



TECHNICAL ASSISTANCE TOOL FOR ADDRESSING CLEAN AIR ACT REQUIREMENTS FOR RECIPROCATING INTERNAL COMBUSTION ENGINES AT DOE SITES

[This Technical Assistance Tool describes suggested non-mandatory approaches for meeting requirements. Technical Assistance Tools are not requirements documents and are not to be construed as requirements in any audit or appraisal for compliance with the parent Policy, Order, Notice or Manual.]



**Office of Environmental Protection, Sustainability
Support & Corporate Safety Analysis
Office of Health, Safety and Security
U.S. Department of Energy
Washington, D.C. 20585**

PREFACE

This document, *Technical Assistance Tool for Addressing Clean Air Act Requirements for Reciprocating Internal Combustion Engines at DOE Sites*, addresses U.S. Department of Energy (DOE) obligations under the Clean Air Act for operating reciprocating internal combustion engines.

Comments on this Technical Assistance Tool should be addressed to Office of Environmental Protection, Sustainability Support & Corporate Safety Analysis (HS-21), U.S. Department of Energy, 1000 Independence Ave., S.W., Washington, DC 20585.

Contact Name: John “Larry” Stirling
Phone: 202-586-2417
Facsimile: 202-586-7330
Email: John.Stirling@hq.doe.gov

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ABBREVIATIONS AND ACRONYMS

2S	two-stroke
2SLB	two-stroke lean burn
4S	four-stroke
4SLB	four-stroke lean burn
4SRB	four-stroke rich burn
ASTM	ASTM International, formerly the American Society for Testing and Materials
cc	cubic centimeter
CEMS	continuous emission monitoring system
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring system
CO	carbon monoxide
CO ₂	carbon dioxide
CPMS	continuous parametric monitoring system
DOE	U.S. Department of Energy
EDR	emergency demand response
EPA	U.S. Environmental Protection Agency
GOCO	Government owned, contractor operated
HAP	hazardous air pollutant
HP	horsepower
KOH	potassium hydroxide
LB	lean burn
LPG	liquefied petroleum gas
L/cyl	liters per cylinder
NESHAP	National Emissions Standard for Hazardous Air Pollutants (40 CFR, Part 63)

NFPA	National Fire Protection Association
NO _x	nitrogen oxides
NSCR	non-selective catalytic reduction
NSPS	New Source Performance Standards (40 CFR, Part 60)
PM	particulate matter
RATA	relative accuracy test audit
RB	rich burn
RICE	reciprocating internal combustion engines
SI	spark ignition
VOC	volatile organic compounds

CHAPTER 1 – INTRODUCTION

This document provides technical assistance to DOE program and field elements for complying with the Federal Clean Air Act regulations applicable to Reciprocating Internal Combustion Engines (RICE). RICE are stationary internal combustion engines that burn fuel to generate reciprocating motion. DOE sites likely operate a variety RICE for any of the following purposes: emergency electrical power, generation of electrical power at remote sites, remote welding equipment, emergency water pumps, testing cells for new fuels, inert gas production, gas or oil transmission and gas or oil production.

The Environmental Protection Agency (EPA) has created multiple national air pollution regulations to reduce air emissions from RICE. In many cases, these programs are implemented and enforced by State, local or tribal air agencies. Sites are encouraged to first work with their respective State, local or tribal air agency regarding specific interpretations or questions regarding any of the RICE regulations. If the air agency does not have the delegated responsibility from EPA for any of the RICE regulation, the site should contact the applicable regional EPA office (Appendix A).

The RICE regulations are applicable to the owner or operator of a facility (DOE site). For government owned, contractor operated (GOCO) sites, the determination for compliance with air pollution regulations should be defined in the contract between the contractor and DOE.

This document is divided into chapters that detail provisions of the New Source Performance Standards (NSPS) and the National Emissions Standards for Hazardous Air Pollutants (NESHAP) applicable to RICE. Each chapter is divided into five sections that detail the applicability of the regulation, (including exemptions), administrative and operational requirements within the regulation, alternative compliance options and specific requirements for new and/or modified sources. A matrix is provided for each of the four federal air regulations:

1. Subsection 3.1.1: Spark Ignition (SI) RICE NSPS;
2. Subsection 4.1.1: Compression Ignition (CI) RICE NSPS;
3. Subsection 6.1.1: RICE NESHAP; and
4. Subsection 7.1.1: Test Cell/Stand NESHAP.

Each matrix summarized the applicable requirements of the regulation to the different categories of RICE. The matrix should be consulted first to determine the applicable requirements; a more detailed explanation of the requirements, including references to the applicable regulation, is included in the sections of each chapter after the matrix. Finally, additional resources, initial notifications and the addresses of the EPA Regional Office are provided in the Appendices.

This document does not replace or supplant the requirements of any regulation, standard or law; it cannot be used to replace a comprehensive reading of the referenced regulations, standards or laws. This document serves to inform and explain the requirements of the RICE regulations and directs the user to the appropriate parts of the RICE regulations to better understand the requirements. This document cannot be used to replace a comprehensive reading of the referenced regulations.

SECTION 1.1 TWO STANDARDS

There are two types of Federal air standards applicable to RICE: (1) NSPS and (2) NESHAP. Each set of standards has two separate rules that may be applicable to a RICE. All four regulations are summarized in Table 1-1. It is possible for both the RICE NESHAP and either of the RICE NSPSs to be applicable to a RICE. A flowchart detailing applicability of both RICE NSPSs, the RICE NESHAP and the Engine Test Cell/Stand NESHAP is provided in Subsection 1.1.3.

Table 1.1 - Federal air regulations applicable to RICE			
Sources	Regulation	Chapter	Pollutants
CI RICE constructed after July 11, 2005	40 CFR, Part 60, Subpart IIII (NSPS)	2 & 3	Carbon Monoxide (CO) Hydrocarbons Nitrogen Oxides (NO _x) Non-Methane Hydrocarbons (NMHC) Particulate Matter (PM)
SI RICE constructed after June 12, 2006	40 CFR, Part 60, Subpart JJJJ (NSPS)	2 & 4	CO NO _x Volatile Organic Compounds (VOC)
All RICE (CI and SI)	40 CFR, Part 63, Subpart ZZZZ (NESHAP)	5 & 6	CO† Formaldehyde
Engine Test Cell/Stand at Major HAP Source	40 CFR, Part 63, Subpart P PPPP (NESHAP)	5 & 7	CO† Total Hydrocarbons‡ Organic Hazardous Air Pollutants (HAPs)

†EPA has established that CO is an appropriate surrogate for formaldehyde.

‡EPA has established that total hydrocarbons are an appropriate surrogate for organic HAPs.

1.1.1 RICE New Source Performance Standards

There are two separate RICE NSPSs: one applicable to CI RICE and one applicable to SI RICE. The CI RICE applies to sources constructed, reconstructed or modified after July 11, 2005. The SI RICE applies to sources constructed, reconstructed or modified after June 12, 2006.

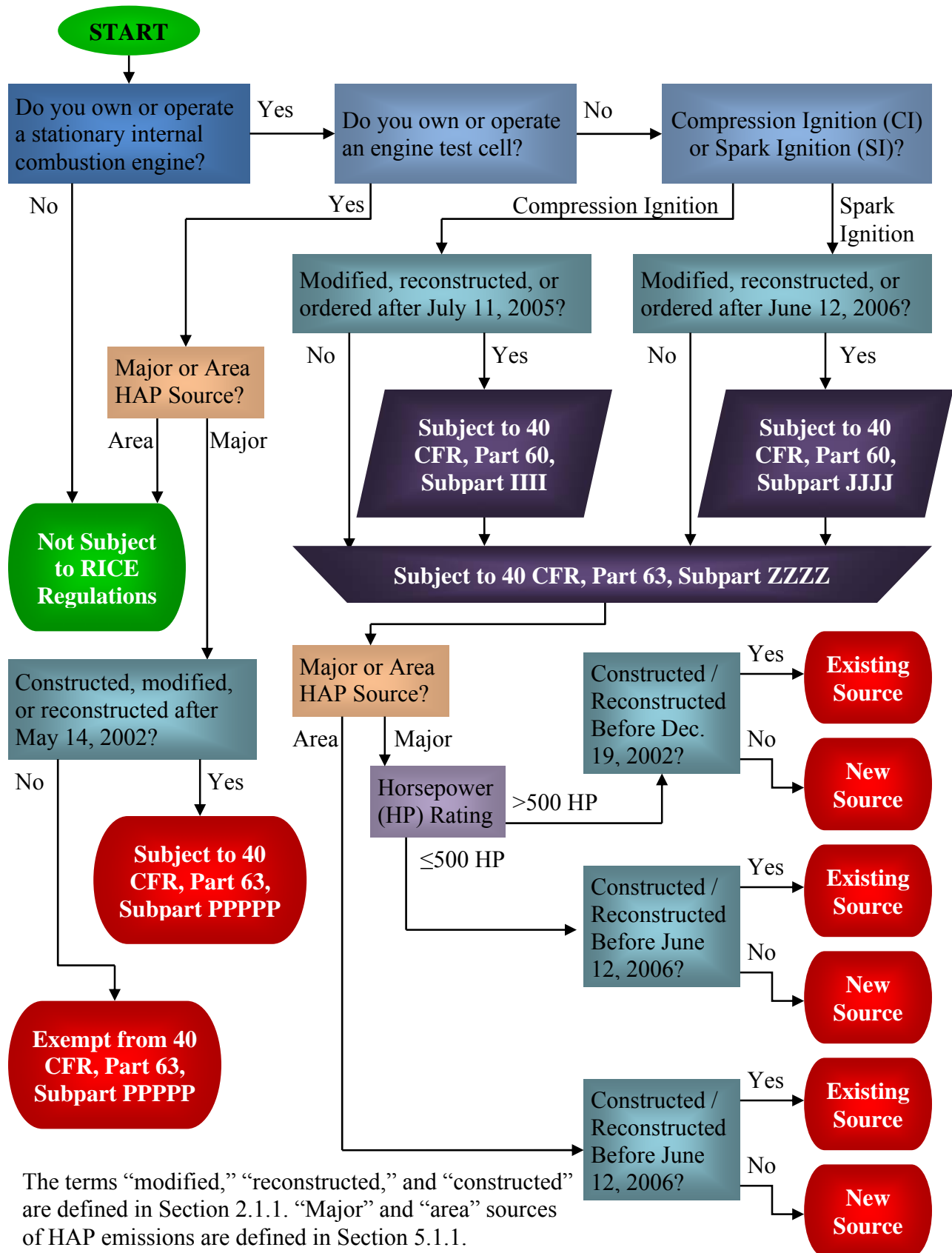
The requirements of both RICE NSPSs are summarized in the matrices included in Subsections 3.1.1 (CI RICE) and 4.1.1 (SI RICE).

1.1.2 RICE National Emissions Standards for Hazardous Air Pollutants

There are also two RICE NESHAPs. The first applies to all RICE, (except engine test cells/stands), regardless of their construction date. The second RICE NESHAP applies only to RICE used as engine test cells/stands and located at major sources of hazardous air pollutant HAP emissions.

The requirements of both RICE NESHAPs are summarized in the matrices included in Subsections 6.1.1 (RICE NESHAP) and 7.1.1 (Engine Test Cell/Stand NESHAP).

1.1.3 RICE Regulation Applicability Flowchart



CHAPTER 2 – NSPS OVERVIEW

Both NSPSs include emissions limits, notification and record keeping requirements and testing procedures. This chapter explains the applicability of each NSPS to RICE and certain exemptions that are common to both RICE NSPSs.

SECTION 2.1 APPLICABILITY

Both RICE NSPS are applicable only to new, modified or reconstructed RICE. RICE subject to either RICE NSPS are also subject to the RICE NESHAP, (Chapter 5).

2.1.1 Definitions

New units are RICE constructed after July 11, 2005 (CI RICE) [*§60.1(a) & §60.4200(a) (3)*] and June 12, 2006 (SI RICE) [*§60.1(a) & 4230(a) (4)*]. Construction starts when a RICE is ordered for a site [*§60.4200(a) & 4230(a)*].

A modification occurs when any physical or operational change to the RICE results in an increase in the emissions rate of any air pollutant in the NSPS [*§60.2 & 14*]. A change in operating hours is not a modification, but replacing fuel injectors to combust more fuel and generate more power over the same period is a modification, if it results in higher emissions of CO. Modified units are RICE modified after July 11, 2005 (CI RICE) [*§60.1(a) & §60.4200(a) (3)*] and June 12, 2006 (SI RICE) [*§60.1(a) & 4230(a) (4)*].

Reconstructed units are RICE reconstructed after July 11, 2005 (CI RICE) [*§60.1(a) & §60.4200(a) (3)*] and June 12, 2006 (SI RICE) [*§60.1(a) & 4230(a) (4)*]. EPA has defined reconstruction as occurring when the fixed capital cost of the new (replacement) components on an existing RICE exceeds 50 percent of the fixed capital cost to construct a comparable new RICE. Reconstructed RICE are subject to the NSPS and must meet the requirements for a new RICE in the year in which they were reconstructed [*§60.15*].

EPA has published guidance documents and determinations regarding modification and reconstruction of sources subject to the NSPS. The regulations defining modification and reconstruction are contained in the following sections of the NSPS:

1. Modification: §60.14; and
2. Reconstruction: §60.15.

Both NSPSs were written for RICE manufacturers, owners and operators. It is expected that new RICE purchased for DOE sites will be certified by the RICE manufacturer. In either case, the detailed requirements included in Chapters 3 and 4 apply to all RICE subject to an NSPS.

2.1.2 Modification and Reconstruction Requirements

Modified or reconstructed RICE must meet the requirements for a new RICE of similar power and displacement for the model year in which the RICE was reconstructed or modified [*§60.4204(e), 4205(f) & 4233(f)*]. Additionally: (1) the RICE must be certified by the manufacturer or rebuilder to the applicable emissions limit for a RICE of similar power and displacement for the model year in which the RICE was reconstructed or modified, or (2) an emission test must be completed by the site within 60 days of the reconstructed or modified RICE commencing operation [*§60.4211(e) & 4243(i)*].

2.1.3 Emergency Use Exemption

Emergency RICE are subject to limited requirements in both NSPSs. Emergency RICE may only be operated during maintenance checks, readiness testing and emergency operations. Readiness tests must be recommended by a Federal, State or local government, manufacturer, vendor or insurance company. Site-specific standards for RICE established by the DOE would be considered Federal standards. Total operation for maintenance checks and readiness tests is limited to a total of 100 hours per year. If a DOE site requires more than 100 hours per year for maintenance checks and readiness tests, a petition may be made to the Administrator for additional hours. Emergency RICE may be operated for up to 50 hours per year in other non-emergency situations, but the 50-hour allowance is included in the 100-hour-per-year total for maintenance and readiness checks. There is no limit on emergency operation of emergency RICE [*§60.4211(f) & 4243(d)*].

Operation of the emergency RICE for peak shaving, to generate income by supplying power to an electric grid, or to otherwise supply non-emergency power as part of a financial arrangement with another entity, is prohibited [*§60.4211(f) & 4243(d)*].

2.1.4 Additional Exemptions

Temporary replacement RICE, certified to meet the emissions limits of either NSPS and located at a facility for less than 1 year are exempt from the requirements of the applicable NSPS [*§60.4200(e) & 4230(f)*].

Additionally, a Federal agency responsible for national defense may request an exemption from any NSPS requirement for RICE it operates or owns. The request must be endorsed by the Federal agency responsible for national defense and include an explanation of the need for exemption [*§60.4200(d) & 4230(e)*]. To petition EPA for an exemption, submit a written request for exemption, including the explanation of need to:

Group Manager, Engine Compliance Programs Group
Engine Programs and Compliance Division (6403J)
Environmental Protection Agency
1200 Pennsylvania Ave., NW.
Washington, DC 20460 [*§89.908(b)*]

The exemption request can include exemption from the sulfur content limits of the CI RICE NSPS for diesel fuel used by a CI RICE [*§60.4207(e)*]; however, a similar exemption the sulfur content of the is not available for SI RICE [*§60.4235*].

CHAPTER 3 – COMPRESSION IGNITION NSPS

The following requirements from the CI RICE NSPS, (40 CFR, Part 60, Subpart IIII), are applicable only to new, reconstructed or modified CI RICE. The requirements for SI RICE are explained in Chapter 4. RICE subject to the CI RICE NSPS are also subject to the RICE NESHAP, (Chapter 5)

SECTION 3.1 APPLICABILITY

This NSPS does not apply to CI RICE being tested at an engine test cell/stand [*§60.4200(b)*]. The CI RICE NSPS is applicable to the following CI RICE:

1. All CI RICE constructed, modified or reconstructed after July 11, 2005;
2. New CI RICE manufactured after April 1, 2006, that are not fire pumps; and
3. Fire pumps manufactured after July 1, 2006 and certified by the NFPA [*§60.4200(a) (2)*].

Table 3.1 establishes the deadlines after which any RICE installed must meet the emissions requirements for the identified model year, except for the listed exclusions. The model-year engine performance requirements do not apply to RICE that are modified, reconstructed or moved from one location to another [*§60.4208*].

CI RICE	NSPS Citation	Installed After	Model Year Requirements [†]	Exclusions
All	§60.4028(a)	12/31/2008	2007	Fire Pumps Only
<25 Horsepower (HP)	§60.4028(b)	12/31/2009	2008	Fire Pumps Only
≥25 HP & <75 HP	§60.4028(c)	12/31/2014	2013	All Emergency CI RICE‡
≥75 HP & <175 HP	§60.4028(d)	12/31/2013	2012	All Emergency CI RICE‡
≥175 HP	§60.4028(e)	12/31/2012	2011	All Emergency CI RICE‡
≥750 HP	§60.4028(f)	12/31/2016	2015	All Emergency CI RICE‡
≥804 HP & <2,680 HP ≥10 L/cyl & <30 L/cyl	§60.4028(g)	12/31/2018	2017	All Emergency CI RICE‡

[†]Identified RICE (except excluded RICE) installed after the deadline must comply with the model year requirements for those RICE in the CI NSPS.

[‡]Emergency RICE include fire pumps.

Any CI RICE subject to emissions limits in the CI RICE NSPS must comply with those emissions limits for the life of the RICE [*§60.4206*].

3.1.1 CI RICE Matrix

The following matrix summarizes the requirements in the CI RICE NSPS, 40 CFR, Part 60, Subpart IIII.

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after April 1, 2006 AND before January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	<11 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 7.8 g/HP-hr CO - 6.0 g/HP-hr PM - 0.75 g/HP-hr	§60.4204(a) Table 1
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after April 1, 2006 AND before January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	≥11 HP & <25 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 7.1 g/HP-hr CO - 4.9 g/HP-hr PM - 0.60 g/HP-hr	§60.4204(a) Table 1
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after April 1, 2006 AND before January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	≥25 HP & <50 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 7.1 g/HP-hr CO - 4.1 g/HP-hr PM - 0.60 g/HP-hr	§60.4204(a) Table 1
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after April 1, 2006 AND before January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	≥50 HP & <175 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 6.9 g/HP-hr	§60.4204(a) Table 1
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements; Combined several sizes due to similar requirements.	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after April 1, 2006 AND before January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	≥175 HP	
Compliance Date:	On startup	
Emissions Limits:	HC - 1.0 g/HP-hr; NO _x - 6.9 g/HP-hr; CO - 8.5 g/HP-hr; and PM - 0.40 g/HP-hr	§60.4204(a) Table 1
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4211(a) §60.4214(a)(2) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.7(a)(1)&4214(a)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements; Combined several sizes due to similar requirements.	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after April 1, 2006 AND before January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	≥10 liters/cylinder & <30 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - 45.0 × N ^{-0.20} (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4204(a) §94.8(a)(1)
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4211(a) §60.4214(a)(2) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.7(a)(1)&4214(a)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	<3,000 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 89.112 and 89.113 or 40 CFR 1039.101, 1039.102, 1039.104, 1039.105, 1039.107, and 1039.115	§60.4204(b)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2007 AND before January 1, 2011	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	≥3,000 HP	
Compliance Date:	On startup	
Emissions Limits:	HC - 1.0 g/HP-hr NO _x - 6.9 g/HP-hr CO - 8.5 g/HP-hr PM - 0.40 g/HP-hr	§60.4204(b) Table 1
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4211(a) §60.4214(a)(2) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2011	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	≥3,000 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 89.112 and 89.113 or 40 CFR 1039.101, 1039.102, 1039.104, 1039.105, 1039.107, and 1039.115	§60.4204(b)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4211(a) §60.4214(a)(2) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2007 AND before January 1, 2013	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder AND ≥10 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - $45.0 \times N^{-0.20}$ (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4204(a) §94.8(a)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4211(a) §60.4214(a)(2) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2013 AND before January 1, 2014	
Compression Type:	Compression Ignition	
Displacement:	<15 liters/cylinder AND ≥ 10 liters/cylinder	
Horsepower Rating:	$\geq 4,958$ HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - $45.0 \times N^{-0.20}$ (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4204(b) §94.8(a)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4211(a) §60.4214(a)(2) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2013 AND before January 1, 2014	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder AND ≥ 15 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - $45.0 \times N^{-0.20}$ (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4204(b) §94.8(a)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4211(a) §60.4214(a)(2) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2013 AND before January 1, 2014	
Compression Type:	Compression Ignition	
Displacement:	<15 liters/cylinder AND \geq 10 liters/cylinder	
Horsepower Rating:	<4,958 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 1042	§60.4204(b)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4211(a) §60.4214(a)(2) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2014	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder AND ≥10 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 1042	§60.4204(b)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4211(a) §60.4214(a)(2) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after April 1, 2006 AND before January 1, 2012	
Compression Type:	Compression Ignition	
Displacement:	≥30 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 12.7 g/HP-hr if speed less than 130 rpm NO _x - (34 × rpm) ^{-0.2} g/HP-hr if speed ≥130 and <2,000 rpm NO _x - 7.3 g/HP-hr if speed ≥2,000 rpm PM - 0.11 g/HP-hr or 60% reduction	§60.4204(c)(1) §60.4204(c)(4)
Initial Test Date:	Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(a)
Test Cycle:	Annual	§60.4211(d)(3)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Conduct initial AND annual performance tests (if engine not certified); and Establish operating parameters for continuous monitoring; and Petition Administrator to accept continuous monitoring parameters.	§60.4211(a) §60.4214(a)(2) §60.4211(d)(1)&(3) §60.4211(d)(2)
Fuel Restrictions:	1000 ppm Diesel	§60.4207(d)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after January 1, 2012 AND before January 1, 2016	
Compression Type:	Compression Ignition	
Displacement:	≥30 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 10.7 g/HP-hr if speed less than 130 rpm NO _x - (33 × rpm) ^{-0.23} g/HP-hr if speed ≥130 and <2,000 rpm NO _x - 5.7 g/HP-hr if speed ≥2,000 rpm PM - 0.11 g/HP-hr or 60% reduction	§60.4204(c)(2) §60.4204(c)(4)
Initial Test Date:	Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(a)
Test Cycle:	Annual	§60.4211(d)(3)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Conduct initial AND annual performance tests (if engine not certified); and Establish operating parameters for continuous monitoring; and Petition Administrator to accept continuous monitoring parameters.	§60.4211(a) §60.4214(a)(2) §60.4211(d)(1)&(3) §60.4211(d)(2)
Fuel Restrictions:	1000 ppm Diesel	§60.4207(d)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after January 1, 2016	
Compression Type:	Compression Ignition	
Displacement:	≥30 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 2.5 g/HP-hr if speed less than 130 rpm NO _x - $(6.7 \times \text{rpm})^{-0.2}$ g/HP-hr if speed ≥130 and <2,000 rpm NO _x - 1.5 g/HP-hr if speed ≥2,000 rpm PM - 0.11 g/HP-hr or 60% reduction	§60.4204(c)(3) §60.4204(c)(4)
Initial Test Date:	Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(a)
Test Cycle:	Annual	§60.4211(d)(3)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Keep records of maintenance conducted on the engine; and Conduct initial AND annual performance tests (if engine not certified); and Establish operating parameters for continuous monitoring; and Petition Administrator to accept continuous monitoring parameters.	§60.4211(a) §60.4214(a)(2) §60.4211(d)(1)&(3) §60.4211(d)(2)
Fuel Restrictions:	1000 ppm Diesel	§60.4207(d)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	Within 30 days of beginning construction	§60.4214(a) & §60.7(a)(1)
Reporting:	N/A	
Special:	National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after April 1, 2006 AND before January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	HC - 1.0 g/HP-hr; NO _x - 6.9 g/HP-hr; CO - 8.5 g/HP-hr; and PM - 0.40 g/HP-hr	§60.4205(a) Table 1
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4209(a) §60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached.	§60.4209(b) §60.4214(c)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after April 1, 2006 AND before January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder AND ≥ 10 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - $45.0 \times N^{-0.20}$ (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4205(a) §94.8(a)(1)
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4209(a) §60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after January 1, 2007 AND before January 1, 2008	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	<50 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 89.112 and 89.113	§60.4205(b)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after January 1, 2008	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	<11 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 5.6 g/HP-hr CO - 6.0 g/HP-hr PM - 0.30 g/HP-hr	§60.4205(b) §60.4202(a)(1)(ii) Table 2
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after January 1, 2008	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	<25 HP & ≥11 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 5.6 g/HP-hr CO - 4.9 g/HP-hr PM - 0.30 g/HP-hr	§60.4205(b) §60.4202(a)(1)(ii) Table 2
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after January 1, 2008	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	<50 HP & ≥25 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 5.6 g/HP-hr CO - 4.1 g/HP-hr PM - 0.30 g/HP-hr	§60.4205(b) §60.4202(a)(1)(ii) Table 2
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after January 1, 2007	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	≤3,000 HP & ≥50 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 89.112 and 89.113	§60.4205(b) §60.4202(a)(2)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2007 AND before January 1, 2011	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	>3,000 HP	
Compliance Date:	On startup	
Emissions Limits:	HC - 1.0 g/HP-hr NO _x - 6.9 g/HP-hr CO - 8.5 g/HP-hr PM - 0.40 g/HP-hr	§60.4205(b) §60.4202(b)(1) Table 1
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2011	
Compression Type:	Compression Ignition	
Displacement:	<10 liters/cylinder	
Horsepower Rating:	>3,000 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 89.112 and 89.113	§60.4205(b) §60.4202(b)(2)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2007 AND before January 1, 2013	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder & ≥10 liters/cylinder	
Horsepower Rating:	All	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - $45.0 \times N^{-0.20}$ (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4205(b) §94.8(a)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2013	
Compression Type:	Compression Ignition	
Displacement:	<15 liters/cylinder & ≥10 liters/cylinder	
Horsepower Rating:	≥4,958 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - $45.0 \times N^{-0.20}$ (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4205(b) §94.8(a)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2013 AND before January 1, 2014	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder & ≥15 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - $45.0 \times N^{-0.20}$ (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4205(b) §94.8(a)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2014	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder & ≥15 liters/cylinder	
Horsepower Rating:	≥2,682 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 17.0 g/kW-hr (if less than 130 revolutions/minute); or NO _x - $45.0 \times N^{-0.20}$ (where N=maximum test speed in revolutions/minute); or NO _x - 9.8 g/kW-hr (if over 2,000 revolutions/minute).	§60.4205(b) §94.8(a)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2013	
Compression Type:	Compression Ignition	
Displacement:	<15 liters/cylinder & ≥10 liters/cylinder	
Horsepower Rating:	<4,958 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 1042	§60.4205(b) §60.4202(f)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2014	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder & ≥15 liters/cylinder	
Horsepower Rating:	<2,682 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by manufacturer; See 40 CFR 1042	§60.4205(b) §60.4202(f)(1)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency - not fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	After July 1, 2006 AND before January 1, 2011	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder	
Horsepower Rating:	<100 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 7.8 g/HP-hr (<11 HP AND >50 & <100 HP); 7.1 g/HP-hr (<50 HP & ≥11) CO - 6.0 g/HP-hr (<11 HP); 4.9 g/HP-hr (<25 & ≥11 HP); 4.1 g/HP-hr (<50 HP & ≥25 HP) or CO - 3.7 g/HP-hr (<100 HP & ≥50 HP) PM - 0.75 g/HP-hr (<11 HP); 0.60 g/HP-hr (<100 HP & ≥11 HP)	§60.4205(c) Table 4
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; and Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4209(a) §60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency fire pump; National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2011	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder	
Horsepower Rating:	<100 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 5.6 g/HP-hr (<50 HP); 3.5 g/HP-hr (<100 HP & ≥50 HP) PM - 0.30 g/HP-hr (<25 HP AND <100 HP & ≥50 HP); 0.22 g/HP-hr (<50 HP & ≥25 HP)	§60.4205(c) Table 4
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	After July 1, 2006 AND before January 1, 2010	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder	
Horsepower Rating:	<175 HP & ≥100 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 7.8 g/HP-hr CO - 3.7 g/HP-hr PM - 0.60 g/HP-hr	§60.4205(c) Table 4
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; and Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4209(a) §60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency fire pump; National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2010	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder	
Horsepower Rating:	<175 HP & ≥100 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 3.0 g/HP-hr PM - 0.22 g/HP-hr	§60.4205(c) Table 4
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	After July 1, 2006 AND before January 1, 2009	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder	
Horsepower Rating:	≤750 HP & ≥175 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 7.8 g/HP-hr CO - 2.6 g/HP-hr PM - 0.40 g/HP-hr	§60.4205(c) Table 4
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; and Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4209(a) §60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency fire pump; National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2009	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder	
Horsepower Rating:	≤750 HP & ≥175 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 3.0 g/HP-hr PM - 0.15 g/HP-hr	§60.4205(c) Table 4
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	After July 1, 2006 AND before January 1, 2008	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder	
Horsepower Rating:	>750 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 7.8 g/HP-hr CO - 2.6 g/HP-hr PM - 0.40 g/HP-hr	§60.4205(c) Table 4
Initial Test Date:	If choosing to conduct an emissions test per §60.4211(b): within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(a)
Test Cycle:	If choosing to conduct an emissions test per §60.4211(b): Initial ONLY	§60.4211(b)&(d)(1)
Test Notifications:	If choosing to conduct an emissions test per §60.4211(b): Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.4211(b) §60.8(d) §60.8(a)
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; and Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Choose one of the following: 1. Purchase an engine certified to 40 CFR 89 or 94. The engine must be installed and configured per manufacturer's recommendations; 2. Keep records of performance tests conducted on the engine or similar engine; 3. Keep records of manufacturer's data indicating compliance with emissions limits; 4. Keep records of control device vendor's data indicating compliance; or 5. Conduct an initial performance test.	§60.4209(a) §60.4211(a) §60.4211(b)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency fire pump; National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2008	
Compression Type:	Compression Ignition	
Displacement:	<30 liters/cylinder	
Horsepower Rating:	>750 HP	
Compliance Date:	On startup	
Emissions Limits:	NMHC + NO _x - 4.8 g/HP-hr PM - 0.15 g/HP-hr	§60.4205(c) Table 4
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Purchase only engines certified to emissions standards; and Engine must be installed and configured per manufacturer's specifications.	§60.4209(a) §60.4211(a) §60.4211(c)
Fuel Restrictions:	1. Low Sulfur Diesel (500 ppm) on and after October 1, 2007 2. Ultra Low Sulfur Diesel (15 ppm) on and after October 1, 2010	§60.4207(a) §60.4207(b)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency fire pump National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after April 1, 2006 AND before January 1, 2012	
Compression Type:	Compression Ignition	
Displacement:	≥30 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 12.7 g/HP-hr if speed less than 130 rpm NO _x - (34 × rpm) ^{-0.2} g/HP-hr if speed ≥130 and <2,000 rpm NO _x - 7.3 g/HP-hr if speed ≥2,000 rpm PM - 0.30 g/HP-hr	§60.4205(d)(1) §60.4205(d)(3)
Initial Test Date:	Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(a)
Test Cycle:	Initial ONLY	§60.4211(d)(1)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; or Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Conduct initial performance test ONLY (if engine not certified); and Establish operating parameters for continuous monitoring; and Petition Administrator to accept continuous monitoring parameters.	§60.4209(a) §60.4211(a) §60.4211(d)(1) §60.4211(d)(2)
Fuel Restrictions:	1000 ppm Diesel	§60.4207(d)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency (Including Fire Pump) National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Installation Date:	On or after January 1, 2012	
Compression Type:	Compression Ignition	
Displacement:	≥30 liters/cylinder	
Horsepower Rating:	Any	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 10.7 g/HP-hr if speed less than 130 rpm NO _x - (33 × rpm) ^{-0.23} g/HP-hr if speed ≥130 and <2,000 rpm NO _x - 5.7 g/HP-hr if speed ≥2,000 rpm PM - 0.30 g/HP-hr	§60.4205(d)(1) §60.4205(d)(3)
Initial Test Date:	Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(a)
Test Cycle:	Initial ONLY	§60.4211(d)(1)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Install a non-resettable hour meter on emergency engines not meeting limits; or Operate and maintain engine / control device per manufacturer's specifications; and Change only emissions-related settings authorized by the manufacturer; and Conduct initial performance test ONLY (if engine not certified); and Establish operating parameters for continuous monitoring; and Petition Administrator to accept continuous monitoring parameters.	§60.4209(a) §60.4211(a) §60.4211(d)(1) §60.4211(d)(2)
Fuel Restrictions:	1000 ppm Diesel	§60.4207(d)
Control Device:	Diesel particulate filter, if required to meet emissions limits.	§60.4209(b)
Monitoring:	If equipped with diesel particulate filter, must install backpressure monitor with high backpressure limit alarm; and Keep records of corrective actions if backpressure limit is approached. If equipped with non-resettable hour meter, keep records of emergency and non-emergency operation hours and reason for operating	§60.4209(b) §60.4214(c) §60.4214(b)
Initial Notification Date:	N/A	§60.4214(b)
Reporting:	N/A	
Special:	Emergency (Including Fire Pump) National Security Exemption also exempts Diesel Fuel Sulfur Requirements	§60.4207(e)

SECTION 3.2 ADMINISTRATIVE REQUIREMENTS

Administrative requirements are the paperwork, testing and monitoring requirements established in the NSPS. This section provides additional detail for specific administrative requirements summarized in the CI RICE Matrix in Subsection 3.1.1.

3.2.1 Recordkeeping

The following records must be kept onsite:

1. Copies of all RICE notifications that were submitted to EPA; and
2. Records detailing the maintenance conducted on a RICE [*§60.4214(a) (2) (i) & (ii)*].

For RICE that are certified by the manufacturer or rebuilder, keep onsite documentation that the RICE is certified and meets applicable emission limits of the SI RICE. If the RICE is not certified, keep documentation that demonstrates compliance with the applicable emission limits, (e.g. air emission testing reports) [*§60.4214(a) (2) (iii) & (iv)*].

All records must be kept for at least 2 years and must be readily available for review by EPA inspectors. Keeping 3 calendar years of records ensures that all of the required records are available for an inspection [*§60.7(f)*].

3.2.2 Notifications

The CI RICE NSPS requires facilities to notify EPA when certain CI RICE are installed or modified. These notifications allow EPA to maintain records of the type, location and installation dates for specific CI RICE. All notifications must be postmarked on or before the dates specified in the CI RICE Matrix (Subsection 3.1.1). Two copies of the notification should be submitted: one to the applicable EPA regional office (Appendix A) and another to the appropriate State, local or tribal air agency.

If required, an initial notification must be submitted no later than 30 days after the construction or reconstruction date (i.e. the date a RICE was ordered) [*§60.7(a) (1) & 4214(a) (1)*] and within 15 days of startup [*§60.7(a) (3)*]. An initial notification for the CI RICE NSPS is included in Appendix B; Appendix A includes addresses for the EPA regional offices.

A modification notification is required within 60 days of any RICE undergoing a modification, (i.e., increase in the emission rate of any air pollutant listed in a NSPS). The modification notification must describe the precise nature of the modification, current and proposed air emissions control equipment, maximum power rating of the RICE before and after the change and the expected completion date of the change [*§60.7(a) (4)*]. Appendix A includes addresses for the EPA regional offices.

3.2.3 Reporting

The CI RICE NSPS requires reports of emission test results, (Section 3.2.4) and regarding the testing and operation of continuous monitoring systems (CMS), (Section 3.2.5).

3.2.4 Emissions Testing

Emission testing (also called performance testing) is required for certain CI RICE. Generally, emission testing is required for large RICE or new, modified or reconstructed RICE that are not certified by a manufacturer or rebuilder.

Before an emission test can be conducted, two copies of the intent-to-test notification must be submitted at least 30 days before the scheduled test date: one to the EPA regional office and another to the State, local or tribal air agency [*§60.8(d)*]. Appendix A includes addresses for the EPA regional offices.

There are two types of emission tests: initial (one-time) and recurring (additional testing on a schedule). If required, an initial emission test must be conducted within 60 days of the RICE achieving its maximum power rate, but no later than 180 days after initial startup [*§60.8(a)*]. Recurring emission tests must be conducted according to the schedule in the CI RICE NSPS. Emission testing must follow EPA reference test methods and include any additional requirements specified in the CI RICE NSPS [*§60.8(b)*].

The emission test report must compare the measured emissions from the test to the emissions limits of the CI RICE NSPS, using the calculations specified in §60.4212 and 4213. The test report must be submitted to EPA within 60 days of the emission test.

Emission testing for CI RICE is structured according to engine displacement, and the procedures are summarized in Table 3.2. For CI RICE less than 30 liters/cylinder (L/cyl), emissions testing requirements are specified in 40 CFR, Parts 89, 94, 1039 and 1042 and testing methods are specified in 40 CFR, Part 1065 [*§60.4212*].

Table 3.2 - Emission testing procedures for CI RICE			
Engine Displacement	Operating Rate	Pollutant	Test Methods
<10 L/cyl	N/A	NMHC NO _x CO Particulate Matter (PM)	§1065
≥10 L/cyl & <30 L/cyl	N/A	NMHC NO _x CO PM	§1065
≥30 L/cyl	±10 percent of 100 percent Peak Load	NO _x	Method 7E or 320 ASTM D 6348–03
		PM	Method 5

3.2.5 Control Equipment Monitoring

If control equipment is installed on CI RICE to meet the emissions limits of the CI RICE NSPS, then operating parameters must be developed that demonstrate the control equipment is functioning effectively. The requirements for petitioning EPA to continuously monitor (via a CMS) and test control equipment are provided in §60.4211(d). Additional requirements for CMS are detailed in the following parts of the NSPS:

1. Notifications: §60.7; and
2. Monitoring: §60.13.

SECTION 3.3 OPERATIONAL REQUIREMENTS

Operational requirements are standards and restrictions established in the NSPS applicable to the operation of the RICE. This section provides additional detail for specific operational requirements summarized in the CI RICE Matrix in Subsection 3.1.1.

3.3.1 Emergency RICE

A non-resettable hour meter is required for all emergency RICE that do not meet the applicable emissions limits for non-emergency RICE in the CI RICE NSPS, (i.e. not certified by the manufacturer). Operators must keep records of RICE operation during both emergency and non-emergency service and the nature of the emergency. The records must include RICE operating time and the reason the RICE was in operation (e.g. readiness testing, power outage). Table 3.3 lists the types of CI RICE requiring a non-resettable hour meter [*§60.4214(b)*]. Since the requirements for emergency RICE require keeping records of the hours of operation in emergency and non-emergency service, an hour meter is recommended for all emergency RICE.

Table 3.3 – Emergency CI RICE requiring non-resettable hour meter		
RICE Size	RICE Type	RICE Model Year
≥175 HP	Emergency (includes fire pumps)	2011
≥75 HP & <175 HP	Emergency (includes fire pumps)	2012
≥25 HP & <75 HP	Emergency (includes fire pumps)	2013

3.3.2 Operation & Maintenance Instructions

All CI RICE and associated control equipment must be operated and maintained according to the manufacturer’s written instructions. Operators are only allowed to change RICE settings expressly permitted by the manufacturer in its written instructions. If the manufacturer’s written instructions are not followed or unavailable, the CI RICE is subject to the additional requirements included in Table 3.4 [*§60.4211(g)*].

Table 3.4 - Additional requirements for RICE without manufacturer’s instructions		
Section	CI RICE	Additional Requirements
§60.4211(g)(1)	<100 HP	<ol style="list-style-type: none"> 1. Develop and follow a maintenance plan, keep records of maintenance conducted to demonstrate compliance with NSPS and maintain and operate the RICE to minimize emissions; and 2. Conduct an initial emission test within 1 year.
§60.4211(g)(2)	≥100 HP & <500 HP	<ol style="list-style-type: none"> 1. Develop and follow a maintenance plan, keep records of maintenance conducted to demonstrate compliance with NSPS and maintain and operate the RICE to minimize emissions; and 2. Conduct an initial emission test within 1 year.

Table 3.4 continues on the next page.

Table 3.4 - Additional requirements for RICE without manufacturer's instructions		
Section	CI RICE	Additional Requirements
§60.4211(g)(3)	≥500 HP	<ol style="list-style-type: none"> 1. Develop and follow a maintenance plan, records of maintenance conducted to demonstrate compliance with NSPS and maintain and operate the RICE to minimize emissions; 2. Conduct an initial emission test within 1 year; and 3. Conduct subsequent emission tests every 3 years or 8,760 hours of RICE operation, whichever comes first.

3.3.3 Operational Restrictions

RICE using diesel particulate filters must be equipped with a backpressure monitor that notifies the operator when the high backpressure limit of the RICE is approached [§60.4209(b)]. The operator must keep records of corrective actions taken after the high backpressure limit has been approached [§60.4214(c)].

3.3.4 Fuel Restrictions

The CI RICE NSPS contains restrictions on the sulfur content of the fuel used by the CI RICE [§60.4207]. These restrictions are included in the matrix in Subsection 3.1.1. Sources subject to a national security exemption are exempt from the sulfur content restrictions of the CI RICE NSPS [§60.4207(e)]. See Subsection 2.1.3 for additional information regarding the application for a national security exemption.

All CI RICE must meet the applicable emissions limits of the CI RICE NSPS, regardless of the fuel combusted [§60.4217]. CI RICE combusting an alternative fuel that cannot meet the emissions limits of the CI RICE NSPS can petition the EPA for alternative emissions limits, as described in Section 3.4.

SECTION 3.4 ALTERNATIVE OPTIONS

A petition for alternative emission limits can be made to the EPA Administrator for CI RICE that combust a fuel that was not certified by the manufacturer for that RICE. The petition must include a demonstration of why the preferred fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health, environmental and other factors [§60.4217].

The procedures for petitioning the EPA for and employing alternative monitoring procedures for the RICE, CMS and/or control equipment are detailed in the following parts of the NSPS:

1. Emission Testing: §60.8; and
2. Monitoring: §60.13.

SECTION 3.5 MODIFICATION AND RECONSTRUCTION REQUIREMENTS

Modified or reconstructed CI RICE must meet the requirements for a new CI RICE of similar power and displacement for the model year in which the engine was reconstructed or modified [*§60.4204(e) & 4205(f)*].

Notification requirements for modifications are included in Subsection 3.2.2.

CHAPTER 4 – SPARK IGNITION NSPS

The following requirements from the SI RICE NSPS, (40 CFR, Part 60, Subpart JJJJ), are applicable only to new, reconstructed or modified SI RICE. The requirements for CI RICE are explained in Chapter 3. RICE subject to the SI RICE NSPS are also subject to the RICE NESHAP, (Chapter 5).

SECTION 4.1 APPLICABILITY

This NSPS does not apply to SI RICE being tested at an engine test cell/stand [*§60.4230(b)*]. This NSPS is applicable to: (1) all SI RICE modified or reconstructed after June 12, 2006; and (2) to RICE constructed (ordered for the site) after June 12, 2006 and manufactured after the dates provided in Table 4.1 [*§60.4230(a) (4)*].

Table 4.1 - New RICE NSPS applicability dates		
NSPS Citation	RICE Description	SI RICE Manufacture Date
§60.4230(a)(4)(i)	All SI RICE $\geq 1,350$ HP	On or after 07/01/2007
	All SI RICE except Lean Burn ≥ 500 HP	
§60.4230(a)(4)(ii)	≥ 500 HP & $< 1,350$ HP Lean Burn	On or after 01/01/2008
§60.4230(a)(4)(iii)	All SI RICE < 500 HP	On or after 07/01/2008
§60.4230(a)(4)(iv)	All Emergency SI RICE > 25 HP	On or after 01/01/2009

Any SI RICE subject to emissions limits in the SI RICE NSPS must comply with those emissions limits for the life of the RICE [*§60.4234*].

4.1.1 SI RICE Matrix

The following matrix summarizes the requirements in the SI RICE NSPS, 40 CFR, Part 60, Subpart JJJJ.

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2007 AND before July 1, 2010	
Compression Type:	Spark Ignition	
Power Cycle:	Rich Burn	
Horsepower Rating:	≥500 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 2.0 g/HP-hr OR 160 ppmvd @ 15% O ₂ CO - 4.0 g/HP-hr OR 540 ppmvd @ 15% O ₂ (or 40 CFR 1048) VOC - 1.0 g/HP-hr OR 86 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2009 must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2010	
Compression Type:	Spark Ignition	
Power Cycle:	Any	
Horsepower Rating:	≥500 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 1.0 g/HP-hr OR 82 ppmvd @ 15% O ₂ CO - 2.0 g/HP-hr OR 270 ppmvd @ 15% O ₂ (or 40 CFR 1048, if before January 1, 2011) VOC - 0.7 g/HP-hr OR 60 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2009, (for lean burn engines ≥500 HP & <1,350 HP: after January 1, 2010), must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2007 AND before July 1, 2010	
Compression Type:	Digester / Landfill Gas Spark Ignition	
Power Cycle:	Rich Burn	
Horsepower Rating:	≥500 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 3.0 g/HP-hr OR 220 ppmvd @ 15% O ₂ CO - 5.0 g/HP-hr OR 610 ppmvd @ 15% O ₂ (or 40 CFR 1048) VOC - 1.0 g/HP-hr OR 80 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2009 must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2007 AND before July 1, 2010	
Compression Type:	Spark Ignition	
Power Cycle:	Lean Burn	
Horsepower Rating:	≥1,350 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 2.0 g/HP-hr OR 160 ppmvd @ 15% O ₂ CO - 4.0 g/HP-hr OR 540 ppmvd @ 15% O ₂ (or 40 CFR 1048) VOC - 1.0 g/HP-hr OR 86 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2009 must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2007 AND before July 1, 2010	
Compression Type:	Digester / Landfill Gas Spark Ignition	
Power Cycle:	Lean Burn	
Horsepower Rating:	≥1,350 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 3.0 g/HP-hr OR 220 ppmvd @ 15% O ₂ CO - 5.0 g/HP-hr OR 610 ppmvd @ 15% O ₂ (or 40 CFR 1048) VOC - 1.0 g/HP-hr OR 80 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2009 must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2008 AND before July 1, 2010	
Compression Type:	Digester / Landfill Gas Spark Ignition	
Power Cycle:	Lean Burn	
Horsepower Rating:	≥500 HP & <1,350 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 3.0 g/HP-hr OR 220 ppmvd @ 15% O ₂ CO - 5.0 g/HP-hr OR 610 ppmvd @ 15% O ₂ (or 40 CFR 1048) VOC - 1.0 g/HP-hr OR 80 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2010 must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2010	
Compression Type:	Digester / Landfill Gas Spark Ignition	
Power Cycle:	Any	
Horsepower Rating:	≥500 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 2.0 g/HP-hr OR 150 ppmvd @ 15% O ₂ CO - 5.0 g/HP-hr OR 610 ppmvd @ 15% O ₂ (or 40 CFR 1048, if before January 1, 2011) VOC - 1.0 g/HP-hr OR 80 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2009 must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2008 AND before July 1, 2010	
Compression Type:	Spark Ignition	
Power Cycle:	Any	
Horsepower Rating:	≥500 HP & <1,350 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 2.0 g/HP-hr OR 160 ppmvd @ 15% O ₂ CO - 4.0 g/HP-hr OR 540 ppmvd @ 15% O ₂ (or 40 CFR 1048) VOC - 1.0 g/HP-hr OR 86 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2009, (for lean burn engines ≥500 HP & <1,350 HP: after January 1, 2010), must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2008 AND before January 1, 2011	
Compression Type:	Spark Ignition	
Power Cycle:	Lean Burn LPG OR Any Fuel Except Gasoline, Digester Gas, or Landfill Gas	
Horsepower Rating:	≥100 HP & <500 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 2.0 g/HP-hr OR 160 ppmvd @ 15% O ₂ CO - 4.0 g/HP-hr OR 540 ppmvd @ 15% O ₂ (or 40 CFR 1048, if before January 1, 2011) VOC - 1.0 g/HP-hr OR 86 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(ii)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2011 must comply with certification requirements	§60.4236(a)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2011	
Compression Type:	Spark Ignition	
Power Cycle:	Any	
Horsepower Rating:	≥500 HP & <1,350 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 1.0 g/HP-hr OR 82 ppmvd @ 15% O ₂ CO - 2.0 g/HP-hr OR 270 ppmvd @ 15% O ₂ VOC - 0.7 g/HP-hr OR 60 ppmvd @ 15% O ₂ (<i>VOC does not include formaldehyde</i>)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2010, (lean burn engines after July 1, 2010), must comply with certification requirements	§60.4236(b)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2008 AND before July 1, 2011	
Compression Type:	Digester / Landfill Gas Spark Ignition	
Power Cycle:	Any	
Horsepower Rating:	<500 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 3.0 g/HP-hr OR 220 ppmvd @ 15% O ₂ CO - 5.0 g/HP-hr OR 610 ppmvd @ 15% O ₂ (or 40 CFR 1048, if before January 1, 2011) VOC - 1.0 g/HP-hr OR 80 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines ≥100 HP manufactured after July 1, 2008)	§60.4243(a)(2)(ii)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2011 must comply with certification requirements	§60.4236(a)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2011	
Compression Type:	Digester / Landfill Gas Spark Ignition	
Power Cycle:	Any	
Horsepower Rating:	<500 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 2.0 g/HP-hr OR 150 ppmvd @ 15% O ₂ CO - 5.0 g/HP-hr OR 610 ppmvd @ 15% O ₂ VOC - 1.0 g/HP-hr OR 80 ppmvd @ 15% O ₂ (<i>VOC does not include formaldehyde</i>)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines ≥100 HP manufactured after July 1, 2008)	§60.4243(a)(2)(ii)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2011 must comply with certification requirements	§60.4236(a)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2009	
Compression Type:	Spark Ignition	
Power Cycle:	Any	
Horsepower Rating:	>25 HP & <130 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x & HC - 10 g/HP-hr CO - 387 g/HP-hr (<i>or 40 CFR 1048, if before January 1, 2011</i>)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines ≥100 HP manufactured after July 1, 2008)	§60.4243(a)(2)(ii)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	1. Engines installed after January 1, 2011 must comply with certification requirement 2. Install at startup a non-resettable hour meter if the emergency engine cannot comply with the emissions limits for engines built after July 1, 2008	§60.4236(c) §60.4237(c)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after January 1, 2009	
Compression Type:	Spark Ignition	
Power Cycle:	Any	
Horsepower Rating:	≥130 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 2.0 g/HP-hr OR 160 ppmvd @ 15% O ₂ CO - 4.0 g/HP-hr OR 540 ppmvd @ 15% O ₂ (or 40 CFR 1048, if before January 1, 2011) VOC - 1.0 g/HP-hr OR 86 ppmvd @ 15% O ₂ (VOC does not include formaldehyde)	§60.4233(e) Table 1
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines ≥100 HP manufactured after July 1, 2008)	§60.4243(a)(2)(ii) & (iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines >500 HP manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	1. Engines installed after January 1, 2011 must comply with certification requirement 2A. Install at startup a non-resettable hour meter if the emergency <500 HP engine cannot comply with the emissions limits for engines built after January 1, 2011; or 2B. Install at startup a non-resettable hour meter if the emergency ≥500 HP engine cannot comply with the emissions limits for engines built after July 1, 2010	§60.4236(c) §60.4237(b) §60.4237(a)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is ≥500 HP and not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after July 1, 2008	
Compression Type:	Spark Ignition	
Power Cycle:	N/A	
Horsepower Rating:	<25 HP	
Compliance Date:	On startup	
Emissions Limits:	<p>Provided by the manufacturer and certified to 40 CFR 90 if:</p> <ol style="list-style-type: none"> 1. Engine displacement <225 cc; manufactured July 1, 2008 to December 31, 2011; or 2. Engine displacement ≥225 cc; manufactured July 1, 2008 to December 31, 2010. <p>Certified to 40 CFR 1054 if:</p> <ol style="list-style-type: none"> 1. Engine displacement <225 cc; manufactured January 1, 2012 or later; or 2. Engine displacement ≥225 cc; manufactured January 1, 2011 or later. 	§60.4233(a)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Engines installed after July 1, 2011 must comply with certification requirements	§60.4236(a)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	<ol style="list-style-type: none"> 1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions. 	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after June 12, 2006	
Compression Type:	Spark Ignition	
Power Cycle:	Lean Burn AND Rich Burn Gasoline	
Horsepower Rating:	>25 HP	
Compliance Date:	On startup	
Emissions Limits:	Provided by the manufacturer and certified to 40 CFR 1048.101. Engines ≤ 40 HP AND $\leq 1,000$ cc may be certified to 40 CFR 90 or 1054, (manufacture date and displacement)	§60.4233(b)
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines ≥ 100 HP manufactured after July 1, 2008)	§60.4243(a)(2)(ii) & (iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines > 500 HP manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2011 must comply with certification requirements	§60.4236(a)
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (< 80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is ≥ 500 HP and not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after June 12, 2006	
Compression Type:	Spark Ignition	
Power Cycle:	Rich Burn Liquefied Petroleum Gas (LPG)	
Horsepower Rating:	>25 HP	
Compliance Date:	On startup	
Emissions Limits:	Within 1 year of engine startup (applicable only to non-certified engines \geq 100 HP manufactured after July 1, 2008)	§60.4243(a)(2)(ii) & (iii)
Initial Test Date:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines $>$ 500 HP manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2011 must comply with certification requirements	§60.4236(a)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is \geq 500 HP and not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Manufactured Date:	On or after June 12, 2006	
Compression Type:	Spark Ignition	
Power Cycle:	Any Fuel Except Rich Burn LPG OR Gasoline	
Horsepower Rating:	>25 HP & <100 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x +HC - 3.8 g/kW-hr (<i>HC emissions not included for natural gas engines</i>) CO - 6.5 g/kW-hr OR 200 g/kW-hr for severe duty engines Engines ≤40 HP and ≤1,000 cc may be certified to 40 CFR 90 or 1054, (manufacture date and displacement) or certified to standards for engines ≥100 HP & <500 HP	§1048.101(c)(2) §1048.101(c)(2) §60.4233(d) Table 1
Initial Test Date:	At startup (applicable only to non-certified engines ≥25 HP)	§60.4243(b)(2)(ii)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	Engines installed after July 1, 2011 must comply with certification requirements	§60.4236(a)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Reconstructed Date:	On or after June 12, 2006 and before RICE Manufacture Date in other standards	
Compression Type:	Spark Ignition	
Power Cycle:	Natural Gas OR Lean Burn LPG	
Horsepower Rating:	>25 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 3.0 g/HP-hr OR 250 ppmvd @ 15% O ₂ CO - 4.0 g/HP-hr OR 540 ppmvd @ 15% O ₂ VOC - 1.0 g/HP-hr OR 86 ppmvd @ 15% O ₂ (<i>VOC does not include formaldehyde</i>)	§60.4233(f)(4)
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	N/A	
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	Within 30 days of beginning construction, if engine is ≥500 HP and not certified.	§60.4245(c) §60.7(a)(1)
Reporting:	N/A	
Special:	Includes Emergency Engines	

Requirement	Explanation	Regulation
Source Type:	Any	
RICE Reconstructed Date:	On or after June 12, 2006 and before RICE Manufacture Date in other standards	
Compression Type:	Spark Ignition	
Power Cycle:	N/A	
Horsepower Rating:	>25 HP & <100 HP	
Compliance Date:	On startup	
Emissions Limits:	NO _x - 3.0 g/HP-hr OR 250 ppmvd @ 15% O ₂ CO - 5.0 g/HP-hr OR 675 ppmvd @ 15% O ₂ VOC - 1.0 g/HP-hr OR 86 ppmvd @ 15% O ₂ (<i>VOC does not include formaldehyde</i>)	§60.4233(f)(4)
Initial Test Date:	Within 1 year of engine startup (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first (applicable only to non-certified engines manufactured after July 1, 2008)	§60.4243(a)(2)(iii)
Test Notifications:	Intent to Test: 30 days prior to scheduled test date Test Report: Within 60 days of achieving maximum production, but no later than 180 days after initial startup	§60.8(d) §60.8(a)
Operational Restrictions:	N/A	
Fuel Restrictions:	If fuel is gasoline, must use low sulfur gasoline, (<80 ppm/gallon - Tier 2)	§60.4235 & §80.195(a)
Control Device:	N/A	
Monitoring:	1. Maintain records of maintenance conducted on the engine and control device. 2A. Certified engine: keep and follow manufacturer's written instructions; OR 2B. Non-certified engine: keep and follow a maintenance plan and maintain and operate the engine to minimize emissions.	§60.4243(a)(1) & (2) §60.4243(a)(1) §60.4243(a)(2)
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

SECTION 4.2 ADMINISTRATIVE REQUIREMENTS

Administrative requirements are the paperwork, testing and monitoring requirements established in the NSPS. This section provides additional detail for specific administrative requirements summarized in the SI RICE Matrix in Subsection 4.1.1.

4.2.1 Recordkeeping

The following records must be kept onsite:

1. Copies of all RICE notifications that were submitted to EPA; and
2. Records detailing the maintenance conducted on a RICE [*§60.4245(a) (1) & (2)*].

For RICE that are certified by the manufacturer or rebuilder, keep onsite documentation that the RICE is certified and meets applicable emission limits of the SI RICE. If the RICE is not certified, keep documentation that demonstrates compliance with the applicable emission limits, (e.g. air emission testing reports) [*§60.4245(a) (3) & (4)*].

All records must be kept for at least 2 years, and must be readily available for review by EPA inspectors. Keeping 3 calendar years of records ensures that all of the required records are available for an inspection [*§60.7(f)*].

4.2.2 Notifications

The SI RICE NSPS requires facilities to notify EPA when certain SI RICE are installed or modified. These notifications allow EPA to maintain records of the type, location and installation dates for specific SI RICE. All notifications must be postmarked on or before the dates specified in the SI RICE Matrix (Subsection 4.1.1). Two copies of the notification should be submitted: one to the applicable EPA regional office (Appendix A) and another to the appropriate State, local or tribal air agency.

If required, an initial notification must be submitted no later than 30 days after the construction or reconstruction date (i.e. the date a RICE was ordered) [*§60.7(a) (1) & 4245(c)*] and within 15 days of startup [*§60.7(a) (3)*]. An initial notification for the SI RICE NSPS is included in Appendix B; Appendix A includes addresses for the EPA regional offices.

A modification notification is required within 60 days of any RICE undergoing a modification, (i.e., increase in the emission rate of any air pollutant listed in a NSPS). The modification notification must describe the precise nature of the modification, current and proposed air emissions control equipment, maximum power rating of the RICE before and after the change and the expected completion date of the change [*§60.7(a) (4)*]. Appendix A includes addresses for the EPA regional offices.

4.2.3 Reporting

The CI RICE NSPS requires reports of emission test results (Section 4.2.4) and regarding the testing and operation of continuous monitoring systems (CMS), (Section 4.2.5).

4.2.4 Emission Testing

Emission testing (also called performance testing) is required for certain SI RICE. Generally, emission testing is required for large RICE or new, modified or reconstructed RICE that are not certified by a manufacturer or rebuilder.

Before an emission test can be conducted, two copies of an intent-to-test notification must be submitted at least 30 days before the scheduled test date: one to the EPA regional office and another to the State, local or tribal air agency [*§60.8(d)*]. Appendix A includes addresses for the EPA regional offices.

There are two types of emission tests: initial (one-time) and recurring (additional testing on a schedule). If required, an initial emission test must be conducted within 60 days of the RICE achieving its maximum power rate, but no later than 180 days after initial startup [*§60.8(a)*]. Recurring emission tests must be conducted according to the schedule in the SI RICE NSPS. Emission testing must follow EPA reference test methods and include any additional requirements specified in the SI RICE NSPS [*§60.8(b)*].

The emission test report must compare the measured emissions from the test to the emissions limits of the SI RICE NSPS, using the calculations specified in §60.4244. The test report must be submitted to EPA within 60 days of the emission test [*§60.8(a)*].

Emission testing for SI RICE is required for engines greater than a specified size, and the procedures are summarized in Table 4.2 [*§60.4244*].

Table 4.2 - Emission testing procedures for SI RICE		
Operating Rate	Pollutant	Test Methods
±10 percent of 100 percent Peak Load	NO _x	Method 7E or 320 ASTM D6522–00(2005) ASTM D 6348–03
	CO	Method 10 or 320 ASTM D6522–00(2005) ASTM D 6348–03
	VOC	Method 25A and 18; or Method 25A w/ cutter; Method 18 or 320 ASTM D 6348–03

4.2.5 Control Equipment Monitoring

If control equipment is installed on SI RICE to meet the emissions limits of the SI RICE NSPS, then a CMS must be installed to demonstrate the control equipment is functioning effectively. Additional requirements for CMS are detailed in the following parts of the NSPS:

1. Notifications: §60.7; and
2. Monitoring: §60.13.

SECTION 4.3 OPERATIONAL REQUIREMENTS

Operational requirements are standards and restrictions established in the NSPS applicable to the operation of the RICE. This section provides additional detail for specific operational requirements summarized in the SI RICE Matrix in Subsection 4.1.1.

4.3.1 Emergency RICE

A non-resettable hour meter is required for all emergency RICE that do not meet the applicable emissions limits for non-emergency RICE in the CI RICE NSPS, (i.e. not certified by the manufacturer). Operators must keep records of RICE operation during both emergency and non-emergency service and the nature of the emergency. The records must include RICE operating time and the reason the RICE was in operation (e.g. readiness testing, power outage). Table 4.3 lists the types of SI RICE requiring a non-resettable hour meter [§60.4237]. Since the requirements for emergency RICE require keeping records of the hours of operation in emergency and non-emergency service, an hour meter is recommended for all emergency RICE.

Table 4.3 – Emergency SI RICE requiring non-resettable hour meter		
RICE Size	RICE Type	Manufacture Date
>25 HP & <130 HP	Emergency	On or after 07/01/2008
≥500 HP	Emergency	On or after 07/01/2010
≥130 HP & <500 HP	Emergency	On or after 07/01/2011

4.3.2 Operation & Maintenance Instructions

All SI RICE and associated control equipment must be operated and maintained according to the manufacturer’s written instructions. Operators are only allowed to change RICE settings expressly permitted by the manufacturer in the written instructions. If the manufacturer’s written instructions are not followed or unavailable, the SI RICE is subject to the additional requirements included in Table 3.4 [§60.4243(a)].

4.3.3 Operational Restrictions

There are no operational restrictions for SI RICE in the SI RICE NSPS.

4.3.4 Fuel Restrictions

The SI RICE NSPS contains restrictions on the sulfur content of the fuel used by the SI RICE. Only gasoline with a maximum sulfur content of 80 ppm by volume (40 CFR 80.195 - Tier 2 Gasoline Sulfur Control) may be used in an SI RICE [§60.4235]. There is no national security exemption available for gasoline used in SI RICE.

The use of propane as an alternative fuel is detailed in Section 4.4.

SECTION 4.4 ALTERNATIVE OPTIONS

SI natural gas engines may combust propane as an alternative fuel during emergency operations for 100 hours per year. If propane is used for more than 100 hours per year in an engine that is not certified to the emissions standards when combusting propane, an emission test is required. Additionally, records must be kept of the reason for and hours of propane use [§60.4243(e)].

SECTION 4.5 MODIFICATION AND RECONSTRUCTION REQUIREMENTS

Modified or reconstructed SI RICE must meet the requirements for a new SI RICE of similar power and displacement for the model year in which the engine was reconstructed or modified, provided in Table 4.4 [*§60.4233(f)*].

Table 4.4 - Requirements for modified or reconstructed SI RICE					
NSPS Citation	RICE Power	Fuel	Engine Description	Standard Date	Applicable Standard
§60.4233(f) (1)	≤25 HP	Any	<225 cubic centimeters (cc)	07/01/2008 - 12/31/2011	40 CFR, Part 90
				01/01/2012 and later	40 CFR, Part 1054
		Any	≥225 cc	07/01/2008 – 12/31/2010	40 CFR, Part 90
				01/01/2011 and later	40 CFR, Part 1054
§60.4233(f) (2) & (3)	≥25 HP	Gasoline LPG - Rich Burn	Non-emergency	07/01/2008	40 CFR Part 1048
			<130 HP Emergency	01/01/2009	§90.103 Phase 1, Class II
			≥130 HP Emergency	01/01/2009	40 CFR, Part 1048
§60.4233(f) (4)	≥25 HP	Natural Gas LPG - Lean Burn	<500 HP Non-emergency	07/01/2008	§60.4233(f) (4)
			≥500 HP & <1,350 HP Non-emergency	01/01/2008	
			≥1,350 HP Non-emergency	07/01/2007	
			<130 HP Emergency	01/01/2009	40 CFR, Part 60 Subpart JJJJ, Table 1
			≥130 HP Emergency	01/01/2009	§60.4233(f) (4)
§60.4233(f) (5)	≥25 HP	Landfill/ Digester Gas	<500 HP	07/01/2008	40 CFR, Part 60 Subpart JJJJ, Table 1
			>500 HP except Lean Burn <1,350 HP	07/01/2007	
			>500 HP & <1,350 HP Lean Burn	01/01/2008	

Notification requirements for modifications are included in Subsection 4.2.2.

CHAPTER 5 – NESHAP OVERVIEW

There are two NESHAPs for RICE: Subpart P P P P P applies to engine test cells/stands located at major sources of HAPs, while Subpart Z Z Z Z applies to all other RICE. Both NESHAPs include emissions limits, notifications, record keeping, reporting requirements and testing procedures. This chapter explains the applicability of each NESHAP to RICE.

SECTION 5.1 APPLICABILITY

Both NESHAPs apply to existing, new, modified or reconstructed RICE. New, modified or reconstructed RICE may be subject to a RICE NSPS (Chapter 2).

5.1.1 Definitions

NESHAP requirements are applicable to RICE at both major and area sources of HAPs. A list of the current HAPs is available at: <http://www.epa.gov/ttn/atw/orig189.html>. The NESHAP defines major and area sources as follows:

1. Major source: facility emits or has the potential-to-emit any single HAP at a rate of 10 tons or more per year or any combination of HAPs at a rate of 25 tons or more per year.
2. Area source: any facility that is not a major source.
3. Facility: includes all sources of HAP emissions within a single contiguous area and under common control [*§63.2*].

EPA has published guidance documents for calculating potential-to-emit, determining facility boundaries and reducing emissions from a major source to become an area source.

5.1.2 New and Existing Sources

An existing source is a RICE subject to a NESHAP for which construction or reconstruction began prior to the proposed date of the RICE NESHAP in the Federal Register, provided in Table 5.1. A new source is a RICE for which construction or reconstruction began after the date the proposed RICE NESHAP was published in the Federal Register, provided in Table 5.1 [*§63.2*].

Table 5.1 - Existing RICE Dates for RICE NESHAP				
NESHAP Citation	Facility	RICE	Rating	Existing Sources Constructed†
§63.6590(a) (1) (i)	Major	4SRB	>500 HP	Before December 19, 2002
§63.6590(a) (1) (i)	Major	CI, 2SLB and 4SLB	>500 HP	Before December 19, 2002
§63.6590(a) (1) (ii)	Major	All	≤500 HP	Before June 12, 2006
§63.6590(a) (1) (iii)	Area	All	All	Before June 12, 2006
§63.9290	Major	Engine Test Cells/Standards	All	May 14, 2002

† Date proposed rule published in the Federal Register

5.1.3 Modification and Reconstruction Requirements

EPA has defined reconstruction as occurring when the fixed capital cost of the new (replacement) components on an existing RICE exceeds 50 percent of the fixed capital cost to construct a comparable new RICE. [*§60.15*]. If reconstruction occurs, the unit is subject to NESHAP requirements for a reconstructed source and also may be subject to the RICE NSPS (Chapter 2) [*§60.15 & 63.2*].

5.1.4 Exemptions

The President may grant an exemption from compliance with any NESHAP, in accordance with section 112(i) (4) of the Act [*§63.6(a) (ii)*]. The President must determine that the technology required by the standard is not available and it is in the national security interests of the United States to do exempt sources from the NESHAP. The exemption is only applicable for less than 2 years, with up to one, 2-year extension available [*§63.6(j)*].

CHAPTER 6 – RICE NESHAP

The following requirements from the RICE NESHAP, (40 CFR, Part 63, Subpart ZZZZ), are applicable to all RICE, except RICE used on an engine test cells/stands. The requirements for engine test cells/stands are in Chapter 7.

SECTION 6.1 APPLICABILITY

The RICE NESHAP is applicable to all RICE, regardless of location or installation date, except engine test cells/stands. It is applicable to RICE at both major and area sources of HAPs. The purpose of the RICE NESHAP is to reduce HAP emissions from RICE [*§63.6580*].

6.1.1 RICE NESHAP Matrix

The following matrix summarizes the requirements for the RICE NESHAP, 40 CFR, Part 63, Subpart ZZZZ.

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Compression Ignition (Limited Use: ≤100 hrs./yr.)	
Power Cycle:	N/A	
Horsepower Rating:	All	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 IIII
Initial Test Date:	N/A	NSPS - 40 CFR 60 IIII
Test Cycle:	N/A	NSPS - 40 CFR 60 IIII
Test Notifications:	N/A	NSPS - 40 CFR 60 IIII
Operational Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Control Device:	N/A	NSPS - 40 CFR 60 IIII
Monitoring:	N/A	NSPS - 40 CFR 60 IIII
Initial Notification Date:	N/A	NSPS - 40 CFR 60 IIII
Reporting:	N/A	NSPS - 40 CFR 60 IIII
Special:	Limited Use	
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Compression Ignition (Emergency & Black Start)	
Power Cycle:	N/A	
Horsepower Rating:	All	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 IIII
Initial Test Date:	N/A	NSPS - 40 CFR 60 IIII
Test Cycle:	N/A	NSPS - 40 CFR 60 IIII
Test Notifications:	N/A	NSPS - 40 CFR 60 IIII
Operational Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Control Device:	N/A	NSPS - 40 CFR 60 IIII
Monitoring:	N/A	NSPS - 40 CFR 60 IIII
Initial Notification Date:	N/A	NSPS - 40 CFR 60 IIII
Reporting:	N/A	NSPS - 40 CFR 60 IIII
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	All	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 IIII
Initial Test Date:	N/A	NSPS - 40 CFR 60 IIII
Test Cycle:	N/A	NSPS - 40 CFR 60 IIII
Test Notifications:	N/A	NSPS - 40 CFR 60 IIII
Operational Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Control Device:	N/A	NSPS - 40 CFR 60 IIII
Monitoring:	N/A	NSPS - 40 CFR 60 IIII
Initial Notification Date:	N/A	NSPS - 40 CFR 60 IIII
Reporting:	N/A	NSPS - 40 CFR 60 IIII
Special:		
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Digester / Landfill Gas \geq 10% Gross Annual Heat Input	
Power Cycle:	N/A	
Horsepower Rating:	All	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	Operated to minimize HAP emissions	§63.6625(c)
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	Separate fuel meters to measure volume of fuel from each source	§63.6625(c)
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:		
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	All	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:		
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:		
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Spark Ignition (Limited Use: ≤100 hrs./yr.)	
Power Cycle:	2-Stroke Lean Burn, 4-Stroke Lean Burn, & 4-Stroke Rich Burn	
Horsepower Rating:	All	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:	Limited Use	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(iii)
Compression Type:	Spark Ignition (Emergency & Black Start)	
Power Cycle:	2-Stroke Lean Burn, 4-Stroke Lean Burn, & 4-Stroke Rich Burn	
Horsepower Rating:	All	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(6) & (7)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	>300 HP & ≤500 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤49 ppbvd @ 15% O ₂ or ≥70% CO reduction	Table 2d(2)
Initial Test Date:	October 30, 2013	§63.6612(a)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. If equipped with an open crankcase, install either: a. A closed crankcase ventilation system preventing emissions; or b. An open crankcase filtration control system to reduce emissions of particulates, metals, and oil mist.	§63.6225(g)
Fuel Restrictions:	Ultra Low Sulfur Diesel if <30 liters per cylinder & >300 HP	§63.6604
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2d(2)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 1, 2010	§63.6645(a)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Compression Ignition (Limited Use: ≤100 hrs./yr.)	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤23 ppmvd @ 15% O ₂ or ≥70% CO reduction	Table 2d(3)
Initial Test Date:	October 30, 2013	§63.6612(a)
Test Cycle:	Every 8,760 hours of operation or 5 calendar years, whichever first	Table 3(5)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If equipped with an open crankcase, install either: a. A closed crankcase ventilation system preventing emissions; or b. An open crankcase filtration control system to reduce emissions of particulates, metals, and oil mist. 4. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) §63.6225(g) Table 2b(2)
Fuel Restrictions:	Ultra Low Sulfur Diesel if <30 liters per cylinder	§63.6604
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2d(3)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 1, 2010	§63.6645(a)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:	Limited Use	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤23 ppmvd @ 15% O ₂ or ≥70% CO reduction	Table 2d(3)
Initial Test Date:	October 30, 2013	§63.6612(a)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first	Table 3(4)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If equipped with an open crankcase, install either: a. A closed crankcase ventilation system preventing emissions; or b. An open crankcase filtration control system to reduce emissions of particulates, metals, and oil mist. 4. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) §63.6225(g) Table 2b(2)
Fuel Restrictions:	Ultra Low Sulfur Diesel if <30 liters per cylinder	§63.6604
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2d(3)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 1, 2010	§63.6645(a)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	≤300 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect air cleaner every 1,000 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 500 hours of operation or annually, whichever first; replace as necessary.	Table 2d(1) §63.6625(i) Table 2d(1)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Compression Ignition (Emergency)	
Power Cycle:	N/A	
Horsepower Rating:	All	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	Exempt	§63.6590(b)(3)(vi-iii)
Initial Test Date:	Exempt	§63.6590(b)(3)(vi-iii)
Test Cycle:	Exempt	§63.6590(b)(3)(vi-iii)
Test Notifications:	Exempt	§63.6590(b)(3)(vi-iii)
Operational Restrictions:	<ol style="list-style-type: none"> 1. Must be located at a residential, commercial, or institutional facility; 2. Unlimited emergency use; 3. Total of ≤100 hours of non-emergency operation for maintenance checks / readiness testing, provided the tests are required by a vendor, manufacturer, insurance company, or government entity, including: <ol style="list-style-type: none"> A. Annual restriction of ≤50 hours total non-emergency operation, including: <ol style="list-style-type: none"> i. ≤15 hours of emergency demand response. <p>Note: If entity requires >100 hours for maintenance checks / readiness testing, Administrator approval is not required if record of requirement is kept.</p>	§63.6590(b)(3)(vi-iii) §63.6640(f)(1)
Fuel Restrictions:	Exempt	§63.6590(b)(3)(vi-iii)
Control Device:	Exempt	§63.6590(b)(3)(vi-iii)
Monitoring:	Exempt	§63.6590(b)(3)(vi-iii)
Initial Notification Date:	Exempt	§63.6590(b)(3)(vi-iii)
Reporting:	Exempt	§63.6590(b)(3)(vi-iii)
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Compression Ignition (Emergency & Black Start)	
Power Cycle:	N/A	
Horsepower Rating:	All	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	<p>1A. Change oil & filter every 500 hours of operation or annually, whichever first; OR</p> <p>1B. Employ an oil analysis program, instead of the oil replacement requirement;</p> <p>2. Inspect air cleaner every 1,000 hours of operation or annually, whichever first; replace as necessary.</p> <p>3. Inspect all hoses & belts every 500 hours of operation or annually, whichever first; replace as necessary.</p> <p>4. Install a non-resettable hour meter.</p>	<p>Table 2d(4)</p> <p>§63.6625(i)</p> <p>Table 2d(4)</p> <p>Table 2d(4)</p> <p>§63.6625(f)</p>
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Digester / Landfill Gas ≥10% Gross Annual Heat Input	
Power Cycle:	N/A	
Horsepower Rating:	All	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 1,440 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 1,440 hours of operation or annually, whichever first; replace as necessary.	Table 2d(11) §63.6625(j) Table 2d(11)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 4,320 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 4,320 hours of operation or annually, whichever first; replace as necessary.	Table 2d(6) §63.6625(j) Table 2d(6)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	§63.6445(d)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 4,320 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 4,320 hours of operation or annually, whichever first; replace as necessary.	Table 2d(6) §63.6625(j) Table 2d(6)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	§63.6445(d)
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition (Limited Use ≤24 hrs./yr.)	
Power Cycle:	4-Stroke Lean Burn & 4-Stroke Rich Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	<p>1A. Change oil & filter every 500 hours of operation or annually, whichever first; OR</p> <p>1B. Employ an oil analysis program, instead of the oil replacement requirement;</p> <p>2. Inspect spark plugs every 1,000 hours of operation or annually, whichever first; replace as necessary.</p> <p>3. Inspect all hoses & belts every 500 hours of operation or annually, whichever first; replace as necessary.</p>	<p>Table 2d(5)</p> <p>§63.6625(j)</p> <p>Table 2d(5)</p> <p>Table 2d(5)</p>
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Limited Use	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition (Limited Use >24 hrs./yr. & ≤100 hrs./yr.)	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤47 ppmvd @ 15% O ₂ or ≥93% CO reduction	Table 2d(8)
Initial Test Date:	April 17, 2014	§63.6612(a)
Test Cycle:	Every 8,760 hours of operation or 5 calendar years, whichever first	Table 3(5)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) Table 2b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2d(8)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 1, 2010	§63.9(b)(2)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:	Limited Use	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤47 ppmvd @ 15% O ₂ or ≥93% CO reduction	Table 2d(8)
Initial Test Date:	April 17, 2014	§63.6612(a)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first	Table 3(4)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) Table 2b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2d(8)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 1, 2010	§63.9(b)(2)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 1,440 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 1,440 hours of operation or annually, whichever first; replace as necessary.	Table 2d(7) §63.6625(j) Table 2d(7)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition (Limited Use >24 hrs./yr. & ≤100 hrs./yr.)	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	Formaldehyde ≤2.7 ppbv @ 15% O ₂ or ≥76 formaldehyde reduction	Table 2d(10)
Initial Test Date:	April 17, 2014	§63.6610(a)
Test Cycle:	Every 8,760 hours of operation or 5 calendar years, whichever first	Table 3(5)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥750°F and ≤1250°F. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 1b(1) Table 1b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2d(10)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 1, 2010	§63.9(b)(2)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:	Limited Use	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	Formaldehyde ≤ 2.7 ppbv @ 15% O ₂ or ≥ 76 formaldehyde reduction	Table 2d(10)
Initial Test Date:	April 17, 2014	§63.6610(a)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first	Table 3(4)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ± 2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature $\geq 750^\circ\text{F}$ and $\leq 1250^\circ\text{F}$. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 1b(1) Table 1b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2d(10)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 1, 2010	§63.9(b)(2)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 1,440 hours of operation or annually, whichever first; OR	Table 2d(9)
	1B. Employ an oil analysis program, instead of the oil replacement requirement;	§63.6625(j)
	2. Inspect all hoses & belts every 1,440 hours of operation or annually, whichever first; replace as necessary.	Table 2d(9)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition (Emergency)	
Power Cycle:	2-Stroke Lean Burn, 4-Stroke Lean Burn, & 4-Stroke Rich Burn	
Horsepower Rating:	All	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	Exempt	§63.6590(b)(3)(vi-iii)
Initial Test Date:	Exempt	§63.6590(b)(3)(vi-iii)
Test Cycle:	Exempt	§63.6590(b)(3)(vi-iii)
Test Notifications:	Exempt	§63.6590(b)(3)(vi-iii)
Operational Restrictions:	<ol style="list-style-type: none"> 1. Must be located at a residential, commercial, or institutional facility; 2. Unlimited emergency use; 3. Total of ≤100 hours of non-emergency operation for maintenance checks / readiness testing, provided the tests are required by a vendor, manufacturer, insurance company, or government entity, including: <ol style="list-style-type: none"> A. Annual restriction of ≤50 hours total non-emergency operation, including: <ol style="list-style-type: none"> i. ≤15 hours of emergency demand response. <p>Note: If entity requires >100 hours for maintenance checks / readiness testing, Administrator approval is not required if record of requirement is kept.</p>	§63.6590(b)(3)(vi-iii) §63.6640(f)(1)
Fuel Restrictions:	Exempt	§63.6590(b)(3)(vi-iii)
Control Device:	Exempt	§63.6590(b)(3)(vi-iii)
Monitoring:	Exempt	§63.6590(b)(3)(vi-iii)
Initial Notification Date:	Exempt	§63.6590(b)(3)(vi-iii)
Reporting:	Exempt	§63.6590(b)(3)(vi-iii)
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Area Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(iii)
Compression Type:	Spark Ignition (Emergency & Black Start)	
Power Cycle:	2-Stroke Lean Burn, 4-Stroke Lean Burn, & 4-Stroke Rich Burn	
Horsepower Rating:	All	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter every 500 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect spark plugs every 1,000 hours of operation or annually, whichever first; replace as necessary. 3. Inspect all hoses & belts every 500 hours of operation or annually, whichever first; replace as necessary. 4. Install a non-resettable hour meter.	Table 2d(5) §63.6625(j) Table 2d(5) Table 2d(5) §63.6625(f)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after December 19, 2002	§63.6590(a)(2 & 3)(i)
Compression Type:	All (Limited Use: ≤100 hrs./yr.)	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by August 16, 2004, (if installed before August 16, 2004)	§63.6595(a)(2) & (3)
Emissions Limits:	Exempt	
Initial Test Date:	Exempt	
Test Cycle:	Exempt	
Test Notifications:	Exempt	
Operational Restrictions:	Exempt	
Fuel Restrictions:	Exempt	
Control Device:	Exempt	
Monitoring:	Exempt	
Initial Notification Date:	120 days after startup	§63.9(b)(2)
Reporting:	Exempt	
Special:	Limited Use	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after December 19, 2002	§63.6590(a)(2 & 3)(i)
Compression Type:	All (Emergency & Black Start)	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by August 16, 2004, (if installed before August 16, 2004)	§63.6595(a)(2) & (3)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	<p>1. Unlimited emergency use;</p> <p>2. Total of ≤100 hours of non-emergency operation for maintenance checks / readiness testing, provided the tests are required by a vendor, manufacturer, insurance company, or government entity, including:</p> <p style="padding-left: 20px;">A. Annual restriction of ≤50 hours total non-emergency operation, including:</p> <p style="padding-left: 40px;">i. ≤15 hours of emergency demand response.</p> <p>Note: If entity requires >100 hours for maintenance checks / readiness testing, Administrator approval is not required if record of requirement is kept.</p>	§63.6640(f)(1)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	N/A	
Initial Notification Date:	Within 120 days of startup	§63.6645(f)
Reporting:	N/A	
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after December 19, 2002	§63.6590(a)(2 & 3)(i)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by August 16, 2004, (if installed before August 16, 2004)	§63.6595(a)(2) & (3)
Emissions Limits:	Formaldehyde ≤580 ppbvd @ 15% O ₂ or ≥70% CO reduction	Table 2a(3)
Initial Test Date:	180 days after startup or by February 10, 2005, (if installed before June 15, 2004) Note: If proposed limit used, 2nd test using promulgated limit by December 13, 2007	§63.6610(a) §63.6610(b)
Test Cycle:	Semiannually, (annually after two consecutive compliant tests)	Table 3(1) & (3)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) Table 2b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2a(3)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	120 days after startup or December 13, 2004, (if installed before June 15, 2004)	§63.6645(b) & (c)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Compression Ignition (Limited Use: ≤100 hrs./yr.)	
Power Cycle:	N/A	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 IIII
Initial Test Date:	N/A	NSPS - 40 CFR 60 IIII
Test Cycle:	N/A	NSPS - 40 CFR 60 IIII
Test Notifications:	N/A	NSPS - 40 CFR 60 IIII
Operational Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Control Device:	N/A	NSPS - 40 CFR 60 IIII
Monitoring:	N/A	NSPS - 40 CFR 60 IIII
Initial Notification Date:	N/A	NSPS - 40 CFR 60 IIII
Reporting:	N/A	NSPS - 40 CFR 60 IIII
Special:	Limited Use	
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Compression Ignition (Emergency & Black Start)	
Power Cycle:	N/A	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 IIII
Initial Test Date:	N/A	NSPS - 40 CFR 60 IIII
Test Cycle:	N/A	NSPS - 40 CFR 60 IIII
Test Notifications:	N/A	NSPS - 40 CFR 60 IIII
Operational Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Control Device:	N/A	NSPS - 40 CFR 60 IIII
Monitoring:	N/A	NSPS - 40 CFR 60 IIII
Initial Notification Date:	N/A	NSPS - 40 CFR 60 IIII
Reporting:	N/A	NSPS - 40 CFR 60 IIII
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 IIII
Initial Test Date:	N/A	NSPS - 40 CFR 60 IIII
Test Cycle:	N/A	NSPS - 40 CFR 60 IIII
Test Notifications:	N/A	NSPS - 40 CFR 60 IIII
Operational Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 IIII
Control Device:	N/A	NSPS - 40 CFR 60 IIII
Monitoring:	N/A	NSPS - 40 CFR 60 IIII
Initial Notification Date:	N/A	NSPS - 40 CFR 60 IIII
Reporting:	N/A	NSPS - 40 CFR 60 IIII
Special:		
Source Type:	Major Source	
RICE Construction Date:	On or after December 19, 2002	§63.6590(a)(2 & 3)(i)
Compression Type:	Digester / Landfill Gas ≥10% Gross Annual Heat Input	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by August 16, 2004, (if installed before August 16, 2004)	§63.6595(a)(2) & (3)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	Operated to minimize HAP emissions	§63.6625(c)
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	Separate fuel meters to measure volume of fuel from each source	§63.6625(c)
Initial Notification Date:	120 days after startup	§63.9(b)(2)
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Digester / Landfill Gas ≥10% Gross Annual Heat Input	
Power Cycle:	N/A	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	Operated to minimize HAP emissions	§63.6625(c)
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	Separate fuel meters to measure volume of fuel from each source	§63.6625(c)
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after December 19, 2002	§63.6590(a)(2 & 3)(i)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by August 16, 2004, (if installed before August 16, 2004)	§63.6595(a)(2) & (3)
Emissions Limits:	Formaldehyde ≤12 ppbvd @ 15% O ₂ or ≥58% CO reduction	Table 2a(1)
Initial Test Date:	180 days after startup or by February 10, 2005, (if installed before June 15, 2004) Note: If proposed limit used, 2nd test using promulgated limit by December 13, 2007	§63.6610(a) §63.6610(b)
Test Cycle:	Semiannually, (annually after two consecutive compliant tests)	Table 3(1) & (3)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) Table 2b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2a(1)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	120 days after startup or December 13, 2004, (if installed before June 15, 2004)	§63.6645(b) & (c)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Spark Ignition (Emergency & Black Start)	
Power Cycle:	2-Stroke Lean Burn & 4-Stroke Rich Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:	Emergency	
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	<250 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after December 19, 2002	§63.6590(a)(2 & 3)(i)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by August 16, 2004, (if installed before August 16, 2004)	§63.6595(a)(2) & (3)
Emissions Limits:	Formaldehyde ≤14 ppbvd @ 15% O ₂ or ≥93% CO reduction	Table 2a(2)
Initial Test Date:	180 days after startup or by February 10, 2005, (if installed before June 15, 2004) Note: If proposed limit used, 2nd test using promulgated limit by December 13, 2007	§63.6610(a) §63.6610(b)
Test Cycle:	Semiannually, (annually after two consecutive compliant tests)	Table 3(1) & (3)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) Table 2b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2a(2)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	120 days after startup or December 13, 2004, (if installed before June 15, 2004)	§63.6645(b) & (c)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Spark Ignition (Emergency & Black Start)	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	≥250 HP & ≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	Exempt	
Initial Test Date:	Exempt	
Test Cycle:	Exempt	
Test Notifications:	Exempt	
Operational Restrictions:	Install a non-resettable hour meter.	§63.6625(d)
Fuel Restrictions:	Exempt	
Control Device:	Exempt	
Monitoring:	Exempt	
Initial Notification Date:	Exempt	
Reporting:	Exempt	
Special:	Emergency	
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006 AND before January 1, 2008	§63.6590(a)(2 & 3)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	≥250 HP & ≤500 HP	
Compliance Date:	January 18, 2008	§63.6595(a)(4)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	N/A	
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	≥250 HP & ≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	Formaldehyde ≤14 ppbvd @ 15% O ₂ or ≥93% CO reduction	Table 2a(2)
Initial Test Date:	180 days after startup or by September 14, 2008, (if installed before January 18, 2008)	§63.6611
Test Cycle:	Semiannually, (annually after two consecutive compliant tests)	Table 3(1) & (3)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) Table 2b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2a(2)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	120 days after startup or July 16, 2008, (if installed before January 18, 2008)	§63.6645(d) & (e)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after December 19, 2002	§63.6590(a)(2 & 3)(i)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	On startup or by August 16, 2004, (if installed before August 16, 2004)	§63.6595(a)(2) & (3)
Emissions Limits:	Formaldehyde ≤ 350 ppbvd @ 15% O ₂ or ≥ 76 formaldehyde reduction	Table 1a(1)
Initial Test Date:	180 days after startup or by February 10, 2005, (if installed before June 15, 2004) Note: If proposed limit used, 2nd test using promulgated limit by December 13, 2007	§63.6610(a) §63.6610(b)
Test Cycle:	Semiannually, (annually after two consecutive compliant tests)	Table 3(2) & (3)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ± 2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature $\geq 750^\circ\text{F}$ and $\leq 1250^\circ\text{F}$. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 1b(1) Table 1b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 1a(1)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	120 days after startup or December 13, 2004, (if installed before June 15, 2004)	§63.6645(b) & (c)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:		
Source Type:	Major Source	
RICE Construction Date:	On or after June 12, 2006	§63.6590(a)(2 & 3)(ii)
Compression Type:	Spark Ignition (Limited Use: ≤100 hrs./yr.)	
Power Cycle:	2-Stroke Lean Burn, 4-Stroke Lean Burn, & 4-Stroke Rich Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	On startup or by January 18, 2008, (if installed before January 18, 2008)	§63.6595(a)(4) & (5)
Emissions Limits:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Test Date:	N/A	NSPS - 40 CFR 60 JJJJ
Test Cycle:	N/A	NSPS - 40 CFR 60 JJJJ
Test Notifications:	N/A	NSPS - 40 CFR 60 JJJJ
Operational Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Fuel Restrictions:	N/A	NSPS - 40 CFR 60 JJJJ
Control Device:	N/A	NSPS - 40 CFR 60 JJJJ
Monitoring:	N/A	NSPS - 40 CFR 60 JJJJ
Initial Notification Date:	N/A	NSPS - 40 CFR 60 JJJJ
Reporting:	N/A	NSPS - 40 CFR 60 JJJJ
Special:	Limited Use	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before December 19, 2002	§63.6590(a)(1)(i)
Compression Type:	All (Limited Use: ≤100 hrs./yr.)	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	Exempt	§63.6590(b)(3)(iv)
Emissions Limits:	Exempt	§63.6590(b)(3)(iv)
Initial Test Date:	Exempt	§63.6590(b)(3)(iv)
Test Cycle:	Exempt	§63.6590(b)(3)(iv)
Test Notifications:	Exempt	§63.6590(b)(3)(iv)
Operational Restrictions:	Exempt	§63.6590(b)(3)(iv)
Fuel Restrictions:	Exempt	§63.6590(b)(3)(iv)
Control Device:	Exempt	§63.6590(b)(3)(iv)
Monitoring:	Exempt	§63.6590(b)(3)(iv)
Initial Notification Date:	Exempt	§63.6590(b)(3)(iv)
Reporting:	Exempt	§63.6590(b)(3)(iv)
Special:	Limited Use	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	<100 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect air cleaner every 1,000 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 500 hours of operation or annually, whichever first; replace as necessary.	Table 2c(2) §63.6625(i) Table 2c(2)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	>300 HP & ≤500 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤49 ppbvd @ 15% O ₂ or ≥70% CO reduction	Table 2c(4)
Initial Test Date:	October 30, 2013	§63.6612(a)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. If equipped with an open crankcase, install either: a. A closed crankcase ventilation system preventing emissions; or b. An open crankcase filtration control system to reduce emissions of metals, particulates, and oil mist.	§63.6225(g)
Fuel Restrictions:	Ultra Low Sulfur Diesel if <30 liters per cylinder & >300 HP	§63.6604
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2c(4)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 16, 2008	§63.6645(d)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before December 19, 2002	§63.6590(a)(1)(i)
Compression Type:	Compression Ignition (Emergency & Black Start)	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	Exempt	§63.6590(b)(3)(iii)
Emissions Limits:	Exempt	§63.6590(b)(3)(iii)
Initial Test Date:	Exempt	§63.6590(b)(3)(iii)
Test Cycle:	Exempt	§63.6590(b)(3)(iii)
Test Notifications:	Exempt	§63.6590(b)(3)(iii)
Operational Restrictions:	1. Unlimited emergency use; 2. Unlimited use for readiness testing / maintenance checks; and 3. Annual restriction of ≤50 hours total non-emergency operation.	§63.6640(f)(2)
Fuel Restrictions:	Exempt	§63.6590(b)(3)(iii)
Control Device:	Exempt	§63.6590(b)(3)(iii)
Monitoring:	Exempt	§63.6590(b)(3)(iii)
Initial Notification Date:	Exempt	§63.6590(b)(3)(iii)
Reporting:	Exempt	§63.6590(b)(3)(iii)
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before December 19, 2002	§63.6590(a)(1)(i)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤23 ppmvd @ 15% O ₂ or ≥70% CO reduction	Table 2c(5)
Initial Test Date:	October 30, 2013	§63.6610(a)
Test Cycle:	Every 8,760 hours of operation or 3 calendar years, whichever first	Table 3(4)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥450°F and ≤1350°F. 3. If equipped with an open crankcase, install either: a. A closed crankcase ventilation system preventing emissions; or b. An open crankcase filtration control system to reduce emissions of metals, particulates, and oil mist. 4. If not using an oxidation catalyst, EPA assigns operating limits.	Table 2b(1) §63.6225(g) Table 2b(2)
Fuel Restrictions:	Ultra Low Sulfur Diesel if <30 liters per cylinder	§63.6604
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2c(5)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	December 13, 2004	§63.6645(b)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Compression Ignition (Emergency & Black Start)	
Power Cycle:	N/A	
Horsepower Rating:	≤500 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	<p>1A. Change oil & filter every 500 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement;</p> <p>2. Inspect air cleaner every 1,000 hours of operation or annually, whichever first; replace as necessary;</p> <p>3. Inspect all hoses & belts every 500 hours of operation or annually, whichever first; replace as necessary;</p> <p>4. Unlimited emergency use;</p> <p>5. Total of ≤100 hours of non-emergency operation for maintenance checks / readiness testing, provided the tests are required by a vendor, manufacturer, insurance company, or government entity, including: A. Annual restriction of ≤50 hours total non-emergency operation, including: i. ≤15 hours of emergency demand response; AND <i>Note: If entity requires >100 hours for maintenance checks / readiness testing, Administrator approval is not required if record of requirement is kept.</i></p> <p>6. Install a non-resettable hour meter.</p>	<p>Table 2c(1) §63.6625(i) Table 2c(1) Table 2c(1) §63.6640(f)(1) §63.6625(f)</p>
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Compression Ignition	
Power Cycle:	N/A	
Horsepower Rating:	≥100 HP & ≤300 HP	
Compliance Date:	May 3, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤230 ppbvd @ 15% O ₂	Table 2c(3)
Initial Test Date:	October 30, 2013	§63.6612(a)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. If 300 HP AND equipped with an open crankcase, install either: a. A closed crankcase ventilation system preventing emissions; or b. An open crankcase filtration control system to reduce emissions of metals, particulates, and oil mist.	§63.6225(g)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2c(3)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	July 16, 2008	§63.6645(d)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Digester / Landfill Gas $\geq 10\%$ Gross Annual Heat Input	
Power Cycle:	N/A	
Horsepower Rating:	<100 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 1,440 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 1,440 hours of operation or annually, whichever first; replace as necessary.	Table 2c(7) §63.6625(j) Table 2c(7)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before December 19, 2002	§63.6590(a)(1)(i)
Compression Type:	Digester / Landfill Gas \geq 10% Gross Annual Heat Input	
Power Cycle:	N/A	
Horsepower Rating:	>500 HP	
Compliance Date:	Exempt	§63.6590(b)(3)(v)
Emissions Limits:	Exempt	§63.6590(b)(3)(v)
Initial Test Date:	Exempt	§63.6590(b)(3)(v)
Test Cycle:	Exempt	§63.6590(b)(3)(v)
Test Notifications:	Exempt	§63.6590(b)(3)(v)
Operational Restrictions:	Exempt	§63.6590(b)(3)(v)
Fuel Restrictions:	Exempt	§63.6590(b)(3)(v)
Control Device:	Exempt	§63.6590(b)(3)(v)
Monitoring:	Exempt	§63.6590(b)(3)(v)
Initial Notification Date:	Exempt	§63.6590(b)(3)(v)
Reporting:	Exempt	§63.6590(b)(3)(v)
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Digester / Landfill Gas $\geq 10\%$ Gross Annual Heat Input	
Power Cycle:	N/A	
Horsepower Rating:	≥ 100 HP & ≤ 500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤ 23 ppmvd @ 15% O ₂ or $\geq 70\%$ CO reduction	Table 2c(12)
Initial Test Date:	April 17, 2014	
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	N/A	
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	N/A	
Initial Notification Date:	July 16, 2008	§63.6645(d)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:	Digester / Landfill	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	<100 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 4,320 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 4,320 hours of operation or annually, whichever first; replace as necessary.	Table 2c(8) §63.6625(j) Table 2c(8)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before December 19, 2002	§63.6590(a)(1)(i)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	June 15, 2007	§63.6595(a)(1)
Emissions Limits:	Exempt	§63.6590(b)(3)(i)
Initial Test Date:	Exempt	§63.6590(b)(3)(i)
Test Cycle:	Exempt	§63.6590(b)(3)(i)
Test Notifications:	Exempt	§63.6590(b)(3)(i)
Operational Restrictions:	Exempt	§63.6590(b)(3)(i)
Fuel Restrictions:	Exempt	§63.6590(b)(3)(i)
Control Device:	Exempt	§63.6590(b)(3)(i)
Monitoring:	Exempt	§63.6590(b)(3)(i)
Initial Notification Date:	Exempt	§63.6590(b)(3)(i)
Reporting:	Exempt	§63.6590(b)(3)(i)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	2-Stroke Lean Burn	
Horsepower Rating:	≥100 HP & ≤500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤225 ppbvd @ 15% O ₂	Table 2c(9)
Initial Test Date:	April 17, 2014	§63.6612(a)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	N/A	
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2c(9)
Monitoring:	N/A	
Initial Notification Date:	July 16, 2008	§63.6645(d)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	<100 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 1,440 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 1,440 hours of operation or annually, whichever first; replace as necessary.	Table 2c(7) §63.6625(j) Table 2c(7)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before December 19, 2002	§63.6590(a)(1)(i)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	June 15, 2007	§63.6595(a)(1)
Emissions Limits:	Exempt	§63.6590(b)(3)(ii)
Initial Test Date:	Exempt	§63.6590(b)(3)(ii)
Test Cycle:	Exempt	§63.6590(b)(3)(ii)
Test Notifications:	Exempt	§63.6590(b)(3)(ii)
Operational Restrictions:	Exempt	§63.6590(b)(3)(ii)
Fuel Restrictions:	Exempt	§63.6590(b)(3)(ii)
Control Device:	Exempt	§63.6590(b)(3)(ii)
Monitoring:	Exempt	§63.6590(b)(3)(ii)
Initial Notification Date:	Exempt	§63.6590(b)(3)(ii)
Reporting:	Exempt	§63.6590(b)(3)(ii)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Lean Burn	
Horsepower Rating:	≥100 HP & ≤500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	CO ≤47 ppbvd @ 15% O ₂	Table 2c(10)
Initial Test Date:	April 17, 2014	§63.6612(a)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	N/A	
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 2c(10)
Monitoring:	N/A	
Initial Notification Date:	July 16, 2008	§63.6645(d)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	<100 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	N/A	
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	N/A	
Operational Restrictions:	1A. Change oil & filter and inspect spark plugs every 1,440 hours of operation or annually, whichever first; OR 1B. Employ an oil analysis program, instead of the oil replacement requirement; 2. Inspect all hoses & belts every 1,440 hours of operation or annually, whichever first; replace as necessary.	Table 2c(7) §63.6625(j) Table 2c(7)
Fuel Restrictions:	N/A	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	N/A	
Initial Notification Date:	N/A	
Reporting:	N/A	
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before December 19, 2002	§63.6590(a)(1)(i)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	June 15, 2007	§63.6595(a)(1)
Emissions Limits:	Formaldehyde ≤350 ppbvd @ 15% O ₂ or ≥76 formaldehyde reduction	Table 1a(1)
Initial Test Date:	December 12, 2007	§63.6610(a)
Test Cycle:	Semiannually, (annually after two consecutive compliant tests)	Table 3(2) & (3)
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	1. Maintain ΔP across catalyst ±2 inches H ₂ O from test @ 100% load. 2. Maintain exhaust temperature ≥750°F and ≤1250°F. 3. If not using an oxidation catalyst, EPA assigns operating limits.	Table 1b(1) Table 1b(2)
Fuel Restrictions:	N/A	
Control Device:	Oxidation Catalyst, if necessary to achieve CO emissions limit	Table 1a(1)
Monitoring:	CPMS or CEMS	§63.6625(a)/(b)
Initial Notification Date:	December 13, 2004	§63.6645(b)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Spark Ignition	
Power Cycle:	4-Stroke Rich Burn	
Horsepower Rating:	≥100 HP & ≤500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	Formaldehyde ≤10.3 ppbvd @ 15% O ₂	Table 2c(11)
Initial Test Date:	April 17, 2014	§63.6610(a)
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Note: If not using oxidation catalyst, Administrator must pre-approve test Compliance Status: 60 days after testing completed	§63.6645(g) §63.6620(f) §63.6645(h)(2)
Operational Restrictions:	N/A	
Fuel Restrictions:	N/A	
Control Device:	N/A	
Monitoring:	N/A	
Initial Notification Date:	July 16, 2008	§63.6645(d)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.6650(b) §63.6650(b)(3)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before December 19, 2002	§63.6590(a)(1)(i)
Compression Type:	Spark Ignition (Emergency & Black Start)	
Power Cycle:	2-Stroke Lean Burn, 4-Stroke Lean Burn, & 4-Stroke Rich Burn	
Horsepower Rating:	>500 HP	
Compliance Date:	Exempt	§63.6590(b)(3)(iii)
Emissions Limits:	Exempt	§63.6590(b)(3)(iii)
Initial Test Date:	Exempt	§63.6590(b)(3)(iii)
Test Cycle:	Exempt	§63.6590(b)(3)(iii)
Test Notifications:	Exempt	§63.6590(b)(3)(iii)
Operational Restrictions:	1. Unlimited emergency use; 2. Unlimited use for readiness testing / maintenance checks; and 3. Annual restriction of ≤50 hours total non-emergency operation.	§63.6640(f)(2)
Fuel Restrictions:	Exempt	§63.6590(b)(3)(iii)
Control Device:	Exempt	§63.6590(b)(3)(iii)
Monitoring:	Exempt	§63.6590(b)(3)(iii)
Initial Notification Date:	Exempt	§63.6590(b)(3)(iii)
Reporting:	Exempt	§63.6590(b)(3)(iii)
Special:	Emergency	

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Before June 12, 2006	§63.6590(a)(1)(ii)
Compression Type:	Spark Ignition (Emergency & Black Start)	
Power Cycle:	2-Stroke Lean Burn, 4-Stroke Lean Burn, & 4-Stroke Rich Burn	
Horsepower Rating:	≤500 HP	
Compliance Date:	October 19, 2013	§63.6595(a)(1)
Emissions Limits:	Exempt	
Initial Test Date:	Exempt	
Test Cycle:	Exempt	
Test Notifications:	Exempt	
Operational Restrictions:	<p>1A. Change oil & filter every 500 hours of operation or annually, whichever first; OR</p> <p>1B. Employ an oil analysis program, instead of the oil replacement requirement;</p> <p>2. Inspect spark plugs every 1,000 hours of operation or annually, whichever first; replace as necessary;</p> <p>3. Inspect all hoses & belts every 500 hours of operation or annually, whichever first; replace as necessary;</p> <p>4. Unlimited emergency use;</p> <p>5. Total of ≤100 hours of non-emergency operation for maintenance checks / readiness testing, provided the tests are required by a vendor, manufacturer, insurance company, or government entity, including:</p> <p style="padding-left: 20px;">A. Annual restriction of ≤50 hours total non-emergency operation, including:</p> <p style="padding-left: 40px;">i. ≤15 hours of emergency demand response; AND</p> <p>Note: If entity requires >100 hours for maintenance checks / readiness testing, Administrator approval is not required if record of requirement is kept.</p> <p>6. Install a non-resettable hour meter.</p>	<p>Table 2c(6)</p> <p>§63.6625(j)</p> <p>Table 2c(6)</p> <p>Table 2c(6)</p> <p>§63.6640(f)(1)</p> <p>§63.6625(f)</p>
Fuel Restrictions:	Exempt	
Control Device:	Operate and maintain RICE and any after-treatment control device according to the manufacturer's written instructions or develop a written maintenance plan	§63.6625(e)
Monitoring:	Exempt	
Initial Notification Date:	Exempt	
Reporting:	Exempt	
Special:	Emergency	

6.1.2 Exemptions

Certain RICE are exempt from the RICE NESHAP, as described in Table 6.1.

Table 6.1 - RICE exempt from RICE NESHAP				
Section	RICE Type	Size	Source Type	Requirements
§63.6585	Engine test cells/stands	Any	Major Source	Subpart P P P P P
§63.6590(b) (1)	New or reconstructed emergency or limited-use†	≥500 HP	Major Source	Initial Notification
§63.6590(b) (3) (i)	Existing SI 2SLB	≥500 HP	Major Source	Exempt
§63.6590(b) (3) (ii)	Existing SI 4SLB	≥500 HP	Major Source	Exempt
§63.6590(b) (3) (iii) & (iv)	Existing emergency or limited-use†	≥500 HP	Major Source	Exempt
§63.6590(b) (3) (v)	Existing landfill/digester gas combustor‡	≥500 HP	Major Source	Exempt
§63.6590(b) (3) (vi-viii)	Existing residential, commercial or institutional	Any	Area Source	Exempt
§63.6590(c) (1)	New or reconstructed	All	Area Source	40 CFR Part 60, IIII or JJJJ
§63.6590(c) (2)	New or reconstructed 2SLB	≤500 HP	Major Source	40 CFR Part 60, IIII or JJJJ
§63.6590(c) (3)	New or reconstructed 4SLB	<250 HP	Major Source	40 CFR Part 60, IIII or JJJJ
§63.6590(c) (4)	New or reconstructed 4SRB	≤500 HP	Major Source	40 CFR Part 60, IIII or JJJJ
§63.6590(c) (5)	New or reconstructed landfill/digester gas combustor‡	≤500 HP	Major Source	40 CFR Part 60, IIII or JJJJ
§63.6590(c) (6)	New or reconstructed emergency or limited-use†	≤500 HP	Major Source	40 CFR Part 60, IIII or JJJJ
§63.6590(c) (7)	New or reconstructed CI	≤500 HP	Major Source	40 CFR Part 60, IIII or JJJJ

† Limited-use engines that are used <100 hours per year

‡ Must combust landfill or digester gas ≥10 percent of the gross heat input to the RICE on an annual basis

SECTION 6.2 ADMINISTRATIVE REQUIREMENTS

Administrative requirements are the paperwork, testing and monitoring requirements established in the NSPS. This section provides additional detail for specific administrative requirements summarized in the RICE NESHAP Matrix in Subsection 6.1.1.

6.2.1 Recordkeeping

The following records must be kept onsite:

1. Occurrence and duration of each startup/shutdown that causes an emissions exceedance;
2. Each RICE or control equipment malfunction;
3. Required maintenance performed on the RICE, control equipment and/or monitoring equipment;
4. Each period when the CMS is malfunctioning, inoperative or out of control (if applicable);
5. All required measurements to demonstrate compliance;
6. All CMS audits, adjustments and calibration checks (if applicable);
7. Emission tests; and
8. All notifications and reports [*§63.10(b) (2) & 6655(a-e)*].

All records must be kept for at least 5 years after they were required and must be readily available for review by EPA inspectors. Keeping 6 calendar years of records ensures that all of the required records are available for an inspection. Records can be kept in electronic format. [*§63.10(b) (1) & 6660(b) & (c)*].

RICE using a continuous monitoring system (CM)S are required to have a performance evaluation plan (i.e., a written quality control program) for the CMS. Previous (i.e., superseded) versions of the performance evaluation plan must be kept onsite [*§63.6655(b) (2)*]. For RICE equipped with control equipment, records of the temperature data (as applicable) or all other approved operating parameters, must be kept and reduced to 4-hour rolling averages. Additionally, the monthly reading of the pressure drop across the catalyst (as applicable) must be kept [*§63 Subpart ZZZZ, Table 6*].

6.2.2 Notifications

The RICE NESHAP requires facilities to provide an initial notification to EPA for certain RICE, as detailed in Table 6.2. These notifications allow EPA to maintain records of the type, location and installation dates for specific CI RICE. All notifications must be postmarked on or before the dates specified in Table 6.2. Two copies of the notification should be submitted: one to the applicable EPA regional office (Appendix A) and another to the appropriate State, local or tribal air agency.

Table 6.2 - RICE NESHAP initial notification requirements

NESHAP Citation	New/Existing	RICE Size	Source	Date	Installation Date
§63.6645(a) (1) & (5)	Existing†	≤500 HP & ≥100 HP	Major	CI: 08/31/2010 SI: 02/16/2011	Before 06/12/2006
§63.6645(a) (2) & (5)	Existing†	≥100 HP	Area		
§63.6645(a) (3)	Existing†	>500 HP	Major	12/13/2004	Before 12/19/2002
§63.6645(a) (4)	4SLB new or reconstructed†	≥250 HP	Major	07/16/2008	On or after 06/12/2006 and before 03/18/2008
				120 days after installation	On or after 03/18/2008
§63.6645(b) §63.6590(b) (1) & (2)	New or reconstructed	>500 HP	Major	12/13/2004	On or after 12/19/2002 and before 08/16/2004
§63.6645(c) §63.6590(b) (1) & (2)	New or reconstructed	>500 HP	Major	120 days after installation	On or after 08/16/2004
§63.6645(d)	New or reconstructed	≤500 HP	Major	07/16/2008	On or after 06/12/2006 and before 03/18/2008
§63.6645(e)	New or reconstructed	≤500 HP	Major	120 days after installation	On or after 03/18/2008

†Emergency RICE and RICE not subject to a NESHAP emission limit are exempted from these initial notification requirements [§63.6645(a) (5)]

Copies of initial notification forms are provided in Appendix C and are available online at:

http://www.epa.gov/ttn/atw/rice/spark_rice_initial_notify.doc (SI RICE)

http://www.epa.gov/ttn/atw/rice/rice_initial_notify.doc (CI RICE)

6.2.3 Reporting

The RICE NESHAP requires multiple reports and approvals depending on the size and type of RICE.

6.2.3. a. Construction / Reconstruction Approval

The approval of EPA must be obtained before constructing new or reconstructing existing RICE. A one-time application for approval of construction or reconstruction must be submitted to EPA before actual construction begins. This notification is in addition to any permit applications or notification requirements required by the State, local or tribal air agency. A separate application must be submitted to EPA for each RICE. The application must include the following:

1. Name and address of the owner or operator (DOE site address);
2. Notification of intention to construct a new or to reconstruct an existing RICE;
3. Address of the RICE;
4. Identification of the applicable NESHAP, (40 CFR, Part 63, Subpart ZZZZ);
5. Expected dates of beginning and completing construction of the RICE;
6. Estimate of the types and quantities of HAPs that will be emitted;

7. For construction: A technical description of the RICE, including size, fuel, stroke, burn type, emissions control equipment and expected control efficiency (if applicable) and emissions egress points; and
8. For reconstruction: A brief description of the RICE, components to be reconstructed, present and proposed emissions control equipment and expected control efficiency (if applicable). If the reconstructed RICE will comply with the RICE NESHAP as a reconstructed RICE, no further information is required; if the RICE cannot comply with the RICE NESHAP requirements for a reconstructed RICE, include the additional information defined in §63.5(d) (3) [*§63.9(b) (4) & 63.5(d) (1-3)*].

EPA will approve or disapprove the application for construction or reconstruction within 60 calendar days of EPA providing notification that the application is complete [*§63.5(e)*]. An initial notification of the actual startup date for the new or reconstructed source must be submitted within 15 calendar days of the startup date [*§63.9(b) (4) (v)*].

6.2.3. b. Emissions Test / Initial Compliance Report

Within 60 days of completing emission testing or within 30 days of an initial compliance demonstration, a notification of compliance status must be submitted to EPA and the State, local or tribal air agency [*§63.6645(h) (1-2)*]. The notification of compliance status must detail the following information:

1. The methods used to determine compliance (e.g., reference test method numbers);
2. The results of the emission test, continuous monitoring system (CMS) performance evaluation and/or other monitoring procedure certification;
3. The methods used to ensure continuous compliance (e.g., monitoring, reporting and emission tests);
4. Type and quantity of HAPs emitted by the RICE, in the same unit and time period as the RICE NESHAP (e.g. parts per million, volumetric dry);
5. Whether the RICE is a major or area source;
6. Description of the pollution control equipment, including percent control efficiency; and
7. Statement that the source complies with the RICE NESHAP [*§63.9(h) (2)*].

6.2.3. c. Compliance Report

Compliance reports detail any malfunctions of the RICE or control equipment, deviations from the emissions or operating limits of the RICE NESHAP and CMS operation over a specific time period. EPA requires a Summary Compliance Report that includes the following information at the frequency specified in Table 3.4: [*§63.6650(c)*]

1. Facility name and address.
2. Statement by the responsible official, certifying the accuracy of the content of the report and including the official's name, title and signature.
3. Date of the report and the beginning and ending dates of the reporting period.
4. Malfunctions:
 - a. Number, duration and brief description of each malfunction during the reporting period that caused or may have caused emission exceedance; and
 - b. Description of actions taken during a malfunction to minimize emissions; and
 - c. Actions taken to correct a malfunction; or
 - d. A statement that no malfunctions occurred during the reporting period.
5. Deviations of emissions or operating limits: [*§63.6640(b)*]
 - a. Total time the RICE was in operation during the deviation; and

- b. Information on the number, duration and cause of deviations (including unknown cause, if applicable) and corrective action(s) taken; or
 - c. A statement that no deviations occurred during the reporting period.
6. Landfill/digester gas combustors only:
- a. Fuel flow rate of each fuel and the heating values used in the calculations;
 - b. Demonstration that the percentage of heat input provided by landfill gas or digester gas is ≥ 10 percent of the total fuel consumption on an annual basis;
 - c. Operating limits provided in your permit and any deviations from these limits; and
 - d. Any problems or errors suspected with the meters [*§63.6650(g)*].

6.2.3. d. Compliance Report Submittal Schedule

Required Summary Compliance Reports and Excess Emissions and CMS Performance Reports are required at the frequencies specified in Table 6.3 [*§63.6650(b)*].

Table 6.3 - RICE NESHAP compliance reporting periods					
Installation	Type	Power	Source	Report	Restriction
Existing	All	≥ 100 HP & ≤ 500 HP	Major	Semiannual	
Existing	CI	> 500 HP	Major	Semiannual	
Existing	4SRB	> 500 HP	Major	Semiannual	
Existing	CI	> 300 HP	Area	Semiannual	
Existing	4SLB & 4SRB	> 500 HP	Area	Semiannual	> 24 hours/year
New or reconstructed	All	> 500 HP	Major	Semiannual	
New or reconstructed	4SLB	≥ 250 HP & ≤ 500 HP	Major	Semiannual	
Any	Limited-use†	All	All	Annual	< 100 hours/year
New or reconstructed	Landfill/digester Gas Combustor†	All	All	Annual	

† Limited-use RICE are used less than 100 hours per year.

‡ The RICE must combust landfill or digester gas equivalent to 10 percent or more of the gross heat input to the RICE on an annual basis

Semi-annual compliance reports must be submitted (postmarked) by the end of the month following the end of the reporting period (i.e., January 31 and July 31). The reporting periods for semi-annual compliance reports:

1. January 1 through June 30; and
2. July 1 through December 31 [*§63.6650(b) (1-4)*].

Annual compliance reports include the entire calendar year and must be submitted (postmarked) by January 31 of the following year [*§63.6650(b) (6-9)*].

If a State, tribal or local air agency has established alternate dates for submitting compliance reports in a Title V (Part 70) permit, the reports can be submitted on the dates in the permit [*§63.6650(b) (5)*].

Emissions standards are not applicable during RICE startup, but apply at all other times [*§63.6625(h)*]. Deviations of operational or emissions limits for the first 200 hours of operation after engine startup (the engine burn-in period) on new, rebuilt and reconstructed RICE are not violations [*§63.6640(d)*].

6.2.3. e. Excess Emissions / CMS Performance Reports

Excess Emissions and CMS Performance Report must be submitted to EPA if the total duration of the excess emissions or operating limit exceedance is ≥ 1 percent of the total operating time of the RICE for the reporting period or the CMS downtime, (including time out of control), is ≥ 5 percent of the total operating time of the RICE for the reporting period, [*§63.10(e) (3) (viii)*]. If the excess emissions or operating limit exceedance is < 1 percent and the CMS downtime is < 5 percent, only the Summary Compliance Report is required [*§63.10(e) (3) (vii)*]. The Excess Emissions and CMS Performance Report must contain the following information:

1. CMS performance:
 - a. Emission and/or operating limit(s) of the RICE NESHAP or petition [*§63.10(e) (3) (vi) (E)*];
 - b. Monitoring equipment manufacturer and model number [*§63.10(e) (3) (vi) (F)*];
 - c. Date of the latest CMS certification or audit [*§63.10(e) (3) (vi) (G)*];
 - d. Total operating time of the RICE during the period [*§63.10(e) (3) (vi) (H)*];
 - e. Total duration of excess emissions during the reporting period, expressed as a percent of the total source operating time and a breakdown of the total duration of excess emissions, including causes [*§63.10(e) (3) (vi) (I)*];
 - f. Total CMS downtime during the reporting period, expressed as a percent of the total source operating time and a breakdown of the total duration of CMS downtime, including causes [*§63.10(e) (3) (vi) (J)*];
 - g. A description of any changes to the CMS, RICE or control equipment [*§63.10(e) (3) (vi) (K)*]; or
 - h. A statement that there were no periods of time that the CMS was out of control.

6.2.4 Emission Testing

Emission testing (also called performance testing) is required for the following RICE:

1. Existing SI 4SRB RICE > 500 HP located at a major source [*§63.6600(a)*];
2. Any new or reconstructed RICE > 500 HP located at a major source [*§63.6600(b)*];
3. Existing CI RICE > 500 HP located at a major source [*§63.6600(d)*];
4. New or reconstructed 4SLB RICE ≥ 250 HP and ≤ 500 HP located at a major source [*§63.6601*];
5. Existing RICE ≤ 500 HP and ≥ 100 HP located at a major source [*§63.6602*];
6. Existing CI RICE > 300 HP located at an area source [*§63.6603(a)*];
7. Existing 4SLB RICE > 500 HP located at an area source [*§63.6603(a)*]; and
8. Existing 4SRB RICE > 500 HP located at an area source [*§63.6603(a)*].

Before an emission test can be conducted, two copies of the intent-to-test notification must be submitted at least 60 days before the scheduled test date: one to the EPA regional office and another to the State, local or tribal air agency [*§63.7(b) & 6645(g)*]. Appendix A includes addresses for the EPA regional offices.

There are two types of emission tests: initial (one-time) and recurring (additional testing on a schedule). Initial and recurring test dates are provided in the RICE NESHAP Matrix (Subsection 6.1.1) and Tables 6.4 and 6.5 [§63.6630, 6640, & 6615]. For initial testing, any emission testing completed before the compliance date can be used instead of conducting another emission test, if the original testing meets the requirements of §63.6610(d). If the RICE is considered non-operational and is subject to emission testing, the testing can be delayed until the RICE is started up again [§63.6620(b)].

Table 6.4 – Initial emissions testing requirements for RICE					
NESHAP Citation	Installation	Type	Power	Source	Test Date
§63.6611 Table 2a	New or Reconstructed†	SI 4SLB	≥250 HP & ≤500 HP	Major	≤240 days after startup
§63.6610 §63.6612 Tables 1a & 2a	New or Reconstructed†	All SI All CI	>500 HP	Major	≤180 days after startup
§63.6595(a) Table 1a	Existing	SI 4SRB	>500 HP	Major	December 12, 2007
§63.6595(a) Table 2c (3-5)	Existing	All CI	≥100 HP & ≤500 HP	Major	October 30, 2013
			>500 HP	Major	
§63.6595(a) Table 2d (2-3)	Existing	All CI	>300 HP	Area	October 30, 2013
§63.6595(a) Table 2c (12)	Existing	Landfill & Digester Gas	≤500 HP & ≥100 HP	Major	April 17, 2014
§63.6595(a) Table 2c (9-11)	Existing	All SI	≥100 HP & ≤500 HP	Major	April 17, 2014
§63.6595(a) Table 2d (8&10)	Existing	SI 4SRB & 4SLB	>500 HP	Area	

†New or reconstructed RICE ordered on or after December 19, 2002 and before June 15, 2004 must conduct an initial emissions test by February 10, 2005 and a second initial emissions test by December 13, 2007.

Table 6.5 - Subsequent emissions testing requirements for RICE

NESHAP Citation	Installation	Type	Power	Source	Emissions Limitation	Testing Schedule
Table 3(1)	New or reconstructed	2SLB & CI	>500 HP	Major	Reduce CO & No CEMS	Semiannually
		4SLB	≥250 HP			
Table 3(2)	All	4SRB	≥5,000 HP	Major	Reduce formaldehyde	Semiannually
Table 3(3)	All	Any	>500 HP	Major	Limit formaldehyde concentration	Semiannually
Table 3(3)	New or reconstructed	4SLB	≥250 HP & ≤500 HP	Major		Semiannually
Table 3(4)	Existing not limited-use†	CI	>500 HP	Both	Limit or reduce CO or formaldehyde	8,760 hours of operation or 3 calendar years
		4SLB & 4SRB‡	>500 HP	Area		
Table 3(5)	Existing limited-use†	CI	>500 HP	Both	Limit or reduce CO or formaldehyde	8,760 hours of operation or 5 calendar years
		4SLB & 4SRB‡	>500 HP	Area		

†Does not include emergency and black-start RICE

‡Operated for more than 24 hours/year

Two copies of the emission test report must be submitted within 60 days of the emissions test:

(1) to EPA and (2) to the State, local or tribal air agency [*§63.6645(g)*]. The emission test report must be accompanied by a notification of compliance status, as detailed in Subsection 6.2.3b [*§63.6645(h) (1)*]. The emission test report must include the following:

1. The engine model number, manufacturer, year of purchase and listed site-rated brake horsepower;
2. The ambient temperature, pressure and humidity during the emission test;
3. The percent load at which the RICE was tested and an explanation of all assumptions made to estimate or calculate percent load during the test. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device and an estimate of its accurate in percentage of true value must be provided [*§63.6620(i)*];
4. The quality assurance program utilized during the emission test [*§63.7(c)*]; and
5. Test results, analysis of samples, determination of emissions and raw data [*§63.7(g)*].

Emission testing procedures are summarized in Table 6.6 [*§63.6620*].

Table 6.6 - Emission testing procedures for RICE

Operating Rate	Pollutant	Test Methods
±10 percent of 100 percent Peak Load [<i>§63.6610(d)</i>]	CO	Method 10 or 320 ASTM D6522–00(2005) ASTM D6348–03
	Formaldehyde	Method 320 or 323 ASTM D6348–03, R percent must be ≥70 and ≤130

6.2.5 Control Equipment Monitoring

If control equipment is installed on SI RICE to meet the emissions limits of the SI RICE NSPS, then a CMS must be installed to demonstrate the control equipment is functioning effectively. The CMS can either be: (1) a continuous emissions monitoring system (CEMS) that provides continuous air emissions (e.g., CO emissions) from the RICE or (2) a continuous parametric monitoring system (CPMS) that continuously samples, analyzes and provides a record of some RICE operating or control device parameter (e.g., pressure drop across a filter). Due to the expense of operating, testing and maintaining a CEMS, this is not a recommended compliance option for the RICE NESHAP.

Types of RICE where a CMS could be employed to satisfy the emissions limits in the RICE NESHAP are detailed in Table 6.7.

Table 6.7 - RICE NESHAP CMS applicability						
NESHAP Citation	Installation	Type	Power	Source	CMS Type	Restriction
Table 5 (1, 3 & 5)	New or reconstructed	2SLB	>500 HP	Major	CPMS	
	New or reconstructed	4SLB	≥250 HP	Major	CPMS	
Table 5 (1-5)	All	CI	>500 HP	Both	CPMS	
	Existing	4SLB	>500 HP	Area	CPMS	>24 hours/year
Table 5 (6)	All	CI	>500 HP	Both	CEMS	
	Existing	4SLB	>500 HP	Area	CEMS	>24 hours/year
Table 5 (7-8)	All	4SRB	>500 HP	Major	CPMS	
Table 5 (7-9)	Existing	4SRB	>500 HP	Area	CPMS	>24 hours/year
Table 5 (10-11)	New or reconstructed	All	>500 HP	Major	CPMS	
	New or reconstructed	4SLB	≥250 HP & ≤500 HP	Major	CPMS	
	Existing	4SRB	>500 HP	Both	CPMS	

If a CMS is employed, a performance evaluation must be conducted on the CMS. EPA must be notified of a performance evaluation at least 60 days before the scheduled evaluation date [*§63.7(e) & 63.9(g)*]. A petition must be to EPA for approval of operating limits (or that no limits be established) before conducting an initial performance test for RICE that utilize CPMS [*§63.6620(f)*]. The petition must include the information contained in the Alternative Compliance Option Section 4.5.8.

Data from the CPMS must be collected every 15 minutes [*§63.6625(b) (3)*]. The CPMS must be installed, operated and maintained according to the following requirements:

1. *§63.8*: operation, quality control programs, performance evaluations, alternative monitoring methods and data reduction;

2. §63.9: notification requirements for performance evaluations;
3. §63.10: recordkeeping requirements and reporting requirements;
4. §63.6625(b) (1-2 & 5-6): development of a site-specific monitoring plan that includes CPMS design, data collection, quality assurance, quality control, performance evaluations and system audits;
5. §63.6625(b) (4): for temperature ranges, the temperature sensor must have a minimum tolerance of 5° Fahrenheit or 1 percent of the measurement range, whichever is larger.
6. §63.6635: monitoring malfunctions; and
7. §63.6655: recordkeeping requirements [*§63.6625(b)*].

A CMS is considered to be out of control if either of the following occur:

1. The zero (low-level), mid-level (if applicable) or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard; or
2. The CMS fails a performance audit, relative accuracy audit, RATA or linearity test audit [*§63.8(c) (7) (i)*].

An out of control CMS shall be corrected as soon as possible and all necessary tests that indicated the CMS was out of control must be repeated to determine that the CMS has been adequately repaired. A successful repeat test demonstrates that the monitored requirement is below the applicable limit. The period that the CMS is out of control begins the hour the performance check on the CMS was conducted and ends the hour following successful demonstration of the CMS and return to allowable limits. Any data recorded during the out of control period will not be used for data averages or calculations [*§63.8(c) (7) (ii)*].

SECTION 6.3 OPERATIONAL REQUIREMENTS

Operational requirements are standards and restrictions established in the NESHAP applicable to the operation of the RICE. This section provides additional detail for specific operational requirements summarized in the RICE Matrix in Subsection 6.1.1.

6.3.1 Emergency, Black-start and Limited-use RICE

The RICE NESHAP contains exemptions for certain emergency, black-start and limited-use RICE. Black-start RICE are used to start up a combustion turbine. Emergency RICE are operated only during emergencies, (e.g. fire pumps or electrical generators). Limited-use RICE are any non-emergency RICE used for less than 100 hours per year.

Emergency RICE may only be operated during maintenance checks, readiness testing and emergency operations. Readiness tests must be recommended by a Federal, State or local government, manufacturer, vendor or insurance company. Site-specific standards for RICE established by the DOE would be considered Federal standards. Total operation for maintenance checks and readiness tests are included in Table 6.8. If a DOE site requires more than 100 hours per year for maintenance checks and readiness tests, a petition may be made to the Administrator for additional hours. [*§63.6640(f) (1) (ii)*]. Emergency RICE may be operated for up to 50 hours per year in other non-emergency situations, but the 50-hour allowance is included in the total allowed hours for maintenance and readiness checks in Table 6.8 [*§63.6640(f) (1) (iii)*]. There is no limit on emergency operation of emergency RICE [*§63.6640(f) (1) (i)*].

Operation of emergency RICE for peak shaving, to generate income by supplying power to an electric grid or to otherwise supply non-emergency power as part of a financial arrangement with another entity, is prohibited, except that the emergency RICE in Table 6.8 may be operated for up to 15 hours per year as part of an EDR program; the 15 hours of operation are counted as part of the 50 hours per year of operation in other non-emergency situations. EDR operation occurs when the regional transmission organization or equivalent balancing authority and transmission operator have determined that emergency conditions exist. The RICE can be operated for no more than 30 minutes prior to the time when the emergency condition is expected to occur and must cease operating immediately after the facility is notified that the emergency condition no longer exists. A financial arrangement can be made by the site, so long as it is limited to providing emergency power onsite only [*§63.6640(f) (1) (iii)*].

Table 6.8 - Emergency RICE limitations					
Section	Emergency RICE Type	Size	Source	Emergency Demand Response	Maintenance / Readiness Check Limits
§63.6640(f) (1)	Existing	≤500 HP	Major	15 hours/year	100 hours
	New or reconstructed installed after 06/12/2006	>500 HP	Major	15 hours/year	
	Existing	All	Area	15 hours/year	
§63.6640(f) (2)	Installed prior to 06/12/2006	>500 HP	Major	Prohibited	Unlimited

The following RICE must be equipped with a non-resettable hour meter:

1. New or reconstructed emergency 4SLB RICE ≥250 HP and ≤500 HP located at a major source [*§63.6625(d)*];
2. Existing emergency RICE ≤500 HP located at a major source; and
3. All existing emergency RICE located at an area source [*§63.6625(f)*].

Since the requirements for emergency RICE require keeping records of the hours of operation in emergency and non-emergency service, an hour meter is recommended for all emergency RICE. Operators must keep records of the emergency RICE operating hours during both emergency and non-emergency service and the nature of the emergency. If participating in an EDR program, records of the emergency notification from the regional transmission organization or equivalent balancing authority must be kept onsite [*§63.6655(f)*].

6.3.2 Operation & Maintenance Instructions

The following RICE and associated control equipment must be operated and maintained according to the manufacturer's written instructions. If the manufacturer's written instructions are not followed or unavailable, a maintenance plan must be developed that provides for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The maintenance plan must also require that records of maintenance conducted on the RICE or control equipment (if applicable) be kept. If an oil analysis program is used (Subsection 6.4.1), this also must be included in the maintenance plan [*§63.6625(i) & (j)*].

1. All RICE <100 HP located at a major source;
2. Emergency or black-start RICE ≤ 500 HP located at a major source;
3. All emergency or black-start RICE ≤ 500 HP located at an area source;
4. CI RICE ≤ 300 HP located at an area source;
5. Two-stroke lean burn (2SLB) RICE located at an area source;
6. Landfill/digester gas combustor located at an area source;
7. Four-stroke lean burn (4SLB) RICE ≤ 500 HP located at an area source;
8. Four-stroke rich burn (4SRB) RICE ≤ 500 HP located at an area source;
9. Limited-use (operated ≤ 24 hours per year) 4SLB RICE > 500 HP located at an area source; and
10. Limited-use (operated ≤ 24 hours per year) 4SRB RICE > 500 HP located at an area source [$\S 63.6625(e)$].

6.3.3 Operational Restrictions

The RICE must be operated in compliance with the emissions and operating limitations of the NESHAP at all times [$\S 63.6605(a)$]. The RICE and any associated control equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions [$\S 63.6605(b)$].

The time spent in startup for a RICE must be the minimum period necessary for appropriate and safe loading of the engine and cannot exceed 30 minutes. The time the RICE spends idling during startup shall be minimized [$\S 63.6625(h)$].

Table 6.9 details the oil and filter change and air cleaner, spark plug, hose and belt inspection requirements for RICE that are not subject to emissions limits and testing requirements. If an oil analysis program (Subsection 6.4.1) is employed, the parameters for analysis instead of conducting the oil change also are provided in Table 6.9.

Table 6.9 - Oil change and oil analysis program requirements					
NES-HAP Table	Type	Power	Source	Inspection or Change Frequency [†]	Oil Analysis Program Parameters
2c-1 2d-4	CI emergency / black-start	All	Both	Oil & Filter: 500 hours of operation or annually Air Cleaner: 1,000 hours of operation or annually Hoses & Belts: 500 hours of operation or annually	Total Base Number: <30 percent of new oil Viscosity: >20 percent of new oil Water Content: >0.5 percent by volume
2c-2	CI	<100 HP	Major	Oil & Filter: 1,000 hours of operation or annually Air Cleaner: 1,000 hours of operation or annually	
2d-1		≤ 300 HP	Area	Hoses & Belts: 500 hours of operation or annually	

Table 6.9 continues on the next page.

Table 6.9 - Oil change and oil analysis program requirements

NES-HAP Table	Type	Power	Source	Inspection or Change Frequency [†]	Oil Analysis Program Parameters
2c-6 2d-5	SI emergency / black-start	All	Both	Oil & Filter: 500 hours of operation or annually Spark Plugs: 1,000 hours of operation or annually	Total Acid Number: Increase >3.0mg KOH*/gram oil of new oil Viscosity: >20 percent of new oil Water Content: >0.5 percent by volume
2d-5	SI limited-use [‡] 4SLB & 4SRB	>500 HP	Area	Hoses & Belts: 500 hours of operation or annually	
2c-7	SI 4SRB & 4SLB	<100 HP	Major	Oil & Filter: 1,440 hours of operation or annually	
2d-7 2d-9	SI 4SLB & 4SRB	≤500 HP	Area	Spark Plugs: 1,440 hours of operation or annually	
2d-11	Landfill/digester gas combustor [□]	All	Area	Hoses & Belts: 1,440 hours of operation or annually	
2c-8	SI 2SLB	<100 HP	Major	Oil & Filter: 4,320 hours of operation or annually Spark Plugs: 4,320 hours of operation or annually	
2d-6	SI 2SLB	All	Area	Hoses & Belts: 4,320 hours of operation or annually	

[†]Oil and filter must be changed; if an oil analysis program is used, oil must be checked against oil analysis parameters and changed if any listed parameter is exceeded. The air cleaner, spark plugs, hoses and belts must be inspected and replaced, as necessary.

[‡]Limited-use SI engines that are used ≤24 hours per year

*KOH = potassium hydroxide

[□]The RICE must combust landfill or digester gas equivalent to 10 percent or more of the gross heat input to the RICE on an annual basis

For all existing CI RICE ≥300 HP that are not classified as emergency or black-start engines, the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters must be followed. Additionally, if these RICE are not equipped with a closed crankcase ventilation system, a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere or an open crankcase filtration emission control system that reduces emissions of oil mist, particulates and metals from the crankcase must be installed [§63.6625(g)].

6.3.4 Fuel Restrictions

Ultra low sulfur diesel fuel must be used in CI RICE >300 HP and a displacement of <30 liters/cylinder [§63.6604 & 80.510(b)].

New or reconstructed RICE that combust landfill or digester gas equivalent to 10 percent or more of the gross heat input to the RICE on an annual basis must record fuel use daily [§63.6655(c)]. Separate fuel meters must be used to measure the volumetric flow rate of each fuel supplied (e.g., natural gas and landfill gas) [§63.6625(c)].

SECTION 6.4 ALTERNATIVE OPTIONS

The RICE NESHAP provides for several alternative compliance options for operating, testing and monitoring RICE.

6.4.1 Oil Analysis Program

An oil analysis program can be used to extend the specified oil change requirements for certain RICE. The analysis program must be part of the written maintenance plan or manufacturer's instructions. Analyses must be performed at the frequency the oil would be changed, provided in the RICE NESHAP Matrix (Subsection 6.1.1) and Table 6.9. The parameters for testing the oil to determine if the oil needs to be changed also are provided in Table 6.9. The total base number (applicable to CI RICE only) is a measure of the reserve alkalinity in the oil. The total acid number (applicable to SI RICE only) is a measure of the amount of potassium hydroxide (KOH) needed to neutralize the acid in one gram of oil.

If any of these parameters are exceeded, the oil must be changed within 2 days of receipt of the test results. If the RICE is not operating when the results are received, the oil may be changed anytime before the RICE is restarted.

If an oil analysis program is used, records of the analysis, the parameters analyzed and the dates that oil was changed in the RICE must be maintained [*§63.6625(i) & (j)*].

6.4.2 Alternative Emissions Limits

For certain RICE, an alternative compliance option to an emissions limit is included in the RICE NESHAP. The alternative is demonstrating the percent reduction of an air pollutant by a control device. The addition of a control device requires additional recordkeeping, monitoring and reporting requirements detailed in Sections 6.2 and 6.3. CO or formaldehyde reduction is determined using an emissions test. The inlet and outlet concentrations must be normalized to a dry basis at 15 percent oxygen or CO₂. These conversions should be completed by the company conducting the air emissions test. The calculations are presented in *§63.6620(e) (2)*.

To calculate the percent reduction of formaldehyde or CO by the control device, use the following equation: [*§63.6620(e) (1)*]

Equation 3.1: Formaldehyde / CO Percent Reduction per *§63.6620(e) (1)*

$$\frac{C_I \times C_O}{C_I} \times 100$$

Where:

C_I = Concentration of formaldehyde or CO before control device (inlet)

C_O = Concentration of formaldehyde or CO after control device (outlet)

If an add-on control technology other than an oxidation catalyst or NSCR is used, a petition must be submitted to EPA requesting operating limits and monitoring parameters for the control equipment. The requirements for the petition are in *§63.6620(f), (g) and (h)*.

6.4.3 Alternative Monitoring Options

A petition also can be submitted to EPA requesting alternative monitoring, quality control, quality assurance and RATA requirements if a CMS is employed. The petition must include the information in §63.6625(b) (1) and 6655(b) (3) and §63.8(f) (4) and (6). If an alternative monitoring program, method or test that is not specified in the NESHAP is being used, a request needs to be made to EPA at least 60 days prior to implementation of the alternative monitoring program, method or test [*§63.7(f) (2) (i) & 8(f) (4) (i)*].

The petition should be submitted to EPA well in advance of the compliance dates specified in the RICE NESHAP to ensure a timely review by EPA and approval before the compliance date. Minor changes to monitoring procedures may be made in the site-specific performance evaluation plan without the approval of EPA [*§63.8(f) (4)*].

6.4.4 Alternative Work Practices

A petition for alternative work practices, (i.e. alternatives to RICE startup requirements), can be submitted to EPA. The alternative proposal must achieve at least an equivalent reduction in HAP emissions to the original standard in the RICE NESHAP. EPA will publish the alternative in the Federal Register and will include general procedures established by EPA. The petition must contain the information specified in §63.6(g).

SECTION 6.5 MODIFICATION AND RECONSTRUCTION REQUIREMENTS

Modified RICE may be subject to a RICE NSPS (Chapter 2). Reconstructed RICE, as defined in Subsection 2.1.1, are subject to the RICE NESHAP as new sources and subject to the RICE NSPS. Refer to Chapter 2 for more information on reconstructed RICE.

CHAPTER 7 – ENGINE TEST CELLS/STANDS NESHAP

The following requirements from the Engine Test Cell/Stand NESHAP, (40 CFR, Part 63, Subpart P), are applicable to engine test cells/stands. The requirements for all other RICE are in Chapter 6.

SECTION 7.1 APPLICABILITY

The Engine Test Cell/Stand NESHAP is applicable to all engine test cells/stands, regardless of installation date, located at major sources where uninstalled stationary or mobile engines are tested [*§63.9285*].

Existing affected sources were constructed on or before May 14, 2002; new or reconstructed sources are constructed after May 14, 2002 [*§63.9290*]. New or reconstructed engine test cells/stands ≥ 25 HP are subject to all of the requirements of 40 CFR, Part 63, Subpart P. New or reconstructed engine test cells/stands < 25 HP are only subject to the initial notification requirement. There are no requirements for existing engine test cells/stands in the Engine Test Cell/Stand NESHAP [*§63.9290(3)(b)*].

7.1.1 Engine Test Cell/Stand NESHAP Matrix

The following matrix summarizes the requirements for the Engine Test Cell/Stand NESHAP, 40 CFR, Part 63, Subpart P.

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	After May 14, 2002	
Compression Type:	N/A	
Power Cycle:	N/A	
Horsepower Rating:	≥25 HP (or 19 kilowatts)	
Compliance Date:	On startup or by May 27, 2003, (if installed before May 27, 2003)	§63.9295(a)(1)
Emissions Limits:	CO/THC ≤20 ppmvd @ 15% O ₂ OR ≥96% reduction from control device inlet to outlet 100% Permanent Total Enclosure or Determined Capture Efficiency	§63.9300 & Table 1(1) §63.9322
Initial Test Date:	180 days after startup or November 23, 2003, (if installed before May 27, 2003)	§63.9310
Test Cycle:	N/A	
Test Notifications:	Intent to Test: 60 days prior to scheduled test date Compliance Status: 30 days after testing completed	§63.9345(d) §63.9345(c)
Operational Restrictions:	Thermal Oxidizer: Average combustion temperature during any 3-hour period must be greater than or equal to measured temperature during last emissions test Catalytic Oxidizer: Average temperature during any 3-hour period measured just before catalyst bed must be greater than or equal to measured temperature during last emissions test Other emissions control technology: Request alternative operating and monitoring parameters from Administrator Permanent Total Enclosure: Pressure drop ≥0.007" W.C. or ≥200 feet per minute average facial air velocity through all natural draft openings Other Emissions Capture System: Gas volumetric flow rate or duct static pressure during any 3-hour period must be greater than or equal to measured rate or pressure during last emissions test	§63.9302(a) & Table 2 §63.9302(a) & Table 2 §63.9302(b) & Table 2 §63.9322(a) & Table 2 §63.9322(a) & Table 2
Fuel Restrictions:	N/A	
Control Device:	Thermal Oxidizer, Catalytic Oxidizer, or other emissions control technology	Table 2
Monitoring:	CPMS (15-minute period) or CEMS	
Initial Notification Date:	120 after startup or by September 24, 2003, (if installed before May 27, 2003)	§63.9(b)(2)
Reporting:	Semiannual Compliance Reports (Jan 1-Jun 30 & Jul 1-Dec 31); or As specified in the Title V permit	§63.9350(a) §63.9350(a)(5)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	On or before May 14, 2002	
Compression Type:	N/A	
Power Cycle:	N/A	
Horsepower Rating:	≥25 HP (or 19 kilowatts)	
Compliance Date:	May 27, 2003	§63.9295(a)(1)
Emissions Limits:	Exempt	§63.9290(b)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	Exempt	§63.9290(b)
Operational Restrictions:	Exempt	§63.9290(b)
Fuel Restrictions:	N/A	
Control Device:	Exempt	§63.9290(b)
Monitoring:	Exempt	§63.9290(b)
Initial Notification Date:	September 24, 2003	§63.9(b)(2)
Reporting:	Exempt	§63.9290(b)
Special:		
Source Type:	Major Source	
RICE Construction Date:	Any	
Compression Type:	N/A	
Power Cycle:	N/A	
Horsepower Rating:	<25 HP (or 19 kilowatts)	§63.6920(c)
Compliance Date:	N/A	
Emissions Limits:	Exempt	§63.6920(c)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	Exempt	§63.6920(c)
Operational Restrictions:	Equipment used to test engines <25 HP (or 19 kilowatts)	§63.6920(c)
Fuel Restrictions:	N/A	
Control Device:	Exempt	§63.6920(c)
Monitoring:	Exempt	§63.6920(c)
Initial Notification Date:	120 after startup or by September 24, 2003, (if installed before May 27, 2003)	§63.9(b)(2)
Reporting:	Exempt	§63.6920(c)
Special:		

Requirement	Explanation	Regulation
Source Type:	Major Source	
RICE Construction Date:	Any	
Compression Type:	N/A	
Power Cycle:	N/A	
Horsepower Rating:	All	
Compliance Date:	N/A	
Emissions Limits:	Exempt	§63.9290(d)(1-4)
Initial Test Date:	N/A	
Test Cycle:	N/A	
Test Notifications:	Exempt	§63.9290(d)(1-4)
Operational Restrictions:	1. Testing of turbine or rocket engines; 2. Located at research facility or teaching activity not engaged in commercial production; OR 3. Used to evaluate fuels, transmissions, or electronics.	§63.9290(d)(1-4)
Fuel Restrictions:	N/A	
Control Device:	Exempt	§63.9290(d)(1-4)
Monitoring:	Exempt	§63.9290(d)(1-4)
Initial Notification Date:	Exempt	§63.9290(d)(1-4)
Reporting:	Exempt	§63.9290(d)(1-4)
Special:	Exempt	

CHAPTER 8 – ADDITIONAL RESOURCES**SECTION 8.1 40 OF THE CODE OF FEDERAL REGULATIONS FOR RICE**

1. 40 CFR, Part 60, Subpart A [*e-CFR*†]: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?type=simple;c=ecfr;cc=ecfr;idno=40;region=DIV1;q1=Subpart%20A;rgn=div6;view=text;node=40%3A7.0.1.1.1.1>
2. 40 CFR, Part 60, Subpart III [*e-CFR*†]: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?type=simple;c=ecfr;cc=ecfr;idno=40;region=DIV1;q1=60%20Subpart%20III;rgn=div6;view=text;node=40%3A7.0.1.1.1.98>
3. 40 CFR, Part 60, Subpart JJJ [*e-CFR*†]: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?type=simple;c=ecfr;cc=ecfr;idno=40;region=DIV1;q1=60%20Subpart%20JJJ;rgn=div6;view=text;node=40%3A7.0.1.1.1.99>
4. 40 CFR, Part 63, Subpart A [*e-CFR*†]: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?type=simple;c=ecfr;cc=ecfr;idno=40;region=DIV1;q1=Subpart%20A;rgn=div6;view=text;node=40%3A10.0.1.1.1.1>
5. 40 CFR, Part 63, Subpart ZZZ [*e-CFR*†]: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?type=simple;c=ecfr;cc=ecfr;idno=40;region=DIV1;q1=Subpart%20ZZZ;rgn=div6;view=text;node=40%3A14.0.1.1.1.1>
6. 40 CFR, Part 63, Subpart PPPP [*e-CFR*†]: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?type=simple;c=ecfr;cc=ecfr;idno=40;region=DIV1;q1=Subpart%20PPPP;rgn=div6;view=text;node=40%3A15.0.1.1.1.3>

†e-CFR is an updated version of the CFR incorporating amendments published in the Federal Register; it is not an official legal edition of the CFR. The CFR is available at:

<http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>

SECTION 8.2 EPA RESOURCES

EPA has developed a variety of resources to assist in complying with the requirements for RICE.

1. EPA Web site for CI RICE NSPS: <http://www.epa.gov/ttn/atw/nsps/cinsps/cinspspg.html>
2. EPA Web site for SI RICE NSPS: <http://www.epa.gov/ttn/atw/nsps/sinsps/sinspspg.html>
3. EPA Web site for RICE NESHAP: <http://www.epa.gov/ttn/atw/rice/ricepg.html>
4. EPA Web site for RICE NESHAP regulatory navigation tool: <http://www.epa.gov/ttn/atw/rice/output/quiz.html>
5. EPA Region 1 Web site for RICE: <http://www.epa.gov/region1/rice/>
6. Combustion Portal (Cooperative Agreement between EPA, Compliance Assistance Center and National Center for Manufacturing Sciences): <http://www.combustionportal.org/rice.cfm>

SECTION 8.3 DOE RESOURCES

Additionally, the Office of Health, Safety and Security has issued guidance on complying with the RICE NESHAP and other federal air regulations. These may be found on the DOE Clean Air Work Group website at <http://www.hss.doe.gov/sesa/environment/air/cawg/>.

APPENDIX A

EPA Regional Office Addresses

From: <http://www.epa.gov/aboutepa/postal.html#regional> (retrieved 5/23/2012)

Region 1
States: CT, MA, ME, NH, RI, VT
Environmental Protection Agency
5 Post Office Square - Suite 100
Boston, MA 02109-3912

Region 6
States: AR, LA, NM, OK, TX
Environmental Protection Agency
Fountain Place 12th Floor, Suite 1200
1445 Ross Avenue
Dallas, TX 75202-2733

Region 2
States: NJ, NY, PR, VI
Environmental Protection Agency
290 Broadway
New York, NY 10007-1866

Region 7
States: IA, KS, MO, NE
Environmental Protection Agency
901 North 5th Street
Kansas City, KS 66101

Region 3
States: DC, DE, MD, PA, VA, WV
Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

Region 8
States: CO, MT, ND, SD, UT, WY
Environmental Protection Agency
1595 Wynkoop St.
Denver, CO 80202-1129

Region 4
States: AL, FL, GA, KY, MS, NC, SC, TN
Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-3104

Region 9
States: AZ, CA, HI, NV
Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Region 5
States: IL, IN, MI, MN, OH, WI
Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604-3507

Region 10
States: AK, ID, OR, WA
Environmental Protection Agency
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

APPENDIX B

RICE NSPS Initial Notification Reports

The following initial notification reports were developed to comply with the initial notification requirements of 40 CFR, Part 60, Subpart IIII, the CI RICE NSPS and Subpart JJJJ, the SI RICE NSPS.

Initial Notification of Applicability
40 CFR Part 60, Subpart IIII, New Source Performance Standard for Stationary
Compression Ignition Reciprocating Internal Combustion Engines

Yes, I am subject to 40 CFR Part 60, Subpart IIII, New Source Performance Standard for Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE)

New CI RICE, constructed after July 11, 2005

Reconstructed CI RICE, reconstructed after July 11, 2005

Note: Initial Notifications are required for the following CI RICE:

1. All CI RICE >3,000 horsepower (HP);
2. Engine displacement ≥ 10 liters/cylinder; or
3. Pre-2007 model year engines >175 HP that are not certified by the manufacturer to the emissions standards of the CI RICE NSPS.

Construction / Reconstruction Date: [Enter Date RICE Ordered or Reconstruction Began]

The CI RICE was mass-produced and purchased in completed form.

Note: The date of construction / reconstruction is not required for CI RICE that are mass produced and purchased in completed form. Form must be submitted within 30 days after construction or reconstruction.

Startup Date: [Enter Date RICE Started Up (Operational)]

The CI RICE is not operational (startup has not begun).

Note: Submit another notification with the startup date within 15 days after startup.

Company name: [Enter DOE Site Name here.]

Owner name/title: [Enter DOE Site Name here.]

Owner/company address: [Enter DOE Site Address here.]

Owner telephone number: [Enter Responsible Official number.]

Owner email address (if available): [Enter Responsible Official email.]

NAICS code(s): [Enter NAICS Codes here.]

RICE physical location address: [Enter RICE Address here.]

If the Operator information is different from the Owner, please provide the following:

Operator name/title: [If GOCO, Enter Contractor Name here.]

Operator telephone number: [If GOCO, Enter Responsible Official Number here.]

Operator email address (if available): [If GOCO, Enter Responsible Official email here.]

Initial Notification of Applicability
40 CFR Part 60, Subpart IIII, New Source Performance Standard for Stationary
Compression Ignition Reciprocating Internal Combustion Engines

Complete the following table for each new or reconstructed CI RICE at the facility.

Serial Number	Make	Model	Model Year	Engine Family†	Maximum Power	Displacement	Control Equipment	Fuel(s) Used	Date Constructed/Reconstructed

†Engine family is provided by the manufacturer.

I hereby certify that the information presented herein is correct to the best of my knowledge.

(Responsible Official Signature)

(Date)

(Responsible Official Name & Title)

(Telephone Number)

Initial Notification of Applicability
40 CFR Part 60, Subpart JJJJ, New Source Performance Standard for Stationary Spark Ignition Reciprocating Internal Combustion Engines

Yes, I am subject to 40 CFR Part 60, Subpart JJJJ, New Source Performance Standard for Stationary Spark Ignition (SI) Reciprocating Internal Combustion Engines (RICE)

New SI RICE, constructed after July 11, 2005

Reconstructed CI RICE, reconstructed after July 11, 2005

Note: Initial Notifications are required only for SI RICE \geq 500 horsepower (HP) that are not certified by the manufacturer to the emissions standards of the SI RICE NSPS.

Construction / Reconstruction Date: *[Enter Date RICE Ordered or Reconstruction Began]*

The SI RICE was mass-produced and purchased in completed form.

Note: The date of construction / reconstruction is not required for SI RICE that are mass produced and purchased in completed form. Form must be submitted within 30 days after construction or reconstruction.

Startup Date: *[Enter Date RICE Started Up (Operational)]*

The SI RICE is not operational (startup has not begun).

Note: Submit another notification with the startup date within 15 days after startup.

Company name: *[Enter DOE Site Name here.]*

Owner name/title: *[Enter DOE Site Name here.]*

Owner/company address: *[Enter DOE Site Address here.]*

Owner telephone number: *[Enter Responsible Official number.]*

Owner email address (if available): *[Enter Responsible Official email.]*

NAICS code(s): *[Enter NAICS Codes here.]*

RICE physical location address: *[Enter RICE Address here.]*

If the Operator information is different from the Owner, please provide the following:

Operator name/title: *[If GOCO, Enter Contractor Name here.]*

Operator telephone number: *[If GOCO, Enter Responsible Official Number here.]*

Operator email address (if available): *[If GOCO, Enter Responsible Official email here.]*

Initial Notification of Applicability
40 CFR Part 60, Subpart JJJJ, New Source Performance Standard for Stationary
Spark Ignition Reciprocating Internal Combustion Engines

Complete the following table for each new or reconstructed SI RICE at the facility.

Serial Number	Make	Model	Model Year	Engine Family†	Maximum Power	Displacement	Control Equipment	Fuel(s) Used	Date Constructed/Reconstructed

†Engine family is provided by the manufacturer.

I hereby certify that the information presented herein is correct to the best of my knowledge.

 (Responsible Official Signature)

 (Date)

 (Responsible Official Name & Title)

 (Telephone Number)

APPENDIX C

RICE NESHAP Initial Notification Reports

The following initial notification reports were provided by EPA to comply with the initial notification requirements of 40 CFR, Part 63, Subpart ZZZZ, the RICE NESHAP.

Initial Notification of Applicability
40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air
Pollutants Stationary Spark Ignition Reciprocating Internal Combustion Engines

Yes, I am subject to 40 CFR Part 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

Compliance Date:

- Any four-stroke rich burn (4SRB) spark ignition (SI) RICE >500 brake horsepower (HP), located at a major source of HAP, installed before August 16, 2004: December 13, 2004;
- Any SI RICE located at an area source of HAP, any SI RICE ≤500 brake HP located at a major source of HAP and any two-stroke and four-stroke lean burn (2SLB & 4SLB) SI RICE >500 brake HP, installed before June 12, 2006: October 19, 2013; or
- New/reconstructed SI RICE, installed on or after June 12, 2006: 15 days of startup.

Company name: *[Enter DOE Site Name here.]*

Owner name/title: *[Enter DOE Site Name here.]*

Owner/company address: *[Enter DOE Site Address here.]*

Owner telephone number: *[Enter Responsible Official number.]*

Owner email address (if available): *[Enter Responsible Official email.]*

NAICS code(s): *[Enter NAICS Codes here.]*

RICE physical location address: *[Enter RICE Address here.]*

Facility Type (choose one): Major source Area source

If the Operator information is different from the Owner, please provide the following:

Operator name/title: *[If GOCO, Enter Contractor Name here.]*

Operator telephone number: *[If GOCO, Enter Responsible Official Number here.]*

Operator email address (if available): *[If GOCO, Enter Responsible Official email here.]*

Total number of stationary SI RICE at the facility: *[Enter number here.]*

Complete the following table for each SI RICE at the facility.

RICE Identification	RICE Horsepower Rating	RICE Description

I hereby certify that the information presented herein is correct to the best of my knowledge.

(Responsible Official Signature)

(Date)

(Responsible Official Name & Title)

(Telephone Number)

**Initial Notification of Applicability
40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air
Pollutants Stationary Compression Ignition Reciprocating Internal Combustion Engines**

Yes, I am subject to 40 CFR Part 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

Compliance Date:

- Any compression ignition (CI) RICE, installed before June 12, 2006: May 3, 2013; or
 New/reconstructed source, installed on or after June 12, 2006: 15 days of startup.

Company name: *[Enter DOE Site Name here.]*

Owner name/title: *[Enter DOE Site Name here.]*

Owner/company address: *[Enter DOE Site Address here.]*

Owner telephone number: *[Enter Responsible Official number.]*

Owner email address (if available): *[Enter Responsible Official email.]*

NAICS code(s): *[Enter NAICS Codes here.]*

RICE physical location address: *[Enter RICE Address here.]*

Facility Type (choose one): Major source Area source

If the Operator information is different from the Owner, please provide the following:

Operator name/title: *[If GOCO, Enter Contractor Name here.]*

Operator telephone number: *[If GOCO, Enter Responsible Official Number here.]*

Operator email address (if available): *[If GOCO, Enter Responsible Official email here.]*

Total number of stationary CI RICE at the facility: *[Enter number here.]*

Complete the following table for each CI RICE at the facility.

RICE Identification	RICE Horsepower Rating	RICE Description

I hereby certify that the information presented herein is correct to the best of my knowledge.

(Responsible Official Signature)

(Date)

(Responsible Official Name & Title)

(Telephone Number)