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40 CFR Parts 60 and 63
National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 60 and 63

[EPA–HQ–OAR–2008–0708, FRL–9756–4]

RIN 2060–AQ58

National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is finalizing amendments to the national emission standards for hazardous air pollutants for stationary reciprocating internal combustion engines. The final amendments include alternative testing options for certain large spark ignition (generally natural gas-fueled) stationary reciprocating internal combustion engines, management practices for a subset of existing spark ignition stationary reciprocating internal combustion engines in sparsely populated areas and alternative monitoring and compliance options for the same engines in populated areas. The EPA is establishing management practices for existing compression ignition engines on offshore vessels. The EPA is also finalizing limits on the hours that stationary emergency engines may be used for emergency demand response and establishing fuel and reporting requirements for certain emergency engines used for emergency demand response. The final amendments also correct minor technical or editing errors in the current regulations for stationary reciprocating internal combustion engines.

DATES: This final rule is effective on April 1, 2013. The incorporation by reference of certain publications listed in this final rule is approved by the Director of the Federal Register as of April 1, 2013.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2008–0708. The EPA also relies on materials in Docket ID Nos. EPA–HQ–OAR–2002–0059, EPA–HQ–OAR–2005–0029, and EPA–HQ–OAR–2005–0030 and incorporates those dockets into the record for this final rule. All documents in the docket are listed on the *www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the Air and Radiation Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

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

SUPPLEMENTARY INFORMATION:

Background Information Document. On June 7, 2012 (77 FR 33812), the EPA proposed amendments to the national emission standards for hazardous air pollutants (NESHAP) for stationary reciprocating internal combustion engines (RICE) and the new source performance standards (NSPS) for stationary engines. A summary of the public comments on the proposal and the EPA's responses to the comments, as well as the Regulatory Impact Analysis Report, are available in Docket ID No. EPA–HQ–OAR–2008–0708.

SUPPLEMENTARY INFORMATION:

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

I. General Information

A. Executive Summary

1. Purpose of the Regulatory Action

The purpose of this action is to finalize amendments to the NESHAP for stationary RICE under section 112 of the Clean Air Act (CAA). This final rule was developed to address certain issues that were raised by various stakeholders through lawsuits, several petitions for reconsideration of the 2010 RICE NESHAP amendments and other communications. This final rule also provides clarifications and corrects minor technical or editing errors in the current RICE NESHAP and revises the NSPS for stationary engines, 40 CFR part 60, subparts IIII and JJJJ, for consistency with the RICE NESHAP.

This action is conducted under the authority of section 112 of the CAA, ''Hazardous Air Pollutants'' (HAP), which requires the EPA to establish NESHAP for the control of HAP from both new and existing sources in regulated source categories.

2. Summary of the Major Provisions of the Regulatory Action

After promulgation of the 2010 RICE NESHAP amendments, the EPA received several petitions for reconsideration, legal challenges, other communications raising issues related to practical implementation and certain factual information that had not been brought to the EPA's attention during the rulemaking. The EPA has considered this information and comments submitted in response to the proposed amendments, and believes that amendments to the rule to address certain issues are appropriate. Therefore, the EPA is finalizing amendments to 40 CFR part 63, subpart ZZZZ, NESHAP for stationary RICE. The current regulation applies to owners and operators of existing and new stationary RICE at major and area sources of HAP emissions. The applicability of the rule remains the same and is not changed by this final rule. The EPA is also finalizing amendments to the NSPS for stationary engines to conform with certain amendments finalized for the RICE NESHAP. The key amendments to the regulations are summarized in the following paragraphs.

The EPA is adding an alternative compliance demonstration option for stationary 4-stroke rich burn (4SRB) spark ignition (SI) engines subject to a 76 percent or more formaldehyde reduction requirement. Owners and operators of 4SRB engines will be permitted to demonstrate compliance with the 76 percent formaldehyde reduction emission standard by testing emissions of total hydrocarbons (THC) and showing that the engine is achieving at least a 30 percent reduction of THC emissions. The alternative compliance option provides a less expensive and less complex, but equally effective, method for demonstrating compliance than testing for formaldehyde.

Certain stationary RICE are maintained in order to be able to respond to emergency power needs. This action finalizes limitations on the operation of emergency engines for emergency demand response programs. The final rule limits operation of stationary emergency RICE as part of an emergency demand response program to within the 100 hours per year that were already permitted for maintenance and testing of the engines. The limitation of 100 hours per year ensures that a sufficient number of hours are available for engines to meet regional transmission organization and independent system operator tariffs and other requirements for participating in various emergency demand response programs and will assist in stabilizing the grid during periods of instability, preventing electrical blackouts and supporting local electric system reliability. The final rule also limits operation of certain emergency engines used to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region to 50 hours per year; this operation counts as part of the 100 hours of year permitted for maintenance and testing of the engine. This rule also establishes fuel and reporting requirements for emergency engines larger than 100 horsepower (HP) used for this purpose or used (or contractually obligated to be available) for more than 15 hours of emergency demand response per calendar year.

The EPA is finalizing management practices for owners and operators of existing stationary 4-stroke SI engines above 500 HP that are area sources of HAP emissions and where the engines are remote from human activity. A remote area is defined as either a Department of Transportation (DOT) Class 1 pipeline location,[1] or, if the engine is not on a pipeline, if within a 0.25 mile radius of the facility there are 5 or fewer buildings intended for human occupancy. The EPA determined that a 0.25 mile radius was appropriate because it is similar to the area used for the DOT Class 1 pipeline location. This final rule establishes management practices for these sources rather than numeric emission limits and associated testing and monitoring. This provision and the division of remote and non-remote engines into two separate subcategories addresses reasonable concerns with accessibility, infrastructure and staffing that stem from the remoteness of the engines and higher costs that would be associated with compliance with the existing requirements. Existing stationary 4-stroke SI engines above 500 HP at area sources that are in populated areas (defined as not in DOT pipeline Class 1 areas, or if not on a pipeline, if within a 0.25 mile radius of the engine there are more than 5 buildings intended for human occupancy) are subject to an equipment standard that requires the installation of HAP-reducing aftertreatment. The EPA has the discretion to set an equipment standard as generally available control technology (GACT) for engines located at area sources of HAP. Sources are required to test their engines to demonstrate compliance initially, perform catalyst activity check-ups and either monitor the catalyst inlet temperature continuously or employ high temperature shutdown devices to protect the catalyst.

To address how certain existing compression ignition (CI) engines are currently regulated, the EPA is specifying that any existing CI engine above 300 HP at an area source of HAP emissions that was certified to meet the Tier 3 engine standards[2] and was installed before June 12, 2006, is in compliance with the NESHAP. This provision creates regulatory consistency between the same engines installed before and after June 12, 2006. Engines at area sources of HAP for which construction commenced before June 12, 2006, are considered existing engines under the NESHAP.

The EPA is finalizing amendments to the requirements for existing stationary Tier 1 and Tier 2 certified CI engines located at area sources that are subject to state and locally enforceable requirements requiring replacement of the engine by June 1, 2018. This addresses a specific concern regarding the interaction of the NESHAP with certain rules for agricultural engines in the San Joaquin Valley in California. The EPA is allowing these engines to meet management practices under the RICE NESHAP from the May 3, 2013, compliance date until January 1, 2015, or 12 years after installation date, but not later than June 1, 2018. This provision addresses concerns about requiring owners and operators to install controls on their engines in order to meet the RICE NESHAP, and then having to replace their engines shortly thereafter due to state and local rules specifying the replacement of engines. Owners and operators will have additional time to replace their engines without having to install controls, but are required to use management practices during that period.

Another change the EPA is making is to broaden the definition of remote area sources in Alaska in the RICE NESHAP. Previously, remote areas were considered those that are not on the Federal Aid Highway System (FAHS). This change permits existing stationary CI engines at other remote area sources in Alaska to meet management practices rather than numerical emission standards likely to require

[1] A Class 1 location is defined as an offshore area or any class location unit that has 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline.

[2] See 40 CFR part 89—Control of Emissions From New and In-Use Nonroad Compression-Ignition Engines.

aftertreatment. These remote areas have the same challenges as areas not on the FAHS, and complying with the current rule would similarly be prohibitively costly and potentially infeasible. In addition to area sources located in areas of Alaska that are not accessible by the FAHS being defined as remote and subject to management practices, any stationary RICE in Alaska meeting all of the following conditions are subject to management practices:

(1) The only connection to the FAHS is through the Alaska Marine Highway System, or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid, and

(2) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes, and

(3) The generating capacity of the area source is less than 12 megawatts (MW), or the stationary RICE is used exclusively for backup power for renewable energy.

The last significant change the EPA is finalizing is to require compliance with management practices rather than numeric emission limits in the RICE NESHAP for existing CI RICE on offshore drilling vessels on the Outer Continental Shelf (OCS) that become subject to the RICE NESHAP as a result of the operation of the OCS regulations (40 CFR part 55). The final amendments specify that owners and operators of existing non-emergency CI RICE with a site rating greater than 300 HP on offshore drilling vessels on the OCS are required to change the oil every 1,000 hours of operation or annually, whichever occurs first; inspect and clean air filters every 750 hours of operation or annually and replace as necessary; inspect fuel filters and belts, if installed, every 750 hours of operation or annually and replace as necessary; and inspect all flexible hoses every 1,000 hours of operation or annually and replace as necessary. Owners and operators can elect to use an oil analysis program to extend the oil change requirement.

3. Costs and Benefits

These final amendments will reduce the capital and annual costs of the original 2010 amendments by $287 million and $139 million, respectively. The EPA estimates that with these final amendments, the capital cost of compliance with the 2010 amendments to the RICE NESHAP in 2013 is $840 million and the annual cost is $490 million ($2010). These costs are identical to the costs estimated for the amendments to the RICE NESHAP proposed on June 7, 2012, since the changes from the proposal do not affect the costs of the rule in the year 2013. The capital and annual costs of the original 2010 final rule and the 2010 final rule with these final amendments incorporated into the rule are shown in Table 1.

TABLE 1—SUMMARY OF COST IMPACTS FOR EXISTING STATIONARY RICE

Engine	2010 Final rule		2010 Final rule with these final amendments
	Total Annual Cost		
SI	$253 million ($2009)	$251 million ($2010)	$115 million ($2010).
CI	$373 million ($2008)	$375 million ($2010)	$373 million ($2010).
	Total Capital Cost		
SI	$383 million ($2009)	$380 million ($2010)	$103 million ($2010).
CI	$744 million ($2008)	$748 million ($2010)	$740 million ($2010).

These final amendments would also result in decreases to the emissions reductions estimated in 2013 from the original 2010 RICE NESHAP amendments. The reductions that were estimated for the original 2010 RICE NESHAP amendments were 7,000 tpy of HAP, 124,000 tpy of CO, 2,800 tpy of PM, 96,000 tpy of NO_X and 58,000 tpy of VOC. The estimated reductions in 2013 from the 2010 RICE NESHAP rulemaking with these final amendments are 2,800 tons per year (tpy) of HAP, 36,000 tpy of carbon monoxide (CO), 2,800 tpy of particulate matter (PM), 9,600 tpy of nitrogen oxide (NO_X), and 36,000 tpy of volatile organic compounds (VOC). The difference in the emission reductions is primarily due to the changes to the requirements for existing 4-stroke stationary SI RICE at area sources of HAP that are in remote areas. These emission reduction estimates are identical to those estimated for the June 7, 2012, proposed amendments to the RICE NESHAP. The emission reductions of the original 2010 final rule and the 2010 final rule with these final amendments incorporated into the rule are shown in Table 2.

TABLE 2—SUMMARY OF REDUCTIONS FOR EXISTING STATIONARY RICE

Pollutant	Emission reductions (tpy) in the year 2013			
	2010 Final rule		2010 Final rule with these final amendments	
	CI	SI	CI	SI
HAP	1,014	6,008	1,005	1,778
CO	14,342	109,321	14,238	22,211
PM	2,844	N/A	2,818	N/A
NO_X	N/A	96,479	N/A	9,648
VOC	27,395	30,907	27,142	9,147

The EPA estimates the monetized co-benefits in 2013 of the original 2010 RICE NESHAP amendments with these final amendments incorporated to be $830 million to $2,100 million (2010 dollars) at a 3-percent discount rate and $740 million to $1,800 million (2010 dollars) at a 7-percent discount rate. The benefits that were estimated for the original 2010 RICE NESHAP amendments were $1,500 million to $3,600 million (2010 dollars) at a 3-percent discount rate and $1,300 million to $3,200 million (2010 dollars) at a 7-percent discount rate. A summary of the monetized co-benefits estimates for CI and SI engines at discount rates of 3 percent and 7 percent for the original 2010 final rule and the 2010 final rule with these final amendments incorporated into the rule is in Table 3 of this preamble.

TABLE 3—SUMMARY OF THE MONETIZED $PM_{2.5}$ CO-BENEFITS FINAL AMENDMENTS TO THE NESHAP FOR STATIONARY CI AND SI ENGINES

[millions of 2010 dollars] [a, b]

Pollutant	Emission reductions (tons per year)	Total monetized co-benefits (3 percent discount)	Total monetized co-benefits (7 percent discount)
Original 2010 Final Rules [c]			
Stationary CI Engines: Total Benefits	2,844 $PM_{2.5}$ 27,395 VOC	$950 to $2,300	$860 to $2,100.
Stationary SI Engines: Total Benefits	96,479 NO_X 30,907 VOC	$510 to $1,300	$470 to $1,100.
2010 Final Rules With These Final Amendments			
Stationary CI Engines: Directly emitted $PM_{2.5}$	2,818	$770 to $1,900	$690 to $1,700.
Stationary SI Engines: NO_X	9,648	$62 to $150	$55 to $140.

[a] All estimates are for the analysis year (2013) and are rounded to two significant figures so numbers may not sum across rows. The total monetized co-benefits reflect the human health benefits associated with reducing exposure to $PM_{2.5}$ through reductions of $PM_{2.5}$ precursors, such as NO_X and directly emitted $PM_{2.5}$. It is important to note that the monetized co-benefits do not include reduced health effects from exposure to HAP, direct exposure to NO_2, exposure to ozone, ecosystem effects or visibility impairment.

[b] PM co-benefits are shown as a range from Pope, *et al.* (2002) to Laden, *et al.* (2006). These models assume that all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality because the scientific evidence is not yet sufficient to allow differentiation of effects estimates by particle type.

[c] The benefits analysis for the 2010 final rules applied out-dated benefit-per-ton estimates compared to the updated estimates described in this preamble and reflected monetized co-benefits for VOC emissions, which limits direct comparability with the monetized co-benefits estimated for this final rule. In addition, these estimates have been updated from their original currency years to 2010$, so the rounded estimates for the 2010 final rules may not match the original RIAs.

We have not re-estimated the benefits for the final rule compared to the proposal because the emission reductions estimated for the final rule are the same as those estimated for the proposed amendments. Since the June 7, 2012, reconsideration proposal, the EPA has made several updates to the approach we use to estimate mortality and morbidity benefits in the PM NAAQS Regulatory Impact Analysis (RIA),[3, 4] including updated epidemiology studies, health endpoints, and population data. Although the EPA has not re-estimated the benefits for this rule to apply this new approach, these updates generally offset each other, and we anticipate that the rounded benefits estimated for this rule are unlikely to be different than those provided above.

More detail regarding the air quality and cost impacts and the benefits from this action can be found in section IV of this preamble.

B. 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 the final amendments.	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.

[3] U.S. Environmental Protection Agency (U.S. EPA). 2012a. *Regulatory Impact Analysis for the Proposed Revisions to the National Ambient Air Quality Standards for Particulate Matter.* EPA–452/R–12–003. Office of Air Quality Planning and Standards, Health and Environmental Impacts Division. June. Available at *http://www.epa.gov/ttnecas1/regdata/RIAs/PMRIACombinedFile_Bookmarked.pdf.*

[4] U.S. Environmental Protection Agency (U.S. EPA). 2012b. *Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter.* EPA–452/R–12–003. Office of Air Quality Planning and Standards, Health and Environmental Impacts Division. December. Available at *http://www.epa.gov/pm/2012/finalria.pdf.*

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 an engine is regulated by this action, owners and operators should examine the applicability criteria of this final rule. For any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

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

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

D. Judicial Review

Under section 307(b)(1) of the CAA, judicial review of this final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by April 1, 2013. Under section 307(d)(7)(B) of the CAA, only an objection to this final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements. Section 307(d)(7)(B) of the CAA further provides that ''[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.'' This section also provides a mechanism for us to convene a proceeding for reconsideration, ''[i]f the person raising an objection can demonstrate to the EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.'' Any person seeking to make such a demonstration to us should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, Ariel Rios Building, 1200 Pennsylvania Ave. NW., Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW., Washington, DC 20460.

II. Summary of Final Amendments

This action finalizes amendments to the NESHAP for RICE in 40 CFR part 63, subpart ZZZZ. This action also finalizes amendments to the NSPS for stationary engines in 40 CFR part 60, subparts IIII and JJJJ. The NESHAP for stationary RICE to regulate emissions of HAP was developed in several stages. The EPA initially addressed stationary RICE greater than 500 HP located at major sources of HAP emissions in 2004 (69 FR 33473). The EPA addressed new stationary RICE less than or equal to 500 HP located at major sources and new stationary RICE located at area sources in 2008 (73 FR 3568). Most recently, requirements for existing stationary RICE less than or equal to 500 HP located at major sources and existing stationary RICE located at area sources were finalized in 2010 (75 FR 9648 and 75 FR 51570).

The EPA is finalizing these amendments to address a number of issues that have been raised by different stakeholders through lawsuits, several petitions for reconsideration of the 2010 RICE NESHAP amendments, and other communications. The EPA is also finalizing revisions to 40 CFR part 60, subparts IIII and JJJJ for consistency with the RICE NESHAP and to make minor corrections and clarifications. The amendments that the EPA is finalizing in this action are discussed in this section. The changes from the proposal to this final rule are discussed in section III.

A. Total Hydrocarbon Compliance Demonstration Option

The EPA is adding an alternative method of demonstrating compliance with the NESHAP for existing and new stationary 4SRB non-emergency engines greater than 500 HP that are located at major sources of HAP emissions. Under these final amendments, the emission standard remains the same, that is, existing and new stationary 4SRB engines greater than 500 HP and located at major sources are still required to reduce formaldehyde emissions by 76 percent or more or limit the concentration of formaldehyde in the stationary RICE exhaust to 350 parts per billion by volume, dry basis or less at 15 percent oxygen (O_2). This final rule adds an alternative compliance demonstration option to the existing method of demonstrating compliance with the formaldehyde percent reduction standard. The current method is to test engines for formaldehyde. The alternative for owners and operators of 4SRB engines meeting a 76 percent or more formaldehyde reduction is to test their engines for THC showing that the engine is achieving at least a 30 percent reduction of THC emissions. Including this optional THC compliance demonstration option reduces the cost of compliance significantly while continuing to achieve the same level of HAP emission reduction because the emission standards would remain the same. As discussed in the June 7, 2012, proposal, data provided to EPA indicate that a strong relationship exists between percentage reductions of THC and percentage reductions of formaldehyde (the surrogate for HAP emissions in the NESHAP) on rich burn engines using non-selective catalytic reduction (NSCR). Data analyzed by the EPA indicate that if the NSCR is reducing THC by at least 30 percent from 4SRB engines, formaldehyde emissions are guaranteed to be reduced by at least 76 percent, which is the percentage reduction required for the relevant engines. Indeed, the percentage reduction of formaldehyde is invariably well above the 76 percent level, and is usually above 90 percent. Therefore, the EPA concluded that for SI 4SRB engines using NSCR and meeting the NESHAP by showing a percentage reduction of HAP, it would be appropriate to allow sources to demonstrate compliance with the NESHAP by showing a THC reduction of at least 30 percent. Owners and operators of existing stationary 4SRB engines less than or equal to 500 HP that are required to limit the concentration of formaldehyde in the stationary RICE exhaust to 10.3 parts per million by volume, dry basis (ppmvd) or less at 15 percent O_2 do not have the option to demonstrate compliance using THC and must continue to demonstrate compliance by testing for formaldehyde following the methods and procedures specified in the rule because the EPA could not verify a clear relationship between concentrations of THC and concentrations of formaldehyde in the exhaust from these SI 4SRB engines.

Owners and operators opting to use the THC compliance demonstration method must demonstrate compliance by showing that the average reduction of THC is equal to or greater than 30 percent. Owners and operators of 4SRB stationary RICE complying with the

requirement to reduce formaldehyde emissions and demonstrating compliance by using the THC compliance demonstration option must conduct performance testing using Method 25A of 40 CFR part 60, appendix A—Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer. Measurements of THC at the inlet and the outlet of the NSCR must be on a dry basis and corrected to 15 percent O_2 or equivalent carbon dioxide content. To correct to 15 percent O_2, dry basis, owners and operators must measure oxygen using Method 3, 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005) and measure moisture using Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03. Because owners and operators are complying with a percent reduction requirement, the method used must be suitable for the entire range of emissions since pre and post-catalyst emissions must be measured. Method 25A is capable of measuring emissions down to 5 ppmv and is, therefore, an appropriate method for measuring THC emissions for compliance demonstration purposes. The EPA is allowing sources the option to meet a minimum THC percent reduction of 30 percent by using Method 25A of 40 CFR part 60, appendix A to demonstrate compliance with the formaldehyde percent reduction in 40 CFR part 63, subpart ZZZZ.

B. Emergency Demand Response and Reliability

The EPA is finalizing certain revisions to the proposal regarding use of existing engines for emergency demand response and system reliability. Following is a summary of the prior requirements for these engines, including those in the 2010 regulation, a discussion of the information and input the EPA received in response to the proposal, and a description of the provisions being finalized in this action.

Existing emergency engines less than or equal to 500 HP located at major sources of HAP and existing emergency engines located at area sources of HAP were not regulated under the RICE NESHAP rulemakings finalized in 2004 and 2008. They could operate uncontrolled for an unlimited amount of time. The 2010 RICE NESHAP rulemaking for the first time established requirements for these existing emergency engines, requiring affected engines to comply by May 3, 2013, for stationary CI RICE and October 19, 2013, for stationary SI RICE. Under the RICE NESHAP requirements originally finalized in 2010, these existing emergency stationary engines must limit operation to situations like blackouts and floods and to a maximum of 100 hours per year for other specified operations beginning with the applicable compliance date in 2013 for the engine. The limitation of 100 hours per year included maintenance checks and readiness testing of the engine, as well as a limit of 15 hours per year for use as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. Under the 2010 regulation, existing emergency engines were required to meet management practice standards based on proper operation and maintenance of the engine; meeting these standards would not require installation of aftertreatment to control emissions.

Soon after the 2010 rule was final, the EPA received petitions for reconsideration of the 15-hour limitation for emergency demand response that was finalized in the 2010 rule. According to one petition, the 15-hour limit, while usually adequate to cover the limited hours in which these engines are expected to be called upon, would not be sufficient to allow these emergency engines to participate in emergency demand response programs since some regional transmission organizations and independent system operators require engines be available for more than 15 hours in order to meet emergency demand response situations. For example, PJM's Emergency Load Response Program requires that emergency engines guarantee that they will be available for 60 hours per year. By contrast, another petition asked EPA to eliminate the emergency demand response provision because of the adverse effects that the petitioner believes would result from increased emissions from these engines. The EPA received other comments that addressed the types of situations in which engines are called upon for emergency demand response and system reliability.

The EPA believes that the emergency demand response programs that exist across the country are important programs that protect the reliability and stability of the national electric service grid. The use of stationary emergency engines as part of emergency demand response programs can help prevent grid failure or blackouts, by allowing these engines to be used for limited hours in specific circumstances of grid instability prior to the occurrence of blackouts. A standard that requires owners and operators of stationary emergency engines that participate in emergency demand response programs to apply aftertreatment could make it economically infeasible for these engines to participate in these programs, impairing the ability of regional transmission organizations and independent system operators to use these relatively small, quick-starting and reliable sources of energy to protect the reliability of their systems in times of critical need. Information provided by commenters on the proposal indicates that these emergency demand response events are rarely called.[5]

The limited circumstances specified in the final rule for operation of stationary emergency engines for emergency demand response purposes include periods during which the Reliability Coordinator, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert (EEA) Level 2 as defined in the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergency, and during periods where there is a deviation of voltage or frequency of 5 percent or more below standard voltage or frequency. During EEA Level 2 alerts there is insufficient energy supply and a true potential for electrical blackouts. System operators must call on all available resources during EEA Level 2 alerts in order to stabilize the grid to prevent failure. Therefore, this situation is a good indicator of severe instability on the system, which the EPA believes is appropriately considered an emergency situation. Consistent normal voltage provided by the utility is often called power quality and is an important factor in local electric system reliability. Reliability of the system requires electricity being provided at a normal expected voltage. The American National Standards Institute standard C84.1–1989 defines the maximum allowable voltage sag at below 5 percent. On the local distribution level local voltage levels are therefore important and a 5 percent or more change in the normal voltage or frequency is substantial and an indication that additional resources are needed to ensure local distribution system reliability.

In addition to the circumstances described above, the EPA also received comments on other situations where the

[5] See document number EPA–HQ–OAR–2008–0708–1142 in the rulemaking docket.

local transmission and distribution system operator has determined that there are conditions that could lead to a blackout for the local area where the ready availability of emergency engines is critical to system reliability. These include situations where:

- The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

The EPA believes the operation of emergency engines in these situations should be addressed in the final rule as well.

Therefore, based on the EPA's review of the petitions and comments that the EPA has received with respect to emergency demand response and system reliability, the EPA has concluded that it is appropriate to revise the provisions for stationary engines used in these limited circumstances. The provisions the EPA is amending are in §§ 63.6640(f) and 63.6675 of 40 CFR part 63, subpart ZZZZ. The final amendments to those sections specify that owners and operators of stationary emergency RICE can operate their engines as part of an emergency demand response program within the 100 hours already provided for operation for maintenance and testing. Owners and operators of stationary emergency engines can operate for up to 100 hours per year for emergency demand response and system reliability during periods in which the Reliability Coordinator, or other authorized entity as determined by the Reliability Coordinator, has declared an EEA Level 2 as defined in the NERC Reliability Standard EOP–002–3, Capacity and Energy Emergency, and during periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. In addition, existing emergency stationary RICE at area sources of HAP can operate for up to 50 hours per year if all of the following conditions are met:

- The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- The owner or operator has a pre-existing plan that contemplates the engine's operation under the circumstances described above; and
- The owner or operator identifies and records the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

For all engines operating to satisfy emergency demand response or system reliability under the circumstances described above, the hours spent for emergency demand response operation and local system reliability are added to the hours spent for maintenance and testing purposes and are counted towards the limit of 100 hours per year. If the total time spent for maintenance and testing, emergency demand response, and system reliability operation exceeds 100 hours per year, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

As noted above, the EPA received comments expressing concerns about the emissions from emergency engines, noting that the engines are likely to be dispatched on days when energy demand is high, which often coincides with days when air quality is poor. While the EPA is sensitive to these concerns, the availability of these engines for a more tailored response to emergencies may be preferable in terms of air quality impacts than relying on other generation, including coal-fired spinning reserve generation. After consideration of the concerns raised in the comments, the EPA is finalizing provisions that require stationary emergency CI RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency demand response, or that operate for local system reliability, to use diesel fuel meeting the specifications of 40 CFR 80.510(b) beginning January 1, 2015, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. The specifications of 40 CFR 80.510(b) require 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; this fuel is referred to as ''ultra low sulfur diesel fuel'' (ULSD). This emission reduction requirement was not part of the original 2010 rulemaking. Although the EPA does not have information specifying the percentage of existing stationary emergency CI engines currently using residual fuel oil or non-ULSD distillate fuel, the most recent U.S. Energy Information Administration data available for sales of distillate and residual fuel oil to end users [6] show that significant amounts of non-ULSD are still being purchased by end users that typically operate stationary combustion sources, including stationary emergency CI engines. For example, in the category of Commercial End Use, sales data for the year 2011 show that only 56 percent of the total distillate and residual fuel oil sold was ULSD. The data provided for Electric Power End Use show that 57 percent of total fuel sold was residual fuel oil. For Industrial End Use, the percentage of total fuel that was residual fuel oil was 26 percent. The EPA believes that requiring cleaner fuel for these stationary emergency CI engines will significantly limit or reduce the emissions of regulated air pollutants emitted from these engines, further protecting public health and the environment. Information provided to EPA by commenters [7] showed that the use of ULSD will significantly reduce emissions of air toxics, including metallic HAP (e.g., nickel, zinc, lead) and benzene.

In addition to the fuel requirement, owners and operators of stationary emergency CI RICE larger than 100 HP that operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency demand response must report the dates and times the engines operate for emergency demand response annually to the EPA, beginning with operation during the 2015 calendar year. Owners and operators of these engines are also required to report the dates, times and situations that the engines operate to mitigate local transmission and/or

[6] U.S. Energy Information Administration. Distillate Fuel Oil and Kerosene Sales by End Use. Available at *http://www.eia.gov/dnav/pet/pet_cons_821use_dcu_nus_a.htm.*

[7] See document number EPA–HQ–OAR–2008–0708–1459 in the rulemaking docket.

distribution limitations annually to the EPA, beginning with operation during the 2015 calendar year. This information is necessary to determine whether these engines are operating in compliance with the regulations and will assist the EPA in assessing the impacts of the emissions from these engines.

The EPA is adding these requirements beginning in January, 2015, rather than upon initial implementation of the NESHAP for existing engines in May or October of 2013, to provide sources with appropriate lead time to institute these new requirements and make any physical adjustments to engines and other facilities like tanks or other containment structures, as well as any needed adjustments to contracts and other business activities, that may be necessitated by these new requirements.

The EPA is also amending the NSPS for stationary CI and SI engines in 40 CFR part 60, subparts IIII and JJJJ, respectively, to provide the same limitation for stationary emergency engines for emergency demand response and system reliability operation as for engines subject to the RICE NESHAP. The NSPS regulations currently do not include such a provision for emergency demand response or system reliability operation; the issue was not raised during the original promulgation of the NSPS. The EPA is adding an emergency demand response and system reliability provision under the NSPS regulations in these final amendments. The EPA is revising the existing language in §§ 60.4211(f) and 60.4219 of 40 CFR part 60, subpart IIII, and §§ 60.4243(d) and 60.4248 of 40 CFR part 60, subpart JJJJ, to specify that emergency engines must limit operation for engine maintenance and testing and emergency demand response to a maximum of 100 hours per year; 50 of the 100 hours may be used to operate to mitigate local reliability issues, as discussed previously for the RICE NESHAP.

The EPA is also finalizing amendments to the NSPS regulations that require owners and operators of stationary emergency engines larger than 100 HP that operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency demand response to report the dates and times the engines operated for emergency demand response annually to the EPA, beginning with operation during the 2015 calendar year. Owners and operators of these engines are also required to report the dates, times and situations that the engines operate to mitigate local transmission and/or distribution limitations annually to the EPA, beginning with operation during the 2015 calendar year. The EPA anticipates that in most cases, the entity that dispatches the engines to operate, such as the curtailment service provider or utility, will report the information to the EPA on behalf of the facility that owns the engine. Thus, the burden of the reporting requirement will likely be on the entities that dispatch the engines. The EPA's burden estimate (see section V.B Paperwork Reduction Act) assumes the dispatching entity will report the date and hours dispatched without contacting individual engine operators. Emergency engines subject to 40 CFR part 60, subpart IIII are already required by subpart IIII to use diesel fuel that meets the requirements of 40 CFR 80.510(b).

The 2010 regulation specified that existing emergency engines at area sources of HAP that are residential, commercial, or institutional facilities were not subject to the RICE NESHAP requirements as long as the engines were limited to no more than 15 hours per year for emergency demand response. The EPA is specifying in the final rule that existing emergency engines at area sources of HAP that are residential, commercial, or institutional facilities are subject to the applicable requirements for stationary emergency engines in the RICE NESHAP if they operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency demand response, or they operate to mitigate local transmission and/or distribution limitations. Information provided by commenters on the 2010 regulation and the amendments proposed in June 2012 indicates that these engines typically operate less than 15 hours per year for emergency demand response.

For stationary emergency engines above 500 HP at major sources of HAP that were installed before June 12, 2006, prior to these final amendments, there was no emergency demand response provision and there was no time limit on the use of emergency engines for routine testing and maintenance in § 63.6640(f)(2)(ii). Those engines were not the focus of the 2010 RICE NESHAP amendments; therefore, the EPA did not make any changes to the requirements for those engines as part of the 2010 amendments. For consistency, the EPA is now also revising 40 CFR part 63, subpart ZZZZ to require owners and operators of stationary emergency engines above 500 HP at major sources of HAP installed prior to June 12, 2006, to limit operation of their engines for maintenance and testing and emergency demand response program to a total of 100 hours per year. These engines would also be required to use diesel fuel meeting the specifications of 40 CFR 80.510(b) beginning January 1, 2015, however, if the engine operates or is contractually obligated to be available for more than 15 hours per year. Any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015 may be used until depleted. In addition to the fuel requirement, owners and operators of these engines must report the dates and times the engines operate for emergency demand response annually to the EPA, beginning with operation during the 2015 calendar year.

More detail regarding the public comments regarding emergency demand response and the EPA's responses can be found in the Response to Public Comments document available in the rulemaking docket.

C. Peak Shaving

In the June 7, 2012, proposal, the EPA proposed a temporary provision for existing stationary emergency engines located at area sources to apply the 50 hours per year that is allowed under § 63.6640(f) for non-emergency operation towards any non-emergency operation, including peak shaving. The peak shaving provision was proposed to expire in April 2017. As discussed further in section III.B, the EPA is not finalizing the proposed temporary 50-hour provision for existing stationary emergency engines located at area sources engaged in peak shaving and other non-emergency use as part of a financial arrangement with another entity. However, in consideration of the short time between this final rule and the May 3, 2013, or October 19, 2013, compliance dates for affected sources, this final rule includes a provision limiting the use of existing stationary emergency engines located at area sources to 50 hours per year prior to May 3, 2014, for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engines are operated as part of a peak shaving (load management) program with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. This extension provides additional time so that these sources that wish to engage in peak shaving can come into compliance with the applicable requirements for non-emergency engines.

D. Non-Emergency Stationary SI RICE Greater Than 500 HP Located at Area Sources

The EPA is finalizing amendments to the requirements that apply to existing stationary non-emergency 4-stroke SI RICE greater than 500 HP located at area sources of HAP emissions, which are generally natural gas fired engines.

The EPA is creating a subcategory for existing spark ignition engines located in sparsely populated areas. Engines located in remote areas that are not close to significant human activity may be difficult to access, may not have electricity or communications, and may be unmanned most of the time. The costs of the emission controls, testing, and continuous monitoring requirements may be unreasonable when compared to the HAP emission reductions that would be achieved, considering that the engines are in sparsely populated areas. Moreover, the location of these engines is such that there would be limited public exposure to the emissions. The EPA believes that establishing a subcategory for SI engines at area sources of HAP located in sparsely populated areas accomplishes the agency's goals and is adequate in protecting public health. The EPA is creating this subcategory using criteria based on the existing DOT classification system for natural gas pipelines. This system classifies locations based on their distance to natural gas pipelines covered by the Pipeline and Hazardous Materials Safety Administration regulations. The DOT system defines a class location unit as an onshore area that extends 220 yards or 200 meters on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of natural gas pipeline. The DOT approach further classifies pipeline locations into Class 1 through Class 4 locations based on the number of buildings intended for human occupancy. A Class 1 location is defined as an offshore area or any class location unit that has 10 or fewer buildings intended for human occupancy. The DOT classification system also has special provisions for locations where buildings with four or more stories above ground are prevalent and locations that lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. To be considered remote under this final rule, a source on a pipeline could not fall under these special provisions and, in addition, must be in a Class 1 location. For those engines not associated with pipelines, the EPA is using similar criteria. An engine would be considered to be in sparsely populated areas if within 0.25 mile radius of the engine there are 5 or fewer buildings intended for human occupancy.

Owners and operators of existing stationary non-emergency 4-stroke lean burn (4SLB) and 4SRB RICE greater than 500 HP at area sources that are in sparsely populated areas as described above would be required to perform the following:

- Change oil and filter every 2,160 hours of operation or annually, whichever comes first;
- Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.

Sources have the option to use an oil analysis program as described in § 63.6625(i) of the rule in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d of the rule. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If none of these condemning limits are exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

Owners and operators of existing stationary 4SLB and 4SRB area source engines above 500 HP in sparsely populated areas would also have to operate and maintain the stationary RICE and aftertreatment control device (if any) according to the manufacturer's emission-related written instructions or develop their 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.

Owners and operators of engines in sparsely populated areas would have to conduct a review of the surrounding area every 12 months to determine if the nearby population has changed. If the engine no longer meets the criteria for a sparsely populated area, the owner and operator must within 1 year comply with the emission standards specified below for populated areas.

For engines in populated areas, i.e., existing stationary 4SLB and 4SRB non-emergency engines greater than 500 HP at area sources that are located on DOT Class 2 through Class 4 pipeline segments or, for engines not associated with pipelines, that do not meet the 0.25 mile radius with 5 or less buildings criteria, the EPA is revising the requirements that were finalized in the 2010 rule. The EPA is adopting an equipment standard requiring the installation of a catalyst to reduce HAP emissions. Owners and operators of existing area source 4SLB non-emergency engines greater than 500 HP in populated areas would be required to install an oxidation catalyst. Owners and operators of existing area source 4SRB non-emergency engines greater than 500 HP in populated areas would be required to install NSCR. Owners and operators must conduct an initial test to demonstrate that the engine achieves at least a 93 percent reduction in CO emissions or a CO concentration level of 47 ppmvd at 15 percent O_2, if the engine is a 4SLB engine. Similarly, owners and operators must conduct an initial performance test to demonstrate that the engine achieves at least either a 75 percent CO reduction, a 30 percent THC reduction, or a CO concentration level of 270 ppmvd at 15 percent O_2 if the engine is a 4SRB engine. The initial test must consist of three test runs. Each test run must be of at least 15 minute duration, except that each test run conducted using appendix A to 40 CFR part 63, subpart ZZZZ must consist of one measurement cycle as defined by the method and include at least 2 minutes of test data phase measurement. To measure CO, emission sources must use the CO methods already specified in subpart ZZZZ, or appendix A to 40 CFR part 63, subpart ZZZZ. The THC testing

must be conducted using EPA Method 25A.

The owner or operator of both engine types must also use a high temperature shutdown device that detects if the catalyst inlet temperature is too high, or, alternatively, the owner or operator can monitor the catalyst inlet temperature continuously and maintain the temperature within the range specified in the rule. For 4SLB engines the catalyst inlet temperature must remain at or above 450 °F and at or below 1,350 °F. For 4SRB engines the temperature must be greater than or equal to 750 °F and less than or equal to 1,250 °F at the catalyst inlet.

Owners and operators must in addition to the initial performance test conduct annual checks of the catalyst to ensure proper catalyst activity. The annual check of the catalyst must at a minimum consist of one 15-minute run using the methods discussed above, except that each test run conducted using appendix A to 40 CFR part 63, subpart ZZZZ must consist of one measurement cycle as defined by the method and include at least 2 minutes of test data phase measurement. Owners and operators of 4SLB engines must demonstrate during the catalyst activity test that the catalyst achieves at least a 93 percent reduction in CO emissions or that the engine exhaust CO emissions are no more than 47 ppmvd at 15 percent O_2. Owners and operators of 4SRB engines must demonstrate during the catalyst activity check that their catalyst is reducing CO emissions by 75 percent or more, the CO concentration level at the engine exhaust is less than or equal to 270 ppmvd at 15 percent O_2, or THC emissions are being reduced by at least 30 percent.

If the emissions from the engine do not exceed the levels required for the initial test or annual checks of the catalyst, then the catalyst is considered to be working properly. If the emissions exceed the specified pollutant levels in the rule, the exceedance(s) is/are not considered a violation, but the owner or operator would be required to shut down the engine and take appropriate corrective action (e.g., repairs, clean or replace the catalyst, as appropriate). A follow-up test must be conducted within 7 days of the engine being started up again to demonstrate that the emission levels are being met. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the engine may not operate, except for purposes of start-up and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified.

E. Stationary CI RICE Certified to Tier Standards

The EPA is amending the requirements for any stationary CI engine certified to the Tier 3 standards in 40 CFR part 89 (Tier 2 for engines above 560 kilowatt (kW)) located at an area source and installed before June 12, 2006. The EPA is finalizing amendments to specify that any existing certified Tier 3 (Tier 2 for engines above 560 kW) CI engine that was installed before June 12, 2006, is in compliance with the RICE NESHAP. This amendment includes any existing stationary Tier 3 (Tier 2 for engines above 560 kW) certified CI engine located at an area source of HAP emissions. Without these amendments, Tier 3 engines, which were built to meet stringent emission standards, would not be able to comply with the applicable RICE NESHAP emission standards for existing engines without further testing and monitoring, and possible retrofit with further controls, due to differences in the emission standards and testing protocols in the RICE NESHAP versus the Tier 3 standards in 40 CFR part 89. However, an identical engine certified to the Tier 3 standards (or Tier 2 standards for engines above 560 kW) in 40 CFR part 89 that was installed after June 12, 2006, would not have to be retrofit in order to comply with the NESHAP. The EPA believes that the Tier 3 standards (Tier 2 for engines above 560 kW) are technologically stringent regulations and believes it is unnecessary to require further regulation of engines meeting these standards.

The EPA is also amending the requirements for existing stationary CI engines that are certified to the Tier 1 and Tier 2 standards in 40 CFR part 89, located at area sources of HAP, greater than 300 HP and subject to a state or local rule that requires the engine to be replaced. The EPA does not think it is appropriate to require emission controls on a stationary CI engine that is going to be retired only a short time after the rule goes into effect. These engines (equipped with aftertreatment) could end up being in operation for less than 2 years or at most only 5 years before having to be replaced with a certified Tier 4 engine. It would not be reasonable to require the engine owner to invest in costly controls and monitoring equipment for an engine that will be replaced shortly after the installation of the controls. Consequently, the EPA is allowing these engines to meet management practices from the applicable May 3, 2013, compliance date until January 1, 2015, or 12 years after installation date (whichever is later), but not later than June 1, 2018, after which time the CO emission standards in Table 2d of 40 CFR part 63, subpart ZZZZ) apply. The management practices include requirements for when to inspect and replace the engine oil and filter, air cleaner, hoses and belts. The complete details of which management practices are required are shown in Table 2d of the rule. Owners and operators of these existing stationary CI engines located at area sources of HAP emissions that intend to meet management practices rather than the emission limits prior to January 1, 2015, or 12 years after installation date, but not later than June 1, 2018, must submit a notification by March 3, 2013, stating that they intend to use this provision and identifying the state or local regulation that the engine is subject to.

F. Definition for Remote Areas of Alaska

The RICE NESHAP amendments finalized in 2010 specified less stringent requirements for existing non-emergency CI engines at area sources located in remote areas of Alaska. Remote areas are defined under the 2010 rule as those not accessible by the FAHS. In this action, the EPA is expanding the definition of remote areas of Alaska to extend beyond areas that are not accessible by the FAHS. The EPA is expanding the current definition because some areas that are accessible by the FAHS face the same challenges as areas that are not accessible, including high energy costs, extreme weather conditions, lengthy travel times, inaccessibility, and very low population density. Many of these areas are not connected to the electric grid and rely on back up diesel generation to support fluctuating renewable energy systems. The energy supply system is another area that is particularly different in Alaska compared to the rest of the country where the majority of customers are connected to the grid. These final amendments specify that existing stationary CI engines at area sources of HAP in areas of Alaska that are accessible by the FAHS and that meet all of the following criteria will also be considered remote and subject to management practices under the rule:

- The stationary CI engine is located in an area not connected to the Alaska Railbelt Grid,
- At least 10 percent of the power generated by the engine per year is used for residential purposes, and
- The generating capacity of the area source is less than 12 MW, or the engine

is used exclusively for backup power for renewable energy.

The EPA is limiting the remote classification to engines that are used at least partially for residential purposes, where the impact of higher energy costs is of greatest concern. The classification is further limited to sources that are used infrequently as backup for renewable power, or that are at smaller capacity facilities, which are generally in more sparsely populated areas.

G. Requirements for Offshore Vessels

The EPA is revising the requirements in the RICE NESHAP for existing non-emergency CI RICE greater than 300 HP on offshore vessels that are area sources of HAP. Engines on vessels on the OCS in certain circumstances become subject to the provisions of the RICE NESHAP as a result of the operation of the OCS regulations at 40 CFR part 55. The rationale for this revision is discussed further in section III.D. The EPA is finalizing the following management practice requirements for existing non-emergency CI RICE greater than 300 HP on offshore vessels that are area sources of HAP:

- Change oil every 1,000 hours of operation or annually, whichever comes first, except that sources can extend the period for changing the oil if the oil is part of an oil analysis program as discussed below and the condemning limits are not exceeded;
- Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary;
- Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary; and
- Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

These sources may use an oil analysis program in order to extend the specified oil change requirement. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity and percent water content. The analysis must be conducted at the same frequency specified for changing the engine oil. If the condemning limits provided below are not exceeded, the engine owner or operator is not required to change the oil. If any of the condemning limits are exceeded, the engine owner or operator must change the oil within two business days or before continuing to use the engine, whichever is later. The condemning limits are as follows:

- Total Base Number is less than 30 percent of the Total Base Number of the oil when new; or
- Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
- Percent water content (by volume) is greater than 0.5.

Owners and operators of these existing stationary CI RICE must develop a maintenance plan that specifies how the management practices will be met and keep records to demonstrate that the required management practices are being met.

H. Miscellaneous Corrections and Revisions

The EPA is making some minor corrections and clarifications to the stationary engine rules to address miscellaneous issues. The revisions are as follows:

- Revising Tables 1b and 2b of 40 CFR part 63, subpart ZZZZ to correct language requiring the pressure drop to be at plus or minus 10 percent of 100 percent load for all engines. The engines that were regulated in 2010 are not subject to the load requirements and therefore the EPA is correcting these tables to make this clear.
- Adding a footnote to Table 1b of 40 CFR part 63, subpart ZZZZ stating that sources can petition the Administrator for a different temperature range consistent with Table 2b of the rule.
- Correcting rows 8 and 10 in Table 2d of 40 CFR part 63, subpart ZZZZ to indicate that the requirements apply to non-emergency, non-black start stationary RICE greater than 500 HP that are 4SLB and 4SRB that operate more than 24 hours per year, as intended in the original rule.
- Revising the language in § 63.6625(b) of 40 CFR part 63, subpart ZZZZ that states ''* * * in paragraphs (b)(1) through (5) of this section'' to ''in paragraphs (b)(1) through (6) of this section.''
- Changing Tables 2c and 2d of 40 CFR part 63, subpart ZZZZ, where it currently specifies to inspect air cleaner, to also specify that it must be replaced as necessary.
- Revising § 63.6620(b) of 40 CFR part 63, subpart ZZZZ to indicate that testing must be conducted within plus or minus 10 percent of 100 percent load for stationary RICE greater than 500 HP located at a major source (except existing non-emergency CI stationary RICE greater than 500 HP located at a major source) that are subject to testing.
- Specifying that, as was intended in the rule adding these requirements, the operating limitations (pressure drop and catalyst inlet temperature) in Tables 1b and 2b of 40 CFR part 63, subpart ZZZZ do not have to be met during startup.
- For consistency, and as provided in the original RICE NESHAP for other stationary RICE, clarifying in 40 CFR part 63, subpart ZZZZ that the existing stationary RICE regulated in 2010 (i.e., engines constructed before June 12, 2006, that are less than or equal to 500 HP located at major sources or engines located at area sources) must burn landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis in order to qualify as a landfill or digester gas engine under the rule.
- Clarifying § 60.4207(b) of 40 CFR part 60, subpart IIII to specify that owners and operators of stationary CI engines less than 30 liters per cylinder that are subject to the subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b), except owners and operators may use up any diesel fuel acquired prior to October 1, 2010, that does not meet the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
- Adding appendix A to 40 CFR part 63, subpart ZZZZ, which includes procedures that can be used for measuring CO emissions from existing stationary 4SLB and 4SRB stationary RICE above 500 HP located at area sources of HAP that are complying with the emission limits in Table 2d of 40 CFR part 63, subpart ZZZZ.
- Reinstating the footnotes for Table 2 of 40 CFR part 60, subpart JJJJ. The footnotes were inadvertently removed when the rule was amended on June 28, 2011 (76 FR 37954).
- Adding ''part 60'' in Table 4 of the NESHAP, in row 2 where it refers to 40 CFR appendix A.
- Clarifying in § 63.6625(a) of 40 CFR part 63, subpart ZZZZ that a continuous emission monitoring system is only required to be installed at the outlet of the control device for engines that are complying with the requirement to limit the concentration of CO.
- Adding definitions of terms used in Equation 4 of § 63.6620 of 40 CFR part 63, subpart ZZZZ.
- Clarifying that, as was intended in the rule adding these requirements, all of the standards for stationary SI RICE in § 60.4231(b) of 40 CFR part 60, subpart JJJJ are for stationary SI RICE that use gasoline.
- Clarifying that, as was intended in the rule adding these requirements, all of the standards for stationary SI RICE in § 60.4231(c) of 40 CFR part 60, subpart JJJJ are for stationary SI RICE that are rich burn engines that use liquified petroleum gas (LPG).

• Clarifying that, as was intended in the rule adding these requirements, all of the standards for stationary SI RICE in § 60.4231(d) of 40 CFR part 60, subpart JJJJ are for stationary SI RICE that are not gasoline engines or rich burn engines that use LPG.

• Clarifying in § 63.6625(b)(1) and the entries for § 63.8(c)(1)(i) and (iii) in Table 8 of 40 CFR part 63, subpart ZZZZ that a startup, shutdown, and malfunction plan is not required for a continuous parameter monitoring system.

• Clarifying in the entry for § 63.10(b)(1) in Table 8 of 40 CFR part 63, subpart ZZZZ that the most recent two years of data do not have to be retained on site.

• Revising footnote 2 of Table 2c and footnote 1 of Table 2d of 40 CFR part 63, subpart ZZZZ to include a reference to § 63.6625(j), as was intended in the rule addressing these requirements.

III. Summary of Significant Changes Since Proposal

A. Emergency Demand Response and Reliability

The EPA proposed to limit operation of emergency stationary RICE as part of an emergency demand response program to within the 100 hours per year that is already permitted for maintenance and testing of the engines. The EPA proposed that owners and operators of stationary emergency engines could operate the engines for emergency demand response when the Reliability Coordinator, or other authorized entity as determined by the Reliability Coordinator, has declared an EEA Level 2 as defined in the NERC Reliability Standard EOP–002–3, Capacity and Energy Emergencies, plus during periods where there is a deviation of voltage or frequency of 5 percent or more below standard voltage or frequency. After considering public comments received on the proposed rule, the EPA is finalizing the proposed amendment to limit operation for maintenance and testing and emergency demand response to no more than 100 hours per year.

The EPA received some comments in support of the provision for emergency demand response operation, while other commenters opposed the limitation. The commenters who supported the provision noted that the engines are rarely called for emergency demand response, and that the EPA has limited the emergency demand response operation to emergency situations where a blackout is imminent. The commenters also noted that the public health impacts created by a widespread power outage outweigh the air quality impacts from the engines. The EPA agrees with the commenters that it is appropriate to include a provision for operation of emergency engines for a limited number of hours per year as part of emergency demand response programs to help prevent grid failure or blackouts. Preventing stationary emergency engines from being able to qualify and participate in emergency demand response programs without having to apply aftertreatment could force owners and operators to remove their engines from these programs, which could impair the ability of regional transmission organizations and independent system operators to use these relatively small, quick-starting and reliable sources of energy to protect the reliability of their systems.

The commenters who opposed the provision for demand response provided no significant argument that the conditions under which these engines would be permitted to operate for emergency demand response would not be emergency conditions. Commenters who opposed the provision were concerned about the air quality and health impacts of emissions from stationary engines. The commenters were concerned that recent actions by the Federal Energy Regulatory Commission (FERC) that impact demand response compensation in organized wholesale energy markets will greatly increase the amount of demand response participating in organized wholesale capacity markets. In response to the commenters, the EPA notes that, prior to the 2013 compliance dates for existing engines, there are no limitations on the hours of operation for those engines. The standards that go into effect in 2013 will for the first time establish requirements for these engines, including limitations on their hours of operation in certain situations such as emergency demand response, and ULSD fuel requirements which will reduce HAP emissions from the engines. Regarding the FERC regulations and their effect on use of demand response in capacity markets, these are comments more appropriately directed towards the FERC. As noted above, the emergency demand response situations during which the emergency engines may be used for a limited number of hours per year are appropriately considered emergency situations.

Commenters were also concerned that these engines would be called to operate for demand response on high ozone days, further contributing to nonattainment with ozone standards. However, other commenters noted that emergency demand response events do not predominantly occur on ozone exceedance days. These commenters also note that some of the commenters opposing use of emergency engines during emergency demand response would benefit by such a limitation because other emission sources may be used instead of the emergency engines, including sources that some of these commenters may operate, and that the effect on total emissions of using these alternative emission sources is not clear. Concerns about contribution to ozone nonattainment by stationary engines can be addressed through area-specific requirements such as state-based State Implementation Plans that would be directed towards ozone nonattainment areas. More detail regarding the public comments and the EPA's responses can be found in the Response to Public Comments document available in the rulemaking docket.

As mentioned in the previous paragraph, in response to the concerns about the air quality impact of emissions from emergency engines operating in emergency demand response programs, and based on public comments received on the proposed rule, the EPA is finalizing a requirement for owners and operators of existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that use diesel fuel and operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency demand response to use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. This fuel requirement also applies to owners and operators of new emergency CI stationary RICE with a site rating of more than 500 brake HP with a displacement of less than 30 liters per cylinder located at a major source of HAP that use diesel fuel and operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency demand response. Owners and operators must begin meeting this ULSD fuel requirement on January 1, 2015, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. As noted by commenters on the proposed amendments and as discussed in section II.B, requiring the use of diesel fuel meeting the requirements of 40 CFR 80.510(b) is expected to reduce the HAP emissions significantly from the engines compared to emissions resulting from use of unregulated diesel fuel. The fuel

requirement begins on January 1, 2015, in order to give affected sources appropriate lead time to institute these new requirements and make any physical adjustments to engines and other facilities like tanks or containment structures, as well as any needed adjustments to contracts and other business activities, that may be necessitated by these new requirements.

The final amendments also require owners and operators of emergency stationary RICE larger than 100 HP that operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency demand response to submit an annual report to the EPA documenting the dates and times that the emergency stationary RICE operated for emergency demand response, beginning with the 2015 calendar year. Commenters on the proposed amendments recommended that the EPA gather information on the impacts of the emissions from emergency engines during emergency demand response situations. The EPA agrees that a reporting requirement will increase the EPA's ability to ensure that these engines are operating in compliance with the regulations and that it will provide further information regarding the impacts of these engines on emissions. In response to these comments, the EPA is establishing a requirement to annually report to EPA the engine location and duration of operation for emergency demand response. This information will be used by the EPA, as well as state and local air pollution control agencies, to assess the health impacts of the emissions from these engines and to aid the EPA in ensuring that these engines comply with the regulations. Additional discussion of the rationale for the fuel and reporting requirements, as well as responses to other significant comments regarding emergency engines engaged in emergency demand response, can be found in the Response to Public Comments document in the docket.

Public commenters, in particular the National Rural Electric Cooperative Association (NRECA), indicated that the proposed EEA Level 2 and 5 percent voltage or frequency deviation triggers did not account for situations when the local balancing authority or transmission operator for the local electric system has determined that electric reliability is in jeopardy, and recommended that the EPA include additional situations where the local transmission and distribution system operator has determined that there are conditions that could lead to a blackout for the local area. The comments from NRECA indicated that rural distribution lines are not configured in a typical grid pattern, but instead have distribution lines that can run well over 50 miles from a substation and regularly extend 15 miles or longer. During periods of exceptionally heavy stress within the region or sub-region, electricity from regional power generators may not be available because of transmission constraints, according to the commenter. The commenter indicated that in many cases, there may be only one transmission line that feeds the rural distribution system, and no alternative means to transmit power into the local system.

In response to those comments and in recognition of the unique challenges faced by the local transmission and distribution system operators in rural areas, the EPA is specifying in the final rule that existing emergency stationary RICE at area sources can be used for 50 hours per year as part of a financial arrangement with another entity if all of the following conditions are met:

- The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- The power is provided only to the facility itself or to support the local transmission and distribution system.
- The owner or operator identifies and records the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

Engines operating in systems that do not meet the conditions described here will not be considered emergency engines if they operate for these purposes as part of a financial arrangement with another entity.

Stationary emergency CI RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder located at area sources that operate for this purpose are also required to use diesel fuel meeting the specifications of 40 CFR 80.510(b) beginning January 1, 2015, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. Owners and operators of these engines are also required to report the dates and times the engines operated for this purpose annually to the EPA, beginning with operation during the 2015 calendar year. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. Further discussion of the rationale for the changes is available in the Response to Public Comments document in the docket.

B. Peak Shaving

The EPA proposed a temporary provision for existing stationary emergency engines located at area sources to apply the 50 hours per year that is allowed under § 63.6640(f) for non-emergency operation towards any non-emergency operation, including operation as part of a financial agreement with another entity. The peak shaving provision was proposed to expire in April 2017. The purpose of the proposed provision for peak shaving was to give sources an additional resource for maintaining reliability while facilities are coming into compliance with the NESHAP From Coal and Oil-Fired Electric Utility Steam Generating Units (77 FR 9304, February 16, 2012). Based on public comments received on the proposal, the EPA is not finalizing the proposed provision for peak shaving in this action. As noted by the commenters, operation for peak shaving does not fairly come under the definition of emergency use as it is designed to increase capacity in the system, rather than responding to an emergency situation such as a blackout or imminent brownout. The EPA believes that peak shaving activity and other activities designed to increase capacity should be treated as part of long term capacity planning, not as use akin to emergencies. The EPA agrees with commenters who state that allowance for emergency engines to be used for peak shaving could well lead to increased use of these engines, particularly in situations that are not emergency situations. The EPA also agrees that use of internal combustion engines for peak shaving is not based on emergency use, but instead is generally based on the economic benefit gained by operating the engine rather than another power source. The EPA agrees with the commenters that there is not sufficient information on the record to show that these engines are needed to maintain reliability while facilities are coming

into compliance with the NESHAP From Coal and Oil-Fired Electric Utility Steam Generating Units, and the commenters who supported the limited temporary provision did not provide information to show that rule would cause reliability issues that necessitate the operation of these engines. The EPA believes that given this information, it is appropriate to treat use of internal combustion engines as peak power units not as emergency use but as normal power generation, and thus believes it is appropriate to require emissions aftertreatment requirements (or similar controls as appropriate for non-emergency engines) for engines engaging in these activities for compensation. Further discussion is available in the Response to Public Comments document in the docket.

However, in consideration of the short time between this final rule and the May 3, 2013, or October 19, 2013 compliance dates for affected sources, this final rule permits the use of existing stationary emergency engines located at area sources for 50 hours per year through May 3, 2014 for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engines are operated as part of a peak shaving (load management) program with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. Owners and operators of these engines, which have heretofore not been regulated, may have taken actions based on the June 7, 2012, proposal that would now leave them in danger of being in noncompliance with the applicable requirements for the engine in the RICE NESHAP.

C. Non-Emergency Stationary SI RICE Greater Than 500 HP Located at Area Sources

The EPA proposed to require existing stationary non-emergency 4-stroke SI RICE greater than 500 HP located at area sources of HAP that are in sparsely populated areas to meet management practices. The proposed management practices required the engine owner and operator to change the oil and filter and inspect spark plugs, hoses and belts every 1,440 hours of operation or annually, whichever comes first. The proposed management practices were based on similar requirements for existing non-emergency stationary SI RICE smaller than 500 HP. The EPA received public comments indicating that the interval for performing the management practices for engines larger than 500 HP should be every 2,160 hours of operation or annually, whichever comes first. Commenters indicated that larger engines have increased capabilities compared to smaller size engines, which allows engines to extend the maintenance interval. Larger engines have increased oil capacities, use improved oil grades/synthetics, and use oil sweetening systems, according to the commenters. Commenters also noted that larger engines use better quality, more expensive spark plugs that last longer than 1,440 hours, and that less frequent maintenance intervals reduce the environmental impacts associated with disposing waste oils and traveling to remote locations. The EPA agrees with the arguments presented by the commenters. Therefore, in this final rule, EPA is requiring engine owners and operators to change the oil and filter and inspect spark plugs, hoses and belts every 2,160 hours of operation or annually, whichever comes first.

For existing stationary non-emergency SI 4SRB RICE that are in populated areas, the EPA proposed an equipment standard that required the installation of NSCR to reduce HAP emissions. The proposed rule required these engines to demonstrate that the catalyst achieves at least a 75 percent CO reduction or a 30 percent THC reduction. The EPA is retaining this requirement in this final rule, but is adding another option in response to public comments that allows the owner and operator of the engine to demonstrate that the catalyst achieves a CO concentration level of 270 ppmvd at 15 percent O_2. As noted by the public comments, this represents a 75 percent reduction from typical uncontrolled emissions from existing stationary non-emergency SI 4SRB RICE and is the CO standard required for new SI 4SRB engines in the NSPS for stationary SI engines. The EPA is also clarifying that, as was intended in the original proposal, engines located in Class 4 locations are not considered remote. More detail regarding the public comments and the rationale for these changes can be found in the Response to Public Comments document, which is available in the docket for this rulemaking.

D. Definition for Remote Areas of Alaska

The EPA proposed to expand the definition of remote areas of Alaska to extend beyond areas that are not accessible by the FAHS. Specifically, the EPA proposed that areas of Alaska that are accessible by the FAHS and that met all of the following criteria would also be considered remote and subject to management practices under the rule: (1) The stationary CI engine is located in an area not connected to the Alaska Railbelt Grid; (2) at least 10 percent of the power generated by the engine per year is used for residential purposes; and (3) the generating capacity of the area source is less than 12 MW, or the engine is used exclusively for backup power for renewable energy and is used less than 500 hours per year on a 10-year rolling average. After considering the public comments received on the proposed criteria, the EPA is finalizing the first two criteria as proposed, but finalizing a slightly different third criterion. In this final rule, existing CI engines at area sources of HAP are considered remote if they meet the first and second criteria above and they are either at a source with a generating capacity less than 12 MW, or used exclusively for backup power for renewable energy. Based on public comments received on the proposal, the EPA is not finalizing the limitation that the engine be used less than 500 hours per year on a 10-year rolling average. Commenters indicated that basing the applicability on the previous 10 years of operation would ignore recent investments in renewable energy that have significantly decreased engine hours of operation in recent years. The EPA is also defining ''backup power for renewable energy'' in this final rule as engines that provide backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5). The rationale for these changes can be found in the Response to Public Comments document available in the docket.

E. Requirements for Offshore Vessels

The RICE NESHAP does not on its face apply to mobile sources, including marine vessels. However, the regulations applicable to sources on the OCS, codified at 40 CFR part 55, specify that vessels are OCS sources when they are (1) permanently or temporarily attached to the seabed and erected thereon and used for the purpose of exploring, developing or producing resources there from, within the meaning of section 4(a)(1) of the OCS Lands Act (43 U.S.C. 1331, *et seq.*); or (2) physically attached to an OCS facility, in which case only the stationary sources aspects of the vessels will be regulated. 40 CFR 55.2. The OCS regulations provide that NESHAP requirements apply to a vessel that is an OCS source where the provisions are ''rationally related to the attainment and maintenance of the federal or state ambient air quality standards or the

requirements of part C of title I of the Act.'' 40 CFR 55.13(e).

The EPA received comments during the public comment period for the June 7, 2012, proposal recommending that the RICE NESHAP be amended such that for any existing non-emergency CI RICE above 300 HP on offshore vessels on the OCS that become subject to the RICE NESHAP as a result of the operation of the OCS regulations (40 CFR part 55), such engines may meet the NESHAP through management practices rather than numeric emission limits. This amendment was not contained or contemplated in the June 7, 2012, proposal. However, the comments indicated several significant issues related to application of the NESHAP to regulation of existing marine vessel engines located in the OCS as a result of the OCS regulations; in particular, whether the numerical standards applicable to other CI engines located at area sources (marine vessels located in the OCS are generally located at area sources) are technologically feasible for existing marine engines located in the OCS. Some commenters noted specific technological issues relevant to engines on marine vessels in the OCS. The commenters indicated that emission controls for existing CI RICE to meet the NESHAP may be technically infeasible due to weight and space constraints, catalyst fouling from the low-load engine operation required by the U.S. Coast Guard, safety concerns regarding engine backpressure and lack of catalyst vendor experience with retrofitting. Commenters suggested that, to the extent marine vessel engines become subject to the NESHAP as a result of the OCS regulations, these engines should be subject to GACT requirements that the commenters believe are more appropriate for these types of engines. The commenters indicated that management practices similar to those currently required in the rule for existing non-emergency stationary CI RICE smaller than 300 HP are more appropriate as GACT for existing non-emergency stationary CI RICE above 300 HP on vessels operating on the OCS.

Based on these comments, the EPA published a reopening of the comment period to take further comment on whether the RICE NESHAP should be revised to require management practices for these vessels (77 FR 60341, October 3, 2012). Based on the comments received during the two comment periods, the EPA agrees with the commenters that management practices are more reasonable as GACT for existing non-emergency stationary CI RICE larger than 300 HP on vessels operating on the OCS and is finalizing management practices for these engines. The EPA did not receive any public comments indicating that HAP emission controls were generally available and had been demonstrated for the large engines on the vessels. The final management practices include changing the oil every 1,000 hours of operation or annually, whichever comes first; inspecting and cleaning air filters every 750 hours of operation or annually, whichever comes first, and replacing as necessary; inspecting fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replacing as necessary; and inspecting all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replacing as necessary. Facilities have the option of using an oil analysis program to extend the oil change requirement. Additional discussion of the rationale for these changes can be found in the Response to Public Comments document available in the docket.

IV. Summary of Environmental, Energy and Economic Impacts

A. What are the air quality impacts?

The EPA estimates that the rule with the final amendments incorporated will reduce emissions from existing stationary RICE as shown in Table 4 of this preamble. The emissions reductions the EPA previously estimated for the 2010 amendments to the RICE NESHAP are shown for comparison. Reductions are shown for the year 2013, which is the first year the final RICE NESHAP will be implemented for existing stationary RICE.

TABLE 4—SUMMARY OF REDUCTIONS FOR EXISTING STATIONARY RICE

Pollutant	Emission Reductions (tpy) in the year 2013			
	2010 Final rule		2010 Final rule with these final amendments	
	CI	SI	CI	SI
HAP	1,014	6,008	1,005	1,778
CO	14,342	109,321	14,238	22,211
PM	2,844	N/A	2,818	N/A
NO_X	N/A	96,479	N/A	9,648
VOC	27,395	30,907	27,142	9,147

The EPA estimates that more than 900,000 stationary CI engines will be subject to the rule in total, but only a small number of stationary CI engines are affected by the final amendments in this action. The EPA did not estimate any changes in the reductions from the 2010 rule for the amendments associated with emergency engines. To determine emissions from emergency engines for the 2010 rule, the EPA estimated that these types of engines would on average operate for 50 hours per year. The average hours of operation for emergency engines is not expected to change based on the final amendments and 50 hours per year is still believed to be representative of average emergency engine operation. Information provided by commenters demonstrated that these engines have been operated very infrequently for emergency demand response events.[8] Therefore, the emissions previously calculated remain appropriate.

It is estimated that approximately 330,000 stationary SI engines will be subject to the rule in total; however, only a subset of stationary SI engines are affected by the final amendments in this action. The decrease in estimated reductions for SI engines is primarily due to final amendments to the requirements for existing 4SRB and 4SLB SI engines larger than 500 HP at area sources of HAP that are in remote areas. Those engines were required by the 2010 rule to meet emission limits that were expected to require the installation of aftertreatment to reduce emissions; under these final amendments, those engines are required

[8] See document number EPA–HQ–OAR–2008–0708–1142 in the rulemaking docket.

to meet management practices that would not require the installation of aftertreatment. Further information regarding the estimated reductions of this final rule can be found in the memorandum titled, ''RICE NESHAP Reconsideration Final Amendments—Cost and Environmental Impacts,'' which is available in the docket (EPA–HQ–OAR–2008–0708). The EPA did not estimate any impacts associated with the minor changes to the NSPS for stationary CI and SI engines.

B. What are the cost impacts?

The final amendments are expected to reduce the overall cost of the original 2010 RICE NESHAP amendments. The EPA estimates that with these final amendments incorporated, the cost of the rule for existing stationary RICE will be as shown in Table 5 of this preamble. The costs the EPA previously estimated for the 2010 amendments to the RICE NESHAP are shown for comparison. The costs that were previously estimated are shown in the original year ($2008 for CI and $2009 for SI), as well as updated to 2010 dollars.

TABLE 5—SUMMARY OF COST IMPACTS FOR EXISTING STATIONARY RICE

Engine	2010 Final Rule		2010 Final Rule with these Final Amendments
Total Annual Cost			
SI	$253 million ($2009)	$251 million ($2010)	$115 million ($2010).
CI	$373 million ($2008)	$375 million ($2010)	$373 million ($2010).
Total Capital Cost			
SI	$383 million ($2009)	$380 million ($2010)	$103 million ($2010).
CI	$744 million ($2008)	$748 million ($2010)	$740 million ($2010).

Further information regarding the estimated cost impacts of the final amendments, including the cost of the final amendments in 2010 dollars, can be found in the memorandum titled, ''RICE NESHAP Reconsideration Final Amendments—Cost and Environmental Impacts,'' which is available in the docket (EPA–HQ–OAR–2008–0708). The EPA did not estimate costs associated with the changes to the NSPS for stationary CI and SI engines. The changes to the NSPS are minor and are not expected to impact the costs of those rules.

C. What are the benefits?

Emission controls installed to meet the requirements of this final rule will generate benefits by reducing emissions of HAP as well as criteria pollutants and their precursors, including CO, NO_X and VOC. NO_X and VOC are precursors to $PM_{2.5}$ (particles smaller than 2.5 microns) and ozone. The criteria pollutant benefits are considered co-benefits for this rule. For this final rule, the EPA was only able to quantify the health co-benefits associated with reduced exposure to $PM_{2.5}$ from emission reductions of NO_X and directly emitted $PM_{2.5}$. The EPA has not re-estimated the benefits from the proposal for this final rule because the emission reductions have not changed since the reconsideration proposal.[9]

The EPA previously estimated that the monetized co-benefits in 2013 of the stationary CI NESHAP would be $940 million to $2,300 million (2008 dollars) at a 3-percent discount rate and $850 million to $2,100 million (2008 dollars) at a 7-percent discount rate.[10] For stationary SI engines, EPA previously estimated that the monetized co-benefits in 2013 would be $510 million to $1,200 million (2009 dollars) at a 3-percent discount rate) and $460 million to $1,100 million (2009 dollars) at a 7-percent discount rate.[11]

The final amendments are expected to reduce the overall emission reductions of the rules, primarily due to the changes to requirements for engines in remote areas. In addition to revising the anticipated emission reductions, the EPA has also updated the methodology used to calculate the co-benefits to be consistent with methods used in more recent rulemakings, which is summarized below and discussed in more detail in the CI and SI Final Reconsideration RIAs, the RIAs for this rulemaking. The EPA estimates the monetized co-benefits of the final amendments of the CI NESHAP in 2013 to be $770 million to $1,900 million (2010 dollars) at a 3-percent discount rate and $690 million to $1,700 million (2010 dollars) at a 7-percent discount rate. For SI engines, the EPA estimates the monetized co-benefits of the final amendments in 2013 to be $62 million to $150 million (2010 dollars) at a 3-percent discount rate and $55 million to $140 million (2010 dollars) at a 7-percent discount rate.

Using alternate relationships between $PM_{2.5}$ and premature mortality supplied by experts, higher and lower co-benefits estimates are plausible, but most of the expert-based estimates fall between

[9] Since the June 7, 2012 reconsideration proposal, the EPA has made several updates to the approach used to estimate mortality and morbidity benefits, as demonstrated in the RIA for the PM NAAQS. Changes include applying the concentration-response functions from more recent epidemiology studies, adding some health endpoints, and updating population data. Although the EPA has not re-estimated the benefits for this rule by applying these changes, we anticipate that the rounded benefits estimated for this rule are unlikely to be very different than those provided here. Specifically, we anticipate that the changes that would likely lead to small increases in the benefits would likely be offset by changes that would likely lead to small decreases in the benefits. References for the RIA for the PM NAAQS are: (1) U.S. Environmental Protection Agency (U.S. EPA). 2012a. Regulatory Impact Analysis for the Proposed Revisions to the National Ambient Air Quality Standards for Particulate Matter. EPA–452/R–12–003. Office of Air Quality Planning and Standards, Health and Environmental Impacts Division. June. Available at *http://www.epa.gov/ttnecas1/regdata/RIAs/PMRIACombinedFile_Bookmarked.pdf.* (2) U.S. Environmental Protection Agency (U.S. EPA). 2012b. Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter. EPA–452/R–12–003. Office of Air Quality Planning and Standards, Health and Environmental Impacts Division. December. Available at *http://www.epa.gov/pm/2012/finalria.pdf.*

[10] U.S. Environmental Protection Agency. 2010. *Regulatory Impact Analysis (RIA) for Existing Stationary Compression Ignition Engines NESHAP: Final Draft.* Research Triangle Park, NC. February. *http://www.epa.gov/ttn/ecas/regdata/RIAs/CIRICENESHAPRIA2-17-0cleanpublication.pdf.*

[11] U.S. Environmental Protection Agency. 2010. *Regulatory Impact Analysis (RIA) for Existing Stationary Spark Ignition (SI) RICE NESHAP: Final Report.* Research Triangle Park, NC. August. *http://www.epa.gov/ttn/ecas/regdata/RIAs/riceriafinal.pdf.*

these two estimates.[12] A summary of the monetized co-benefits estimates for CI and SI engines at discount rates of 3-percent and 7-percent is in Table 6 of this preamble.

TABLE 6—SUMMARY OF THE MONETIZED $PM_{2.5}$ CO-BENEFITS FINAL AMENDMENTS TO THE NESHAP FOR STATIONARY CI AND SI ENGINES

[Millions of 2010 dollars] [a] [b]

Pollutant	Emission reductions (tons per year)	Total monetized co-benefits (3 percent discount)	Total monetized co-benefits (7 percent discount)
Original 2010 Final Rules [c]			
Stationary CI Engines:			
Total Benefits	2,844 $PM_{2.5}$, 27,395 VOC	$950 to $2,300	$860 to $2,100.
Stationary SI Engines:			
Total Benefits	96,479 NO_X, 30,907 VOC	$510 to $1,300	$470 to $1,100.
2010 Final Rules With These Final Amendments			
Stationary CI Engines:			
Directly emitted $PM_{2.5}$	2,818	$770 to $1,900	$690 to $1,700.
Stationary SI Engines:			
NO_X	9,648	$62 to $150	$55 to $140.

[a] All estimates are for the analysis year (2013) and are rounded to two significant figures so numbers may not sum across rows. The total monetized co-benefits reflect the human health benefits associated with reducing exposure to $PM_{2.5}$ through reductions of $PM_{2.5}$ precursors, such as NO_X and directly emitted $PM_{2.5}$. It is important to note that the monetized co-benefits do not include reduced health effects from exposure to HAP, direct exposure to NO_2, exposure to ozone, ecosystem effects or visibility impairment.

[b] PM co-benefits are shown as a range from Pope, *et al.* (2002) to Laden, *et al.* (2006). These models assume that all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality because the scientific evidence is not yet sufficient to allow differentiation of effects estimates by particle type.

[c] The benefits analysis for the 2010 final rules applied out-dated benefit-per-ton estimates compared to the updated estimates described in this preamble and reflected monetized co-benefits for VOC emissions, which limits direct comparability with the monetized co-benefits estimated for this final rule. In addition, these estimates have been updated from their original currency years to 2010$, so the rounded estimates for the 2010 final rules may not match the original RIAs.

These co-benefits estimates represent the total monetized human health benefits for populations exposed to less $PM_{2.5}$ in 2013 from controls installed to reduce air pollutants in order to meet this final rule. To estimate human health co-benefits of these rules, the EPA used benefit-per-ton factors to quantify the changes in $PM_{2.5}$-related health impacts and monetized benefits based on changes in directly emitted $PM_{2.5}$ and NO_X emissions. These benefit-per-ton factors were derived using the general approach and methodology laid out in Fann, Fulcher and Hubbell (2009).[13] This approach uses a model to convert emissions of $PM_{2.5}$ precursors into changes in ambient $PM_{2.5}$ levels and another model to estimate the changes in human health associated with that change in air quality, which are then divided by the emission reductions to create the benefit-per-ton estimates. However, for these rules, the EPA utilized air quality modeling of emissions in the ''Non-EGU Point other'' category because the EPA does not have modeling specifically for stationary engines.[14] [15] The primary difference between the estimates used in this analysis and the estimates reported in Fann, Fulcher and Hubbell (2009) is the air quality modeling data utilized. While the air quality data used in Fann, Fulcher and Hubbell (2009) reflects broad pollutant/source category combinations, such as all non-EGU stationary point sources, the air quality modeling data used in this analysis has narrower sector categories. In addition, the updated air quality modeling data reflects more recent emissions data (2005 rather than 2001) and has a higher spatial resolution (12 km rather than 36 km grid cells). The benefits methodology, such as health endpoints assessed, risk estimates applied, and valuation techniques applied did not change. As a result, the benefit-per-ton estimates presented herein better reflect the geographic areas and populations likely to be affected by this sector. However, these updated estimates still have similar limitations as all national-average benefit-per-ton estimates in that they reflect the geographic distribution of the modeled emissions, which may not exactly match the emission reductions in this rulemaking, and they may not reflect local variability in population density, meteorology, exposure, baseline health incidence rates or other local factors for any specific location.[16]

[12] 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.

[13] Fann, N., C.M. Fulcher, B.J. Hubbell. 2009. *The influence of location, source, and emission type in estimates of the human health benefits of reducing a ton of air pollution.* Air Qual Atmos Health (2009) 2:169–176.

[14] U.S. Environmental Protection Agency. 2012. *Technical support document: Estimating the benefit per ton of reducing $PM_{2.5}$ precursors from other point sources.* Research Triangle Park, NC.

[15] Stationary engines are included in the other non-EGU point source category. If the affected stationary engines are more rural than the average of the non-EGU sources modeled, then it is possible that the benefits may be somewhat less than the EPA has estimated here. The TSD provides the geographic distribution of the air quality changes associated with this sector. It is important to emphasize that this modeling represents the best available information on the air quality impact on a per ton basis for these sources.

[16] To the extent that the $PM_{2.5}$ improvements achieved by the 2010 final rule would have been located in areas with lower average population density compared to the engines regulated under these amendments, there is a potential for the estimated loss in benefits to be overstated by the use of national-average benefit-per-ton estimates. For example, if only engines in areas with higher population density are regulated, this scenario should result in higher benefit-per-ton estimates than a scenario only regulating engines in areas with lower population density. It is important to

The EPA applies these national benefit-per-ton estimates calculated for this sector separately for directly emitted $PM_{2.5}$ and NO_X and multiply them by the corresponding emission reductions. The sector modeling does not provide estimates of the $PM_{2.5}$-related benefits associated with reducing VOC emissions, but these unquantified benefits are generally small compared to other $PM_{2.5}$ precursors. More information regarding the derivation of the benefit-per-ton estimates for this category is available in the Technical Support Document, which is available in the docket for this rulemaking.

These models assume that all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality because the scientific evidence is not yet sufficient to allow differentiation of effects estimates by particle type. The main $PM_{2.5}$ precursors affected by this final rule are directly emitted $PM_{2.5}$ and NO_X. Even though the EPA assumes that all fine particles have equivalent health effects, the benefit-per-ton estimates vary between precursors depending on the location and magnitude of their impact on $PM_{2.5}$ levels, which drive population exposure. For example, directly emitted 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.

It is important to note that the magnitude of the $PM_{2.5}$ co-benefits is largely driven by the concentration response function for premature mortality. Experts have advised the 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. The EPA cites two key empirical studies, one based on the American Cancer Society cohort study [17] and the extended Six Cities cohort study.[18] In the RIA for the proposed reconsideration amendments rule, which is available in the docket, the EPA also includes benefits estimates derived from the expert judgments and other assumptions.

The EPA strives to use the best available science to support our benefits analyses. The EPA recognizes that interpretation of the science regarding air pollution and health is dynamic and evolving. After reviewing the scientific literature, the EPA has determined that the no-threshold model is the most appropriate model for assessing the mortality benefits associated with reducing $PM_{2.5}$ exposure. Consistent with this finding, the EPA has conformed the previous threshold sensitivity analysis to the current state of the PM science by incorporating a new ''Lowest Measured Level'' (LML) assessment in the RIA accompanying these rules. While an LML assessment provides some insight into the level of uncertainty in the estimated PM mortality benefits, the EPA does not view the LML as a threshold and continues to quantify PM-related mortality impacts using a full range of modeled air quality concentrations.

Most of the estimated PM-related co-benefits for these rules would accrue to populations exposed to higher levels of $PM_{2.5}$. For this analysis, policy-specific air quality data are not available due to time or resource limitations, and, thus, the EPA is unable to estimate the percentage of premature mortality associated with this specific rule's emission reductions at each $PM_{2.5}$ level. As a surrogate measure of mortality impacts, the EPA provides the percentage of the population exposed at each $PM_{2.5}$ level using the source apportionment modeling used to calculate the benefit-per-ton estimates for this sector. Using the Pope, *et al.* (2002) study, 77 percent of the population is exposed to annual mean $PM_{2.5}$ levels at or above the LML of 7.5 micrograms per cubic meter ($\mu g/m^3$). Using the Laden, *et al.* (2006) study, 25 percent of the population is exposed above the LML of 10 $\mu g/m^3$. It is important to emphasize that we have high confidence in $PM_{2.5}$-related effects down to the lowest LML of the major cohort studies. This fact is important, because, as the EPA models avoided premature deaths among populations exposed to levels of $PM_{2.5,}$ the EPA has lower confidence in levels below the LML for each study.

Every benefit analysis examining the potential effects of a change in environmental protection requirements is limited, to some extent, by data gaps, model capabilities (such as geographic coverage) and uncertainties in the underlying scientific and economic studies used to configure the benefit and cost models. Despite these uncertainties, the EPA believes the benefit analysis for these rules provides a reasonable indication of the expected health benefits of the rulemaking under a set of reasonable assumptions. This analysis does not include the type of detailed uncertainty assessment found in the 2006 $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) RIA because the EPA lacks the necessary air quality input and monitoring data to run the benefits model. In addition, the EPA has not conducted air quality modeling for these rules, and using a benefit-per-ton approach adds another important source of uncertainty to the benefits estimates. The 2006 $PM_{2.5}$ NAAQS benefits analysis [19] provides an indication of the sensitivity of our results to various assumptions.

It should be noted that the monetized co-benefits estimates provided above do not include benefits from several important benefit categories, including exposure to HAP, NO_X, ozone, as well as ecosystem effects and visibility impairment. Although the EPA does not have sufficient information or modeling available to provide monetized estimates for these amendments, the EPA includes a qualitative assessment of these unquantified benefits in the RIAs for these final amendments.

For more information on the benefits analysis, please refer to the CI and SI RIAs for these amendments, which are available in the docket.

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

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

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory 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

note that the benefit-per-ton estimates that EPA applied in this assessment reflect pollution transport as well as a variety of emission source locations, including areas with high and low population density. Without information regarding the specific location of the engines affected by the 2010 final rule and the amendments, it is not possible to be more precise regarding the true magnitude of the loss in benefits.

[17] 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.

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

[19] U.S. Environmental Protection Agency, 2006. *Proposed amendments Regulatory Impact Analysis: $PM_{2.5}$ NAAQS.* Prepared by Office of Air and Radiation. October. Available on the Internet at *http://www.epa.gov/ttn/ecas/ria.html.*

economy of $100 million or more. Accordingly, the EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Order 12866 and Executive Order 13563 (76 FR 3821, January 21, 2011), and any changes made in response to OMB recommendations have been documented in the docket for this action. In addition, the EPA prepared a RIA of the potential costs and benefits associated with this action.

A summary of the monetized benefits, compliance costs and net benefits for the 2010 rule with the final amendments to the stationary CI engines NESHAP at discount rates of 3 percent and 7 percent is in Table 7 of this preamble. The summary for stationary SI engines is included in Table 8 of this preamble. OMB Circular A–4 recommends that analysis of a change in an existing regulatory program use a baseline that assumes ''no change'' in the existing regulation. For purposes of this final rule, however, the EPA has decided that it is appropriate to assume a baseline in which the original 2010 rule did not exist. The EPA feels that this baseline is appropriate because full implementation of this final rule has not taken place as of yet (it will take place in 2013). In addition, this assumption is consistent with the baseline definition applied in the proposed NESHAP for Industrial, Commercial, and Institutional Boilers (76 FR 80532) and NSPS for Commercial/Industrial Solid Waste Incineration Units (76 FR 80452). We have not re-estimated the benefits from the proposal for this final rule because the emission reductions have not changed since the reconsideration proposal. Since the June 7, 2012, reconsideration proposal, we have updated the epidemiology studies used to calculate mortality and morbidity benefits in the PM NAAQS proposal RIA.[20] These updates would reduce the monetized benefits estimated for the RICE NESHAP reconsideration by less than 4 percent.

TABLE 7—SUMMARY OF THE MONETIZED BENEFITS, COMPLIANCE COSTS AND NET BENEFITS FOR THE 2010 RULE WITH THE FINAL AMENDMENTS TO THE STATIONARY CI ENGINE NESHAP IN 2013

[Millions of 2010 dollars] [a]

	3-Percent discount rate	7-Percent discount rate
Total Monetized Benefits [b]	$770 to $1,900	$690 to $1,700.
Total Compliance Costs [c]	$373	$373.
Net Benefits	$400 to $1,500	$320 to $1,300.
Non-Monetized Benefits	Health effects from exposure to HAP. Health effects from direct exposure to NO_2 and ozone. Health effects from $PM_{2.5}$ exposure from VOC. Ecosystem effects. Visibility impairment.	

[a] All estimates are for the implementation year (2013) and are rounded to two significant figures.
[b] The total monetized co-benefits reflect the human health benefits associated with reducing exposure to $PM_{2.5}$ through reductions of $PM_{2.5}$ precursors, such as NO_X and directly emitted $PM_{2.5}$. Co-benefits are shown as a range from Pope, *et al.* (2002) to Laden, *et al.* (2006). These models assume that all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality because the scientific evidence is not yet sufficient to allow differentiation of effects estimates by particle type.
[c] The engineering compliance costs are annualized using a 7-percent discount rate.

TABLE 8—SUMMARY OF THE MONETIZED BENEFITS, COMPLIANCE COSTS AND NET BENEFITS FOR THE 2010 RULE WITH THE FINAL AMENDMENTS TO THE STATIONARY SI ENGINE NESHAP IN 2013

[Millions of 2010 dollars] [a]

	3-Percent discount rate	7-Percent discount rate
Total Monetized Benefits [b]	$62 to $150	$55 to $140.
Total Compliance Costs [c]	$115	$115.
Net Benefits	$−53 to $35	$−60 to $25.
Non-Monetized Benefits	Health effects from exposure to HAP. Health effects from direct exposure to NO_2 and ozone. Health effects from $PM_{2.5}$ exposure from VOC. Ecosystem effects. Visibility impairment.	

[a] All estimates are for the implementation year (2013) and are rounded to two significant figures.
[b] The total monetized co-benefits reflect the human health benefits associated with reducing exposure to $PM_{2.5}$ through reductions of $PM_{2.5}$ precursors, such as NO_X and directly emitted $PM_{2.5}$. Co-benefits are shown as a range from Pope, *et al.* (2002) to Laden, *et al.* (2006). These models assume that all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality because the scientific evidence is not yet sufficient to allow differentiation of effects estimates by particle type.
[c] The engineering compliance costs are annualized using a 7-percent discount rate.

For more information on the cost-benefit analysis, please refer to the RIA for these final amendments, which is available in the docket for this rulemaking.

[20] U.S. Environmental Protection Agency (U.S. EPA). 2012. Regulatory Impact Analysis for the Proposed Revisions to the National Ambient Air Quality Standards for Particulate Matter. EPA–452/R–12–003. Office of Air Quality Planning and Standards, Health and Environmental Impacts Division. June. Available at *http://www.epa.gov/ttnecas1/regdata/RIAs/PMRIACombinedFile_Bookmarked.pdf*.

B. Paperwork Reduction Act

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

As discussed in this preamble to this final action, there are reporting requirements that will begin in 2016. Owners and operators of emergency stationary engines that operate or are contractually obligated to be available for more than 15 hours per year for emergency demand response must document their operation in annual reports to the EPA. These reports are necessary to enable EPA or States to identify affected facilities that may not be in compliance with the requirements. The burden of this reporting requirement is not included in the ICR burden estimate because it is after the first 3 years after which sources must begin complying with the rule. The reporting burden beginning in 2016 would only be included starting with the first ICR renewal. The EPA anticipates that in most cases, the entity that dispatches the engines to operate, such as the curtailment service provider or utility, will report the information to EPA on behalf of the facility that owns the engine. Thus, the burden of the reporting requirement will likely be on the entities that dispatch the engines. The number of entities is uncertain, but the EPA estimates that approximately 446 local utilities would engage in the reporting requirement. The EPA estimates that each utility would spend approximately 16 hours per year reporting the information to the EPA. As of June 2012, the total compensation for management/professional staff was $51.23 per hour. Adjusting this compensation rate by applying an overhead rate of 167 percent yields a total wage rate of $85.60 per hour.[21] This results in an estimated burden of 7,136 hours at a cost of $611,000 per year, beginning in the year 2015. For curtailment service providers, the EPA estimated the burden of the requirement to be 1,000 hours at a cost of $60,000 in the first year of implementation, 2015, and 250 hours at a cost of $15,000 in subsequent years (using a wage rate of $60 per hour). Using an estimated number of 70 curtailment service providers nationwide that are operating engines for emergency demand response, the burden for curtailment service providers would be 70,000 hours at a cost of $4.2 million in the first year of implementation, 2015, and 17,500 hours at a cost of $1 million in subsequent years. Summing the totals for the cooperatives and curtailment service providers yields a total of 77,136 labor hours at a cost of $4.8 million in the first year that reporting is required, 2015, and 24,636 labor hours at a cost of $1.7 million in subsequent years.

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

The OMB has previously approved the information collection requirements contained in the 2010 RICE NESHAP final rulemaking, including those for stationary CI RICE, under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. and has assigned OMB control number 2060–0548. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

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

For purposes of assessing the impacts of this rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. The 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. As mentioned earlier in this preamble, facilities across several industries use affected CI and SI stationary RICE; therefore, a number of size standards are utilized in this analysis.

After considering the economic impacts of this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The small entities directly regulated by this final rule are those in the 15 industries identified in the 6-digit NAICS code represented in this analysis; the employment size standard (where it applies) varies from 500 to 1,000 employees. The annual sales standard (where it applies) is as low as 0.75 million dollars and as high as 33.5 million dollars. In addition, for the electric power generation industry, which is one of the affected industries, the small business size standard is an ultimate parent entity defined as having a total electric output of 4 million megawatt-hours in the previous fiscal year. We have determined that the percentage of small entities impacted by this final rule having annualized costs of greater than 1 percent of their sales is less than 2 percent of all affected small entities according to the small entity analysis.

Although the final reconsideration rule will not have a significant economic impact on a substantial number of small entities, the EPA nonetheless tried to reduce the impact of this rule on small entities. When developing the revised standards, the EPA took special steps to ensure that the burdens imposed on small entities were minimal. The EPA conducted several meetings with industry trade associations to discuss regulatory options and the corresponding burden on industry, such as recordkeeping and reporting. In addition, as mentioned earlier in this preamble, the EPA is reducing the regulatory requirements for a variety of area sources affected under each of the RICE rules with amendments to the final RICE rules promulgated in 2010.

For more information on the small entity impacts associated with this rulemaking, please refer to the Economic Impact and Small Business Analyses in the public docket. These analyses can be found in the RIA for each of the rules affected by this action.

D. Unfunded Mandates Reform Act

This rule does not contain a federal mandate that may result in expenditures of $100 million or more for state, local and tribal governments, in the aggregate, or the private sector in any one year. The EPA is finalizing management

[21] *http://www.bls.gov/news.release/ecec.t05.htm.*

practices for certain existing engines located at area sources and is finalizing amendments that will provide owners and operators with alternative and less expensive compliance demonstration methods. As a result of these changes, the EPA anticipates a substantial reduction in the cost burden associated with this rule. Thus, this final rule is not subject to the requirements of sections 202 or 205 of UMRA.

This final rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. The changes being finalized in this action by the agency will mostly affect stationary engine owners and operators and will not affect small governments. These final amendments will lead to a reduction in the cost burden.

E. Executive Order 13132: Federalism

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

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

This action 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 action. In the spirit of Executive Order 13175, and consistent with the EPA policy to promote communications between the EPA and tribal governments, the EPA has conducted outreach to tribal governments by providing information on the rule during National Tribal Air Association/EPA Policy Calls.

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

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

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

This action is not 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. This action reduces the burden of the rule on owners and operators of stationary engines by providing less burdensome compliance demonstration methods to owners and operators and greater flexibility in the operation of emergency engines. As a result of these changes, the EPA anticipates a substantial reduction in the cost burden associated with this rule.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (''NTTAA''), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs the 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 the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards.

This rulemaking involves technical standards. The EPA has decided to use EPA Method 25A of 40 CFR part 60, appendix A. While the agency identified two voluntary consensus standards as being potentially applicable, the EPA has decided not to use them in this rulemaking. The two candidate voluntary consensus standards, ISO 14965:2000(E) and EN 12619 (1999), identified would not be practical due to lack of equivalency, documentation, validation data and other important technical and policy considerations. The search and review results have been documented and are placed in the docket for this final rule.

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

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

The EPA has concluded that it is not feasible to determine whether there would be disproportionately high and adverse human health or environmental effects on minority, low income or indigenous populations from this final rule, as the EPA does not have specific information about the location of the stationary RICE affected by this final rule. The EPA has taken steps to reduce the impact of the final changes for SI engines by limiting the subcategory for remote engines to those that are not in populated areas.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A Major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is a ''major rule'' as defined by 5 U.S.C. 804(2). This rule will be effective on April 1, 2013.

List of Subjects

40 CFR Part 60

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

40 CFR Part 63

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

Dated: January 14, 2013.

Lisa P. Jackson,

Administrator.

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

PART 60—[AMENDED]

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

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

Subpart A—[Amended]

■ 2. Section 60.17 is amended by adding paragraph (r) to read as follows:

§ 60.17 Incorporations by reference.

* * * * *

(r) The following material is available from the North American Electric Reliability Corporation, 3353 Peachtree Road NE., Suite 600, North Tower, Atlanta, GA 30326, *http://www.nerc.com*, and is available at the following Web site: *http://www.nerc.com/files/EOP-002-3_1.pdf*.

(1) North American Electric Reliability Corporation, Reliability Standards for the Bulk of Electric Systems of North America, Reliability Standard EOP–002–3, Capacity and Energy Emergencies, updated November 19, 2012, IBR approved for §§ 60.4211(f) and 60.4243(d).

(2) [Reserved]

Subpart IIII—[Amended]

■ 3. Section 60.4207 is amended by revising paragraph (b) to read as follows:

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

* * * * *

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

* * * * *

■ 4. Section 60.4211 is amended by revising paragraph (f) to read as follows:

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

* * * * *

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local

transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

* * * * *

■ 5. Section 60.4214 is amended by adding paragraph (d) to read as follows:

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

* * * * *

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 60.4211(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in § 60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.

■ 6. Section 60.4219 is amended by revising the definition of ''Emergency stationary internal combustion engine'' to read as follows:

§ 60.4219 What definitions apply to this subpart?

* * * * *

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in § 60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in § 60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 60.4211(f).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 60.4211(f)(2)(ii) or (iii) and § 60.4211(f)(3)(i).

* * * * *

Subpart JJJJ—[Amended]

■ 7. Section 60.4231 is amended by revising paragraphs (b) through (d) to read as follows:

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

* * * * *

(b) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that use gasoline and that are manufactured on or after the applicable date in § 60.4230(a)(2), or manufactured on or after the applicable date in § 60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE with a maximum engine power greater than 25 HP and less than 130 HP that use gasoline and that are manufactured on or after the applicable date in § 60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cubic centimeters (cc) that use gasoline to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

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

engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc that are rich burn engines that use LPG to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(d) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) under the voluntary manufacturer certification program described in this subpart must certify those engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers who choose to certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP (except gasoline and rich burn engines that use LPG), must certify those engines to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc (except gasoline and rich burn engines that use LPG) to the certification emission standards for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate. For stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) manufactured prior to January 1, 2011, manufacturers may choose to certify these engines to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP.

* * * * *

■ 8. Section 60.4243 is amended by revising paragraph (d) to read as follows:

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

* * * * *

(d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

* * * * *

■ 9. Section 60.4245 is amended by adding paragraph (e) to read as follows:

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

* * * * *

(e) If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually

obligated to be available for more than 15 hours per calendar year for the purposes specified in § 60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in § 60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs (e)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 60.4243(d)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 60.4243(d)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 60.4243(d)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in § 60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in § 60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.

■ 10. Section 60.4248 is amended by revising the definition of ''Emergency stationary internal combustion engine'' to read as follows:

§ 60.4248 What definitions apply to this subpart?

* * * * *

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in § 60.4243(d) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in § 60.4243(d), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 60.4243(d).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 60.4243(d)(2)(ii) or (iii) and § 60.4243(d)(3)(i).

* * * * *

■ 11. Table 2 to Subpart JJJJ of part 60 is revised to read as follows:

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

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

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to § 60.4244.	a. limit the concentration of NO_X in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A or ASTM Method D6522–00 (Reapproved 2005).[a e]	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A or ASTM Method D6522–00 (Reapproved 2005).[a e]	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60, appendix A.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.[e]	(c) Measurements to determine moisture must be made at the same time as the measurementfor NO_X concentration.

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

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

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

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

[a] You may petition the Administrator for approval to use alternative methods for portable analyzer.
[b] You may use ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses, for measuring the O_2 content of the exhaust gas as an alternative to EPA Method 3B.
[c] You may use EPA Method 18 of 40 CFR part 60, appendix, provided that you conduct an adequate presurvey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (*http://www.epa.gov/ttn/emc/prelim/otm11.pdf*).
[d] You may use ASTM D6420–99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic.
[e] Incorporated by reference, see 40 CFR 60.17.

PART 63—[AMENDED]

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

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

Subpart A—[Amended]

■ 13. Section 63.14 is amended by:
■ a. Revising paragraphs (b)(28) and (b)(54);
■ b. Adding paragraph (d)(10);
■ c. Revising paragraph (i)(1); and
■ d. Adding paragraph (s) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(b) * * *

(28) ASTM D6420–99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (Approved October 1, 2004), IBR approved for §§ 60.485(g), 60.485a(g), 63.457(b), 63.772(a) and (e), 63.1282(a) and (d), 63.2351(b), 63.2354(b) and table 8 to subpart HHHHHHH of this part.

* * * * *

(54) ASTM D6348–03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, approved 2003, IBR approved for §§ 63.457, 63.1349, table 4 to subpart DDDD of this part, table 4 to subpart ZZZZ of this part, and table 8 to subpart HHHHHHH of this part.

* * * * *

(d) * * *

(10) Alaska Statute, Title 42—Public Utilities And Carriers And Energy Programs, Chapter 45—Rural and Statewide Energy Programs, Article 1, Power Assistance Programs, Sec. 42.45.045. Renewable energy grant fund and recommendation program, effective May 3, 2012, available at *http://www.legis.state.ak.us/basis/folio.asp*, IBR approved for § 63.6675.

* * * * *

(i) * * *

(1) ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [part 10, Instruments and Apparatus], issued August 31, 1981, IBR approved for §§ 63.309(k), 63.457(k), 63.772(e) and (h), 63.865(b), 63.1282(d) and (g), 63.3166(a), 63.3360(e), 63.3545(a), 63.3555(a), 63.4166(a), 63.4362(a), 63.4766(a), 63.4965(a), 63.5160(d), 63.9307(c), 63.9323(a), 63.11148(e), 63.11155(e), 63.11162(f), 63.11163(g), 63.11410(j), 63.11551(a), 63.11646(a), 63.11945, table 5 to subpart DDDDD of this part, table 4 to subpart JJJJJ of this part, table 5 to subpart UUUUU of this part, and table 1 to subpart ZZZZZ of this part.

* * * * *

(s) The following material is available from the North American Electric Reliability Corporation, 3353 Peachtree Road NE., Suite 600, North Tower, Atlanta, GA 30326, *http://www.nerc.com*, and is available at the following Web site: *http://www.nerc.com/files/EOP-002-3_1.pdf*.

(1) North American Electric Reliability Corporation, Reliability Standards for the Bulk of Electric Systems of North America, Reliability Standard EOP–002–3, Capacity and Energy Emergencies, updated November 19, 2012, IBR approved for § 63.6640(f).

(2) [Reserved]

Subpart ZZZZ—[Amended]

■ 14. Section 63.6585 is amended by adding paragraph (f) to read as follows:

§ 63.6585 Am I subject to this subpart?

* * * * *

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in § 63.6675, which includes operating according to the provisions specified in § 63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in § 63.6640(f)(4)(ii).

■ 15. Section 63.6590 is amended by revising paragraphs (b)(1)(i) and (b)(3)(iii) and removing paragraphs (b)(3)(vi) through (viii).

The revisions read as follows.

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

* * * * *

(b) * * *

(1) * * *

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

* * * * *

(3) * * *

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

* * * * *

■ 16. 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, operating limitations and other requirements 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 CI 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 CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI 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 SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

* * * * *

■ 17. Section 63.6602 is revised to read as follows:

§ 63.6602 What emission limitations and other requirements 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 and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

■ 18. Section 63.6603 is amended by:

■ a. Revising the section heading;

■ b. Revising paragraph (a);

■ c. Revising paragraph (b); and

■ d. Adding paragraphs (c) through (f).

The revisions and addition read as follows:

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

* * * * *

(a) 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 Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in § 63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the

engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in § 63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in § 63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in § 63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in § 63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

■ 19. Section 63.6604 is revised to read as follows:

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

(a) If you own or operate an existing non-emergency, non-black start 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.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2), or are on offshore vessels that meet § 63.6603(c) are exempt from the requirements of this section.

■ 20. 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, operating limitations, and other requirements in this subpart that apply to you at all times.

* * * * *

■ 21. Section 63.6620 is amended by revising paragraphs (b), (d) and (e) to read as follows:

§ 63.6620 What performance tests and other procedures must I use?

* * * * *

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

* * * * *

(d) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (Eq.\ 1)$$

compliance with the percent reduction requirement:

Where:

C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

C_o = concentration of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

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

$$F_O = \frac{0.209\ F_d}{F_C} \quad (Eq.\ 2)$$

Where:

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

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

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

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu)

(ii) Calculate the CO_2 correction factor for correcting

$$X_{CO2} = \frac{5.9}{F_O} \quad (Eq.\ 3)$$

measurement data to 15 percent O_2, as follows:

Where:

X_{CO2} = CO_2 correction factor, percent.

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

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad (Eq.\ 4)$$

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2.

C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X_{CO2} = CO_2 correction factor, percent.

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

* * * * *

■ 22. Section 63.6625 is amended by:

■ a. Revising paragraph (a) introductory text;

■ b. Revising the first sentence in paragraph (b) introductory text;

■ c. Revising paragraph (b)(1)(iv);

■ d. Revising paragraph (e)(6),

■ e. Revising paragraph (g),

■ f. Revising paragraph (i); and

■ g. Revising paragraph (j).

The revisions read as follows:

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

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O_2 or CO_2 according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

* * * * *

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. * * *

(1) * * *

(iv) Ongoing operation and maintenance procedures in accordance with provisions in § 63.8(c)(1)(ii) and (c)(3); and

* * * * *

(e) * * *

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

* * * * *

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet § 63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

* * * * *

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20

percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

■ 23. Section 63.6630 is amended by revising the section heading and paragraph (a) and adding paragraphs (d) and (e) to read as follows:

§ 63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

* * * * *

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

■ 24. Section 63.6640 is amended by:

■ a. Revising the section heading;

■ b. Revising paragraph (a);

■ c. Adding paragraph (c); and

■ d. Revising paragraph (f).

The revisions and addition read as follows:

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

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements 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.

* * * * *

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

* * * * *

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, 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.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

■ 25. Section 63.6645 is amended by adding paragraph (i) to read as follows:

§ 63.6645 What notifications must I submit and when?

* * * * *

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in § 63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in § 63.6603(d) and identifying the state or local regulation that the engine is subject to.

■ 26. Section 63.6650 is amended by adding paragraph (h) to read as follows:

§ 63.6650 What reports must I submit and when?

* * * * *

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 63.13.

■ 27. Section 63.6655 is amended by revising paragraph (f) introductory text to read as follows:

§ 63.6655 What records must I keep?

* * * * *

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, 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. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

* * * * *

■ 28. Section 63.6675 is amended by:

■ a. Adding in alphabetical order the definition of *Alaska Railbelt Grid;*

■ b. Adding in alphabetical order the definition of *Backup power for renewable energy;*

■ c. Revising the definition of *Emergency stationary RICE;* and

■ d. Adding in alphabetical order the definition of *Remote stationary RICE.*

The additions and revision read as follows.

§ 63.6675 What definitions apply to this subpart?

* * * * *

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

* * * * *

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see § 63.14).

* * * * *

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in § 63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 63.6640(f)(2)(ii) or (iii) and § 63.6640(f)(4)(i) or (ii).

* * * * *

Remote stationary RICE means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

* * * * *

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

As stated in §§ 63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed

4SRB stationary RICE >500 HP located at a major source of HAP emissions:

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

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions 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 existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions 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;	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.[1]
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions 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 existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions 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.	Comply with any operating limitations approved by the Administrator.

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

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

As stated in §§ 63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

TABLE 2b TO SUBPART ZZZZ OF PART 63—OPERATING LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND CI STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS, NEW AND RECONSTRUCTED 4SLB STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS, EXISTING CI STATIONARY RICE >500 HP

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions 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.[1]
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO 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 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.[1]
3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and	Comply with any operating limitations approved by the Administrator.

TABLE 2b TO SUBPART ZZZZ OF PART 63—OPERATING LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND CI STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS, NEW AND RECONSTRUCTED 4SLB STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS, EXISTING CI STATIONARY RICE >500 HP—Continued

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

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

As stated in §§ 63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

TABLE 2c TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING COMPRESSION IGNITION STATIONARY RICE LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS AND EXISTING SPARK IGNITION STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE [1].	a. Change oil and filter every 500 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[3]
2. Non-Emergency, non-black start stationary CI RICE <100 HP.	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP.	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O_2.	
4. Non-Emergency, non-black start CI stationary RICE 300>HP≤500.	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP.	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE.	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.[3]	

TABLE 2c TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING COMPRESSION IGNITION STATIONARY RICE LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS AND EXISTING SPARK IGNITION STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS—Continued

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP.	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500.	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O_2.	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500.	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O_2.	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500.	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O_2.	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.	

[1] If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[2] Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

[3] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

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

As stated in §§ 63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

TABLE 2d TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING STATIONARY RICE LOCATED AT AREA SOURCES OF HAP EMISSIONS

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP.	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500.	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP.	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	

TABLE 2d TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING STATIONARY RICE LOCATED AT AREA SOURCES OF HAP EMISSIONS—Continued

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE.	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP.	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP.	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year.	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP.	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP.	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year.	Install NSCR to reduce HAP emissions from the stationary RICE.	

TABLE 2d TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING STATIONARY RICE LOCATED AT AREA SOURCES OF HAP EMISSIONS—Continued

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

[1] Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2] If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

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

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

TABLE 3 TO SUBPART ZZZZ OF PART 63—SUBSEQUENT PERFORMANCE TESTS

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources.	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE ≥5,000 HP located at major sources.	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤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, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE.	Limit or reduce CO emissions and not using a CEMS.	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE.	Limit or reduce CO emissions and not using a CEMS.	Conduct subsequent performance tests every 8,760 hours or 5 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.

■ 34. Table 4 to Subpart ZZZZ of Part 63 is revised to read as follows:

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:

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

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) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (Reapproved 2005).[a c]	(a) 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) ASTM D6522–00 (Reapproved 2005)[a b c] or Method 10 of 40 CFR part 60, appendix A.	(a) The CO concentration must be at 15 percent O_2, dry basis.

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

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
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 (Reapproved 2005).[a]	(a) measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde or THC 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]	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device.	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03,[a] 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. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device.	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A.	(a) THC 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.
		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 (Reapproved 2005).[a]	(a) measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde or CO 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]	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03,[a] 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 c] Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03.[a]	(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 or longer runs.

[a] Incorporated by reference, see 40 CFR 63.14. You may also obtain copies from University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.
[b] You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03.
[c] ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.

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

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:

TABLE 5 TO SUBPART ZZZZ OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS, OPERATING LIMITATIONS, AND OTHER REQUIREMENTS

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP.	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. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP.	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS.	i. The average CO concentration determined from the initial performance test is less than or equal to the CO 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.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP.	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.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP.	a. Limit the concentration of CO, and not using oxidation catalyst.	i. The average CO concentration determined from the initial performance test is less than or equal to the CO 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.
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP.	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.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP.	a. Limit the concentration of CO, and using a CEMS.	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at the 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

TABLE 5 TO SUBPART ZZZZ OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS, OPERATING LIMITATIONS, AND OTHER REQUIREMENTS—Continued

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP.	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, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; 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.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP.	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 or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; 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.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP.	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.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP.	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.
11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP.	a. Reduce CO 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.

TABLE 5 TO SUBPART ZZZZ OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS, OPERATING LIMITATIONS, AND OTHER REQUIREMENTS—Continued

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP.	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.
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year.	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2; ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year.	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2, or the average reduction of emissions of THC is 30 percent or more; ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

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

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

TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS, AND OTHER REQUIREMENTS

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP.	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. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP.	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

TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS, AND OTHER REQUIREMENTS—Continued

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP.	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, 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 or concentration 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, or that the emission remain at or below the CO concentration limit; 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. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP.	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. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP.	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. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP.	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent.[a]
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP.	a. 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.

TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS, AND OTHER REQUIREMENTS—Continued

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP.	a. 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 emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE.	a. Work or 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.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE.	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst.	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; 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.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE.	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst.	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; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and

TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS, AND OTHER REQUIREMENTS—Continued

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		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.
12. Existing limited use CI stationary RICE >500 HP.	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst.	i. Conducting performance tests every 8,760 hours or 5 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; 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.
13. Existing limited use CI stationary RICE >500 HP.	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst.	i. Conducting performance tests every 8,760 hours or 5 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; 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.
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year.	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.

TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS, AND OTHER REQUIREMENTS—Continued

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year.	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent $O_{2,}$ or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

[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.

■ 37. Table 7 to Subpart ZZZZ of Part 63 is revised to read as follows:

As stated in §63.6650, you must comply with the following requirements for reports:

TABLE 7 TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR REPORTS

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP.	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary RICE subject to numerical emission limitations.
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).

TABLE 7 TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR REPORTS—Continued

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in § 63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.
3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year.	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semiannually according to the requirements in § 63.6650(b)(1)–(5).
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in § 63.6640(f)(4)(ii).	Report	a. The information in § 63.6650(h)(1).	i. annually according to the requirements in § 63.6650(h)(2)–(3).

■ 38. Table 8 to Subpart ZZZZ of Part 63 is amended by:

■ a. Revising the entry for § 63.8(c)(1)(i);

■ b. Revising the entry for § 63.8(c)(1)(iii); and

■ c. Revising the entry for § 63.10(b)(1) to read as follows:

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

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

General Provisions Citation	Subject of Citation	Applies to Subpart	Explanation
* *	* *	*	* *
§ 63.8(c)(1)(i)	Routine and predictable SSM	No	
* *	* *	*	* *
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements.	No	
* *	* *	*	* *
§ 63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
* *	* *	*	* *

■ 39. Appendix A to Subpart ZZZZ of Part 63 is added to read as follows:

Appendix A—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

1.0 Scope and Application. What is this Protocol?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O_2) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O_2).

Analyte	CAS No.	Sensitivity
Carbon monoxide (CO)	630–08–0	Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O_2)	*7782–44–7*	

1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

1.4 Range. What is the targeted analytical range for this protocol?

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O_2, or no more than twice the permitted CO level.

1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

2.0 Summary of Protocol

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O_2 gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

3.0 Definitions

3.1 Measurement System. The total equipment required for the measurement of CO and O_2 concentrations. The measurement system consists of the following major subsystems:

3.1.1 Data Recorder. A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

3.1.2 Electrochemical (EC) Cell. A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

3.1.4 Moisture Removal System. Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

3.2 Nominal Range. The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

3.3 Calibration Gas. A vendor certified concentration of a specific analyte in an appropriate balance gas.

3.4 Zero Calibration Error. The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

3.5 Up-Scale Calibration Error. The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

3.7 Repeatability Check. A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

3.8 Sample Flow Rate. The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O_2 and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

4.0 Interferences.

When present in sufficient concentrations, NO and NO_2 are two gas species that have

been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

5.0 Safety. [Reserved]

6.0 Equipment and Supplies.

6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

6.2 Measurement System Components.

6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

6.2.5 Sample Pump. A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.8 Sample Flow Rate Monitoring. An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O_2 concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O_2; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

7.0 Reagents and Standards. What calibration gases are needed?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O_2. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ± 5 percent of the label value. Dry ambient air (20.9 percent O_2) is acceptable for calibration of the O_2 cell. If needed, any lower percentage O_2 calibration gas must be a mixture of O_2 in nitrogen.

7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

7.1.2 Up-Scale O_2 Calibration Gas Concentration.

Select an O_2 gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O_2. When the average exhaust gas O_2 readings are above 6 percent, you may use dry ambient air (20.9 percent O_2) for the up-scale O_2 calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO_2).

8.0 Sample Collection and Analysis

8.1 Selection of Sampling Sites.

8.1.1 Control Device Inlet. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the ''sample conditioning phase'' once per minute until constant readings are obtained. Then begin the ''measurement data phase'' and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the ''refresh phase'' by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the ''measurement data phase'' readings to calculate the average stack gas CO and O_2 concentrations.

8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than ± 10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than ± 3 percent, as instructed by the EC cell manufacturer.

9.0 Quality Control (Reserved)

10.0 Calibration and Standardization

10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

10.1.1 Zero Calibration. For both the O_2 and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ± 3 percent of the up-scale gas value or ± 1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ± 0.3 percent O_2 for the O_2 channel.

10.1.3 Up-Scale Calibration. Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this ''sample conditioning phase'' once per minute until readings are constant for at least two minutes. Then begin the ''measurement data phase'' and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the ''refresh phase'' by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

10.1.4 Up-Scale Calibration Error. The mean of the difference of the ''measurement data phase'' readings from the reported standard gas value must be less than or equal to ± 5 percent or ± 1 ppm for CO or ± 0.5 percent O_2, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single ''measurement data phase'' reading must be less than or equal to ± 2 percent or ± 1 ppm for CO or ± 0.5 percent O_2, whichever is less restrictive, respectively.

10.2 Post-Sampling Calibration Check. Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

11.0 Analytical Procedure

The analytical procedure is fully discussed in Section 8.

12.0 Calculations and Data Analysis

Determine the CO and O_2 concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the ''measurement data phase''.

13.0 Protocol Performance

Use the following protocols to verify consistent analyzer performance during each field sampling day.

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the ''measurement data phase''. The maximum allowable deviation from the mean for each of the individual readings is ± 2 percent, or ± 1 ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ± 2 percent *or ± 1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed*).

13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO_2 gas standards that are generally recognized as representative of diesel-fueled engine NO and NO_2 emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 Interference Response. The combined NO and NO_2 interference response should be less than or equal to ± 5 percent of the up-scale CO calibration gas concentration.

13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 Repeatability Check Calculations. Determine the highest and lowest average ''measurement data phase'' CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ± 3 percent or ± 1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 Pollution Prevention (Reserved)

15.0 Waste Management (Reserved)

16.0 Alternative Procedures (Reserved)

17.0 References

(1) ''Development of an Electrochemical Cell Emission Analyzer Test Protocol'', Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.

(2) ''Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers'', EMC Conditional Test Protocol 30 (CTM–30), Gas Research Institute Protocol GRI–96/0008, Revision 7, October 13, 1997.

(3) ''ICAC Test Protocol for Periodic Monitoring'', EMC Conditional Test Protocol 34 (CTM–034), The Institute of Clean Air Companies, September 8, 1999.

(4) ''Code of Federal Regulations'', Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1–4; 10.

TABLE 1: APPENDIX A—SAMPLING RUN DATA.

Facility_____ Engine I.D._____ Date_____

Run Type: ..... (__) (__) (__) (__)

(X) ..... Pre-Sample Calibration Stack Gas Sample Post-Sample Cal. Check Repeatability Check

Run #	1	1	2	2	3	3	4	4	Time	Scrub. OK	Flow- Rate
Gas	O_2	CO	O_2	CO	O_2	CO	O_2	CO	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sample Cond. Phase	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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Measurement Data Phase ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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