidation catalysts on all non-emergency stationary CI engines would require significant total capital investment and total annual control costs. As stated, the cost per ton significantly decreases with increasing HP. For the greater than 300 HP segment the cost per ton of HAP removed, which includes a mixture of organic and metallic HAP, is estimated to be $51,973. This cost is almost a third less than the estimated cost per ton of $140,395 for stationary engines 50 to 100 HP.

Stationary existing diesel engines were largely uncontrolled at the Federal level prior to the promulgation of EPA's emission standards for stationary diesel engines in 2004, which affected engines constructed beginning in 2002. Non-emergency diesel engines are estimated to emit 90 percent of total combined PM and NO_X emissions from all existing stationary diesel engines, with emergency engines emitting the remaining 10 percent. Of the non-emergency diesel engines, about 50,000 non-emergency engines rated 300 HP or higher were built prior to 2002, which is about 29 percent of the existing population of non-emergency stationary diesel engines. These 50,000 non-emergency diesel engines emit approximately 72 percent of the total HAP emissions, 66 percent of the total PM emissions, and 62 percent of the total NO_X emissions from existing non-emergency stationary diesel engines. This information is based on data from the Power Systems Research Database that was presented in Tables 1–4 of EPA's January 24, 2008 ANPRM for stationary diesel engines emission standards (73 FR 4136).

For these reasons, EPA concluded that it can achieve the highest level of HAP emission reduction relative to cost, while requiring controls where appropriate, by requiring more stringent emission standards on non-emergency stationary diesel engines with a power rating greater than 300 HP. For these reasons and considering the higher level of HAP reductions achieved from engines greater than 300 HP and the reduced annual cost of control, EPA believes that requiring above-the-floor levels that rely on oxidation catalyst control is appropriate for engines greater than 300 HP. EPA solicits comments and data on whether 300 HP is the appropriate size division for setting beyond-the-floor MACT standards requiring the use of add-on controls. Specifically, EPA is seeking comment on whether it would be appropriate to extend the more stringent standards to engines that are less than 300 HP.

Of further consideration are the co-benefits that would be achieved by the use of oxidation catalyst as it will reduce other pollutants such as CO and PM. Taking into account the reductions in CO and PM associated with applying oxidation catalyst to non-emergency CI engines, the cost per ton of pollutants reduced decreases. The total co-benefits of this proposed regulation are presented in a separate memorandum titled ''Impacts Associated with NESHAP for Existing Stationary RICE,'' which provides the costs and emissions impacts of this regulation. These emission estimates are also summarized in Chapter 4 of the RIA.

EPA believes that the emission reductions associated with use of oxidation catalysts, taking into account the costs of such controls, are justified under section 112(d). Therefore, EPA is proposing MACT to be the level that is achieved by applying oxidation catalyst to non-emergency CI engines greater than 300 HP, which is 4 ppmvd of CO at 15 percent O_2, or 90 percent CO efficiency. A fuller discussion of EPA's analysis of regulatory alternatives above-the-floor is presented in the memorandum entitled ''Above-the-Floor Determination for Stationary RICE.''

While these proposed HAP emission standards would not require the use of CDPFs, EPA notes that when compared to oxidation catalysts, CDPFs provide significantly greater reductions in levels of PM from diesel engines, which are a significant health concern. PM emissions from these engines contain several constituents, including black carbon and trace amounts of metallic HAP. EPA estimates that the range of $PM_{2.5}$ emission reductions would increase from 2,600 tons to 7,600 tons if CDPFs are used rather than oxidation catalysts.

The contribution of black carbon emissions to global climate is being evaluated in a number of scientific forums.[3] [4] EPA is interested in comments and information on other regulatory and non-regulatory approaches that could help address black carbon emissions from existing stationary diesel engines.

Sources may wish to review whether it is appropriate for some existing CI engines to use CDPFs to meet the requirements of this rule, given the considerable co-benefits of using CDPF. For example, the cost effectiveness associated with reducing $PM_{2.5}$ with oxidation catalysts on a 300 HP diesel engine is $27,000 per ton, while using a CDPF improves the cost effectiveness to about $9,000 per ton. These cost effectiveness numbers include any potential reductions of metallic HAP which would be emitted in the particle phase. EPA notes, however, that some have suggested that the use of CDPF on older uncontrolled engines may be more problematic than for newer engines that already have some level of engine control.

One of the potential problems raised by industry are the difficulties with retrofitting CDPFs on mechanically-controlled engines versus those that use electronic controls. Furthermore, the diesel PM levels from older engines are, according to some, too high for efficient operation of a CDPF. EPA is requesting comment on the use of CDPF to meet the HAP standards for this rule and on the benefits generally of using CDPFs on older stationary CI engines. EPA also asks for comment on technical feasibility issues that might preclude the use of such devices on older diesel engines.

Stationary diesel engines also emit trace amounts of metallic HAP. EPA believes that formaldehyde and CO are reasonable surrogates for total HAP, including these very small trace emissions of metals. Nonetheless, EPA is taking comment on whether there are more appropriate surrogates for metallic HAP from stationary diesel engines. EPA does not have data regarding the use of other surrogates for these emissions from stationary diesel engines, so EPA is soliciting data on any other such surrogates.

The proposed rule requires the use of ULSD for existing non-emergency stationary diesel engines greater than 300 HP with a displacement of less than 30 liters per cylinder. The use of ULSD is necessary due to concerns about oxidation catalysts simultaneously oxidizing SO_2 to form sulfate particulate. A limit on the diesel fuel sulfur level of 15 ppm will reduce the potential for increased sulfate emissions from diesel engines equipped with oxidation catalysts. The limit on fuel sulfur will also improve the efficiency of the oxidation catalyst. The use of ULSD will also enable stationary diesel engines to utilize CDPF if desired. EPA has already promulgated similar diesel fuel sulfur standards for highway and

[3] Intergovernmental Panel on Climate Change (IPCC). 2007. Changes in Atmospheric Constituents and in Radiative Forcing, in Climate Change 2007, Cambridge University Press, New York, Cambridge University Press.

[4] Atmospheric Aerosol Properties and Climate Impacts. 2009. U.S. Climate Change Science Program Synthesis and Assessment Product 2.3, January 2009.

nonroad diesel engines and for new stationary diesel engines.

e. *Stationary Non-Emergency CI >500 HP*. A regulation covering existing stationary diesel engines greater than 500 HP at major sources was promulgated in 2004. However, based on the MACT floor analysis conducted at that time, the regulation subjected existing diesel engines greater than 500 HP at major sources to emission standards of no further emission control.

However, due to the availability of technically feasible and reasonably cost-effective technologies to control emissions from these existing large stationary CI engines, and the potential of reducing exhaust HAP (as well as PM), EPA is proposing to address HAP emissions from these existing diesel engines >500 HP pursuant to its authority under CAA section 112(d).

As a result of our review of the Emissions Database, the MACT floor for CI non-emergency stationary RICE greater than or equal to 50 HP and less than or equal to 500 HP is 40 ppmvd of CO at 15 percent O_2.

As part of our analysis of going beyond the MACT floor, EPA considered the emissions associated with the use of oxidation catalysts. Similar to EPA's analysis of the emission reductions and costs associated with the use of oxidation catalysts for diesel engines from 300–500 HP, EPA believes the HAP emission reductions associated with use of oxidation catalysts, taking into account the costs of such controls, are justified under section 112(d). A fuller discussion of EPA's analysis of regulatory alternatives above-the-floor is presented in the memorandum entitled ''Above-the-Floor Determination for Stationary RICE.''

EPA is proposing to address emissions from existing non-emergency CI engines greater than 500 HP located at major sources by limiting the CO to 4 ppmvd at 15 percent O_2 or by reducing CO by 90 percent or more. The proposed standards are based on what is achieved by applying oxidation catalyst controls. Oxidation catalyst controls reduce HAP, CO, and PM from diesel engines. The proposed emission standard is in terms of CO, which has been shown to be an appropriate surrogate for HAP. Stationary diesel engines also emit trace amounts of metallic HAP. EPA believes that formaldehyde and CO are reasonable surrogates for total HAP, including these very small trace emissions of metals. Nonetheless, EPA is taking comment on whether there are more appropriate surrogates for metallic HAP from stationary diesel engines. EPA does not have data regarding the use of other surrogates for these emissions from stationary diesel engines, so EPA is soliciting data on any other such surrogates.

For the same reasons provided above for non-emergency diesel engines between 300–500 HP, EPA is requiring the use of ULSD for non-emergency diesel engines above 500 HP.

f. *Stationary Emergency SI 50≥HP≥500*. As a result of our review of the Emissions Database and industry estimates, EPA determined the MACT floor for SI emergency stationary RICE greater than or equal to 50 HP and less than or equal to 500 HP is 2 ppmvd of formaldehyde at 15 percent O_2.

As part of EPA's beyond-the-floor MACT analysis, EPA considered add-on controls for this subcategory. However, the same issues apply to emergency SI engines as to emergency CI engines; in particular, the cost-effectiveness of such controls for HAP reduction on emergency engines and questions about the feasibility of such controls on emergency engines. According to the Population Database there are no SI emergency stationary RICE greater than or equal to 50 HP and less than or equal to 500 HP using catalyst type controls. Therefore, it is not appropriate to require add-on controls on emergency SI engines. EPA also found no other techniques appropriate to go beyond the MACT floor. MACT is therefore equivalent to the MACT floor.

g. *Stationary Non-Emergency 2SLB 50≥HP≤500*. EPA selected the best performing 12 percent of engines for formaldehyde, identified the corresponding CO tests, and averaged the CO emissions from the corresponding tests. As a result, the MACT floor for non-emergency 2SLB stationary RICE greater than or equal to 50 HP and less than or equal to 500 HP is 85 ppmvd of CO at 15 percent O_2.

As part of EPA's beyond-the-floor MACT analysis, EPA considered applying oxidation catalyst controls to this subcategory and estimated the cost per ton of HAP removed. EPA believes the costs to be reasonable for engines 250 HP and above equipped with oxidation catalyst and can be justified in light of the significant reductions of HAP that would be achieved. For example, the cost effectiveness of reducing HAP from 2SLB engines in the 300 to 500 HP size range is about $2,900 per ton. Oxidation catalysts can reduce HAP and CO from stationary spark-ignition engines by approximately 90 percent. The Emissions Database did not indicate any other proven and cost-effective control technologies or other methods that can reduce HAP emissions from 2SLB engines to levels lower than those achieved by oxidation catalysts. The proposed emission limit is in terms of CO, which has been shown to be an appropriate surrogate for HAP. EPA believes the HAP emission reductions associated with use of oxidation catalysts, taking into account the costs of such controls, are justified. Therefore, MACT for engines 250 HP and above is the level that is achievable by applying oxidation catalyst and is 8 ppmvd of CO at 15 percent O_2 or 90 percent CO efficiency. MACT for engines below 250 HP is equivalent to the MACT floor.

h. *Non-Emergency 4SLB 50≥HP≤249*. According to the Population Database, there are no non-emergency 4SLB stationary RICE greater than or equal to 50 HP and less than or equal to 249 HP using catalyst type controls.

EPA reviewed formaldehyde emissions tests from 4SLB engines. EPA selected the best performing 12 percent of engines for formaldehyde and identified the corresponding CO values from the top 12 tests for formaldehyde. The corresponding CO values were then averaged. As a result, the MACT floor for 4SLB stationary RICE greater than or equal to 50 HP and less than or equal to 249 HP is 95 ppmvd of CO at 15 percent O_2.

As part of EPA's beyond-the-floor MACT analysis, EPA considered applying oxidation catalyst controls to this subcategory. However the cost per ton of HAP removed was determined to be too significant and to outweigh the expected HAP reductions from these stationary engines. Therefore, MACT is equivalent to the MACT floor.

i. *Non-Emergency 4SLB 250≥HP≤500*. For non-emergency 4SLB engines between 250 and 500 HP, EPA found that 5.7 percent of the population is controlled with aftertreatment that yields HAP reductions, particularly oxidation catalysts.

As part of EPA's beyond-the-floor MACT analysis, EPA considered applying oxidation catalyst and estimated the cost per ton of HAP removed. The use of oxidation catalysts on these engines can achieve 90 percent HAP reductions. EPA concluded that the control costs associated with installing oxidation catalysts are reasonable for this type of stationary engine, and thus can be justified considering the significant reductions of HAP that would be achieved by using oxidation catalysts. Oxidation catalysts can reduce HAP and CO from stationary spark-ignition engines. The proposed emission limit is in terms of CO, which has been shown to be an appropriate surrogate for HAP. EPA believes the

HAP emission reductions associated with use of oxidation catalysts, taking into account the costs of such controls, are justified. The Emissions Database did not indicate any other proven and cost-effective control technologies or other methods that can reduce HAP emissions from 4SLB engines to levels lower than those achieved by oxidation catalysts.

EPA determined that the appropriate numerical MACT level could be determined by analyzing uncontrolled levels of HAP and reducing the levels by the expected reductions from oxidation catalysts. EPA analyzed formaldehyde emissions from 4SLB tests for engines without add-on controls. EPA took the average of the best performing 12 percent of engines for formaldehyde and identified the corresponding CO values from the best performing 12 percent of tests. The corresponding CO values were then averaged. The result for 4SLB stationary RICE greater than or equal to 250 HP and less than or equal to 500 HP is 95 ppmvd of CO at 15 percent O_2.

Given an expected 90 percent reduction from the use of oxidation catalysts, MACT is 9 ppmvd of CO at 15 percent O_2 or 90 percent CO efficiency. A fuller discussion of EPA's analysis of regulatory alternatives above-the-floor is presented in the memorandum entitled ''Above-the-Floor Determination for Stationary RICE.''

j. *Non-Emergency 4SRB 50≥HP≤500.* For SI non-emergency stationary 4SRB engines greater than or equal to 50 HP and less than or equal to 500 HP, EPA found that 5.6 percent of the population are using catalyst type controls, according to the Population Database. The add-on control that typically applies to this subcategory of engines is NSCR.

As part of EPA's beyond-the-floor MACT analysis, EPA considered the application of NSCR to such engines. The Emissions Database provided no other proven and cost effective emission control methods currently available which can reduce HAP emissions from 4SRB engines to levels lower than that achieved through NSCR control.

The technology is proven, has been applied to thousands of rich burn engines, and is efficient at reducing HAP emissions. EPA considered applying NSCR and estimated the cost per ton of HAP removed. EPA believes the costs are reasonable and appropriate and can be justified considering the significant reductions of HAP that would be achieved by using NSCR on this subcategory of engines. For example, the cost effectiveness of reducing HAP from stationary 4SRB engines in the 300 to 500 HP size range is about $5,000 per ton.

Other pollutants are also reduced through the use of NSCR including significant reductions in NO_X and CO emissions. Taking into consideration the emission reductions achieved by applying NSCR to 4SRB engines greater than 50 HP, the cost per ton of emissions reduced is favorable for this type of stationary engines. A fuller discussion of EPA's analysis of regulatory alternatives above-the-floor is presented in the memorandum entitled ''Above-the-Floor Determination for Stationary RICE.''

EPA determined that the appropriate numerical MACT level could be determined by analyzing uncontrolled levels of HAP and reducing the levels by the expected reductions from NSCR. EPA analyzed formaldehyde emissions from 4SRB engines without add-on controls and averaged the emissions from the best performing 12 percent of engines. The result for 4SRB stationary RICE greater than or equal to 50 HP and less than or equal to 500 HP is 2 ppmvd of formaldehyde at 15 percent O_2.

Therefore, MACT is the level that is achievable by applying NSCR and is 200 ppbvd of formaldehyde at 15 percent O_2 or 90 percent formaldehyde efficiency.

2. Engines at Area Sources

Under section 112(k) of the CAA, EPA developed a national strategy to address air toxic pollution from area sources. The strategy is part of EPA's overall national effort to reduce toxics, but focuses on the particular needs of urban areas. Section 112(k) requires EPA to list area source categories and to ensure 90 percent of the emissions from area sources are subject to standards pursuant to section 112(d) of the CAA. Under section 112(k), the CAA specifically mandated that EPA develop a strategy to address public health risks posed by air toxics from area sources in urban areas. Section 112(k) also mandates that the strategy achieve a 75 percent reduction in cancer incidence attributable to HAP emitted by stationary sources. As mentioned, stationary RICE are listed as a source category under the Urban Air Toxics Strategy developed under the authority of sections 112(k) and 112(c)(3) of the CAA. These area sources are subject to standards under section 112(d).

Section 112(d)(5) of the CAA indicates that EPA may elect to promulgate standards or requirements to area sources ''which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants.'' For determining emission limitations, GACT standards can be more flexible requirements than MACT standards. For example, the CAA provisions for setting GACT do not require setting control baseline or ''floor'' that is equal to the average emission levels achieved by the best performing 12 percent of a type of facility, for existing sources, or the emission control achieved in practice by the best controlled similar source, for new sources. EPA is permitted to consider costs and other factors during the GACT analysis. Control technology options available to stationary RICE located at area sources are the same as those discussed for engines located at major sources.

The requirements being proposed in this action are applicable to stationary RICE located at area sources of HAP emissions. EPA has chosen to propose national requirements, which not only focus on urban areas, but address emissions from area sources in all areas (urban and rural).

For stationary RICE, it would not be practical or appropriate to limit the applicability to urban areas and EPA has determined that national standards are appropriate. Stationary RICE are located in both urban and rural areas. In fact, there are some rural areas with high concentrations of stationary RICE. Stationary RICE are employed in various industries used for both the private and public sector for a wide range of applications such as generator sets, irrigation sets, air and gas compressors, pumps, welders, and hydro power units. Stationary RICE may be used by private entities for agricultural purposes and be located in a rural area, or it may be used as a standby generator for an office building located in an urban area. Other stationary RICE may operate at large sources for electric power generation, transmission, or distribution purposes.

In previous rulemakings, EPA had determined that stationary RICE are located all over the U.S., and EPA cannot say that these sources are more prevalent in certain areas of the country. Therefore, for the source category of stationary RICE, EPA is proposing national requirements without a distinction between urban and non-urban areas. EPA requests comment on this approach and its appropriateness for today's population of stationary RICE.

For subcategories of larger engines, particularly those above 500 HP and those for which EPA has based MACT on the use of add-on controls, the control technologies that create the basis for the emission standards for engines located at major sources are readily available and feasible for all engines.

Further, for those cases where EPA is basing the MACT emission standards on add-on controls, the MACT standards is in all cases beyond the MACT floor. In these cases, EPA determined that costs associated with implementing HAP-reducing technologies are reasonable and justified. Hence, there is no reason why GACT should be any different than MACT for larger engines located at area sources. Consequently, EPA has determined that for area sources that are non-emergency 2SLB engines greater than or equal to 250 HP, non-emergency 4SLB engines greater than or equal to 250 HP, non-emergency 4SRB greater than or equal to 50 HP, emergency CI engines greater than 500 HP, non-emergency CI engines greater than 300 HP, landfill and digester gas engines greater than 500 HP, and emergency SI engines greater than 500 HP, GACT is based on the same emission controls as are discussed above for major sources.

As discussed, GACT provides EPA more flexibility in setting requirements than MACT and can include available control technologies or management practices to reduce HAP emissions. EPA has determined that for area sources that are non-emergency 2SLB engines greater than or equal to 50 HP and less than 250 HP, non-emergency 4SLB engines greater than or equal to 50 HP and less than 250 HP, emergency CI engines greater than or equal to 50 HP and less than or equal to 500 HP, non-emergency CI engines greater than or equal to 50 HP and less than or equal to 300 HP, engines less than 50 HP, landfill and digester gas engines greater than or equal to 50 HP and less than or equal to 500 HP, and emergency SI engines greater than or equal to 50 HP and less than or equal to 500 HP, EPA proposes that GACT is management practices.

Management practices include several specific maintenance requirements that will help ensure that the exhaust emissions from these engines are minimized. Some of the management practices include changing oil and filter, changing spark plugs and replacement of air cleaners. EPA specifically requests comments on these management practices and asks commenters to provide information on any additional management practices that may be appropriate for these engines. A maintenance plan is required in order to help keep records that the management practices are being followed.

Although add-on controls are technically feasible for some engines located at area sources, control costs are high and EPA believes that it is possible to achieve reasonable controls using management practices. For example, capital costs associated with installing an oxidation catalyst on a 200 HP diesel engine are about $2,100 with annual costs of $700. Such costs are significant particularly when one considers that the cost per ton of this option is on the order of $72,000 per ton of HAP reduced. Considering the high cost per ton of HAP reduced, it is difficult to justify requiring add-on controls on these engines.

Furthermore, EPA is attempting to minimize the burden of the proposed rule, specifically on small businesses and individual owners and operators. EPA does not believe that management practices would be a substantial burden on owners and operators such as private owners and small entities.

3. Startup, Shutdown, and Malfunction Limits

With respect to the exemption from emission standards during periods of Startup, Shutdown and Malfunction in the General Provisions (*see, e.g.*, 40 CFR 63.6(f)(1) (exemption from non-opacity emission standards) and (h)(1) (exemption from opacity and visible emission standards)), we note that on December 19, 2008, in a decision addressing a challenge to the 2002, 2004 and 2006 amendments to those provisions, the Court of Appeals for the District of Columbia Circuit vacated the SSM exemption. *Sierra Club* v. *EPA* 2008 U.S. App. LEXIS 25578 (D.C. Cir. Dec. 19, 2008). We are still evaluating the recent court decision, and the time for appeal of that decision has not yet run. However, in light of the court decision, EPA is proposing not to apply the SSM exemption for non-opacity standards set forth in 40 CFR 63.6(f)(1) to this NESHAP. The SSM exemption for opacity and visible emissions standards in 40 CFR 63.6(h)(1) is not relevant here because the standards proposed in this action do not constitute opacity or visible emission standards.

EPA recognizes that there are different modes of operation for any stationary source, and those modes generally include start-up, normal operations, shut-down, and malfunctions. EPA does not believe that emissions should be different during periods of shutdown compared to normal operations, but EPA does believe that emissions will likely be different during periods of startup and malfunction, particularly for engines relying on catalytic controls.

EPA is proposing two options in this action for subcategories where the proposed emission standard is based on the use of catalytic controls. The first option is to have the same standards apply during both normal operation and periods of startup and malfunctions. While EPA is aware of the general properties of engine catalytic controls, our Emissions Database has no specific data showing that emissions during periods of startup and malfunction are different than during normal operation. Furthermore, EPA does not have substantial information regarding the specific parameters (e.g. timing, temperature) of such differences in emissions.

Although we lack specific data on emissions during start-up and malfunction, EPA recognizes that emissions are likely to differ during these periods for engines relying on catalytic controls. Accordingly, for subcategories where the proposed emission standard is based on the use of catalytic controls, EPA is also co-proposing emission limitations that would apply to stationary RICE during periods of startup and malfunction in order to account for the different emissions characteristics of stationary internal combustion engines during startup and malfunction periods, compared to other periods of operation. In particular, engines using catalytic controls like OC and NSCR to reduce emissions cannot rely on the operation of such devices during periods of startup, because the engine exhaust temperatures need to increase up to a certain level for such controls to work effectively. In addition, add-on controls cannot be presumed to work reliably during periods of malfunction. Malfunctions may include failure of engine control systems that are essential for the proper performance and emissions of the engine. Engine malfunctions may affect the exhaust gas temperatures and composition of the exhaust gases in ways that could decrease the effectiveness or even damage permanently the emission control device.

During startup operation with an OC, engine exhaust temperatures must reach about 250 to 300 degrees C in order to work effectively. In the case of NSCR, exhaust gas temperatures must reach between 425 to 650 degrees C in order to work effectively. It can take about 15 to 30 minutes of operation—depending on engine size—for exhaust temperatures to reach those temperature levels. Thus, for the subcategories of stationary RICE discussed above where the proposed emission standard is based on the use of catalytic controls, EPA is co-proposing that the standards during periods of startup and malfunction will be based on emissions expected from the best controlled sources prior to the full warm-up of the catalytic control. The standard is based on the emissions levels from the best controlled engines that do not include catalytic controls,

because prior to warm-up, the engine conditions do not allow for effective catalytic control.

Under either co-proposal, for the subcategories of stationary RICE discussed above where the proposed emission limitations during normal operation are not based on the use of oxidation catalyst or NSCR, we are proposing the same emission limitations during startup and malfunction as during periods of normal operation.

EPA requests comment on these proposed approaches to addressing emissions during start-up, shutdown and malfunction and the proposed standards that would apply during these periods. See Tables 1, 2 and 3 of this preamble, setting forth proposed standards using the approach of differentiating between periods of start-up and malfunction and normal operations. EPA requests comment on other approaches to setting MACT standards during periods of start-up, shutdown or malfunction, and notes that an approach that sets a single MACT standard that applies at all times, including SSM periods, may result in a higher overall MACT standard, based on the need to account for variation of operations in setting MACT standards. *Sierra Club* v. *EPA,* 439 F.3d 875 (D.C. Cir. 2007) (holding that EPA may legitimately account for variability because ''each [source] must meet the [specified] standard every day and under all operating conditions.'' (quoting *Mossville Environmental Action Network* v. *EPA, 370 F.3d 1232 (D.C. Cir. 2004).* EPA also asks for comment on the level of specificity needed to define the periods of startup and malfunction to assure clarity regarding when standards for those periods apply, including whether it should be based on the time necessary for an engine to warm to temperatures needed for effective catalytic control and whether maximum time limits should be included.

C. How did EPA determine the compliance requirements?

EPA discussed the specific compliance requirements that are being proposed in section III of the preamble. In general, EPA has attempted to reduce the burden on affected owners and operators. The following presents the rationale for the proposed compliance requirements.

Stationary non-emergency RICE located at major sources that are less than 100 HP, stationary RICE located at area sources that are not subject to numerical emission standards, and all stationary emergency RICE are only subject to compliance requirements in the form of management practices to minimize emissions. EPA does not believe that the proposed management practices are a burdensome requirement, and it is expected that most owners and operators are already using such practices. It is in the owner's best interest to operate and maintain the engine and aftertreatment device (if one is installed) properly. The proposed requirements minimize the burden on individual owners and operators and small entities, while ensuring that the engine and aftertreatment device is operated and maintained correctly. Further, EPA does not believe that it is reasonable to subject small stationary RICE and stationary emergency RICE to performance testing. Subjecting the engines to maintenance requirements will assist in minimizing and maintaining emissions below the emission standards. The cost of requiring performance testing on these engines would be too significant when compared to the cost of the unit itself and to the benefits of such testing. In addition, subjecting stationary RICE located at area sources that are not subject to numerical emission standards to performance testing would serve little purpose, given that the purpose of testing is to determine whether the engine is meeting numerical limits, which is unnecessary where no such limits apply.

For stationary non-emergency RICE located at major sources that are greater than or equal to 100 HP and stationary RICE located at area sources that are subject to numerical emission standards, EPA determined that performance testing is necessary to confirm that the emission standards are being met. Again, EPA has attempted to reduce compliance requirements and is proposing a level of performance testing commensurate with ensuring that the emission standards are being met. Therefore, for non-emergency stationary RICE located at major sources that are greater than or equal to 100 HP and less than or equal to 500 HP and stationary RICE located at area sources that are subject to numerical emission standards, EPA chose to require an initial performance test only. However, if the engine is rebuilt or overhauled, the engine must be re-tested to demonstrate that it meets the emission standards.

For existing non-emergency stationary RICE greater than 500 HP, testing every 8,760 hours of operation of 3 years, whichever comes first, is also required. EPA believes such a requirement is appropriate for these size engines, but does not believe that further testing is necessary for smaller engines, i.e., those less than or equal to 500 HP. Subsequent performance testing is appropriate for engines greater than 500 HP due to their size and frequency of operation. Plus, many States mandate more stringent compliance requirements for large engines. Finally, the RICE NESHAP for engines greater than 500 HP located at major sources also required further performance testing following the initial compliance demonstration.

Owners and operators of stationary non-emergency 2SLB, 4SLB, 4SRB, and CI RICE that are greater than 500 HP and are located at an area source, and stationary non-emergency CI RICE that are greater than 500 HP and are located at a major source must continuously monitor pressure drop across the catalyst and catalyst inlet temperature if the engine is equipped with oxidation catalyst or NSCR. These parameters serve as surrogates of the catalyst performance. The pressure drop across the catalyst can indicate if the catalyst is damaged or fouled, in which case, catalyst performance would decrease. If the pressure drop across the catalyst deviates by more than two inches of water from the pressure drop across the catalyst measured during the initial performance test, the catalyst might be damaged or plugged. If the catalyst is changed, the pressure drop across the catalyst must be reestablished. The catalyst inlet temperature is a requirement for proper performance of the catalyst. In general, the catalyst performance will decrease as the catalyst inlet temperature decreases. In addition, if the catalyst inlet temperature is too high, it might be an indication of ignition misfiring, poisoning, or fouling, which would decrease catalyst performance. In addition, the catalyst requires inlet temperatures to be greater than or equal to the specified temperature for the reduction of HAP emissions.

EPA is proposing to remove the proposed EPA Method 323 from 40 CFR part 63, subpart ZZZZ, as an acceptable method for determining compliance with the formaldehyde emission limitation. The method is currently included as an optional test method for measuring formaldehyde in addition to EPA Method 320 and ASTM D6348–03 for stationary engines. EPA Method 323 was first proposed as part of the NESHAP for Stationary Combustion Turbines published January 14, 2003 (68 FR 1888) for measuring formaldehyde emissions from natural gas-fired sources. However, the method was not included in the final rule due to reliability concerns and EPA never promulgated EPA Method 323 as a final

standard in 40 CFR part 63, appendix A. Due to unresolved technical issues associated with the method affecting engine test results, EPA has no plans to finalize EPA Method 323. Therefore, EPA finds it appropriate to propose to remove the method from subpart ZZZZ.

D. How did EPA determine the reporting and recordkeeping requirements?

EPA discussed the specific reporting and recordkeeping requirements that are being proposed in section III of the preamble. In general, EPA has attempted to reduce the reporting and recordkeeping burden on affected owners and operators. The following presents the rationale for the proposed reporting and recordkeeping requirements.

Owners and operators of emergency engines are required to keep records of their hours of operation (emergency and non-emergency). Owners and operators must install a non-resettable hour meter on their engines to record the necessary information. The owner and operators are required to record the time of operation and the reason the engine was in operation during that time. EPA believes these requirements are appropriate for emergency engines. The requirement to maintain records documenting why the engine was operating will ensure that regulatory agencies have the necessary information to determine if the engine was in compliance with the maintenance and testing hour limitation of 100 hours per year.

EPA does not believe the recordkeeping requirements being placed upon owners and operators of stationary emergency engines are onerous. Emergency engines are often equipped with the equipment necessary to record hours of operation and operators may already be recording the information. Even as a brand new requirement, recording the time and reason of operation should take minimal time and effort. Further, recording the hours and reason for operation is necessary to assure that the engine is in compliance. Finally, these requirements are consistent with previously promulgated requirements affecting the same or similar engines, namely under the CI and SI NSPS.

The reporting requirements being proposed in this rule are consistent with those required for engines subject to the 2004 rule, i.e., stationary RICE greater than 500 HP located at major sources, and are based on the General Provisions. Owners and operators of existing emergency stationary RICE, existing stationary RICE that are less than 100 HP and existing stationary RICE that are not subject to any numerical emission standards, do not have to submit the notifications listed in the NESHAP General Provisions (40 CFR part 63, subpart A). Owners and operators of all other engines must submit an initial notification, notification of performance test, and a notification of compliance for each stationary RICE which must comply with the specified emission limitations.

V. Summary of Environmental, Energy and Economic Impacts

A. What are the air quality impacts?

The proposed rule is expected to reduce total HAP emissions from stationary RICE by 13,000 tons per year (tpy) beginning in the year 2013 or the first year the rule will become effective. EPA estimates that approximately 290,000 stationary SI engines will be subject to the rule and nearly 1 million stationary CI engines will be subject to the rule. These estimates include stationary engines located at major and area sources; however, not all stationary engines are subject to numerical emission standards. Further information regarding the estimated reductions of the proposed rule can be found in the memorandum entitled ''Impacts Associated with NESHAP for Existing Stationary RICE,'' which is available in the docket.

In addition to HAP emissions reductions, the proposed rule will reduce other pollutants such as CO, NO_X , and PM. The proposed rule is expected to reduce emissions of CO by more than 510,000 tpy in the year 2013. Emissions of NO_X are expected to be reduced by 79,000 tpy in the year 2013. Reductions of PM are estimated at close to 2,600 tpy in the year 2013, and SO_X reductions are expected to be more than 4,000 tpy in the year 2013. Emissions of volatile organic compounds (VOC) are estimated to be reduced by 90,000 tpy in the year 2013.

B. What are the cost impacts?

The total national capital cost for the final rule for existing stationary RICE is estimated to be $528 million, with a total national annual cost of $345 million in year 2013 (the first year the rule is implemented). Further information regarding the estimated cost impacts of this proposed rule can be found in the memorandum entitled ''Impacts Associated with NESHAP for Existing Stationary RICE,'' which is available in the docket.

C. What are the benefits?

We estimate the monetized benefits of this proposed NESHAP to be $930 million to $2.0 billion (2007$, 3% discount rate) in the year of full implementation (2013); higher or lower estimates are plausible according to alternate models identified by experts describing the relationship between $PM_{2.5}$ and premature mortality.[5] The benefits at a 7% discount rate are $850 million to $1.8 billion (2007$). We base the estimate of human health benefits derived from the $PM_{2.5}$ and $PM_{2.5}$ precursor emission reductions on the approach and methodology laid out in the Technical Support Document that accompanied the Regulatory Impact Analysis (RIA) for the revision to the National Ambient Air Quality Standard for Ground-level Ozone (NAAQS), March 2008. We generated estimates that represent the total monetized human health benefits (the sum of premature mortality and morbidity) of reducing $PM_{2.5}$ and $PM_{2.5}$ precursor emissions. A summary of the range of the monetized benefits estimates at discount rates of 3% and 7% is in Table 4 of this preamble.

TABLE 4—SUMMARY OF THE RANGE OF MONETIZED BENEFITS ESTIMATES FOR THE PROPOSED RICE NESHAP

Pollutant	Emission reductions (tons)	Total monetized benefits (millions of 2007 dollars, 3% discount) [1]	Total monetized benefits (millions of 2007 dollars, 7% discount) [1]
Direct $PM_{2.5}$	2,561	$550 to $1,200	$500 to $1,100.
$PM_{2.5}$ precursors	184,536	$380 to $820	$350 to $740.

[5] Roman et al., 2008. Expert Judgment Assessment of the Mortality Impact of Changes in Ambient Fine Particulate Matter in the U.S. Environ. Sci. Technol., 42, 7, 2268–2274.

TABLE 4—SUMMARY OF THE RANGE OF MONETIZED BENEFITS ESTIMATES FOR THE PROPOSED RICE NESHAP—Continued

Pollutant	Emission reductions (tons)	Total monetized benefits (millions of 2007 dollars, 3% discount) [1]	Total monetized benefits (millions of 2007 dollars, 7% discount) [1]
Grand total	.....	$930 to $2,000	$850 to $1,800.

[1] All estimates are for the analysis year (full implementation, 2013), and are rounded to two significant figures so numbers may not sum across rows. We assume that 40% of emissions reductions are from major point sources and 60% are from area sources. $PM_{2.5}$ precursors reflect emission reductions of NO_X, SO_X, and VOCs. All fine particles are assumed to have equivalent health effects, and the monetized benefits incorporate the conversion from precursor emissions to ambient fine particles. Monetized benefits from HAP reductions are not included in these estimates.

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. Experts have advised EPA to consider a variety of assumptions, including estimates based both on empirical (epidemiological) studies and judgments elicited from scientific experts, to characterize the uncertainty in the relationship between $PM_{2.5}$ concentrations and premature mortality. For this proposed NESHAP we cite two key empirical studies, one based on the American Cancer Society cohort study [6] and the extended Six Cities cohort study.[7] Alternate models identified by experts describing the relationship between $PM_{2.5}$ and premature mortality would yield higher and lower estimates (Roman *et al.* 2008).

EPA is exploring updates to the benefit-per-ton estimates, including two technical updates, as well as addressing the assumption regarding thresholds in the health impact function. For more information, please consult the RIA for this proposed rule that is available in the docket.

To generate the benefit-per-ton estimates, we used a model to convert emissions of direct $PM_{2.5}$ and $PM_{2.5}$ precursors into changes in $PM_{2.5}$ air quality and another model to estimate the changes in human health based on that change in air quality. Finally, the monetized health benefits were divided by the emission reductions to create the benefit-per-ton estimates. Even though all fine particles are assumed to have equivalent health effects, the benefit-per-ton estimates vary between precursors because each ton of precursor reduced has a different propensity to form $PM_{2.5}$. For example, NO_X has a lower benefit-per-ton estimate than direct $PM_{2.5}$ because it does not form as much $PM_{2.5}$, thus the exposure would be lower, and the monetized health benefits would be lower.

This analysis does not include the type of detailed uncertainty assessment found in the 2006 $PM_{2.5}$ NAAQS RIA because we lack the necessary air quality input and monitoring data to run the benefits model. However, the 2006 $PM_{2.5}$ NAAQS benefits analysis provides an indication of the sensitivity of our results to the use of alternative concentration response functions, including those derived from the PM expert elicitation study.

The annualized costs of this rulemaking are estimated at $345 million (2007 dollars) in the year of full implementation, and the benefits are estimated at $930 million to $2.0 billion (2007 dollars, 3% discount rate) for that same year. Thus, net benefits of this rulemaking are estimated at $590 million to $1.6 billion (2007 dollars, 3% discount rate); higher or lower estimates are plausible according to alternate models identified by experts describing the relationship between $PM_{2.5}$ and premature mortality. The net benefits at a 7% discount rate are $500 million to $1.5 billion (2007$). EPA believes that the benefits are likely to exceed the costs by a significant margin even when taking into account the uncertainties in the cost and benefit estimates. It should be noted that the range of benefits estimates provided above does not include ozone-related benefits from the reductions in VOC and NO_X emissions expected to occur as a result of this final rule, nor does this range include benefits from the portion of total PM emissions reduction that is not $PM_{2.5}$ or other hazardous air pollutants. We do not have sufficient information or modeling available to provide such estimates for this rulemaking. For more information, please refer to the RIA for this proposed rule that is available in the docket.

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

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

VI. Solicitation of Public Comments and Participation

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

EPA is requesting specific comment on the proposed emission standards for existing non-emergency 4SLB engines greater than or equal to 250 HP and existing non-emergency 4SRB engines greater than or equal to 50 HP. Specifically, EPA is seeking comment on the appropriateness of setting more stringent emission standards for certain existing rich burn engines than what is currently required for other rich burn engines already regulated. For example, the proposed emission standards for existing non-emergency 4SRB engines greater than or equal to 50 HP is 200 ppbvd of formaldehyde or 90 percent formaldehyde reduction, whereas the current emission standards for existing and new non-emergency 4SRB engines greater than 500 HP at major sources is 350 ppbvd and 75 percent formaldehyde reduction.

EPA is also requesting comment on the proposed formaldehyde emission standards that apply to rich burn engines. EPA is particularly interested in determining whether it would be appropriate to include a VOC emission standard in place of or as an alternative to the formaldehyde emission standards. If so, EPA is requesting information on what an appropriate VOC emission standard should be. Commenters are

[6] Pope et al., 2002. ''Lung Cancer, Cardiopulmonary Mortality, and Long-term Exposure to Fine Particulate Air Pollution.'' Journal of the American Medical Association. 287:1132–1141.

[7] Laden et al., 2006. ''Reduction in Fine Particulate Air Pollution and Mortality.'' *American Journal of Respiratory and Critical Care Medicine.* 173: 667–672.

encouraged to submit stationary engine test data containing VOC emissions pre- and post-catalyst as well as any engine test data that includes both formaldehyde and VOC emissions from the same engine. In addition, we ask for comments and data on whether there are other more appropriate surrogates than formaldehyde and CO for the metallic HAP that are emitted by stationary diesel engines.

EPA is proposing emission standards for existing stationary non-emergency CI engines that are greater than 300 HP that are based on the use of oxidation catalyst. EPA solicits comments on whether 300 HP is the appropriate size division for setting beyond-the-floor MACT standards requiring the use of add-on controls. Specifically, EPA is seeking comment on whether it is feasible or appropriate to extend the more stringent standards to engines that are less than 300 HP. EPA also requests comments on the possibility of requiring CDPFs for existing diesel engines, rather than oxidation catalysts, and, if so, which subcategory or subcategories of stationary diesel engines would be most appropriate for control using CDPFs. The use of CDPFs would help achieve the same level of HAP reduction as oxidation catalysts, with a higher level of control of diesel PM. EPA is also interested in comments and information on other regulatory and non-regulatory approaches for addressing black carbon emissions from existing stationary diesel engines.

EPA also requests comments on other proven technologies that may be able to achieve significant HAP reductions. For example, we request comment on the possible requirement of using closed crankcase ventilation systems on engines affected by this proposed rule. Closed crankcase ventilation systems have been used in mobile engine applications for many years.

In addition, EPA is requesting comment on the fuel requirements. EPA is proposing that existing stationary non-emergency CI engines greater than 300 HP with a displacement of less than 30 liters per cylinder must meet the ULSD fuel requirement of 40 CFR 80.510(b). These engines would be required to be operated with fuel having a sulfur content of less than or equal to 15 ppm. EPA is specifically interested in whether it would be appropriate to require all existing stationary CI engines (except those with a displacement of greater than or equal to 30 liters per cylinder) to use 15 ppm sulfur fuel. EPA is interested in determining if smaller engines, i.e., those less than 300 HP, and emergency engines should be subject to fuel requirements also and is requesting comment on this issue. Furthermore, EPA is also interested in receiving comments and information about the option of adding a requirement to the regulations that would prohibit the burning of crankcase oil or mixing crankcase oil with fuel in engines equipped with exhaust aftertreatment technologies. EPA is interested in information on whether such practice has the potential for increasing HAP emissions or damaging exhaust aftertreatment technologies that would be used to meet the proposed emission limits.

Finally, EPA is requesting comment on the management practices being proposed for some subcategories of engines located at area sources. EPA is interested to receive information on any additional management practices that could be required.

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 effect on the economy of $100 million or more. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under 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 proposed rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The Information Collection Request (ICR) document prepared by EPA has been assigned EPA ICR number 1975.06.

The information requirements are based on notification, recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically 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 proposed rule will not require any notifications or reports beyond those required by the General Provisions. 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 sources must comply) is estimated to be 3,422,879 labor hours per year at a total annual cost of $15,554,937. This estimate includes notifications of compliance and performance tests, engine performance testing, semiannual compliance reports, continuous monitoring, and recordkeeping. The total capital costs associated with the requirements over the 3-year period of the ICR is estimated to be $30,772,678 per year. There are no additional operation and maintenance costs for the requirements over the 3-year period of the ICR.

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

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this rule, which includes this ICR, under Docket ID number EPA–HQ–OAR–2008–0708. Submit any comments related to the ICR for this proposed rule to EPA and OMB. See **ADDRESSES** section at the beginning of this action for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725

17th Street, NW., Washington, DC 20503, Attention: Desk Officer for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after March 5, 2009, a comment to OMB is best assured of having its full effect if OMB receives it by April 6, 2009. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

C. Regulatory Flexibility Act

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

The companies owning facilities with affected RICE can be grouped into small and large categories using Small Business Administration (SBA) general size standard definitions. Size standards are based on industry classification codes (i.e., North American Industrial Classification System, or NAICS) that each company uses to identify the industry or industries in which they operate in. The SBA defines a small business in terms of the maximum employment, annual sales, or annual energy-generating capacity (for electricity generating units—EGUs) of the owning entity. These thresholds vary by industry and are evaluated based on the primary industry classification of the affected companies. In cases where companies are classified by multiple NAICS codes, the most conservative SBA definition (i.e., the NAICS code with the highest employee or revenue size standard) was used.

As mentioned earlier in this preamble, facilities across several industries use affected RICE, so therefore a number of size standards are utilized in this analysis. For the 9 industries identified at the 6-digit NAICS code represented in this analysis, the employment size standard varies from 500 to 1,000 employees. The annual sales standard is as low as 0.75 million dollars and as high as 34 million dollars. In addition, for the electric power generation industry, the small business size standard is an ultimate parent entity defined as having a total electric output of 4 million megawatt-hours (MW-hr) in the previous fiscal year. The specific SBA size standard is identified for each affected industry within the industry profile to support this economic analysis.

After considering the economic impacts of this final rule on small entities, we have concluded that this action will not have a significant economic impact on a substantial number of small entities (or SISNOSE). This certification is based on the economic impact of this proposed action to all affected small entities across all industries affected. We estimate that all small entities will have annualized costs of less than 1 percent of their sales in all industries except NAICS 2211 (electric power generation, transmission, and distribution). In this case, however, the number of small entities having annualized costs of greater than 1 percent of their sales is less than 10 percent. Hence, we conclude that there is no SISNOSE for this proposal.

Although the proposed rule will not have a significant economic impact on a substantial number of small entities, we nonetheless tried to reduce the impact of the proposed rule on small entities. We held meetings with industry trade associations and company representatives to discuss the proposed rule and included provisions to limit monitoring and recordkeeping requirements to the extent possible. We continue to be interested in the potential impacts of the proposed action on small entities and welcome comments on issues related to such impacts.

D. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531–1538, requires Federal agencies, unless otherwise prohibited by law, to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. This rule contains 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. Accordingly, EPA has prepared under section 202 of the UMRA a written statement which is summarized below.

As discussed previously in this preamble, the statutory authority for the proposed rule is section 112 of the CAA. Section 112(b) lists the 189 chemicals, compounds, or groups of chemicals deemed by Congress to be HAP. These toxic air pollutants are to be regulated by NESHAP. Section 112(d) of the CAA directs us to develop NESHAP based on MACT, which require existing and new major sources to control emissions of HAP. EPA is required to address HAP emissions from stationary RICE located at area sources under section 112(k) of the CAA, based on criteria set forth by EPA in the Urban Air Toxics Strategy previously discussed in this preamble. These NESHAP apply to existing stationary RICE less than or equal to 500 HP located at major sources of HAP emissions, existing non-emergency stationary CI RICE greater than 300 HP, and existing stationary RICE located at area sources of HAP emissions.

In compliance with section 205(a), we identified and considered a reasonable number of regulatory alternatives. The regulatory alternative upon which the rule is based is the least costly, most cost-effective alternative to achieve the statutory requirements of Clean Air Act section 112.

1. Social Costs and Benefits

The RIA prepared for the proposed rule, including the Agency's assessment of costs and benefits, is detailed in the ''Regulatory Impact Analysis for the Proposed RICE NESHAP'' in the docket. Based on estimated compliance costs on all sources associated with the proposed rule and the predicted change in prices and production in the affected industries, the estimated social costs of the proposed rule are $345 million (2007 dollars). It is estimated that by 2013, HAP will be reduced by 13,000 tpy due to reductions in formaldehyde, acetaldehyde, acrolein, methanol and other HAP from existing stationary RICE. Formaldehyde and acetaldehyde have been classified as ''probable human carcinogens.'' Acrolein, methanol and the other HAP are not considered carcinogenic, but produce several other toxic effects. The proposed rule will also achieve reductions in 511,000 tons of CO, approximately 79,000 tons of NO_X per year, about 90,000 tons of VOC per year, and approximately 2,600 tons of PM per year, in the year 2013. Exposure to CO can affect the cardiovascular system and the central nervous system. Emissions of NO_X can transform into PM, which can result in fatalities and many respiratory problems (such as asthma or bronchitis); and NO_X can also transform into ozone causing several respiratory problems to affected populations.

The total monetized benefits of the proposed rule range from $0.9 to $2.0 billion. (2007 dollars).

2. Future and Disproportionate Costs

The UMRA requires that we estimate, where accurate estimation is reasonably feasible, future compliance costs imposed by the rule and any disproportionate budgetary effects. Our

estimates of the future compliance costs of the proposed rule are discussed previously in this preamble. We do not believe that there will be any disproportionate budgetary effects of the proposed rule on any particular areas of the country, State or local governments, types of communities (e.g., urban, rural), or particular industry segments.

3. Effects on the National Economy

The UMRA requires that we estimate the effect of the proposed rule on the national economy. To the extent feasible, we must estimate the effect on productivity, economic growth, full employment, creation of productive jobs, and international competitiveness of the U.S. goods and services if we determine that accurate estimates are reasonably feasible and that such effect is relevant and material. The nationwide economic impact of the proposed rule is presented in the ''Regulatory Impact Analysis for RICE NESHAP'' in the docket. This analysis provides estimates of the effect of the proposed rule on most of the categories mentioned above. The results of the economic impact analysis were summarized previously in this preamble. In addition, we have determined that the proposed rule contains no regulatory requirements that might significantly or uniquely affect small governments. Therefore, this rule is not subject to the requirements of section 203 of the UMRA.

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'' are defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

This proposed rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This proposed rule primarily affects private industry, and does not impose significant economic costs on State or local governments. Thus, Executive Order 13132 does not apply to this proposed rule.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed rule from State and local officials.

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

This proposed rule does not have tribal implications as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this proposed rule.

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

EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5–501 of the Executive Order has the potential to influence the regulation. This proposed rule is not subject to Executive Order 13045 because it is based 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 action is not a ''significant energy action'' as defined in Executive Order 13211 (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 below.

With respect to energy supply and prices, EPA's analysis suggests that at the industry level, the annualized costs represent a very small fraction of revenue (less than 0.7 percent). As a result, EPA can conclude supply and price impacts on affected energy producers and consumers should be small.

To enhance understanding regarding the regulation's influence on energy consumption, EPA examined publicly available data describing energy consumption for the electric power sector. The electric power sector is expected to incur more than 40 percent of the $345 million in compliance costs associated with the proposed rule, and the industry is expected to incur the greatest share of the costs relative to other affected industries. The Annual Energy Outlook 2009 (EIA, 2008) provides energy consumption data. Since this rule only affects diesel and natural gas-fired RICE, EPA's analysis focuses on impacts of consumption of these fuels. As shown in Table 6 of this preamble, the electric power sector accounts for less than 0.5 percent of the U.S. total liquid fuels (which includes diesel fuel) and less than 6.5 percent of U.S. natural gas consumption. As a result, any energy consumption changes attributable to the proposed rule should not significantly influence the supply, distribution, or use of energy nationwide.

TABLE 6—U.S. ELECTRIC POWER[a] SECTOR ENERGY CONSUMPTION (QUADRILLION BTUS): 2013

	Quantity	Share of total energy use (percent)
Distillate fuel oil	0.12	0.1
Residual fuel oil	0.38	0.4
Liquid fuels subtotal	0.50	0.5
Natural gas	6.27	6.1
Steam coal	21.55	21.0
Nuclear power	8.53	8.3
Renewable energy[b]	4.80	4.7
Electricity Imports	0.08	0.1
Total Electric Power Energy Consumption[c]	41.86	40.8

TABLE 6—U.S. ELECTRIC POWER [a] SECTOR ENERGY CONSUMPTION (QUADRILLION BTUS): 2013

	Quantity	Share of total energy use (percent)
Delivered Energy Use	74.05	72.2
Total Energy Use	102.58	100.0

[a] Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.
[b] Includes conventional hydroelectric, geothermal, wood and wood waste, biogenic municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.
[c] Includes non-biogenic municipal waste not included above.
Source: U.S. Energy Information Administration. 2008a. Supplemental Tables to the Annual Energy Outlook 2009. Table 10. Available at: *http://www.eia.doe.gov/oiaf/aeo/supplement/supref.html*.

I. National Technology Transfer and Advancement Act

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

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

Under § 63.7(f) and § 63.8(f) of subpart A of the General Provisions, a source may apply to EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required or referenced testing methods, performance specifications, or procedures.

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

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

EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it 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 proposed rule is expected to reduce HAP emissions from stationary RICE and thus decrease the amount of such emissions to which all affected populations are exposed.

List of Subjects in 40 CFR Part 63

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

Dated: February 25, 2009.

Lisa P. Jackson,

Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is proposed to be amended as follows:

PART 63—[AMENDED]

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

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

Subpart A—[Amended]

2. Section 63.6590 is amended by revising paragraphs (b)(1) introductory text and (b)(3) to read as follows:

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

* * * * *

(b) * * *

(1) An affected source which meets either of the criteria in paragraphs (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(f).

* * * * *

(3) A stationary RICE which is an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, or an existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions 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.

* * * * *

3. Section 63.6595 is amended by revising paragraph (a)(1) to read as follows:

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

(a) * * *

(1) If you have an existing stationary RICE, excluding existing non-emergency 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 applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary

RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than [DATE 3 YEARS FROM THE EFFECTIVE DATE OF THE RULE].

* * * * *

4. Section 63.6600 is amended by revising paragraph (c) and adding paragraph (d) 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?

* * * * *

(c) If you own or operate any of the following stationary 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 or an existing 4SLB 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.

(d) If you own or operate an existing stationary CI 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 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

5. The heading of section 63.6601 is revised to read as follows:

§ 63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 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?

* * * * *

6. Section 63.6602 is added to read as follows:

§ 63.6602 What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart which apply to you.

7. Section 63.6603 is added to read as follows:

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Tables 1b and 2b to this subpart which apply to you.

8. Section 63.6604 is added to read as follows:

§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

If you own or operate an existing non-emergency CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are exempt from the requirements of this section.

9. Section 63.6605 is amended by revising paragraph (a) to read as follows:

§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

* * * * *

10. The heading of § 63.6611 is revised 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 new or reconstructed 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?

* * * * *

11. Section 63.6612 is added to read as follows:

§ 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area 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 demonstration according to Tables 4 and 5 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) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

§ 63.6620—[Amended]

12. Section 63.6620 is amended by removing and reserving paragraph (c).

* * * * *

13. Section 63.6625 is amended by adding paragraphs (e), (f) and (g) to read as follows:

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

* * * * *

(e) If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, you must operate and maintain the stationary RICE and aftertreatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good

air pollution control practice for minimizing emissions.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing stationary 4SRB RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary 4SRB RICE located at an area source of HAP emissions, air-to-fuel ratio controllers (AFRC) are required to be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFRC must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

14. Section 63.6640 is amended as follows:

a. By revising paragraph (a);

b. By revising paragraph (b);

c. By revising paragraph (e); and

d. By adding paragraph (f).

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

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

* * * * *

(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 a 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 (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed 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 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.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you may operate your emergency stationary RICE 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 RICE beyond 100 hours per year. Emergency stationary RICE 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.

15. Section 63.6645 is amended by revising paragraph (a) to read as follows:

§ 63.6645 What notifications must I submit and when?

(a) If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, an existing stationary RICE located at an area source of HAP emissions, 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, except existing stationary RICE less than 100 HP, existing stationary emergency RICE, and existing stationary RICE not subject to any numerical emission standards, 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.

* * * * *

16. Section 63.6655 is amended by adding paragraphs (e) and (f) to read as follows:

§ 63.6655 What records must I keep?

* * * * *

(e) If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart, you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operate and maintain the stationary RICE and aftertreatment control device (if any) according to your own maintenance plan.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines or an existing emergency

stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you 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.

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 a 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 (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed 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 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. 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

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE at 100 percent load plus or minus 10 percent:

For each * * *	You must meet the following emission limitation at all times, except during periods of startup, or malfunction * * *	You must meet the following emission limitation during periods of startup, or malfunction * * *
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 to 350 ppbvd or less at 15 percent O_2.	limit the concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.

19. 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 and Existing 4SRB Stationary RICE >500 HP Located at an Area Source of HAP Emissions

As stated in §§ 63.6600, 63.6603, 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 and existing 4SRB stationary RICE >500 HP located at an area 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 2. 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; or 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 90 percent or more and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 200 ppbvd or less at 15 percent O_2 and using NSCR.	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 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.
3. 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; 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; or	a. comply with any operating limitations approved by the Administrator.

For each * * *	You must meet the following operating limitation * * *
4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 90 percent or more and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 200 ppbvd or less at 15 percent O_2 and not using NSCR.	

20. 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 63.6640, 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 at all times, except during periods of startup, or malfunction * * *	You must meet the following emission limitation during periods of startup, or malfunction * * *
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.	limit concentration of CO in the stationary RICE exhaust to 259 ppmvd or less at 15 percent O_2.
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.	limit concentration of CO in the stationary RICE exhaust to 420 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.	limit concentration of CO in the stationary RICE exhaust to 77 ppmvd or less at 15 percent O_2.

21. 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, Existing 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 existing, new and reconstructed compression ignition stationary RICE:

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.

For each * * *	You must meet the following operating limitation * * *
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.

22. Table 2c to Subpart ZZZZ of Part 63 is added to read as follows:

Table 2c to Subpart ZZZZ of Part 63—Emission Limitations for Existing Stationary RICE Located at a Major Source of HAP Emissions

As stated in §§ 63.6601, 63.6602 and 63.6604, you must comply with the following emission limitations for existing stationary RICE 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 limitation at all times, except during periods of startup, or malfunction * * *	You must meet the following emission limitation during periods of startup, or malfunction * * *
1. Non-Emergency 2SLB 50≥HP≤249	a. limit concentration of CO in the stationary RICE exhaust to 85 ppmvd or less at 15 percent O_2.	limit concentration of CO in the stationary RICE exhaust to 85 ppmvd or less at 15 percent O_2.
2. Non-Emergency 2SLB 250≥HP≤500	a. limit concentration of CO in the stationary RICE exhaust to 8 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 90 percent or more.	limit concentration of CO in the stationary RICE exhaust to 85 ppmvd or less at 15 percent O_2.
3. Non-Emergency 4SLB 50≥HP≤249	a. limit concentration of CO in the stationary RICE exhaust to 95 ppmvd or less at 15 percent O_2.	limit concentration of CO in the stationary RICE exhaust to 95 ppmvd or less at 15 percent O_2.
4. Non-Emergency 4SLB 250≥HP≤500	a. limit concentration of CO in the stationary RICE exhaust to 9 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 90 percent or more.	limit concentration of CO in the stationary RICE exhaust to 95 ppmvd or less at 15 percent O_2.
5. Non-Emergency 4SRB 50≥HP≤500	a. limit concentration of formaldehyde in the stationary RICE exhaust to 200 ppbvd or less at 15 percent O_2; or b. reduce formaldehyde emissions by 90 percent or more.	limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.
6. All CI 50≥HP≤300	a. limit concentration of CO in the stationary RICE exhaust to 40 ppmvd or less at 15 percent O_2.	limit concentration of CO in the stationary RICE exhaust to 40 ppmvd or less at 15 percent O_2.
7. Emergency CI 300>HP≤500	a. limit concentration of CO in the stationary RICE exhaust to 40 ppmvd or less at 15 percent O_2.	limit concentration of CO in the stationary RICE exhaust to 40 ppmvd or less at 15 percent O_2.
8. Non-Emergency CI >300 HP	a. limit concentration of CO in the stationary RICE exhaust to 4 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 90 percent or more.	limit concentration of CO in the stationary RICE exhaust to 40 ppmvd or less at 15 percent O_2.
9. <50 HP	a. limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.	limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.
10. Landfill/Digester 50≥HP≤500	a. limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.	limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.
11. Emergency SI 50≥HP≤500	a. limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.	limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.

23. Table 2d to Subpart ZZZZ of Part 63 is added to read as follows:

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at an Area Source of HAP Emissions

As stated in §§ 63.6603 and 63.6625, you must comply with the following requirements for existing stationary RICE located at an area source of HAP emissions at 100 percent load plus or minus 10 percent:

For each * * *	You must meet the following emission or operating limitation at all times, except during periods of startup, or malfunction * * *	You must meet the following emission or operating limitation during periods of startup, or malfunction * * *
1. Non-Emergency 2SLB 50≥HP≤249	a. change oil and filter every 500 hours; b. replace spark plugs every 1000 hours; and c. inspect all hoses and belts every 500 hours and replace as necessary.	i. change oil and filter every 500 hours; ii. replace spark plugs every 1000 hours; and iii. inspect all hoses and belts every 500 hours and replace as necessary.
2. Non-Emergency 2SLB ≥250 HP	a. limit concentration of CO in the stationary RICE exhaust to 8 ppmvd or less at 15 percent O_2; or b. reduce CO emissions by 90 percent or more.	limit concentration of CO in the stationary RICE exhaust to 85 ppmvd or less at 15 percent O_2.
3. Non-Emergency 4SLB 50≥HP≤249	a. change oil and filter every 500 hours; b. replace spark plugs every 1000 hours; and c. inspect all hoses and belts every 500 hours and replace as necessary.	i. change oil and filter every 500 hours; ii. replace spark plugs every 1000 hours; and iii. inspect all hoses and belts every 500 hours and replace as necessary.
4. Non-Emergency 4SLB ≥250 HP	a. limit concentration of CO in the stationary RICE exhaust to 9 ppmvd or less at 15 percent O_2; or b. reduce CO emissions by 90 percent or more.	limit concentration of CO in the stationary RICE exhaust to 95 ppmvd or less at 15 percent O_2.
5. Non-Emergency 4SRB ≥50 HP	a. limit concentration of formaldehyde in the stationary RICE exhaust to 200 ppbvd or less at 15 percent O_2; or b. reduce formaldehyde emissions by 90 percent or more.	limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.
6. Emergency CI 50≥HP≤500	a. change oil and filter every 500 hours; b. inspect air cleaner every 1000 hours and replace as necessary; and c. inspect all hoses and belts every 500 hours and replace as necessary.	i. change oil and filter every 500 hours; ii. inspect air cleaner every 1000 hours and replace as necessary; and iii. inspect all hoses and belts every 500 hours and replace as necessary.
7. Emergency CI >500 HP	a. limit concentration of CO in the stationary RICE exhaust to 40 ppmvd or less at 15 percent O_2.	limit concentration of CO in the stationary RICE exhaust to 40 ppmvd or less at 15 percent O_2.
8. Non-Emergency CI 50≥HP≤300	a. change oil and filter every 500 hours; b. inspect air cleaner every 1000 hours and replace as necessary; and c. inspect all hoses and belts every 500 hours and replace as necessary.	i. change oil and filter every 500 hours; ii. inspect air cleaner every 1000 hours and replace as necessary; and iii. inspect all hoses and belts every 500 hours and replace as necessary.
9. Non-Emergency CI >300 HP	a. limit concentration of CO in the stationary RICE exhaust to 4 ppmvd or less at 15 percent O_2; or b. reduce CO emissions by 90 percent or more.	limit concentration of CO in the stationary RICE exhaust to 40 ppmvd or less at 15 percent O_2.
10. <50 HP	a. change oil and filter every 200 hours; b. replace spark plugs every 500 hours (SI engines only); and c. inspect all hoses and belts every 500 hours and replace as necessary.	i. change oil and filter every 200 hours; ii. replace spark plugs every 500 hours (SI engines only); and iii. inspect all hoses and belts every 500 hours and replace as necessary.
11. Landfill/Digester Gas 50≥HP≤500	a. change oil and filter every 500 hours; b. replace spark plugs every 1000 hours; and c. inspect all hoses and belts every 500 hours and replace as necessary.	i. change oil and filter every 500 hours; ii. replace spark plugs every 1000 hours; and iii. inspect all hoses and belts every 500 hours and replace as necessary.
12. Landfill/Digester Gas >500 HP	a. limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.	limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.
13. Emergency SI 50≥HP≤500	a. change oil and filter every 500 hours; b. replace spark plugs every 1000 hours; and c. inspect all hoses and belts every 500 hours and replace as necessary.	i. change oil and filter every 500 hours; ii. replace spark plugs every 1000 hours; and iii. inspect all hoses and belts every 500 hours and replace as necessary.
14. Emergency SI >500 HP	a. limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.	limit concentration of formaldehyde in the stationary RICE exhaust to 2 ppmvd or less at 15 percent O_2.

24. Table 3 to Subpart ZZZZ of Part 63 is revised to read as follows:

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§ 63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each * * *	Complying with the requirement to * * *	You must * * *
1. 2SLB and 4SLB stationary RICE with a brake horsepower >500 located at major sources and new or reconstructed CI stationary RICE with a brake horsepower >500 located at major sources.	reduce CO emissions and not using a CEMS	conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE with a brake horsepower ≥5,000 located at major sources.	reduce formaldehyde emissions	conduct subsequent performance tests semiannually.[1]
3. Stationary RICE with a brake horsepower >500 located at major sources.	limit the concentration of formaldehyde in the stationary RICE exhaust.	conduct subsequent performance tests semiannually.[1]
4. Existing non-emergency stationary RICE with a brake horsepower >500.	limit or reduce CO or formaldehyde emissions	conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first.

[1] After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

25. 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, 63.6612, 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 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 or CO 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.

For each * * *	Complying with the requirement to * * *	You must * * *	Using * * *	According to the following requirements * * *
		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.
		iv. measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 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.
		v. measure CO at the exhaust of the stationary RICE	(1) 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 D6348–03.	(a) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour 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.

26. Table 5 to Subpart ZZZZ of Part 63 is revised to read as follows:

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance with Emission Limitations and Operating Limitations

As stated in §§ 63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each * * *	Complying with the requirement to * * *	You have demonstrated initial compliance if * * *
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS.	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions and not using oxidation catalyst.	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.

For each * * *	Complying with the requirement to * * *	You have demonstrated initial compliance if * * *
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at both the inlet and outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
4. 4SRB stationary RICE >500 HP located at a major source.	a. Reduce formaldehyde emissions and using NSCR.	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE >500 HP located at a major source.	a. Reduce formaldehyde emissions and not using NSCR.	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
6. Stationary RICE >500 HP located at a major source.	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR.	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. Stationary RICE >500 HP located at a major source.	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
8. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source.	a. Reduce CO or formaldehyde emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source.	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

27. Table 6 to Subpart ZZZZ of Part 63 is revised to read as follows:

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance with Emission Limitations and Operating Limitations

As stated in § 63.6640, you must continuously comply with the emissions and operating limitations as required by the following:

For each * * *	Complying with the requirement to * * *	You must demonstrate continuous compliance by * * *
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS.	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; [a] and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS.	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; [a] and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to § 63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to § 63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. 4SRB stationary RICE >500 HP located at a major source.	a. Reduce formaldehyde emissions and using NSCR.	i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and ii. reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. 4SRB stationary RICE >500 HP located at a major source.	a. Reduce formaldehyde emissions and not using NSCR.	i. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake HP ≥5,000 located at a major source.	Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved [a].

For each * * *	Complying with the requirement to * * *	You must demonstrate continuous compliance by * * *
7. Stationary RICE >500 HP located at a major source.	Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR.	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; [a] and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. Stationary RICE >500 HP located at a major source.	Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; [a] and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing stationary RICE <100 HP located at a major or area source.	a. Reduce formaldehyde emissions; or	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
	b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary RICE located at an area source not subject to any numerical emission limitations.	a. Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
11. Existing stationary RICE >500 HP, except 4SRB >500 HP located at major sources.	a. Reduce CO or formaldehyde emissions; or	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.
	b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	

[a] After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

28. 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].		
§ 63.6(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	Additional requirements are specified in § 63.6625 and in Tables 2d and 6 to this subpart.
§ 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).	No.	
§ 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.	
§ 63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes	Except that § 63.7(b)(1) only applies as specified in § 63.6645.
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that § 63.7(b)(2) only applies as specified in § 63.6645.
§ 63.7(c)	Quality assurance/test plan	Yes	Except that § 63.7(c) only applies as specified in § 63.6645.
§ 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.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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. Except that § 63.8(e) only applies as specified in § 63.6645.
§ 63.8(f)(1)–(5)	Alternative monitoring method	Yes	Except that § 63.8(f)(4) only applies as specified in § 63.6645.
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that § 63.8(f)(6) only applies as specified in § 63.6645.
§ 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. Except that § 63.9(b) only applies as specified in § 63.6645.
§ 63.9(c)	Request for compliance extension	Yes	Except that § 63.9(c) only applies as specified in § 63.6645.
§ 63.9(d)	Notification of special compliance requirements for new sources.	Yes	Except that § 63.9(d) only applies as specified in § 63.6645.
§ 63.9(e)	Notification of performance test	Yes	Except that § 63.9(e) only applies as specified in § 63.6645.
§ 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	Except that § 63.9(g) only applies as specified in § 63.6645.
§ 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. Except that § 63.9(g) only applies as specified in § 63.6645.
§ 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. Except that § 63.9(h) only applies as specified in § 63.6645.
§ 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.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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.	

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