

# DIVISION OF ENVIRONMENTAL QUALITY

# DRAFT OPERATING AIR PERMIT

PERMIT NUMBER: 0551-AOP-R12

#### IS ISSUED TO:

Carthage Forest Products, LLC 322 North Oak Street Carthage, AR 71725
Dallas County
AFIN: 20-00017

PURSUANT TO THE RULES OF THE ARKANSAS OPERATING AIR PERMIT PROGRAM, 8 CAR PT. 42: THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

May 31, 2022 AND May 30, 2027

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

| Signed:   |      |
|---|------|
| Demetria Kimbrough Deputy Director, Office of Air Quality | Date |

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## List of Acronyms and Abbreviations

Ark. Code Ann. Arkansas Code Annotated

AFIN Arkansas DEQ Facility Identification Number

C.F.R. Code of Federal Regulations

CO Carbon Monoxide

COMS Continuous Opacity Monitoring System

HAP Hazardous Air Pollutant

Hp Horsepower

lb/hr Pound Per Hour

NESHAP National Emission Standards (for) Hazardous Air Pollutants

MVAC Motor Vehicle Air Conditioner

No. Number

NO<sub>x</sub> Nitrogen Oxide

NSPS New Source Performance Standards

PM Particulate Matter

PM<sub>10</sub> Particulate Matter Equal To Or Smaller Than Ten Microns

PM<sub>2.5</sub> Particulate Matter Equal To Or Smaller Than 2.5 Microns

SNAP Significant New Alternatives Program (SNAP)

SO<sub>2</sub> Sulfur Dioxide

SSM Startup, Shutdown, and Malfunction Plan

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

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#### **SECTION I: FACILITY INFORMATION**

PERMITTEE: Carthage Forest Products, LLC

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FACILITY ADDRESS: 322 North Oak Street

Carthage, AR 71725

MAILING ADDRESS: 322 North Oak Street

Carthage, AR 71725

COUNTY: Dallas County

CONTACT NAME: Gary Milhollen

CONTACT POSITION: General Manager

TELEPHONE NUMBER: (870) 254-2213

REVIEWING ENGINEER: Derrick Brown

UTM North South (Y): Zone 15: 3770785.62 m

UTM East West (X): Zone 15: 541192.41 m

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#### **SECTION II: INTRODUCTION**

# **Summary of Permit Activity**

Carthage Forest Products, LLC operates a lumbermill located in Carthage, AR. This modification permits operation of an emergency fire pump engine (SN-18) that has already been installed. The source, SN-18, is a 315-Hp Certified Emergency Fire Pump Engine. This modification increases permitted emissions by 0.7 tpy of PM, 0.1 tpy of PM<sub>10</sub>, 0.2 tpy of SO<sub>2</sub>, 0.1 tpy of VOC, 0.5 tpy of CO, and 0.6 tpy of NO<sub>x</sub>.

#### **Process Description**

This facility produces finished lumber from southern yellow pine timber. By-products of the operation include bark, sawdust, planer shavings, and dry chips. These byproducts are collected and sold.

Yellow pine logs are delivered to the sawmill by truck. The logs are stored on site and watered as needed. Oversized logs are routed through the Chop Saw (SN-10) to get to the proper length for processing. All logs go through the Debarker (SN-11) for bark removal and then into the Sawmill (SN-06) for converting into green lumber. All Sawmill processing is conducted inside the building and water may be sprayed on the saws to keep the saws lubricated and prevent fires. The water spray also controls particulate emissions. Production through the Chop Saw, Debarker, and Sawmill will not exceed 210 tons of logs per hour and 270,200 tons of logs per year.

Green sawdust and chip fines will be collected from the Sawmill and blown by a high pressure system from the sawmill screening area to the concrete fuel silo near the kiln using the Fuel Silo Cyclone (SN-15). Bark and log trim may be processed through the Bark Hog or Horizontal Hog (IA Group A.13). Bark from the Debarker and the Bark Hog is collected and mechanically conveyed to the Bark Bin for loading into trucks for sale. Chips are mechanically conveyed to the Chip Bin for sale. Byproduct Storage and Handling (SN-12) addresses minimal emissions from loading byproducts into trucks for shipping off site.

Rough green lumber from the Sawmill is sorted and stacked at the sticker stacker for drying in the Continuous Dry Kiln, CDK, (SN-14). This dual path CDK is heated with a slope grate sawdust burner which receives green biomass fuel from the Fuel Silo. CDK emissions are released to the atmosphere through the powered stacks on each end of the kiln and through fugitive emissions at the door openings. The CDK can dry up to 68.5 million board feet per year (MMBf/yr).

The Planer Mill processes the dry rough lumber from the CDK into dimensional lumber that is ready for packaging and sale. The planing equipment removes a layer of wood from the boards giving them a smooth, straight appearance and makes them standard sizes for sale. Planer shavings are picked up from the planer, trimmer, and hog within the Planer Mill and conveyed with a new low-pressure/high-volume pulse jet baghouse collector, Planer Mill Baghouse (SN-

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16). The shavings will be deposited into a truck bin for loading into trucks for shipping offsite and sale. Minimal particulate emissions are released from the bag house.

Emissions from facility traffic are permitted as Paved Haul Roads (SN-07) and Unpaved Haul Roads (SN-08). Emergency Engine (SN-09) is a Cummins Model 125 kW (183 BHP) diesel fired engine. This 2018 model year engine was installed at the facility in 2018; it has been relocated to support CDK burner operation in the event of a power outage. The engine is certified to Tier III standards.

The facility operates a 500-gallon gasoline tank (SN-17) and a 1,000-gallon diesel tank that qualifies as a Group A.3 Insignificant Activity and a 315-hp Emergency Fire Pump Engine (SN-18). Various other sawmill sources are identified as Group A.13 Insignificant Activities including an Ash Storage Pile and Bark Hog and Horizontal Hog/Grizzly Separator.

# **Rules and Regulations**

The following table contains the rules and regulations applicable to this permit.

| Rules and Regulations  |
|--|
| Arkansas Air Pollution Control Code, 8 CAR pt. 40, effective March 14, 2016  |
| Rules of the Arkansas Plan of Implementation for Air Pollution Control, 8 CAR pt. 41, effective May 6, 2022  |
| Rules of the Arkansas Operating Air Permit Program, 8 CAR pt. 42, effective March 14, 2016   |
| 40 C.F.R. Part 60, Subpart IIII – Standards of Performance (NSPS) for Stationary   |
| Compression Ignition Internal Combustion Engines  40 C.F.R. Part 63, Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal   |
| Combustion Engines  40 C.F.R. Part 63, Subpart CCCCCC - NESHAP for Gasoline Dispensing Facilities  |
| 1 Jet Jet State of the state of |

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# **Emission Summary**

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

|        | E                     | MISSION SUMMARY  |  |  |  |
|--------|-----------------------|--|--|--|--|
| Source | Description           | D 11   | Emission Rates                                 |  |  |
| Number | Description           | Pollutant  | lb/hr  | tpy  |  |
|        |                       | PM   | 13.9   | 36.1   |  |
|        |                       | $PM_{10}$  | 6.3  | 13.7   |  |
|        |                       | $\mathrm{SO}_2$  | 1.3  | 1.2  |  |
| Tota   | l Allowable Emissions | VOC  | 43.5   | 164.6  |  |
|        |                       | CO   | 9.7  | 25.9   |  |
|        |                       | NOx  | 5.7  | 10.5   |  |
|        |                       | Lead   | 0.00134  | 0.00589  |  |
|        | HAPs                  | Total HAP**  | 2.64   | 10.41  |  |
| 06     | Sawmill               | PM<br>PM <sub>10</sub>   | 2.2<br>1.1                                     | 1.4<br>0.7                                     |  |
| 07     | Paved Haul Roads      | PM<br>PM <sub>10</sub>   | 1.7<br>0.4                                     | 6.9<br>1.4                                     |  |
| 08     | Unpaved Haul Roads    | PM<br>PM <sub>10</sub>   | 3.8<br>0.8                                     | 11.9<br>2.4                                    |  |
| 09     | Emergency Pump Engine | PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> Total HAP | 0.1<br>0.1<br>0.4<br>0.5<br>1.5<br>1.2<br>0.04 | 0.1<br>0.1<br>0.1<br>0.2<br>0.4<br>0.3<br>0.01 |  |
| 10     | Chop Saw              | PM<br>PM <sub>10</sub>   | 0.3<br>0.2                                     | 0.2<br>0.1                                     |  |
| 11     | Debarker              | PM<br>PM <sub>10</sub>   | 0.3<br>0.1                                     | 0.2<br>0.1                                     |  |
| 12     | Byproduct Handling    | PM<br>PM <sub>10</sub>   | 0.2<br>0.1                                     | 0.2<br>0.1                                     |  |

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|        | EMISSION SUMMARY      |                 |                |          |  |
|--------|-----------------------|-----------------|----------------|----------|--|
| Source | Description           | Pollutant       | Emission Rates |          |  |
| Number | Description           | Pollutant       | lb/hr          | tpy      |  |
|        |                       | PM              | 1.2            | 4.8      |  |
|        |                       | $PM_{10}$       | 0.9            | 3.6      |  |
|        |                       | $\mathrm{SO}_2$ | 0.2            | 0.9      |  |
| 14     | Continuous Dry Kiln   | VOC             | 40.7           | 163.8    |  |
| 14     | Continuous Dry Kim    | CO              | 6.3            | 25.0     |  |
|        |                       | $NO_X$          | 2.4            | 9.6      |  |
|        |                       | Lead            | 1.34E-03       | 5.89E-03 |  |
|        |                       | Total HAP       | 2.58           | 10.38    |  |
|        | 7 10" 6 1             | PM              | 1.7            | 1.7      |  |
| 15     | Fuel Silo Cyclone     | $PM_{10}$       | 1.6            | 1.6      |  |
| 16     | Dlanar Mill Daghauga  | PM              | 2.0            | 8.6      |  |
| 10     | Planer Mill Baghouse  | $PM_{10}$       | 0.8            | 3.5      |  |
| 1.7    | C 1' C T 1            | VOC             | 0.2            | 0.5      |  |
| 17     | Gasoline Storage Tank | Total HAP       | 0.01           | 0.01     |  |
|        |                       | PM              | 0.2            | 0.1      |  |
|        |                       | $PM_{10}$       | 0.2            | 0.1      |  |
|        | Emanage av Eina Daves | $\mathrm{SO}_2$ | 0.7            | 0.2      |  |
| 18     | Emergency Fire Pump   | VOC             | 2.1            | 0.6      |  |
|        | Engine                | CO              | 1.9            | 0.5      |  |
|        |                       | $NO_X$          | 2.1            | 0.6      |  |
|        |                       | Total HAP       | 0.01           | 0.01     |  |

<sup>\*\*</sup>HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

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#### SECTION III: PERMIT HISTORY

Permit #0551-A was issued to C & S Lumber Company on May 25, 1979. This was the first air permit issued for this facility.

Idaho Timber Corporation of Carthage, Inc. was issued a temporary permit (#551-AR-1) in July of 1993. This permit allowed the facility to refine operation of the equipment and to conduct emissions testing. A final permit (#551-AR-2) was issued to this facility on August 15, 1995.

Permit #0551-AR-3 was issued on November 3, 1997. Under this permit, the facility decreased allowable throughput in order to remain a minor source with regards to Title V.

Permit #0551-AOP-R0 was issued on July 28, 2000. This was the first Title V permit issued to this facility. Under that permit, the facility was classified as a major source for Title V purposes due to VOC emissions in excess of 100 tons per year. The permitted increase in emissions resulted from an increase in production (from 50 MM board feet per year to 55 MM board feet per year) and the installation of a new natural gas fired lumber drying kiln.

Permit #0551-AOP-R1 was issued on November 30, 2005. This was the first renewal of the Title V permit for this facility. HAP emissions from the drying kilns were quantified for the first time based on NCASI factors. No modifications or changes to the method of operation were made.

Permit #0551-AOP-R2 was issued on July 5, 2007. This modification allowed the facility to correct the permitted emission limits for the boiler based on current stack test data and to increase the annual production limit from 55 MMBF/yr to 65 MMBF/yr. The changes in the permitted emission rates were 26.6 tpy PM, 6.7 tpy PM<sub>10</sub>, 4.8 tpy SO<sub>2</sub>, 23.6 tpy VOC, 149.4 tpy CO, and 17.1 tpy NO<sub>X</sub>.

Permit #0551-AOP-R3 was issued on October 9, 2012. This application was submitted to:

- Renew the facility's Title V air permit;
- Permit sawmill operations (SN-06);
- Permit paved haul roads (SN-07) and unpaved haul roads (SN-08);
- Permit emergency pump engine (SN-09) which is subject to NESHAP 40 C.F.R. Part 63 Subpart ZZZZ;
- Permit chop saw (SN-10);
- Permit debarker (SN-11);
- Permit boiler fuel and chip handling (SN-12);
- Permit gasoline storage tank (SN-13) which is subject to NESHAP 40 C.F.R. Part 63 Subpart CCCCCC; and
- Add insignificant activities (1,000 Gallon Horizontal Above ground Diesel Storage Tank, Fuel Storage Pile, Ash Storage Pile, Planer Shavings Loadout, Green Chip Loadout, Bark Hog & Horizontal Hog, and Conveyor Transfer Points).

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The total annual permitted emission rate limit changes associated with this modification include: -19.6 tpy PM<sub>10</sub>, +0.1 tpy SO<sub>2</sub>, -5.6 tpy VOC, +0.2 tpy CO, +0.4 tpy NO<sub>x</sub>, +0.032 tpy Acetaldehyde, +1.8 tpy Acetone, +0.202 tpy Acrolein, +0.01 tpy Arsenic, +0.0202 tpy Benzene, +0.02 tpy Beryllium, +0.002 tpy Cadmium, +0.01 tpy Chromium (Hex), -1.6898 tpy Formaldehyde, +0.15 tpy Hexane, +0.01 tpy Manganese, +0.02 tpy Mercury, +0.05 tpy Naphthalene, +0.01 tpy Styrene, +0.3801 Toluene, and +0.1001 tpy Xylene.

Permit #0551-AOP-R4 was issued on December 12, 2012. This facility submitted an administrative amendment application to change Specific Condition #30 to reference Specific Condition #29 instead of #28. There were no annual permitted emission rate limit changes associated with this amendment.

Permit #0551-AOP-R5 was issued on April 25, 2014. This facility submitted an application to add the applicable NESHAP 40 C.F.R. Part 63 Subpart JJJJJJ conditions to the wood fired boiler (SN-01). There wasn't any emission changes associated with this modification.

Permit #0551-AOP-R6 was issued on June 8, 2015. This facility submitted an administrative amendment application to correct a typographical error for the acetaldehyde annual limit for the Wood Waste Fired Boiler (SN-01). The annual limit for acetaldehyde was input at 0.03 tpy instead of 0.23 tpy as calculated. The total annual permitted emission rate limit changes include +0.2 tpy acetaldehyde.

Permit #0551-AOP-R7 was issued on May 4, 2017. This facility has submitted a Title V renewal which also included the following revisions:

- Correct rounding errors for the emissions for SN-08 (unpaved haul roads) and SN-07 (paved haul roads)
- Revise the PM, PM<sub>10</sub>, and NO<sub>X</sub> emissions for SN-01 (wood fired boiler) to use AP-42 instead of past stack test data. This has caused a large increase in these emissions.
- Revise the PM emissions from SN-12 (boiler fuel and wood chip handling) by basing the emissions on hours of operation instead of material processed.
- Revise the SO<sub>2</sub> emissions from SN-09 (emergency pump engine) due to now using AP-42 factors.

The permitted emission limits increased by 133.3 tpy of PM, 77.5 tpy of PM<sub>10</sub>, 141.9 tpy of NO<sub>X</sub>, and 0.06 tpy of acetone; while the permitted emission limits decreased by 0.1 tpy for CO. Permit #0551-AOP-R8 was issued on November 30, 2018. This application was submitted as a minor modification to Permit No. 0551-AOP-R7 to replace SN-09 (Emergency Pump Engine) with a new engine. The permitted emission limits increased by 0.1 tpy of VOC, 0.2 tpy of CO, and 0.04 tpy of total combustion HAPs; while the permitted emission limits decreased by 0.1 tpy of NO<sub>X</sub>.

Permit #0551-AOP-R9 was issued on May 8, 2019. This application was submitted as an administrative amendment to add a Planer Shavings Storage Bin to the Insignificant Activities list as a group A-13 activity. There were no permitted emissions changes with this permit revision.

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Permit #0551-AOP-R10 was issued on May 31, 2022. This application was submitted to renew the Title V Air Permit. In addition the following revisions were made to this permit:

- Updated the permit contact information.
- Corrected previously made typographical errors, including the omission of the NSPS IIII from the Regulations Table.
- Updated emission limits to be consistent with rounding methods.
- Removed the daily fuel usage limit at SN-01, since the emissions are based on maximum hourly capacity.
- Specific Condition 8 was updated to include the maximum operating capacity of SN-01 for testing purposes.
- Corrected the source information for SN-09 and added HAP emissions based on updated calculations.
- Added a NESHAP ZZZZ condition for SN-09.
- Combined the Planer Shavings Loadout & the Planer Shavings Storage Bin as one source on the Insignificant Activities List.

Based on the revisions listed above, the overall annual permitted emission limits were increased by 0.1 ton of PM and 0.31 ton of Total HAP.

Permit #0551-AOP-R11 was issued on November 13, 2023. This modification allowed the following:

- Remove sources SN-01, SN-02A, SN-03, SN-04, and SN-13 from the permit.
- Update emissions of sources SN-06, SN-10, SN-11, and SN-12 due to changes in method of operation.
- Add new sources SN-15, SN-16, and SN-17
- Convert existing source SN-05 from a natural gas burner batch kiln to a slope grate sawdust burner dual path continuous drying kiln. Reclassify SN-05 as a new source, SN-14 due to the extent of the conversion.

Emission changes as a result of these modifications are: Decreases of 204.1 tpy of PM, 131.2 tpy of PM<sub>10</sub>, 6.2 tpy of SO<sub>2</sub>, 217.5 tpy of CO, 189.3 tpy of NO<sub>x</sub>, 0.00771 tpy of Lead, 3.92 tpy of Total HAP, 1.86 tpy of Acetone, and an increase of 45.0 tpy of VOC.

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#### **SECTION IV: SPECIFIC CONDITIONS**

#### SN-06 Sawmill

#### Source Description

Logs go into the sawmill for conversion into green lumber. All sawmill processing is conducted inside the building and water may be sprayed on the saws to keep the saws lubricated and prevent fires. The water spray also controls particulate emissions.

#### **Specific Conditions**

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition#37. [8 CAR § 41-401 *et seq.* and 40 C.F.R. § 52 Subpart E]

| SN | Description | Pollutant        | lb/hr | tpy |
|----|-------------|------------------|-------|-----|
| 06 | Sawmill     | PM <sub>10</sub> | 1.1   | 0.7 |

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| SN | Description | Pollutant | lb/hr | tpy |
|----|-------------|-----------|-------|-----|
| 06 | Sawmill     | PM        | 2.2   | 1.4 |

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

| SN | Limit | Regulatory Citation       |  |
|----|-------|---------------------------|--|
| 06 | 5%    | 8 CAR § 40-401 and A.C.A. |  |

4. Weekly observations of the opacity from SN-06 shall be conducted by a person trained but not necessarily certified in EPA Reference Method 9. If visible emissions in excess of the permitted levels are detected, the permittee shall immediately take action to identify the cause of the visible emissions in excess of the permit limit, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain

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records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated weekly, kept on site, and made available to Division of Environmental Quality personnel upon request.

- a. The date and time of the observation.
- b. If visible emissions which appeared to be above the permitted limit were detected.
- c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
- d. The name of the person conducting the opacity observations.

[8 CAR § 41-605 and 40 C.F.R. § 52 Subpart E]

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# SN-07 and SN-08 Paved and Unpaved Haul Roads

#### Source Description

These sources consist of paved and unpaved haul roads. Emissions are generated from vehicles traveling throughout the facility on the paved and unpaved haul roads.

### **Specific Conditions**

5. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

| SN | Description        | Pollutant | lb/hr | tpy |
|----|--------------------|-----------|-------|-----|
| 07 | Paved Haul Roads   | $PM_{10}$ | 0.4   | 1.4 |
| 08 | Unpaved Haul Roads | $PM_{10}$ | 0.8   | 2.4 |

6. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| SN | Description        | Pollutant | lb/hr | tpy  |
|----|--------------------|-----------|-------|------|
| 07 | Paved Haul Roads   | PM        | 1.7   | 6.9  |
| 08 | Unpaved Haul Roads | PM        | 3.8   | 11.9 |

7. Nothing in this permit shall be construed to authorize a violation of the Arkansas Water and Air Pollution Control Act or the federal National Pollutant Discharge Elimination System (NPDES). [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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# SN-09 Emergency Pump Engine

#### Source Description

Emergency pump engine (SN-09), is a 125 kW (183 HP) Cummins Model C125D6C diesel engine. This 2018 model year engine was installed at the facility in 2018. The engine is subject to NSPS 40 C.F.R. Part 60, Subpart IIII.

The pump engine is used to pump water to the CDK burner operations during power outages. The engine will be operated for approximately 30 minutes per week for maintenance purposes; otherwise, it will only operate in emergency situations.

#### **Specific Conditions**

8. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #12. [8 CAR § 41-401 *et seq.* and 40 C.F.R. § 52 Subpart E]

| SN | Description           | Pollutant        | lb/hr | tpy |
|----|-----------------------|------------------|-------|-----|
|    |                       | PM <sub>10</sub> | 0.1   | 0.1 |
|    |                       | $SO_2$           | 0.4   | 0.1 |
| 09 | Emergency Pump Engine | VOC              | 0.5   | 0.2 |
|    |                       | СО               | 1.5   | 0.4 |
|    |                       | $NO_x$           | 1.2   | 0.3 |

9. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #12. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| SN | Description           | Pollutant       | lb/hr       | tpy         |
|----|-----------------------|-----------------|-------------|-------------|
| 09 | Emergency Pump Engine | PM<br>Total HAP | 0.1<br>0.04 | 0.1<br>0.01 |

10. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

| SN | Limit | Regulatory Citation                         |
|----|-------|---|
| 09 | 20%   | 8 CAR § 41-403 and 40 C.F.R. § 52 Subpart E |

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- 11. Annual observations of the opacity from SN-09 shall be conducted by a person trained but not necessarily certified in EPA Reference Method 9. If visible emissions in excess of the permitted levels are detected, the permittee shall immediately take action to identify the cause of the visible emissions in excess of the permit limit, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated annually, kept on site, and made available to Division of Environmental Quality personnel upon request.
  - a. The date and time of the observation.
  - b. If visible emissions which appeared to be above the permitted limit were detected.
  - c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
  - d. The name of the person conducting the opacity observations.

[8 CAR § 41-605 and 40 C.F.R. § 52 Subpart E]

- 12. The permittee shall not operate the emergency generator SN-09 in excess of 500 total hours (emergency and non-emergency) per calendar year in order to demonstrate compliance with the annual emission rate limits. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with 8 CAR § 41-502 and other applicable regulations. [8 CAR § 41-605, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
- 13. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition 12. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The calendar year totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [8 CAR § 41-605 and 40 C.F.R. § 52 Subpart E]

#### **NSPS Subpart IIII Conditions**

- 14. SN-09 is subject to 40 C.F.R. Part 60, Subpart IIII. The permittee shall comply with all applicable provisions of 40 C.F.R. Part 60, Subpart IIII which includes, but is not limited to, Specific Conditions 15 through 21. [8 CAR § 41-204 and 40 C.F.R. § 60 Subpart IIII]
- 15. The provisions of 40 C.F.R. Part 60 Subpart IIII are applicable to owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines. For the purposes of 40 C.F.R. Part 60 Subpart IIII, the date that construction commences is the date the engine is ordered by the owner or operator. [8 CAR § 41-204 and 40 C.F.R. §60.4200(a)(2)(i)]

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- 16. Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [8 CAR § 41-204 and 40 C.F.R. §60.4205(b)]
- 17. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [8 CAR § 41-204 and 40 C.F.R. §60.4207(b)]
- 18. If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine. [8 CAR § 41-204 and 40 C.F.R. §60.4209(a)]
- 19. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section. [8 CAR § 41-204 and 40 C.F.R. §60.4211(c)]
- 20. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (a) through (c) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (a) through (c) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [8 CAR § 41-204 and 40 C.F.R. §60.4211(f)]
  - a. There is no time limit on the use of emergency stationary ICE in emergency situations.
  - b. You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (b).

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

- ii. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- c. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (b) of this section. Except as provided in paragraph (i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
    - 1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
    - 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
    - 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
    - 4. The power is provided only to the facility itself or to support the local transmission and distribution system.

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

21. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. [8 CAR § 41-204 and 40 C.F.R. §60.4211(g)]

## **NESHAP Subpart ZZZZ Condition**

22. SN-09 is subject to 40 C.F.R. § 63 Subpart ZZZZ. Compliance with this subpart shall be demonstrated through compliance with all applicable provisions of 40 C.F.R. § 60 Subpart IIII which includes, but is not limited to, Specific Conditions 15 through 21. [8 CAR § 41-204 and 40 C.F.R. § 63.6590(c)(1)]

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# SN-10 Chop Saw

#### Source Description

Unprocessed logs are brought to the facility by trucks and are off-loaded into the log yard. Oversized logs are cut to a manageable length with the Chop Saw prior to entering the Debarker (SN-11) and then the Sawmill (SN-06).

#### **Specific Conditions**

23. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 41-401 *et seq.* and 40 C.F.R. § 52 Subpart E]

| SN | Description | Pollutant        | lb/hr | tpy |
|----|-------------|------------------|-------|-----|
| 10 | Chop Saw    | PM <sub>10</sub> | 0.2   | 0.1 |

24. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| SN | Description | Pollutant | lb/hr | tpy |
|----|-------------|-----------|-------|-----|
| 10 | Chop Saw    | PM        | 0.3   | 0.2 |

- 25. The permittee shall conduct weekly visible emissions observations of the opacity from SN-10 and shall be keep record of the observations. Weekly observations shall be taken during equipment operation and are only required when the source has operated during any part of the week. If, during the weekly observations, visible emissions are observed, the permittee shall immediately take action to identify the cause of the visible emissions and implement corrective action. After corrective action has been taken, the permittee shall conduct another visible emission observation of the opacity to confirm that visible emissions are no longer present. If visible emissions are still present following the corrective action, the permittee shall document that cause a nuisance beyond the property boundary. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated weekly, kept on site, and made available to Division of Environmental Quality personnel upon request.
  - a. The date and time of the observation.
  - b. If visible emissions were detected.

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- c. If visible emissions were detected, the cause of the visible emissions, the corrective action taken, and if the visible emissions were present after the corrective action was taken.
- d. If visible emissions were present following the corrective action, document that the visible emissions do not cause a nuisance beyond the property boundary.
- e. The name of the person conducting the visible emissions observations.

[8 CAR § 40-401, 8 CAR § 40-904, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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#### SN-11 Debarker

#### Source Description

Unprocessed logs are brought to the facility by trucks and are offloaded into the log yard. The logs are conveyed through the Debarker (SN-11) prior to entering the Sawmill.

#### **Specific Conditions**

26. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 41-401 *et seq.* and 40 C.F.R. § 52 Subpart E]

| SN | Description | Pollutant        | lb/hr | tpy |
|----|-------------|------------------|-------|-----|
| 11 | Debarker    | PM <sub>10</sub> | 0.1   | 0.1 |

27. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| SN | Description | Pollutant | lb/hr | tpy |
|----|-------------|-----------|-------|-----|
| 11 | Debarker    | PM        | 0.3   | 0.2 |

- 28. The permittee shall conduct weekly visible emissions observations of the opacity from SN-11 and shall be keep record of the observations. Weekly observations shall be taken during equipment operation and are only required when the source has operated during any part of the week. If, during the weekly observations, visible emissions are observed, the permittee shall immediately take action to identify the cause of the visible emissions and implement corrective action. After corrective action has been taken, the permittee shall conduct another visible emission observation of the opacity to confirm that visible emissions are no longer present. If visible emissions are still present following the corrective action, the permittee shall document that cause a nuisance beyond the property boundary. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated weekly, kept on site, and made available to Division of Environmental Quality personnel upon request.
  - a. The date and time of the observation.
  - b. If visible emissions were detected.

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- c. If visible emissions were detected, the cause of the visible emissions, the corrective action taken, and if the visible emissions were present after the corrective action was taken.
- d. If visible emissions were present following the corrective action, document that the visible emissions do not cause a nuisance beyond the property boundary.
- e. The name of the person conducting the visible emissions observations.

[8 CAR § 40-401, 8 CAR § 40-904, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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# SN-12 Byproduct Handling

# Source Description

Wood chips, barks, and shavings are collected at the saw mill. The emissions for the storage and loading of byproducts for sale are identified here. The material is loaded into trucks for shipping offsite. Emissions are estimated using DEQ memorandum dated August 22, 2003.

#### **Specific Conditions**

29. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

| SN | Description        | Pollutant        | lb/hr | tpy |
|----|--------------------|------------------|-------|-----|
| 12 | Byproduct Handling | PM <sub>10</sub> | 0.1   | 0.1 |

30. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #37. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| SN | Description        | Pollutant | lb/hr | tpy |
|----|--------------------|-----------|-------|-----|
| 12 | Byproduct Handling | PM        | 0.2   | 0.2 |

31. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

| SN | Limit | Regulatory Citation                         |
|----|-------|---|
| 12 | 20%   | 8 CAR § 41-403 and 40 C.F.R. § 52 Subpart E |

32. Weekly observations of the opacity from source SN-12 shall be conducted by a person trained, but not necessarily certified, in EPA Reference Method 9. If emissions which appear to be in excess of 20% are observed, the permittee shall take immediate action to identify and correct the cause of the excess visible emissions. After corrective action has been taken, another observation of the opacity from the source in question shall be conducted in order to either confirm that excess visible emissions are no longer present or that the source is out of compliance with the permitted opacity limit. The permittee shall maintain records which contain the following items in order to demonstrate compliance

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with this specific condition. These records shall be updated daily, kept on site, and made available to Division of Environmental Quality personnel upon request.

- a. The date and time of the observation.
- b. If visible emissions which appeared to be above the permitted limit were detected.
- c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
- d. The name of the person conducting the opacity observations.

[8 CAR § 41-605 and 40 C.F.R. § 52 Subpart E]

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# SN-14 Continuous Dry Kiln

#### Source Description

Rough green lumber is dried in the Continuous Dry Kiln. The unit is direct fired by a 28 MMBtu/hr green sawdust burner.

#### **Specific Conditions**

33. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #37. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

| SN | Description         | Pollutant       | lb/hr    | tpy      |
|----|---------------------|-----------------|----------|----------|
|    |                     | $PM_{10}$       | 0.9      | 3.6      |
|    | Continuous Dry Kiln | $\mathrm{SO}_2$ | 0.2      | 0.9      |
| 14 |                     | VOC             | 40.7     | 163.8    |
| 14 |                     | CO              | 6.3      | 25.0     |
|    |                     | $NO_x$          | 2.4      | 9.6      |
|    |                     | Lead            | 1.34E-03 | 5.89E-03 |

34. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #37. [8 CAR § 40-701 and A.C.A.]

| SN | Description         | Pollutant | lb/hr | tpy   |
|----|---------------------|-----------|-------|-------|
| 14 | Continuous Dry Kiln | PM        | 1.2   | 4.8   |
|    | Continuous Dry Kiin | Total HAP | 2.58  | 10.38 |

35. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

| SN | Limit | Regulatory Citation                         |
|----|-------|---|
| 14 | 20%   | 8 CAR § 41-403 and 40 C.F.R. § 52 Subpart E |

36. Daily observations of the opacity from source SN-14 shall be conducted by a person trained, but not necessarily certified, in EPA Reference Method 9. If emissions which appear to be in excess of 20% are observed, the permittee shall take immediate action to identify and correct the cause of the excess visible emissions. After corrective action has been taken, another observation of the opacity from the source in question shall be conducted in order to either confirm that excess visible emissions are no longer present or

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that the source is out of compliance with the permitted opacity limit. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated daily, kept on site, and made available to Division of Environmental Quality personnel upon request.

- a. The date and time of the observation.
- b. If visible emissions which appeared to be above the permitted limit were detected.
- c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
- d. The name of the person conducting the opacity observations.

[8 CAR § 41-605 and 40 C.F.R. § 52 Subpart E]

- 37. The permittee shall not produce more than 68.5 MMBF (million board feet) of dried lumber at SN-14 per rolling 12 month period. [8 CAR § 41-605, 8 CAR § 40-904, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
- 38. The permittee shall keep monthly records of lumber production to demonstrate compliance with Specific Condition #37. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Division of Environmental Quality personnel upon request, and submitted in accordance with General Provision #7. [8 CAR § 41-605 and 40 C.F.R. § 52 Subpart E and 8 CAR § 40-904 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 39. Green biomass fuel shall be the only fuel fired in the dry kiln. [8 CAR § 41-605, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

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# SN-15 and SN-16 Fuel Silo Cyclone, Planer Mill Baghouse

#### Source Description

Sawdust from the Sawmill is collected and routed to the Fuel Silo for use as fuel in SN-14. A high efficiency Fuel Silo Cyclone (SN-15) is used to collect the sawdust and deposit into the silo.

Dried lumber is surfaced and trimmed in the Planer Mill to dimension specifications. Shavings generated in the Planer Mill are collected and conveyed by the Planermill Baghouse (SN-16) to the Shavings Truck Bin, from which the shavings are loaded into trucks for sale. The finished lumber is packaged for shipment and stored until sold.

#### **Specific Conditions**

40. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #37. [8 CAR § 41-401 *et seq.* and 40 C.F.R. § 52 Subpart E]

| SN | Description          | Pollutant        | lb/hr | tpy |
|----|----------------------|------------------|-------|-----|
| 15 | Fuel Silo Cyclone    | PM <sub>10</sub> | 1.6   | 1.6 |
| 16 | Planer Mill Baghouse | PM <sub>10</sub> | 0.8   | 3.5 |

41. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #37. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| SN                   | Description          | Pollutant | lb/hr | tpy |
|----------------------|----------------------|-----------|-------|-----|
| 15 Fuel Silo Cyclone |                      | PM        | 1.7   | 1.7 |
| 16                   | Planer Mill Baghouse | PM        | 2.0   | 8.6 |

42. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

| SN | Limit | Regulatory Citation                         |
|----|-------|---|
| 15 | 20%   | 8 CAR § 41-403 and 40 C.F.R. § 52 Subpart E |
| 16 | 5%    | 8 CAR § 40-401 and A.C.A.                   |

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- 43. Daily observations of the opacity from SN-15 and SN-16 shall be conducted by a person trained but not necessarily certified in EPA Reference Method 9. If visible emissions in excess of the permitted levels are detected, the permittee shall immediately take action to identify the cause of the visible emissions in excess of the permit limit, implement corrective action, and perform an EPA Reference Method 9 test to verify emissions are not in excess of the permitted level. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated daily, kept on site, and made available to Division of Environmental Quality personnel upon request.
  - a. The date and time of the observation.
  - b. If visible emissions which appeared to be above the permitted limit were detected.
  - c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
  - d. The name of the person conducting the opacity observations.

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# SN-17 Gasoline Storage Tank

#### Source Description

Carthage Forest Products, LLC operates a 500 gallon, horizontal, aboveground storage tank (AST) that contains gasoline. The gasoline storage tank is subject to NESHAP 40 C.F.R. Part 63 Subpart CCCCCC.

#### **Specific Conditions**

44. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #46. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

| SN | Description           | Pollutant | lb/hr | tpy |
|----|-----------------------|-----------|-------|-----|
| 17 | Gasoline Storage Tank | VOC       | 0.2   | 0.5 |

45. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #46. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| SN Description |                       | Pollutant | lb/hr | tpy  |
|----------------|-----------------------|-----------|-------|------|
| 17             | Gasoline Storage Tank | Total HAP | 0.01  | 0.01 |

- 46. The permittee shall not use more than 26,000 gallons of gasoline per rolling twelve month period at the facility. The permittee shall not use more than 10,000 gallons of gasoline per calendar month. [8 CAR § 41-605, 8 CAR § 40-904, 40 C.F.R. § 70.6, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 47. The permittee shall keep monthly records of gasoline usage in order to demonstrate compliance with Specific Condition #46. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Division of Environmental Quality personnel upon request. [8 CAR § 40-904, 8 CAR § 41-605, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

#### **NESHAP Subpart CCCCC Conditions**

48. SN-17 is subject to NESHAP 40 C.F.R. Part 63 Subpart CCCCCC and shall follow the conditions listed below:

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- a. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - i. Minimize gasoline spills;
  - ii. Clean up spills as expeditiously as practicable;
  - iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- b. The permittee is not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- c. The permittee must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
- d. Portable gasoline containers that meet the requirements of 40 C.F.R. part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[8 CAR § 41-204 and 40 C.F.R. § 63.11116]

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# SN-18 Emergency Fire Pump Engine

#### Source Description

SN-18 is a 315-hp, Compression Ignition, 4-Stroke, 2023 Model Year, Certified Emergency Fire Pump Engine

#### **Specific Conditions**

49. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #72. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

| SN    | Description                | Pollutant        | lb/hr | tpy |
|-------|----------------------------|------------------|-------|-----|
|       |                            | PM <sub>10</sub> | 0.2   | 0.1 |
| SN-18 | Emergency Fire Pump Engine | $SO_2$           | 0.7   | 0.2 |
|       |                            | VOC              | 2.1   | 0.6 |
|       |                            | CO               | 1.9   | 0.5 |
|       |                            | $NO_x$           | 2.1   | 0.6 |

50. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #72. [8 CAR § 40-701 and A.C.A.]

| SN    | Description                | Pollutant       | lb/hr       | tpy         |
|-------|----------------------------|-----------------|-------------|-------------|
| SN-18 | Emergency Fire Pump Engine | PM<br>Total HAP | 0.2<br>0.01 | 0.1<br>0.01 |

51. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

| SN | Limit | Regulatory Citation                         |
|----|-------|---|
| 18 | 20%   | 8 CAR § 41-403 and 40 C.F.R. § 52 Subpart E |

- 52. SN-18 is subject to 40 C.F.R. § 60 Subpart IIII. The permittee shall comply with all applicable provisions of 40 C.F.R. § 60 Subpart IIII which includes, but is not limited to, Specific Conditions #55 through #71. [8 CAR § 41-204 and 40 C.F.R. § 60 Subpart IIII]
- 53. Annual observations of the opacity from SN-18 shall be conducted by a person trained but not necessarily certified in EPA Reference Method 9. If visible emissions in excess of the permitted levels are detected, the permittee shall immediately take action to

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identify the cause of the visible emissions in excess of the permit limit, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated annually, kept on site, and made available to Division of Environmental Quality personnel upon request.

- a. The date and time of the observation.
- b. If visible emissions which appeared to be above the permitted limit were detected.
- c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
- d. The name of the person conducting the opacity observations.
- 54. SN-18 is subject to the requirements of 40 C.F.R. § 63, Subpart ZZZZ. The permittee shall meet the requirements of 40 C.F.R. § 63, Subpart ZZZZ by meeting the requirements of 40 C.F.R. § 60, Subpart IIII. No further requirements apply for such engines under this part. [8 CAR § 41-204 and 40 C.F.R. § 60 Subpart ZZZZ]
- 55. The permittee must comply with the emission standards in the table below for all pollutants. [8 CAR § 41-204 and 40 C.F.R. § 60.4205(c) and Table 4 to 40 C.F.R. § 60 Subpart IIII]

| Maximum engine power  | Model<br>year(s) | NMHC + NO <sub>X</sub><br>g/KW-hr (g/HP-hr) | CO<br>g/KW-hr (g/HP-hr) | PM<br>g/KW-hr (g/HP-hr) |
|-----------------------|------------------|---|-------------------------|-------------------------|
| 225≤KW<450            | 2008 and         | 10.5 (7.8)                                  | 3.5 (2.6)               | 0.54 (0.40)             |
| (300\(\leq HP < 600\) | earlier          |   |                         |                         |
|                       | $2009 + ^3$      | 4.0 (3.0)                                   |                         | 0.20 (0.15)             |

<sup>1</sup>For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

<sup>2</sup>For model years 2010, 2012, manufacturers, express and expressors of fire pump stationary CI.

- <sup>3</sup>In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.
- 56. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in § 60.4205 over the entire life of the engine. [8 CAR § 41-204 and 40 C.F.R. § 60.4206]
- 57. The permittee must use diesel fuel that meets the requirements of 40 C.F.R. § 80.510(b) for nonroad diesel fuel. [8 CAR § 41-204 and 40 C.F.R. § 60.4207(b)]

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

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58. Stationary CI ICE that have a national security exemption under § 60.4200(d) are also exempt from the fuel requirements in § 60.4207. [8 CAR § 41-204 and 40 C.F.R. § 60.4207(e)]

- 59. In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in § 60.4208(a) through (g) after the dates specified in § 60.4208(a) through (g). [8 CAR § 41-204 and 40 C.F.R. § 60.4208(h)]
- 60. The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location. [8 CAR § 41-204 and 40 C.F.R. § 60.4208(i)]
- 61. The permittee must install a non-resettable hour meter prior to startup of the engine. [8 CAR § 41-204 and 40 C.F.R. § 60.4209(a)]
- 62. If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [8 CAR § 41-204 and 40 C.F.R. § 60.4209(b)]
- 63. If you are an owner or operator and must comply with the emission standards specified in 40 C.F.R. § 60 Subpart IIII, you must do all of the following, except as permitted under § 60.4211(g): [8 CAR § 41-204 and 40 C.F.R. § 60.4211(a)]
  - a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [8 CAR § 41-204 and 40 C.F.R. § 60.4211(a)(1)]
  - b. Change only those emission-related settings that are permitted by the manufacturer; and [8 CAR § 41-204 and 40 C.F.R. § 60.4211(a)(2)]
  - c. Meet the requirements of 40 C.F.R. §§ 89, 94 and/or 1068, as they apply to you. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(a)(3)]
- 64. If you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to 40 C.F.R. § 60 Subpart IIII and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in § 60.4211(b)(1) through (5). [8 CAR § 41-204 and 40 C.F.R. § 60.4211(b)]
  - a. Purchasing an engine certified according to 40 C.F.R. § 89 or 40 C.F.R. § 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(b)(1)]

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- b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 C.F.R. § 60 Subpart IIII and these methods must have been followed correctly. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(b)(2)]
- c. Keeping records of engine manufacturer data indicating compliance with the standards. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(b)(3)]
- d. Keeping records of control device vendor data indicating compliance with the standards. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(b)(4)]
- e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(b)(5)]
- 65. If you are an owner or operator of a CI fire pump engine the is manufactured during or after the model year that applies to your fire pump engine rating in table 3 to 40 C.F.R. § 60 Subpart IIII and must comply with the emission standards specified in § 60.4205(c), the permittee must demonstrate compliance by purchasing an engine certified to the emission standards in § 60.4205(c) for the same model year and NFPA nameplate engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in § 60.4211(g). [8 CAR § 41-204 and 40 C.F.R. § 60.4211(c)]
- 66. The permittee must operate the emergency stationary ICE according to the requirements in § 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 C.F.R. § 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in § 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in § 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 C.F.R. § 60 Subpart IIII and must meet all requirements for non-emergency engines. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)]
  - a. There is no time limit on the use of emergency stationary ICE in emergency situations. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(1)]
  - b. The permittee may operate the emergency stationary ICE for any combination of the purposes specified in § 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by § 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by § 60.4211(f)(2). [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(2)]
    - i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator

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maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(2)(i)]

- c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in § 60.4211(f)(2). Except as provided in § 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(3)]
  - i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(3)(i)]
    - 1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(3)(i)(A)]
    - 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(3)(i)(B)]
    - 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(3)(i)(C)]
    - 4. The power is provided only to the facility itself or to support the local transmission and distribution system. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(3)(i)(D)]
    - 5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(f)(3)(i)(E)]
- 67. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows: [8 CAR § 41-204 and 40 C.F.R. § 60.4211(g)]
  - a. If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and

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records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(g)(1)]

- b. If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(g)(2)]
- c. If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [8 CAR § 41-204 and 40 C.F.R. § 60.4211(g)(3)]
- 68. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to 40 C.F.R. § 60 Subpart IIII must do so according to § 60.4212(a) through (e). [8 CAR § 41-204 and 40 C.F.R. § 60.4212]
- 69. The permittee is not required to submit an initial notification. Starting with the model years in the table below, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [8 CAR § 41-204 and 40 C.F.R. § 60.4214(b) and Table 5 to 40 C.F.R. § 60 Subpart IIII]

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| Engine power                      | Starting model year |
|-----------------------------------|---------------------|
| 19≤KW<56 (25≤HP<75)               | 2013                |
| 56\le KW\le 130 (75\le HP\le 175) | 2012                |
| KW≥130 (HP≥175)                   | 2011                |

- 70. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [8 CAR § 41-204 and 40 C.F.R. § 60.4214(c)]
- 71. Table 8 to 40 C.F.R. § 60 Subpart IIII shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you. [8 CAR § 41-204 and 40 C.F.R. § 60.4218]
- 72. The permittee shall not operate the emergency generator SN-18 in excess of 500 total hours (emergency and non-emergency) per calendar year in order to demonstrate compliance with the annual emission rate limits. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with 8 CAR § 41-502 and other applicable regulations. [8 CAR § 41-605, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
- 73. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #72. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The calendar year totals and each individual month's data shall be maintained on-site, made available to Division of Environmental Quality personnel upon request, and submitted in accordance with General Provision #7. [8 CAR § 41-605 and 40 C.F.R. § 52 Subpart E]

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### SECTION V: COMPLIANCE PLAN AND SCHEDULE

Carthage Forest Products, LLC will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future rules and regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

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#### SECTION VI: PLANTWIDE CONDITIONS

- 1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [8 CAR § 41-604, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [8 CAR § 41-310(b) and 40 C.F.R. § 52 Subpart E]
- 3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Division of Environmental Quality or within 180 days of permit issuance if no date is specified. The permittee must notify the Division of Environmental Quality of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Division of Environmental Quality within sixty (60) calendar days after completing the testing. [8 CAR § 41-602 and/or 8 CAR § 40-902 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 4. The permittee must provide:
  - a. Sampling ports adequate for applicable test methods;
  - b. Safe sampling platforms;
  - c. Safe access to sampling platforms; and
  - d. Utilities for sampling and testing equipment.

[8 CAR § 41-602 and/or 8 CAR § 40-902 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

- 5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [8 CAR § 41-203 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 6. This permit subsumes and incorporates all previously issued air permits for this facility. [8 CAR pt. 42 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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7. Unless otherwise specified in the permit, approval to construct any new major stationary source or a major modification subject to 40 C.F.R. § 52.21 shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Division of Environmental Quality may extend the 18-month period upon a satisfactory showing that an extension is justified. [8 CAR § 41-801 *et seq.* and 40 C.F.R. § 52 Subpart E]

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### SECTION VII: INSIGNIFICANT ACTIVITIES

The Division of Environmental Quality deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in 8 CAR pt. 40 and pt. 41 Appendix A. Group B insignificant activities may be listed but are not required to be listed in permits. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated February 26, 2025. [8 CAR § 42-204 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

| Description                                   | Category |
|---|----------|
| Ash Storage Pile                              | A-13     |
| Bark Hog & Horizontal Hog                     | A-13     |
| Diesel (FPE); 359 gallons                     | A-3      |
| Diesel (Emergency Engine); 269 gallons        | A-3      |
| Diesel (fueling rolling stock); 1,000 gallons | A-3      |

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#### SECTION VIII: GENERAL PROVISIONS

- 1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission 8 CAR pt. 40 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission 8 CAR pt. 40 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission 8 CAR pt. 40 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 C.F.R. § 70.6(b)(2)]
- 2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 C.F.R. § 70.6(a)(2) and 8 CAR pt. 42.701(B)]
- 3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Division of Environmental Quality takes final action on the renewal application. The Division of Environmental Quality will not necessarily notify the permittee when the permit renewal application is due. [8 CAR pt. 42.406]
- 4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 C.F.R. § 70.6(a)(1)(ii) and 8 CAR pt. 42.701(A)(2)]
- 5. The permittee must maintain the following records of monitoring information as required by this permit.
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses performed;
  - c. The company or entity performing the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

[40 C.F.R. § 70.6(a)(3)(ii)(A) and 8 CAR pt. 42.701(C)(2)]

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6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 C.F.R. § 70.6(a)(3)(ii)(B) and 8 CAR pt. 42.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. The first report due after issuance of the initial Title V permit shall contain six months of data and each report thereafter shall contain 12 months of data. The report shall contain data for all monitoring requirements in effect during the reporting period. If a monitoring requirement is not in effect for the entire reporting period, only those months of data in which the monitoring requirement was in effect are required to be reported. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in 8 CAR pt. 42.2 must certify all required reports. The permittee will send the reports electronically using https://eportal.adeq.state.ar.us or mail them to the address below:

Division of Environmental Quality Office of Air Quality ATTN: Compliance Inspector Supervisor 5301 Northshore Drive North Little Rock, AR 72118-5317

[40 C.F.R. § 70.6(a)(3)(iii)(A) and 8 CAR pt. 42.701(C)(3)(a)]

- 8. The permittee shall report to the Division of Environmental Quality all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
  - a. For all upset conditions (as defined in 8 CAR pt. 41.601), the permittee will make an initial report to the Division of Environmental Quality by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
    - i. The facility name and location;
    - ii. The process unit or emission source deviating from the permit limit;
    - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
    - iv. The date and time the deviation started;
    - v. The duration of the deviation:

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- vi. The emissions during the deviation;
- vii. The probable cause of such deviations;
- viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
  - ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Division of Environmental Quality within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[8 CAR pt. 41.601, 8 CAR § 41-502, 8 CAR pt. 42.701(C)(3)(b), and 40 C.F.R. § 70.6(a)(3)(iii)(B)]

- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Rule are declared to be separable and severable. [40 C.F.R. § 70.6(a)(5), 8 CAR pt. 42.701(E), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in 8 CAR pt. 42 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. § 7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 C.F.R. § 70.6(a)(6)(i) and 8 CAR pt. 42.701(F)(1)]
- 11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 C.F.R. § 70.6(a)(6)(ii) and 8 CAR pt. 42.701(F)(2)]
- 12. The Division of Environmental Quality may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of

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planned changes or anticipated noncompliance does not stay any permit condition. [40 C.F.R. § 70.6(a)(6)(iii) and 8 CAR pt. 42.701(F)(3)]

- 13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 C.F.R. § 70.6(a)(6)(iv) and 8 CAR pt. 42.701(F)(4)]
- 14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Division of Environmental Quality may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 C.F.R. § 70.6(a)(6)(v) and 8 CAR pt. 42.701(F)(5)]
- 15. The permittee must pay all permit fees in accordance with the procedures established in Rule 9. [40 C.F.R. § 70.6(a)(7) and 8 CAR pt. 42.701(G)]
- 16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 C.F.R. § 70.6(a)(8) and 8 CAR pt. 42.701(H)]
- 17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 C.F.R. § 70.6(a)(9)(i) and 8 CAR pt. 42.701(I)(1)]
- 18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Division of Environmental Quality specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 C.F.R. § 70.6(b) and 8 CAR pt. 42.702(A) and (B)]
- 19. Any document (including reports) required by this permit pursuant to 40 C.F.R. § 70 must contain a certification by a responsible official as defined in 8 CAR pt. 42.2. [40 C.F.R. § 70.6(c)(1) and 8 CAR pt. 42.703(A)]
- 20. The permittee must allow an authorized representative of the Division of Environmental Quality, upon presentation of credentials, to perform the following: [40 C.F.R. § 70.6(c)(2) and 8 CAR pt. 42.703(B)]
  - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

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- b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
- 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Division of Environmental Quality. All compliance certifications required by this permit must include the following: [40 C.F.R. § 70.6(c)(5) and 8 CAR pt. 42.703(E)(3)]
  - a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The compliance status;
  - c. Whether compliance was continuous or intermittent;
  - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
  - e. Such other facts as the Division of Environmental Quality may require elsewhere in this permit or by § 114(a)(3) and § 504(b) of the Act.
- 22. Nothing in this permit will alter or affect the following: [8 CAR pt. 42.704(C)]
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with § 408(a) of the Act; or
  - d. The ability of EPA to obtain information from a source pursuant to § 114 of the Act.
- 23. This permit authorizes only those pollutant emitting activities addressed in this permit. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Division of Environmental Quality

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approval. The Division of Environmental Quality may grant such a request, at its discretion in the following circumstances:

- a. Such an extension does not violate a federal requirement;
- b. The permittee demonstrates the need for the extension; and
- c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[8 CAR pt. 40.314(A), 8 CAR pt. 41.416(A), 8 CAR pt. 42.1013(A), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

- 25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Division of Environmental Quality approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:
  - a. Such a request does not violate a federal requirement;
  - b. Such a request is temporary in nature;
  - c. Such a request will not result in a condition of air pollution;
  - d. The request contains such information necessary for the Division of Environmental Quality to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
  - e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
  - f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[8 CAR pt. 40.314(B), 8 CAR pt. 41.416(B), 8 CAR pt. 42.1013(B), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

- 26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Division of Environmental Quality approval. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:
  - a. The request does not violate a federal requirement;
  - b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and

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c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[8 CAR pt. 40.314(C), 8 CAR pt. 41.416(C), 8 CAR pt. 42.1013(C), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

27. Any credible evidence based on sampling, monitoring, and reporting may be used to determine violations of applicable emission limitations. [8 CAR pt. 40.1001, 8 CAR pt. 41.701, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

#### **APPENDIX A**

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

Source:71 FR 39172, July 11, 2006, unless otherwise noted.

### **What This Subpart Covers**

### § 60.4200 Am I subject to this subpart?

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in <u>paragraphs (a)(1)</u> through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:
- (i) 2007 or later, for engines that are not fire pump engines;
- (ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.
- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:
- (i) Manufactured after April 1, 2006, and are not fire pump engines, or
- (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
- (3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
- (4) The provisions of § 60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.
- (b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.
- (c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

- (d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C, except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.
- (e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011; 86 FR 34357, June 29, 2021]

### **Emission Standards for Manufacturers**

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

- (a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 1039.102, 1039.104, 1039.105, 1039.107, and 1039.115 and 40 CFR part 1039, appendix I, as applicable, for all pollutants, for the same model year and maximum engine power.
- (b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.
- (c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.
- (d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the appropriate Tier 2 emission standards for new marine CI engines as described in 40 CFR part 1042, appendix I, for all pollutants, for the same displacement and rated power:
- (1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

- (2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and
- (3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.
- (e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:
- (1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and
- (2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
- (f) Notwithstanding the requirements in <u>paragraphs (a)</u> through (c) of this section, stationary nonemergency CI ICE identified in <u>paragraphs (a)</u> and (c) of this section may be certified to the provisions of <u>40 CFR part 1042</u> for commercial engines that are applicable for the engine's model year, displacement, power density, and maximum engine power if the engines will be used solely in either or both of the following locations:
- (1) Remote areas of Alaska; and
- (2) Marine offshore installations.
- (g) Notwithstanding the requirements in <u>paragraphs (a)</u> through <u>(f)</u> of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in <u>paragraphs (a)</u> through <u>(e)</u> of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.
- (h) Stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with auxiliary emission control devices (AECDs) as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR part 1039, appendix I, while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011; 81 FR 44219, July 7, 2016; 86 FR 34357, June 29, 2021]

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

- (a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.
- (1) For engines with a maximum engine power less than 37 KW (50 HP):
- (i) The Tier 2 emission standards for new nonroad CI engines for the appropriate rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 for model year 2007 engines; and
- (ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.
- (2) For engines with a rated power greater than or equal to 37 KW (50 HP), the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007.
- (b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in <u>paragraphs</u> (b)(1) through (2) of this section.
- (1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.
- (2) For 2011 model year and later, the Tier 2 emission standards as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105.
- (c) [Reserved]
- (d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.
- (e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the appropriate Tier 2 emission

standards for new marine CI engines as described in 40 CFR part 1042, appendix I, for all pollutants, for the same displacement and rated power:

- (1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;
- (2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;
- (3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and
- (4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.
- (f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:
- (1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and
- (2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.
- (g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI ICE identified in paragraphs (a) and (c) of this section may be certified to the provisions of 40 CFR part 1042 for commercial engines that are applicable for the engine's model year, displacement, power density, and maximum engine power if the engines will be used solely in either or both of the locations identified in paragraphs (g)(1) and (2) of this section. Engines that would be subject to the Tier 4 standards in 40 CFR part 1042 that are used solely in either or both of the locations identified in paragraphs (g)(1) and (2) of this section may instead continue to be certified to the previous tier of standards in 40 CFR part 1042. The previous tier is Tier 3 in most cases; however, the previous tier is Tier 2 if there are no Tier 3 standards specified for engines of a certain size or power rating.
- (1) Remote areas of Alaska; and
- (2) Marine offshore installations.

(h) Notwithstanding the requirements in <u>paragraphs (a)</u> through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in <u>paragraphs (a)</u> through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011; 81 FR 44219, July 7, 2016; 86 FR 34358, June 29, 2021; 88 FR 4471, Jan. 24, 2023]

# § 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

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

[76 FR 37968, June 28, 2011]

#### **Emission Standards for Owners and Operators**

# § 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

- (a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the Tier 1 emission standards in 40 CFR part 1042, appendix I.
- (b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.
- (c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:
- (1) For engines installed prior to January 1, 2012, limit the emissions of NO<sub>X</sub> in the stationary CI internal combustion engine exhaust to the following:
- (i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);
- (ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
- (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

- (2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO<sub>X</sub> in the stationary CI internal combustion engine exhaust to the following:
- (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
- (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- (3) For engines installed on or after January 1, 2016, limit the emissions of NO<sub>X</sub> in the stationary CI internal combustion engine exhaust to the following:
- (i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $9.0 \cdot n^{-0.20}$  g/KW-hr (6.7 ·  $n^{-0.20}$  g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and
- (iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.
- (4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).
- (d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in § 60.4212.
- (e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in <u>paragraphs (a)</u> through (d) of this section.
- (f) Owners and operators of stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with AECDs as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR part 1039, appendix I, while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011; 81 FR 44219, July 7, 2016; 86 FR 34358, June 29, 2021]

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

- (a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the Tier 1 emission standards in 40 CFR part 1042, appendix I.
- (b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
- (c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.
- (d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.
- (1) For engines installed prior to January 1, 2012, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following:
- (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
- (iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
- (2) For engines installed on or after January 1, 2012, limit the emissions of NOx in the stationary CI internal combustion engine exhaust to the following:
- (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
- (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- (3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).
- (e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in § 60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in <u>paragraphs</u> (a) through (e) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 86 FR 34358, June 29, 2021]

# § 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in  $\S\S 60.4204$  and  $\S\S 60.4205$  over the entire life of the engine.

[76 FR 37969, June 28, 2011]

### **Fuel Requirements for Owners and Operators**

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

- (a) [Reserved]
- (b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- (c) [Reserved]
- (d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder must use diesel fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).
- (e) Stationary CI ICE that have a national security exemption under § 60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 85 FR 78463, Dec. 4, 2020]

#### Other Requirements for Owners and Operators

 $\S$  60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

- (a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
- (b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.
- (c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.
- (d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.
- (e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.
- (f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.
- (g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.
- (h) In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.
- (i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

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

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

- (a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.
- (b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

### **Compliance Requirements**

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

- (a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §§ 60.4201(a) through (c) and 60.4202(a), (b), and (d) using the certification procedures required in 40 CFR part 1039, subpart C, and must test their engines as specified in 40 CFR part 1039. For the purposes of this subpart, engines certified to the standards in Table 1 to this subpart shall be subject to the same certification procedures required for engines certified to the Tier 1 standards in 40 CFR part 1039, appendix I. For the purposes of this subpart, engines certified to the standards in Table 4 to this subpart shall be subject to the same certification procedures required for engines certified to the Tier 1 standards in 40 CFR part 1039, appendix I, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.
- (b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §§ 60.4201(d) and (e) and 60.4202(e) and (f) using the certification procedures required in 40 CFR part 1042, subpart C, and must test their engines as specified in 40 CFR part 1042.
- (c) Stationary CI internal combustion engine manufacturers must meet the requirements of <u>40</u> CFR 1039.120, 1039.125, 1039.130, and 1039.135 and <u>40 CFR part 1068</u> for engines that are certified to the emission standards in <u>40 CFR part 1039</u>. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of <u>40 CFR part 1042</u> for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine

- engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to <u>paragraphs</u> (c)(1) through (3) of this section.
- (1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.
- (2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to <u>paragraphs</u> (c)(2)(i) through (iii) of this section:
- (i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.
- (ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.
- (iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.
- (3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.
- (i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR part 1039 or 1042, as appropriate.
- (ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR part 1039 or 1042, as

- appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.
- (iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.
- (d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking, and trading provisions applicable for such engines under those parts.
- (e) Manufacturers of engine families discussed in <u>paragraph</u> (d) of this section may meet the labeling requirements referred to in <u>paragraph</u> (c) of this section for stationary CI ICE by either adding a separate label containing the information required in <u>paragraph</u> (c) of this section or by adding the words "and stationary" after the word "nonroad" or "marine," as appropriate, to the label.
- (f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in § 60.4202 but does not meet all the emission standards for non-emergency engines in § 60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.
- (g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as "Fire Pump Applications Only".
- (h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of § 60.4201 or § 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

- (i) The replacement engine provisions of <u>40 CFR 1068.240</u> are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.
- (j) Stationary CI ICE manufacturers may equip their stationary CI internal combustion engines certified to the emission standards in 40 CFR part 1039 with AECDs for qualified emergency situations according to the requirements of 40 CFR 1039.665. Manufacturers of stationary CI ICE equipped with AECDs as allowed by 40 CFR 1039.665 must meet all the requirements in 40 CFR 1039.665 that apply to manufacturers. Manufacturers must document that the engine complies with the Tier 1 standard in 40 CFR part 1039, appendix I, when the AECD is activated. Manufacturers must provide any relevant testing, engineering analysis, or other information in sufficient detail to support such statement when applying for certification (including amending an existing certificate) of an engine equipped with an AECD as allowed by 40 CFR 1039.665.
- (k) Manufacturers of any size may certify their emergency stationary CI internal combustion engines under this section using assigned deterioration factors established by EPA, consistent with 40 CFR 1039.240 and 1042.240.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 81 FR 44219, July 7, 2016; 86 FR 34358, June 29, 2021]

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

- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:
- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR part 1068, as they apply to you.
- (b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(a) or § 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.
- (1) Purchasing an engine certified to emission standards for the same model year and maximum engine power as described in 40 CFR parts 1039 and 1042, as applicable. The engine must be installed and configured according to the manufacturer's specifications.

- (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
- (3) Keeping records of engine manufacturer data indicating compliance with the standards.
- (4) Keeping records of control device vendor data indicating compliance with the standards.
- (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.
- (d) If you are an owner or operator and must comply with the emission standards specified in § 60.4204(c) or § 60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.
- (1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.
- (2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in <u>paragraphs (d)(2)(i)</u> through (v) of this section.
- (i) Identification of the specific parameters you propose to monitor continuously;
- (ii) A discussion of the relationship between these parameters and NO<sub>X</sub> and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO<sub>X</sub> and PM emissions;
- (iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
- (iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

- (v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
- (3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.
- (e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(e) or § 60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.
- (1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4204(e) or § 60.4205(f), as applicable.
- (2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4212 or § 60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.
- (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in <u>paragraphs (f)(1)</u> through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for the purpose specified in <u>paragraph</u> (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by <u>paragraph</u> (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this <u>paragraph</u> (f)(2).
- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

### (ii)-(iii) [Reserved]

- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in <u>paragraph (f)(2)</u> of this section. Except as provided in <u>paragraph (f)(3)(i)</u> of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

### (ii) [Reserved]

- (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:
- (1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the

emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

- (2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
- (3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.
- (h) The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI ICE equipped with AECDs for qualified emergency situations as allowed by 40 CFR 1039.665.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 81 FR 44219, July 7, 2016; 86 FR 34359, June 29, 2021; 87 FR 48605, Aug. 10, 2022]

#### **Testing Requirements for Owners and Operators**

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to <u>paragraphs (a)</u> through (e) of this section.

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder. Alternatively, stationary CI ICE that are complying with Tier 2 or Tier 3 emission standards as described in 40 CFR part 1039, appendix I, or with Tier 2 emission standards as described in 40 CFR part 1042, appendix I, may follow the testing procedures specified in § 60.4213, as appropriate.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE subject to Tier 2 or Tier 3 emission standards as described in 40 CFR part 1039, appendix I, or Tier 2 emission standards as described in 40 CFR part 1042, appendix I, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard, determined from the following equation:

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

#### Where:

STD = The standard specified for that pollutant in  $\frac{40 \text{ CFR part } 1039}{40 \text{ CFR part } 1039}$  or  $\frac{1042}{40 \text{ cFR part } 1039}$ 

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

#### Where:

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

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

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011; 86 FR 34359, June 29, 2021]

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

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

- (a) Each performance test must be conducted according to the requirements in § 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.
- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in  $\S 60.8(c)$ .
- (c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must last at least 1 hour.
- (d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in <u>paragraphs</u> (d)(1) through (3) of this section.
- (1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

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

Where:

 $C_i$  = concentration of NO<sub>X</sub> or PM at the control device inlet,

 $C_0$  = concentration of NO<sub>X</sub> or PM at the control device outlet, and

R = percent reduction of NO<sub>X</sub> or PM emissions.

(2) You must normalize the NO<sub>X</sub> or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O<sub>2</sub>) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO<sub>2</sub>) using the procedures described in <u>paragraph (d)(3)</u> of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \% O_2}$$
 (Eq. 3)

Where:

 $C_{adj}$  = Calculated NO<sub>X</sub> or PM concentration adjusted to 15 percent O<sub>2</sub>.

 $C_d$  = Measured concentration of NO<sub>X</sub> or PM, uncorrected.

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

 $%O_2$  = Measured  $O_2$  concentration, dry basis, percent.

- (3) If pollutant concentrations are to be corrected to 15 percent O<sub>2</sub> and CO<sub>2</sub> concentration is measured in lieu of O<sub>2</sub> concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.
- (i) Calculate the fuel-specific F<sub>0</sub> value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_{o} = \frac{0.209_{F_{d}}}{F_{c}}$$
 (Eq. 4)

Where:

 $F_0$  = Fuel factor based on the ratio of  $O_2$  volume to the ultimate  $CO_2$  volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O<sub>2</sub>, percent/100.

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

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

(ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent O<sub>2</sub>, as follows:

$$X_{\text{co}_2} = \frac{5.9}{F_0}$$
 (Eq. 5)

Where:

 $X_{CO2} = CO_2$  correction factor, percent.

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

(iii) Calculate the NO<sub>X</sub> and PM gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

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

Where:

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

 $C_d$  = Measured concentration of NO<sub>X</sub> or PM, uncorrected.

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

(e) To determine compliance with the NO<sub>X</sub> mass per unit output emission limitation, convert the concentration of NO<sub>X</sub> in the engine exhaust using Equation 7 of this section:

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

Where:

ER = Emission rate in grams per KW-hour.

 $C_d$  = Measured NO<sub>X</sub> concentration in ppm.

 $1.912 \times 10^{-3}$  = Conversion constant for ppm NO<sub>X</sub> to grams per standard cubic meter at 25 degrees Celsius.

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

T = Time of test run, in hours.

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

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

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

Where:

ER = Emission rate in grams per KW-hour.

- C<sub>adj</sub> = Calculated PM concentration in grams per standard cubic meter.
- Q = Stack gas volumetric flow rate, in standard cubic meter per hour.
- T = Time of test run, in hours.

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

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

### Notification, Reports, and Records for Owners and Operators

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

- (a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.
- (1) Submit an initial notification as required in § 60.7(a)(1). The notification must include the information in <u>paragraphs (a)(1)(i)</u> through (v) of this section. Beginning on February 26, 2025, submit the notification electronically according to <u>paragraph (g)</u> of this section.
- (i) Name and address of the owner or operator;
- (ii) The address of the affected source;
- (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (iv) Emission control equipment; and
- (v) Fuel used.
- (2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.
- (i) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (ii) Maintenance conducted on the engine.
- (iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
- (iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.
- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification.

Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

- (c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.
- (d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.
- (1) The report must contain the following information:
- (i) Company name and address where the engine is located.
- (ii) Date of the report and beginning and ending dates of the reporting period.
- (iii) Engine site rating and model year.
- (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v)-(vi) [Reserved]
- (vii) Hours spent for operation for the purposes specified in § 60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (<a href="https://cdx.epa.gov/">https://cdx.epa.gov/</a>). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4. Beginning on February 26, 2025, submit annual report electronically according to <a href="paragraph (g)">paragraph (g)</a> of this section.
- (e) Owners or operators of stationary CI ICE equipped with AECDs pursuant to the requirements of 40 CFR 1039.665 must report the use of AECDs as required by 40 CFR 1039.665(e).

- (f) Beginning on February 26, 2025, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test required under this section following the procedures specified in <u>paragraphs (f)(1)</u> and <u>(2)</u> of this section.
- (1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<a href="https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert">https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert</a>) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), according to <a href="maintenance">paragraph (g)</a> of this section. The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.
- (2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI according to paragraph (g) of this section.
- (g) If you are required to submit notifications or reports following the procedure specified in this paragraph (g), you must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, you must submit a complete file in the format specified in this subpart, including information claimed to be CBI, to the EPA following the procedures in paragraphs (g)(1) and (2) of this section. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this paragraph (g).
- (1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address <u>oaqpscbi@epa.gov</u>, and as described in paragraph (g) of this section, should include clear CBI markings. ERT files

should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Compression Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email <a href="mailto:oagpscbi@epa.gov">oagpscbi@epa.gov</a> to request a file transfer link.

- (2) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the Stationary Compression Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.
- (h) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (h)(1) through (7) of this section.
- (1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.
- (2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.
- (3) The outage may be planned or unplanned.
- (4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.
- (5) You must provide to the Administrator a written description identifying:
- (i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;
- (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;
- (iii) A description of measures taken or to be taken to minimize the delay in reporting; and
- (iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.
- (6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

- (7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.
- (i) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in <u>paragraphs (i)(1)</u> through (5) of this section.
- (1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).
- (2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.
- (3) You must provide to the Administrator:
- (i) A written description of the force majeure event;
- (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;
- (iii) A description of measures taken or to be taken to minimize the delay in reporting; and
- (iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.
- (4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.
- (5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.
- (j) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7, 2016; 87 FR 48606, Aug. 10, 2022; 89 FR 70512, Aug. 30, 2024]

#### **Special Requirements**

# § 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

- (a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§ 60.4202 and 60.4205.
- (b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in § 60.4207.
- (c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:
- (1) For engines installed prior to January 1, 2012, limit the emissions of NO<sub>X</sub> in the stationary CI internal combustion engine exhaust to the following:
- (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
- (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
- (2) For engines installed on or after January 1, 2012, limit the emissions of NO<sub>X</sub> in the stationary CI internal combustion engine exhaust to the following:
- (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
- (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- (3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

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

- (a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.
- (b) Except as indicated in <u>paragraph</u> (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in remote areas of Alaska may meet the requirements of this subpart by manufacturing and installing engines meeting the Tier 2 or Tier 3 emission standards described in <u>40 CFR part 1042</u> for the same model year, displacement, and maximum engine power, as appropriate, rather than the otherwise applicable requirements of <u>40 CFR part 1039</u>, as indicated in <u>§§ 60.4201(f)</u> and <u>60.4202(g)</u>.
- (c) Manufacturers, owners, and operators of stationary CI ICE that are located in remote areas of Alaska may choose to meet the applicable emission standards for emergency engines in §§ 60.4202 and 60.4205, and not those for non-emergency engines in §§ 60.4201 and 60.4204, except that for 2014 model year and later nonemergency CI ICE, the owner or operator of any such engine must have that engine certified as meeting at least the Tier 3 PM standards identified in appendix I of 40 CFR part 1039 or in 40 CFR 1042.101.
- (d) The provisions of § 60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in remote areas of Alaska.
- (e) The provisions of § 60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.
- (f) The provisions of this section and § 60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in remote areas of Alaska from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011, as amended at <u>81 FR 44219</u>, July 7, 2016; <u>86 FR 34359</u>, June 29, 2021]

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

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in § 60.4204 or § 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost,

energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

#### **General Provisions**

#### § 60.4218 What General Provisions and confidential information provisions apply to me?

- (a) Table 8 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.
- (b) The provisions of <u>40 CFR 1068.10</u> and <u>1068.11</u> apply for engine manufacturers. For others, the general confidential business information (CBI) provisions apply as described in <u>40 CFR part 2</u>.

[88 FR 4471, Jan. 24, 2023]

#### **Definitions**

### § 60.4219 What definitions apply to this subpart?

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

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

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 1042.101(e).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

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

Date of manufacture means one of the following things:

- (1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.
- (2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.
- (3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

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

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

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

- (1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.
- (2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 60.4211(f).
- (3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 60.4211(f)(3)(i).

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

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

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

*Installed* means the engine is placed and secured at the location where it is intended to be operated.

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

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

*Model year* means the calendar year in which an engine is manufactured (see "date of manufacture"), except as follows:

- (1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see "date of manufacture"), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.
- (2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see "date of manufacture").

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

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

Remote areas of Alaska means areas of Alaska that meet either paragraph (1) or (2) of this definition.

- (1) Areas of Alaska that are not accessible by the Federal Aid Highway System (FAHS).
- (2) Areas of Alaska that meet all of the following criteria:
- (i) The only connection to the FAHS is through the Alaska Marine Highway System, or the stationary CI ICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.
- (ii) At least 10 percent of the power generated by the stationary CI ICE on an annual basis is used for residential purposes.

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

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

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

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011; 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7, 2016; 86 FR 34360, June 29, 2021; 87 FR 48606, Aug. 10, 2022]

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§ 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

| Maximum engine<br>power | Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr) |    |                 |    |    |  |  |
|-------------------------|--|----|-----------------|----|----|--|--|
|                         | $NMHC + NO_X$  | НС | NO <sub>X</sub> | CO | PM |  |  |
| KW<8 (HP<11)            | 8.0 (6.0) 1.0 (0.75)   |    |                 |    |    |  |  |

[As stated in §§ 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

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

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

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

| Emission standards for 2008 model year and later emergency static CI ICE <37 KW (50 HP) with a displacement of <10 liters per cyling/KW-hr (g/HP-hr) |               |                        |           |             |  |
|--|---------------|------------------------|-----------|-------------|--|
|  | Model year(s) | NO <sub>X</sub> + NMHC | СО        | PM          |  |
| KW<8 (HP<11)   | 2008 +        | 7.5 (5.6)              | 8.0 (6.0) | 0.40 (0.30) |  |
| 8≤KW<19<br>(11≤HP<25)  | 2008 +        | 7.5 (5.6)              | 6.6 (4.9) | 0.40 (0.30) |  |
| 19≤KW<37<br>(25≤HP<50)   | 2008 +        | 7.5 (5.6)              | 5.5 (4.1) | 0.30 (0.22) |  |

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

| Engine<br>power            | Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d) <sup>1</sup> |
|----------------------------|---|
| KW<75<br>(HP<100)          | 2011  |
| 75≤KW<130<br>(100≤HP<175)  | 2010  |
| 130≤KW≤560<br>(175≤HP≤750) | 2009  |
| KW>560<br>(HP>750)         | 2008  |

As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

|          | Starting model year engine manufacturers must certify |
|----------|---|
|          | new   |
| En ain a | stationary  |
| Engine   | fire pump   |
| power    | engines   |
|          | according to  |
|          | § 60.4202(d) <sup>1</sup>                             |
|          |   |

<sup>&</sup>lt;sup>1</sup> Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

# Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

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

| Maximum engine power | Model year(s)    | Emission standards for stationary fire pump engines in g/KW-hr (g/HP-hr) |           | onary fire  |
|----------------------|------------------|--|-----------|-------------|
|                      |                  | NMHC + NO <sub>X</sub>   | CO        | PM          |
| KW<8 (HP<11)         | 2010 and earlier | 10.5 (7.8)   | 8.0 (6.0) | 1.0 (0.75)  |
| KW<8 (HP<11)         | 2011 +           | 7.5 (5.6)  | 8.0 (6.0) | 0.40 (0.30) |
| 8≤KW<19 (11≤HP<25)   | 2010 and earlier | 9.5 (7.1)  | 6.6 (4.9) | 0.80 (0.60) |
| 8≤KW<19 (11≤HP<25)   | 2011 +           | 7.5 (5.6)  | 6.6 (4.9) | 0.40 (0.30) |
| 19≤KW<37 (25≤HP<50)  | 2010 and earlier | 9.5 (7.1)  | 5.5 (4.1) | 0.80 (0.60) |
| 19≤KW<37 (25≤HP<50)  | 2011 +           | 7.5 (5.6)  | 5.5 (4.1) | 0.30 (0.22) |
| 37≤KW<56 (50≤HP<75)  | 2010 and earlier | 10.5 (7.8)   | 5.0 (3.7) | 0.80 (0.60) |

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

| Maximum engine power    | Model year(s)    | Emission standards for stationary fire pump engines in g/KW-hr (g/HP-hr) |           |             |
|-------------------------|------------------|--|-----------|-------------|
|                         |                  | NMHC + NO <sub>X</sub>   | CO        | PM          |
| 37≤KW<56 (50≤HP<75)     | 2011 + 1         | 4.7 (3.5)  | 5.0 (3.7) | 0.40 (0.30) |
| 56≤KW<75 (75≤HP<100)    | 2010 and earlier | 10.5 (7.8)   | 5.0 (3.7) | 0.80 (0.60) |
| 56≤KW<75 (75≤HP<100)    | 2011 + 1         | 4.7 (3.5)  | 5.0 (3.7) | 0.40 (0.30) |
| 75≤KW<130 (100≤HP<175)  | 2009 and earlier | 10.5 (7.8)   | 5.0 (3.7) | 0.80 (0.60) |
| 75≤KW<130 (100≤HP<175)  | 2010 + 2         | 4.0 (3.0)  | 5.0 (3.7) | 0.30 (0.22) |
| 130≤KW<225 (175≤HP<300) | 2008 and earlier | 10.5 (7.8)   | 3.5 (2.6) | 0.54 (0.40) |
| 130≤KW<225 (175≤HP<300) | $2009 + {}^{3}$  | 4.0 (3.0)  | 3.5 (2.6) | 0.20 (0.15) |
| 225≤KW<450 (300≤HP<600) | 2008 and earlier | 10.5 (7.8)   | 3.5 (2.6) | 0.54 (0.40) |
| 225≤KW<450 (300≤HP<600) | $2009 + {}^{3}$  | 4.0 (3.0)  | 3.5 (2.6) | 0.20 (0.15) |
| 450≤KW≤560 (600≤HP≤750) | 2008 and earlier | 10.5 (7.8)   | 3.5 (2.6) | 0.54 (0.40) |
| 450≤KW≤560 (600≤HP≤750) | 2009 +           | 4.0 (3.0)  | 3.5 (2.6) | 0.20 (0.15) |
| KW>560 (HP>750)         | 2007 and earlier | 10.5 (7.8)   | 3.5 (2.6) | 0.54 (0.40) |
| KW>560 (HP>750)         | 2008 +           | 6.4 (4.8)  | 3.5 (2.6) | 0.20 (0.15) |

<sup>&</sup>lt;sup>1</sup> For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

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

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

| Maximum engine power | Emission standards for stationary fire pump engines in g/KW-hr (g/HP-hr) |    |    |
|----------------------|--|----|----|
|                      | NMHC + NO <sub>X</sub>   | CO | PM |

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

[89 FR 70513, Aug. 30, 2024]

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

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

| Engine power          | Starting model year |
|-----------------------|---------------------|
| 19≤KW<56 (25≤HP<75)   | 2013                |
| 56≤KW<130 (75≤HP<175) | 2012                |
| KW≥130 (HP≥175)       | 2011                |

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

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

| Mode No. | Engine speed <sup>1</sup> | Torque (percent) <sup>2</sup> | Weighting factors |
|----------|---------------------------|-------------------------------|-------------------|
| 1        | Rated                     | 100                           | 0.30              |
| 2        | Rated                     | 75                            | 0.50              |
| 3        | Rated                     | 50                            | 0.20              |

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

| Mode No.                        | Engine speed <sup>1</sup> | Torque (percent) <sup>2</sup> | Weighting factors |
|---------------------------------|---------------------------|-------------------------------|-------------------|
| <sup>1</sup> Engine speed: ±2 p | percent of point.         |                               |                   |

<sup>&</sup>lt;sup>2</sup> Torque: NFPA certified nameplate HP for 100 percent point. All points should be  $\pm 2$  percent of engine percent load value.

# Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

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

| Each  | Complying with the requirement to                          | You must   | Using | According to the following requirements   |
|---|--|--|-------|---|
| 1. Stationary CI internal combustion engine with a displacement of ≥ 30 liters per cylinder | a. Reduce NO <sub>X</sub> emissions by 90 percent or more; | i. Select the sampling port location and number/location of traverse points at the inlet and outlet of the control device; |       | (a) For NOx, O <sub>2</sub> , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of |

| Each | Complying with the requirement to | You must   | Using  | According to the following requirements   |
|------|-----------------------------------|--|--|---|
|      |                                   |  |  | Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4. |
|      |                                   | ii. Measure O <sub>2</sub> at the inlet and outlet of the control device;                                  | (1) Method 3,<br>3A, or 3B of <u>40</u><br><u>CFR part 60,</u><br><u>appendix A-2</u>  | (b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for NO <sub>X</sub> concentration.   |
|      |                                   | iii. If necessary,<br>measure moisture<br>content at the inlet<br>and outlet of the<br>control device; and | (2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17) | (c) Measurements to determine moisture content must be made at the same time as the measurements for NOx concentration.   |
|      |                                   | iv. Measure NO <sub>X</sub> at the inlet and outlet of the control device.                                 | (3) Method 7E of<br>40 CFR part 60,<br>appendix A-4,<br>Method 320 of<br>40 CFR part 63,   | (d) NOx concentration<br>must be at 15 percent<br>O <sub>2</sub> , dry basis. Results<br>of this test consist of  |

| Each | Complying with the requirement to  | You must   | Using   | According to the following requirements  |
|------|--|--|---|--|
|      |  |  | appendix A, or<br>ASTM D 6348-<br>03 (incorporated<br>by reference, see<br>§ 60.17) | the average of the three 1-hour or longer runs.  |
|      | b. Limit the concentration of NO <sub>X</sub> in the stationary CI internal combustion engine exhaust. | i. Select the sampling port location and number/location of traverse points at the exhaust of the stationary internal combustion engine; |   | (a) For NOx, O2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to |

| Each | Complying with the requirement to | You must   | Using   | According to the following requirements  |
|------|-----------------------------------|--|---|--|
|      |                                   |  |   | Section 8.1.2 of<br>Method 7E of 40 CFR<br>part 60, appendix A-4.  |
|      |                                   | ii. Determine the O <sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location;   | (1) Method 3,<br>3A, or 3B of <u>40</u><br><u>CFR part 60,</u><br><u>appendix A-2</u>   | (b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurement for NO <sub>X</sub> concentration. |
|      |                                   | iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and  | (2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)  | (c) Measurements to determine moisture content must be made at the same time as the measurement for NO <sub>X</sub> concentration.             |
|      |                                   | iv. Measure NOx at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device. | (3) Method 7E of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17) | (d) NOx concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.     |
|      | c. Reduce PM emissions by         | i. Select the sampling port  | (1) Method 1 or<br>1A of <u>40 CFR</u>  | (a) Sampling sites must be located at the inlet  |

| Each | Complying with the requirement to  | You must   | Using   | According to the following requirements   |
|------|--|--|---|---|
|      | 60 percent or more   | location and the number of traverse points;  | part 60, appendix A-1   | and outlet of the control device.   |
|      |  | ii. Measure O <sub>2</sub> at the inlet and outlet of the control device;                                  | (2) Method 3,<br>3A, or 3B of <u>40</u><br><u>CFR part 60,</u><br><u>appendix A-2</u> | (b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for PM concentration.                                    |
|      |  | iii. If necessary,<br>measure moisture<br>content at the inlet<br>and outlet of the<br>control device; and | (3) Method 4 of<br>40 CFR part 60,<br>appendix A-3                                    | (c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.  |
|      |  | iv. Measure PM at<br>the inlet and outlet<br>of the control<br>device.                                     | (4) Method 5 of<br>40 CFR part 60,<br>appendix A-3                                    | (d) PM concentration<br>must be at 15 percent<br>O <sub>2</sub> , dry basis. Results<br>of this test consist of<br>the average of the three<br>1-hour or longer runs. |
|      | d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust | i. Select the sampling port location and the number of traverse points;                                    | (1) Method 1 or<br>1A of 40 CFR<br>part 60, appendix<br>A-1                           | (a) If using a control device, the sampling site must be located at the outlet of the control device.   |
|      | 1  | ii. Determine the O <sub>2</sub> concentration of the stationary internal                                  | (2) Method 3,<br>3A, or 3B of <u>40</u>   | (b) Measurements to determine O <sub>2</sub> concentration must be  |

| Each | Complying with the requirement to | You must  | Using  | According to the following requirements  |
|------|-----------------------------------|---|--|--|
|      |                                   | combustion engine<br>exhaust at the<br>sampling port<br>location;   | CFR part 60,<br>appendix A-2                       | made at the same time as the measurements for PM concentration.  |
|      |                                   | iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and | (3) Method 4 of 40 CFR part 60, appendix A-3       | (c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.                                 |
|      |                                   | iv. Measure PM at<br>the exhaust of the<br>stationary internal<br>combustion engine.  | (4) Method 5 of<br>40 CFR part 60,<br>appendix A-3 | (d) PM concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |

[79 FR 11251, Feb. 27, 2014]

# Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

| General<br>Provisions<br>citation | Subject of citation                             | Applies<br>to<br>subpart | Explanation                            |
|-----------------------------------|---|--------------------------|--|
| § 60.1                            | General applicability of the General Provisions | Yes                      |  |
| § 60.2                            | Definitions                                     | Yes                      | Additional terms defined in § 60.4219. |
| § 60.3                            | Units and abbreviations                         | Yes                      |  |

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

| General<br>Provisions<br>citation | Subject of citation                                    | Applies<br>to<br>subpart | Explanation  |
|-----------------------------------|--|--------------------------|--|
| § 60.4                            | Address  | Yes                      |  |
| § 60.5                            | Determination of construction or modification          | Yes                      |  |
| § 60.6                            | Review of plans  | Yes                      |  |
| § 60.7                            | Notification and Recordkeeping                         | Yes                      | Except that $\S 60.7$ only applies as specified in $\S 60.4214(a)$ .   |
| § 60.8                            | Performance tests                                      | Yes                      | Except that § 60.8 only applies to stationary CI ICE with a displacement of (>30 liters per cylinder and engines that are not certified. |
| § 60.9                            | Availability of information                            | Yes                      |  |
| § 60.10                           | State Authority  | Yes                      |  |
| § 60.11                           | Compliance with standards and maintenance requirements | No                       | Requirements are specified in subpart IIII.  |
| § 60.12                           | Circumvention  | Yes                      |  |
| § 60.13                           | Monitoring requirements                                | Yes                      | Except that § 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.                                   |
| § 60.14                           | Modification   | Yes                      |  |
| § 60.15                           | Reconstruction   | Yes                      |  |
| § 60.16                           | Priority list  | Yes                      |  |

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

| General<br>Provisions<br>citation | Subject of citation                             | Applies<br>to<br>subpart | Explanation |
|-----------------------------------|---|--------------------------|-------------|
| § 60.17                           | Incorporations by reference                     | Yes                      |             |
| § 60.18                           | General control device requirements             | No                       |             |
| § 60.19                           | General notification and reporting requirements | Yes                      |             |

# eCFR Content

#### APPENDIX B

# Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

#### **What This Subpart Covers**

#### § 63.6580 What is the purpose of subpart ZZZZ?

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

[73 FR 3603, Jan. 18, 2008]

## § 63.6585 Am I subject to this subpart?

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

- (a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
- (b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.
- (c) An area source of HAP emissions is a source that is not a major source.
- (d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.
- (e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

- (f) The emergency stationary RICE listed in <u>paragraphs (f)(1)</u> through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in § 63.6675, which includes operating according to the provisions specified in § 63.6640(f).
- (1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate for the purpose specified in § 63.6640(f)(4)(ii).
- (2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate for the purpose specified in § 63.6640(f)(4)(ii).
- (3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate for the purpose specified in  $\S 63.6640(f)(4)(ii)$ .

[69 FR 33506, June 15, 2004, as amended at <u>73 FR 3603</u>, Jan. 18, 2008; <u>78 FR 6700</u>, Jan. 30, 2013; <u>87 FR 48607</u>, Aug. 10, 2022]

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

This subpart applies to each affected source.

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

#### (1) Existing stationary RICE.

- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

#### (2) New stationary RICE.

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

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

### (3) Reconstructed stationary RICE.

- (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after December 19, 2002.
- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

#### (b) Stationary RICE subject to limited requirements.

- (1) An affected source which meets either of the criteria in <u>paragraphs</u> (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of <u>subpart A of this part</u> except for the initial notification requirements of § 63.6645(f).
- (i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
- (ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
- (2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of § 63.6645(f) and the requirements of §§ 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.
- (3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:
- (i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

- (ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
- (iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
- (1) A new or reconstructed stationary RICE located at an area source;
- (2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.
- [69 FR 33506, June 15, 2004, as amended at <u>73 FR 3604</u>, Jan. 18, 2008; <u>75 FR 9674</u>, Mar. 3, 2010; <u>75 FR 37733</u>, June 30, 2010; <u>75 FR 51588</u>, Aug. 20, 2010; <u>78 FR 6700</u>, Jan. 30, 2013; <u>87 FR 48607</u>, Aug. 10, 2022]

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

(a) Affected sources.

- (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.
- (2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.
- (3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
- (4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.
- (5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
- (6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.
- (7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

- (b) Area sources that become major sources. If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.
- (1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.
- (2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.
- (c) If you own or operate an affected source, you must meet the applicable notification requirements in § 63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

#### **Emission and Operating Limitations**

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

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

- (a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.
- (b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.
- (c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables

1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

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

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

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

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

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

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

[78 FR 6701, Jan. 30, 2013]

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

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

- (a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.
- (b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either <u>paragraph (b)(1)</u> or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either <u>paragraph (b)(1)</u> or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.
- (1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).
- (2) The stationary RICE is located at an area source that meets <u>paragraphs</u> (b)(2)(i), (ii), and (iii) of this section.
- (i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.
- (ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.
- (iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.
- (c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:
- (1) Change oil every 1,000 hours of operation or within 1 year + 30 days of the previous change, whichever comes first. Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement.
- (2) Inspect and clean air filters every 750 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.

- (3) Inspect fuel filters and belts, if installed, every 750 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.
- (4) Inspect all flexible hoses every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.
- (d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in § 63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in § 63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1 later than June 1, 2018.
- (e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.
- (f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in § 63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in § 63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in § 63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a

site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013; 89 FR 70515, Aug. 30, 2024]

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

- (a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel.
- (b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in § 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
- (c) [Reserved]
- (d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2), or are on offshore vessels that meet § 63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013, as amended at 85 FR 78463, Dec. 4, 2020; 87 FR 48607, Aug. 10, 2022]

#### **General Compliance Requirements**

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

- (a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.
- (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

### **Testing and Initial Compliance Requirements**

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

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

- (a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).
- (b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).
- (c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).
- (d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in <u>paragraphs (d)(1)</u> through <u>(5)</u> of this section.
- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
- (2) The test must not be older than 2 years.
- (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

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

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

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

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

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

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

- (a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).
- (b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in <u>paragraphs (b)(1)</u> through <u>(4)</u> of this section.
- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
- (2) The test must not be older than 2 years.
- (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test,

with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

## § 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

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

- (a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.
- (b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.
- (1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.
- (2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.
- (3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.
- (4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.
- (c) [Reserved]
- (d) You must conduct three separate test runs for each performance test required in this section, as specified in  $\S 63.7(e)(3)$ . Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)

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

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

Where:

C<sub>i</sub> = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

C<sub>o</sub> = concentration of CO, THC, or formaldehyde at the control device outlet, and

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

- (2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in <u>paragraphs (e)(2)(i)</u> through (iii) of this section.
- (i) Calculate the fuel-specific F<sub>0</sub> value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

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

Where:

 $F_0$  = Fuel factor based on the ratio of oxygen volume to the ultimate  $CO_2$  volume produced by the fuel at zero percent excess air.

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

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

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

(ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent O<sub>2</sub>, as follows:

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

Where:

 $X_{CO2} = CO_2$  correction factor, percent.

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

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

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

Where:

C<sub>adj</sub> = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O<sub>2</sub>.

C<sub>d</sub> = Measured concentration of CO, THC, or formaldehyde, uncorrected.

 $X_{CO2} = CO_2$  correction factor, percent.

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

- (f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.
- (g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in <u>paragraphs (g)(1)</u> through (5) of this section.
- (1) Identification of the specific parameters you propose to use as operating limitations;
- (2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;
- (3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
- (4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

- (5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
- (h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.
- (1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time;
- (2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;
- (3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;
- (4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;
- (5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;
- (6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
- (7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.
- (i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. 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.

(j) Beginning on February 26, 2025, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedure specified in § 63.9(k). Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or alternate electronic file.

[69 FR 33506, June 15, 2004, as amended at <u>75 FR 9676</u>, Mar. 3, 2010; <u>78 FR 6702</u>, Jan. 30, 2013; <u>89 FR 70516</u>, Aug. 30, 2024]

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

- (a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O<sub>2</sub> or CO<sub>2</sub> according to the requirements in <u>paragraphs (a)(1)</u> through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.
- (1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.
- (2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in § 63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
- (3) As specified in § 63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.
- (4) The CEMS data must be reduced as specified in § 63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.
- (5) Beginning on February 26, 2025, within 60 days after the date of completing each continuous emissions monitoring system (CEMS) performance evaluation (as defined in § 63.2) that includes a relative accuracy test audit (RATA), you must submit the results of the performance

evaluation following the procedures specified in § 63.9(k). The results of performance evaluations of CEMS measuring RATA pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website. The results of performance evaluations of CEMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation must be included as an attachment in the ERT or alternate electronic file.

- (b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in <u>paragraphs (b)(1)</u> through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in <u>paragraph (b)</u> of this section are applicable September 6, 2011.
- (1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in <u>paragraphs (b)(1)(i)</u> through (v) of this section and in § 63.8(d). As specified in § 63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in <u>paragraphs (b)(1)</u> through (5) of this section in your site-specific monitoring plan.
- (i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
- (ii) Sampling interface (*e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;
- (iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;
- (iv) Ongoing operation and maintenance procedures in accordance with provisions in § 63.8(c)(1)(ii) and (c)(3); and
- (v) Ongoing reporting and recordkeeping procedures in accordance with provisions in § 63.10(c), (e)(1), and (e)(2)(i).
- (2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
- (3) The CPMS must collect data at least once every 15 minutes (see also § 63.6635).
- (4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

- (5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.
- (6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.
- (c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.
- (d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.
- (e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
- (1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;
- (2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;
- (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;
- (4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;
- (5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;
- (6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.
- (7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

- (8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
- (9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and
- (10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.
- (f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
- (g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either § 63.6603(b)(1) or § 63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet § 63.6603(c) do not have to meet the requirements of this paragraph (g).
- (1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
- (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.
- (h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
- (i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of table 2c to this subpart or in items 1 or 4 of table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil and filter change requirement in tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil and filter in table 2c or

2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil and filter. If any of the limits are exceeded, the engine owner or operator must change the oil and filter within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil and filter within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil and filter changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of table 2c to this subpart or in items 5, 6, 7, 8, 10, 11, or 13 of table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil and filter change requirement in tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil and filter in table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil and filter. If any of the limits are exceeded, the engine owner or operator must change the oil and filter within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil and filter within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil and filter changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013; 89 FR 70516, Aug. 30, 2024]

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

- (a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.
- (b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.
- (c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6645.
- (d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.
- (e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
- (1) The compliance demonstration must consist of at least three test runs.
- (2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
- (3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.
- (4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
- (5) You must measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of this subpart. Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or THC concentration.
- (6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

#### **Continuous Compliance Requirements**

#### § 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

- (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
- (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

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

- (a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.
- (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.
- (c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
- (1) The compliance demonstration must consist of at least one test run.
- (2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

- (3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.
- (4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
- (5) You must measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of this subpart. Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or THC concentration.
- (6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device.
- (7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.
- (d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).
- (e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply

with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

- (f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in <u>paragraphs (f)(1)</u> through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (2) You may operate your emergency stationary RICE for the purpose specified in <u>paragraph</u> (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by <u>paragraphs</u> (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this <u>paragraph</u> (f)(2).
- (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

# (ii)-(iii) [Reserved]

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

- (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.
- (ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at <u>71 FR 20467</u>, Apr. 20, 2006; <u>73 FR 3606</u>, Jan. 18, 2008; <u>75 FR 9676</u>, Mar. 3, 2010; <u>75 FR 51591</u>, Aug. 20, 2010; <u>78 FR 6704</u>, Jan. 30, 2013; <u>87 FR 48607</u>, Aug. 10, 2022]

#### Notifications, Reports, and Records

# § 63.6645 What notifications must I submit and when?

- (a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
- (1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

- (2) An existing stationary RICE located at an area source of HAP emissions.
- (3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
- (4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.
- (5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.
- (b) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an initial notification not later than December 13, 2004, or no later than 120 days after the source becomes subject to this subpart, whichever is later. Beginning on February 26, 2025, submit the notification electronically in portable document format (PDF) consistent with § 63.9(k).
- (c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an initial notification not later than 120 days after you become subject to this subpart. Beginning on February 26, 2025, submit the notification electronically in PDF consistent with § 63.9(k).
- (d) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an initial notification not later than July 16, 2008, or no later than 120 days after the source becomes subject to this subpart, whichever is later. Beginning on February 26, 2025, submit the notification electronically in PDF consistent with § 63.9(k).
- (e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008, and you are required to submit an initial notification, you must submit an initial notification not later than 120 days after you become subject to this subpart. Beginning on February 26, 2025, submit the notification electronically in PDF consistent with § 63.9(k).
- (f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with § 63.6590(b), your notification should include the information in § 63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

- (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1).
- (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).
- (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
- (2) Before February 26, 2025, for each initial compliance demonstration required in table 5 to this subpart that includes a performance test conducted according to the requirements in table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to § 63.10(d)(2). Beginning on February 26, 2025, for each initial compliance demonstration required in table 5 to this subpart that includes a performance test conducted according to the requirements in table 3 to this subpart, you must submit the Notification of Compliance Status, including a summary of the performance test results, in PDF to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), before the close of business on the 60th day following the completion of the performance test following the procedure specified in § 63.9(k), except any Confidential Business Information (CBI) is to be submitted according to paragraphs (h)(2)(i) and (ii) of this section. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report, you must submit a complete file, including information claimed to be CBI, to the EPA following the procedures in paragraphs (h)(2)(i) and (ii) of this section. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this paragraph (h)(2).
- (i) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address <u>oaqpscbi@epa.gov</u>, and as described in <u>paragraph (h)(2)</u> of this section, should include clear CBI markings and be

flagged to the attention of the Reciprocating Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link.

- (ii) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711, Attention Reciprocating Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.
- (i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in § 63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in § 63.6603(d) and identifying the state or local regulation that the engine is subject to.

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013; 85 FR 73912, Nov. 19, 2020; 89 FR 70516, Aug. 30, 2024]

#### § 63.6650 What reports must I submit and when?

- (a) You must submit each report in Table 7 of this subpart that applies to you.
- (b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.
- (1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.6595.
- (2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.6595.
- (3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

- (4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
- (5) For each stationary RICE that is subject to permitting regulations pursuant to <u>40 CFR part 70</u> or <u>71</u>, and if the permitting authority has established dates for submitting semiannual reports pursuant to <u>40 CFR 70.6(a)(3)(iii)(A)</u> or <u>40 CFR 71.6 (a)(3)(iii)(A)</u>, you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.
- (6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on December 31.
- (7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in § 63.6595.
- (8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
- (9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.
- (c) The Compliance report must contain the information in <u>paragraphs (c)(1)</u> through (8) of this section.
- (1) Company name and address.
- (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
- (3) Date of report and beginning and ending dates of the reporting period.
- (4) If you had a malfunction during the reporting period, the compliance report must include the starting and ending date and time, the duration (in hours), and a brief description for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction.
- (5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

- (6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- (7) Engine site rating in brake HP, year construction of the engine commenced (as defined in § 63.2, where the exact year is not known, provide the best estimate), and type of engine (CI, SI 2SLB, SI 4SLB, or SI 4SRB).
- (8) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (9) An engine can be claimed as exempt from reporting coordinates (latitude/longitude) via CEDRI if:
- (i) During the reporting period, the engine will be owned by, or operated by or for, an agency of the Federal Government responsible for national defense; and
- (ii) The agency determines that disclosing the coordinates to the general public would be a threat to national security.
- (d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in <u>paragraphs (c)(1)</u> through (8) of this section and the information in <u>paragraphs (d)(1)</u> and (2) of this section.
- (1) The total operating time (in hours) of the stationary RICE at which the deviation occurred during the reporting period.
- (2) Information on the number, duration (in hours), and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (3) A description of any changes in processes, or controls since the last reporting period.
- (e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in <u>paragraphs (c)(1)</u> through (8) and (e)(1) through (13) of this section.
- (1) The date and time that each malfunction started and stopped.
- (2) The start and end date and time and the duration (in hours) that each CMS was inoperative, except for zero (low-level) and high-level checks.
- (3) The start and end date and time and the duration (in hours) that each CMS was out-of-control, including the information in  $\S$  63.8(c)(8).
- (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

- (5) A summary of the total duration (in hours) of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
- (6) A breakdown of the total duration (in hours) of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (7) A summary of the total duration (in hours) of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
- (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
- (9) [Reserved]
- (10) A brief description of the CMS.
- (11) The date of the latest CMS certification or audit.
- (12) A description of any changes in CMS, processes, or controls since the last reporting period.
- (13) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
- (f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. Beginning on February 26, 2025, the semiannual and annual compliance report required in table 7 of this subpart must be submitted according to paragraph (i) of this section. Only those elements required under this subpart are required to be submitted according to paragraph (i) of this section.
- (g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in

- <u>paragraphs (b)(1)</u> through <u>(b)(5)</u> of this section. You must report the data specified in <u>(g)(1)</u> through <u>(g)(3)</u> of this section.
- (1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.
- (2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.
- (3) Any problems or errors suspected with the meters.
- (h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.
- (1) The report must contain the following information:
- (i) Company name and address where the engine is located.
- (ii) Date of the report and beginning and ending dates of the reporting period.
- (iii) Engine site rating in brake HP, year construction of the engine commenced (as defined in § 63.2, where the exact year is not known, provide the best estimate), and type of engine (CI, SI 2SLB, SI 4SLB, or SI 4SRB).
- (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v)-(vi) [Reserved]
- (vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- (viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
- (ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration (in hours), and cause of deviations, and the corrective action taken.
- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

- (3) Before February 26, 2025, the annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (<a href="https://cdx.epa.gov/">https://cdx.epa.gov/</a>). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 63.13. Beginning on February 26, 2025, the annual report must be submitted according to paragraph (i) of this section.
- (i) Beginning on February 26, 2025 for the annual report specified in § 63.6650(h) and February 26, 2025 or one year after the report becomes available in CEDRI, whichever is later for all other semiannual or annual reports, submit all semiannual and annual subsequent compliance reports using the appropriate electronic report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/cedri) for this subpart and following the procedure specified in § 63.9(k), except any CBI must be submitted according to the procedures in § 63.6645(h). The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

[69 FR 33506, June 15, 2004, as amended at <u>75 FR 9677</u>, Mar. 3, 2010; <u>78 FR 6705</u>, Jan. 30, 2013; <u>87 FR 48607</u>, Aug. 10, 2022; <u>89 FR 70517</u>, Aug. 30, 2024]

# § 63.6655 What records must I keep?

- (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in § 63.10(b)(2)(xiv).
- (2) Records of the occurrence and duration (in hours) of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- (3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).
- (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (b) For each CEMS or CPMS, you must keep the records listed in <u>paragraphs (b)(1)</u> through (3) of this section.

- (1) Records described in  $\S 63.10(b)(2)(vi)$  through (xi).
- (2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).
- (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.
- (c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.
- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
- (1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
- (2) An existing stationary emergency RICE.
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.
- (f) If you own or operate any of the stationary RICE in <u>paragraphs</u> (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purpose specified in § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
- (1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.
- (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.
- [69 FR 33506, June 15, 2004, as amended at <u>75 FR 9678</u>, Mar. 3, 2010; <u>75 FR 51592</u>, Aug. 20, 2010; <u>78 FR 6706</u>, Jan. 30, 2013; <u>87 FR 48607</u>, Aug. 10, 2022; <u>89 FR 70518</u>, Aug. 30, 2024]
- § 63.6660 In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for expeditious review according to  $\S 63.10(b)(1)$ .
- (b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to  $\S 63.10(b)(1)$ .

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

### Other Requirements and Information

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

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

[75 FR 9678, Mar. 3, 2010]

### § 63.6670 Who implements and enforces this subpart?

- (a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this

section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

- (c) The authorities that will not be delegated to State, local, or tribal agencies are:
- (1) Approval of alternatives to the non-opacity emission limitations and operating limitations in § 63.6600 under § 63.6(g).
- (2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.
- (3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.
- (4) Approval of major alternatives to recordkeeping and reporting under  $\S$  63.10(f) and as defined in  $\S$  63.90.
- (5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in § 63.6610(b).
- (6) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

[69 FR 33506, June 15, 2004, as amended at 89 FR 70518, Aug. 30, 2024]

### § 63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

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

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

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

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101-549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

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

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.
- (4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i).

*Diesel engine* means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

*Digester gas* means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO<sub>2</sub>.

*Dual-fuel engine* means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

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

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
- (2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 63.6640(f).
- (3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 63.6640(f)(4)(i) or (ii).

*Engine startup* means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

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

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

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

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

*Institutional emergency stationary RICE* means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO<sub>2</sub>.

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

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

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

*Liquid fuel* means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

*Major Source*, as used in this subpart, shall have the same meaning as in § 63.2, except that:

- (1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;
- (2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated;
- (3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and
- (4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NOx) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NOx, CO, and volatile organic compounds (VOC) into CO<sub>2</sub>, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

*Peaking unit or engine* means any standby engine intended for use during periods of high demand that are not emergencies.

*Percent load* means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be

treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to <u>subpart HH of this part</u>, the potential to emit provisions in § 63.760(a) may be used. For natural gas transmission and storage facilities subject to <u>subpart HHH of this part</u>, the maximum annual facility gas throughput for storage facilities may be determined according to § 63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to § 63.1270(a)(2).

*Production field facility* means those oil and gas production facilities located prior to the point of custody transfer.

*Production well* means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

*Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure C<sub>3</sub>H<sub>8</sub>.

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

- (1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.
- (2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.
- (i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.
- (ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.
- (iii) For purposes of this <u>paragraph (2)</u>, the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

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

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NOx (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

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

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in <u>subpart PPPPP of</u> this part, that tests stationary RICE.

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

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per

day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

*Surface site* means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

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

[69 FR 33506, June 15, 2004, as amended at <u>71 FR 20467</u>, Apr. 20, 2006; <u>73 FR 3607</u>, Jan. 18, 2008; <u>75 FR 9679</u>, Mar. 3, 2010; <u>75 FR 51592</u>, Aug. 20, 2010; <u>76 FR 12867</u>, Mar. 9, 2011; <u>78 FR 6706</u>, Jan. 30, 2013; <u>87 FR 48608</u>, Aug. 10, 2022]

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

| For each.                     | You must meet the following emission limitation, except during periods of startup   | During periods of startup you must  |
|-------------------------------|---|---|
| 1. 4SRB<br>stationary<br>RICE | a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup> |
|                               | b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub>   |   |

| For each. | You must meet the following emission limitation, except during periods of | During periods of startup you must. |
|-----------|---|-------------------------------------|
| • •       | startup   | • •                                 |

<sup>&</sup>lt;sup>1</sup> Sources can petition the Administrator pursuant to the requirements of <u>40 CFR 63.6(g)</u> for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

# Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

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

| For each   | You must meet the following operating limitation, except during periods of startup   |  |
|--|--|--|
|  | • • •  |  |
| 1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and using NSCR; | a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.1 |  |
| 2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or  | Comply with any operating limitations approved by the Administrator.   |  |

|   | You must meet the following operating limitation, except during periods of startup |
|---|--|
| existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement o limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and not using NSCR. |  |

<sup>&</sup>lt;sup>1</sup> Sources can petition the Administrator pursuant to the requirements of <u>40 CFR 63.8(f)</u> for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

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

| For each.                     | You must meet the following emission limitation, except during periods of startup   | During periods of startup you must  |
|-------------------------------|---|---|
| 1. 2SLB<br>stationary<br>RICE | a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O <sub>2</sub> . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O <sub>2</sub> until June 15, 2007 | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup> |
| 2. 4SLB<br>stationary<br>RICE | a. Reduce CO emissions by 93 percent or more; or  |   |

| For each.                   | You must meet the following emission limitation, except during periods of startup                                       | During periods of startup you must |
|-----------------------------|---|------------------------------------|
|                             | b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O <sub>2</sub>  |                                    |
| 3. CI<br>stationary<br>RICE | a. Reduce CO emissions by 70 percent or more; or  |                                    |
|                             | b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O <sub>2</sub> |                                    |

<sup>&</sup>lt;sup>1</sup> Sources can petition the Administrator pursuant to the requirements of <u>40 CFR 63.6(g)</u> for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP

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

| For each  | You must meet the following operating limitation, except during periods of startup |
|---|--|
| 1. New and reconstructed 2SLB and CI stationary   | a. maintain your catalyst so that the  |
| RICE >500 HP located at a major source of HAP     | pressure drop across the catalyst does not   |
| emissions and new and reconstructed 4SLB          | change by more than 2 inches of water at   |
| stationary RICE ≥250 HP located at a major source | 100 percent load plus or minus 10 percent  |
| of HAP emissions complying with the requirement   | from the pressure drop across the catalyst   |
| to reduce CO emissions and using an oxidation     | that was measured during the initial   |
| catalyst; and                                     | performance test; and  |
| New and reconstructed 2SLB and CI stationary      | b. maintain the temperature of your  |

| For each   | You must meet the following operating limitation, except during periods of startup   |
|--|--|
| RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.  | stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.   |
| 2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst  | a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and |
|  | b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.   |
| 3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and   | Comply with any operating limitations approved by the Administrator.   |
| New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and |  |

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

<sup>&</sup>lt;sup>1</sup> Sources can petition the Administrator pursuant to the requirements of <u>40 CFR 63.8(f)</u> for a different temperature range.

[<u>78 FR 6707</u>, Jan. 30, 2013]

# Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

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

| For each  | You must meet the following requirement, except during periods of startup   | During periods of startup you must  |
|---|---|---|
| 1. Emergency stationary CI<br>RICE and black start<br>stationary CI RICE <sup>1</sup> | a. Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first <sup>2</sup> . b. Inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>3</sup> |
|   | c. Inspect all hoses and belts every 500 hours of operation   |   |

| For each  | You must meet the following requirement, except during periods of startup   | During periods of startup you must |
|---|---|------------------------------------|
|   | or within 1 year + 30 days of<br>the previous inspection,<br>whichever comes first, and<br>replace as necessary <sup>3</sup>  |                                    |
| 2. Non-Emergency, non-black<br>start stationary CI RICE <100<br>HP  | a. Change oil and filter every 1,000 hours of operation or within 1 year + 30 days of the previous change, whichever comes first <sup>2</sup> .                                 |                                    |
|   | b. Inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary;                   |                                    |
|   | c. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary <sup>3</sup> |                                    |
| 3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP  | Limit concentration of CO in<br>the stationary RICE exhaust<br>to 230 ppmvd or less at 15<br>percent O <sub>2</sub>   |                                    |
| 4. Non-Emergency, non-black start CI stationary RICE 300 <hp≤500< td=""><td>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O<sub>2</sub>; or</td><td></td></hp≤500<> | a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O <sub>2</sub> ; or   |                                    |

| For each  | You must meet the following requirement, except during periods of startup   | During periods of startup you must |
|---|---|------------------------------------|
|   | b. Reduce CO emissions by 70 percent or more  |                                    |
| 5. Non-Emergency, non-black<br>start stationary CI RICE >500<br>HP                                      | a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O <sub>2</sub> ; or   |                                    |
|   | b. Reduce CO emissions by<br>70 percent or more   |                                    |
| 6. Emergency stationary SI RICE and black start stationary SI RICE. <sup>1</sup>                        | a. Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first; <sup>2</sup>                                    |                                    |
|   | b. Inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary;                   |                                    |
|   | c. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary <sup>3</sup> |                                    |
| 7. Non-Emergency, non-black<br>start stationary SI RICE <100<br>HP that are not 2SLB<br>stationary RICE | a. Change oil and filter every 1,440 hours of operation or within 1 year + 30 days of the previous change, whichever comes first; <sup>2</sup>                                  |                                    |

| For each  | You must meet the following requirement, except during periods of startup   | During periods of startup you must |
|---|---|------------------------------------|
|   | b. Inspect spark plugs every 1,440 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary  |                                    |
|   | c. Inspect all hoses and belts every 1,440 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary <sup>3</sup>                   |                                    |
| 8. Non-Emergency, non-black<br>start 2SLB stationary SI RICE<br><100 HP | a. Change oil and filter every 4,320 hours of operation or within 1 year + 30 days of the previous change, whichever comes first; <sup>2</sup>  |                                    |
|   | b. Inspect spark plugs every 4,320 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary;                                       |                                    |
|   | c. Inspect all hoses and belts<br>every 4,320 hours of<br>operation or within 1 year +<br>30 days of the previous<br>inspection, whichever comes<br>first, and replace as<br>necessary <sup>3</sup> |                                    |

| For each  | You must meet the following requirement, except during periods of startup   | During periods of startup you must |
|---|---|------------------------------------|
| 9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500   | Limit concentration of CO in<br>the stationary RICE exhaust<br>to 225 ppmvd or less at 15<br>percent O <sub>2</sub>   |                                    |
| 10. Non-emergency, non-<br>black start 4SLB stationary<br>RICE 100≤HP≤500   | Limit concentration of CO in<br>the stationary RICE exhaust<br>to 47 ppmvd or less at 15<br>percent O <sub>2</sub>    |                                    |
| 11. Non-emergency, non-<br>black start 4SRB stationary<br>RICE 100≤HP≤500   | Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O <sub>2</sub> |                                    |
| 12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis | Limit concentration of CO in<br>the stationary RICE exhaust<br>to 177 ppmvd or less at 15<br>percent O <sub>2</sub>   |                                    |

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

<sup>&</sup>lt;sup>2</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in table 2c of this subpart.

| For each | You must meet the following requirement, except during periods of startup | During periods of startup you must |
|----------|---|------------------------------------|
|----------|---|------------------------------------|

<sup>&</sup>lt;sup>3</sup> Sources can petition the Administrator pursuant to the requirements of <u>40 CFR 63.6(g)</u> for alternative work practices.

[89 FR 70518, Aug. 30, 2024]

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

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

| For each  | You must meet the following requirement, except during periods of startup  | During periods of startup you must   |
|---|--|--|
| 1. Non-Emergency, non-black start<br>CI stationary RICE ≤300 HP | a. Change oil and filter every 1,000 hours of operation or within 1 year + 30 days of the previous change, whichever comes first; <sup>1</sup> b. Inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; | Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. |
|   | c. Inspect all hoses and<br>belts every 500 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary   |  |

| For each  | You must meet the following requirement, except during periods of startup   | During periods of startup you must |
|---|---|------------------------------------|
| 2. Non-Emergency, non-black start CI stationary RICE 300 <hp≤500< td=""><td>a. Limit concentration of<br/>CO in the stationary RICE<br/>exhaust to 49 ppmvd at 15<br/>percent O<sub>2</sub>; or</td><td></td></hp≤500<> | a. Limit concentration of<br>CO in the stationary RICE<br>exhaust to 49 ppmvd at 15<br>percent O <sub>2</sub> ; or  |                                    |
|   | b. Reduce CO emissions<br>by 70 percent or more   |                                    |
| 3. Non-Emergency, non-black start CI stationary RICE >500 HP  | a. Limit concentration of<br>CO in the stationary RICE<br>exhaust to 23 ppmvd at 15<br>percent O <sub>2</sub> ; or  |                                    |
|   | b. Reduce CO emissions<br>by 70 percent or more   |                                    |
| 4. Emergency stationary CI RICE and black start stationary CI RICE. <sup>2</sup>  | a. Change oil and filter<br>every 500 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>change, whichever comes<br>first; <sup>1</sup>                         |                                    |
|   | b. Inspect air cleaner<br>every 1,000 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary; and |                                    |
|   | c. Inspect all hoses and<br>belts every 500 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever  |                                    |

| For each  | You must meet the following requirement, except during periods of startup  | During periods of startup you must |
|---|--|------------------------------------|
|   | comes first, and replace as necessary  |                                    |
| 5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. <sup>2</sup> | operation or within 1 year   |                                    |
|   | c. Inspect all hoses and<br>belts every 500 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary |                                    |
| 6. Non-emergency, non-black start 2SLB stationary RICE  | a. Change oil and filter<br>every 4,320 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>change, whichever comes<br>first; <sup>1</sup>                        |                                    |
|   | b. Inspect spark plugs<br>every 4,320 hours of<br>operation or within 1 year<br>+ 30 days of the previous  |                                    |

| For each   | You must meet the following requirement, except during periods of startup  | During periods of startup you must |
|--|--|------------------------------------|
|  | inspection, whichever<br>comes first, and replace as<br>necessary; and   |                                    |
|  | c. Inspect all hoses and<br>belts every 4,320 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary |                                    |
| 7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP | a. Change oil and filter<br>every 1,440 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>change, whichever comes<br>first; <sup>1</sup>                          |                                    |
|  | b. Inspect spark plugs<br>every 1,440 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary; and    |                                    |
|  | c. Inspect all hoses and<br>belts every 1,440 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary |                                    |

| For each   | You must meet the following requirement, except during periods of startup  | During periods of startup you must |
|--|--|------------------------------------|
| 8. Non-emergency, non-black start<br>4SLB remote stationary RICE >500<br>HP  | a. Change oil and filter<br>every 2,160 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>change, whichever comes<br>first; <sup>1</sup>                          |                                    |
|  | b. Inspect spark plugs<br>every 2,160 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary; and    |                                    |
|  | c. Inspect all hoses and<br>belts every 2,160 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary |                                    |
| 9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year | Install an oxidation catalyst to reduce HAP emissions from the stationary RICE   |                                    |
| 10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP  | a. Change oil and filter<br>every 1,440 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>change, whichever comes<br>first; <sup>1</sup>                          |                                    |

| For each   | You must meet the following requirement, except during periods of startup  | During periods of startup you must |
|--|--|------------------------------------|
|  | b. Inspect spark plugs<br>every 1,440 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary; and    |                                    |
|  | c. Inspect all hoses and<br>belts every 1,440 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary |                                    |
| 11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP | a. Change oil and filter<br>every 2,160 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>change, whichever comes<br>first; <sup>1</sup>                          |                                    |
|  | b. Inspect spark plugs<br>every 2,160 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary; and    |                                    |
|  | c. Inspect all hoses and<br>belts every 2,160 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever   |                                    |

| For each   | You must meet the following requirement, except during periods of startup   | During periods of startup you must |
|--|---|------------------------------------|
|  | comes first, and replace as necessary   |                                    |
| 12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year              | Install NSCR to reduce<br>HAP emissions from the<br>stationary RICE   |                                    |
| 13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis | a. Change oil and filter every 1,440 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;   b. Inspect spark plugs every 1,440 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and |                                    |
|  | c. Inspect all hoses and<br>belts every 1,440 hours of<br>operation or within 1 year<br>+ 30 days of the previous<br>inspection, whichever<br>comes first, and replace as<br>necessary  |                                    |

<sup>&</sup>lt;sup>1</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in table 2d of this subpart.

<sup>&</sup>lt;sup>2</sup> If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required

| For ea | ach | You must meet the following requirement, except during periods of | During periods of startup you must |
|--------|-----|---|------------------------------------|
|        |     | startup   |                                    |

in table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, state or local law under which the risk was deemed unacceptable.

[89 FR 70520, Aug. 30, 2024]

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

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

| For each  | Complying with the requirement to                                      | You must  |
|---|--|---|
| 1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources | Reduce CO emissions<br>and not using a<br>CEMS                         | Conduct subsequent performance tests semiannually. <sup>1</sup> |
| 2. 4SRB stationary RICE ≥5,000 HP located at major sources  | Reduce formaldehyde emissions  | Conduct subsequent performance tests semiannually. <sup>1</sup> |
| 3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources   | Limit the concentration of formaldehyde in the stationary RICE exhaust | Conduct subsequent performance tests semiannually. <sup>1</sup> |

| For each   | Complying with the requirement to                       | You must  |
|--|---|---|
| 4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE | Limit or reduce CO emissions and not using a CEMS       | Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first. |
| 5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE     | Limit or reduce CO<br>emissions and not<br>using a CEMS | Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first. |

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

[78 FR 6711, Jan. 30, 2013]

#### **Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests**

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

| For each .  | Complying with the requirement to | You must   | Using | According to the following requirements   |
|---|-----------------------------------|--|-------|---|
| 1. 2SLB,<br>4SLB, and<br>CI<br>stationary<br>RICE | a. Reduce CO emissions            | i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and |       | (a) For CO, O <sub>2</sub> , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, |

| For each. | Complying with the requirement to | You must  | Using   | According to the following requirements  |
|-----------|-----------------------------------|---|---|--|
|           |                                   |   |   | 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of section 11.1.1 of method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to section 8.1.2 of method 7E of 40 CFR part 60, appendix A-4. |
|           |                                   | ii. Measure the O <sub>2</sub> at the inlet and outlet of the control device; and   | (1) Method 3 or 3A or 3B of 40 CFR part 60, appendix  A-2, or ASTM  D6522-00  (Reapproved 2005)  1 3 (heated probe not necessary) | (b) Measurements to determine O <sub>2</sub> must be made at the same time as the measurements for CO concentration.   |
|           |                                   | iii. Measure the CO<br>at the inlet and the<br>outlet of the control<br>device; and | (2) ASTM D6522-<br>00 (Reapproved<br>2005) <sup>1 2 3</sup> (heated<br>probe not<br>necessary) or                                 | (c) The CO concentration must be at 15 percent O <sub>2</sub> , dry basis.   |

| For each.                     | Complying with the requirement to                | You must  | Using   | According to the following requirements  |
|-------------------------------|--|---|---|--|
|                               |  |   | method 10 of 40<br>CFR part 60,<br>appendix A-4   |  |
|                               |  | iv. Measure moisture content at the inlet and outlet of the control device as needed to determine CO and O <sub>2</sub> concentrations on a dry basis | (3) Method 4 of 40<br>CFR part 60,<br>appendix A-3, or<br>method 320 of 40<br>CFR part 63,<br>appendix A, or<br>ASTM D6348-03 1 | (d) Measurements to determine moisture content must be made at the same time and location as the measurements for CO concentration.  |
| 2. 4SRB<br>stationary<br>RICE | a. Reduce<br>formaldehyde<br>or THC<br>emissions | i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and                    |   | (a) For formaldehyde, THC, O <sub>2</sub> , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of section 11.1.1 of method 1 of 40 CFR part 60, appendix A, the |

| For each. | Complying with the requirement to | You must   | Using  | According to the following requirements   |
|-----------|-----------------------------------|--|--|---|
|           |                                   |  |  | duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to section 8.1.2 of method 7E of 40 CFR part 60, appendix A. |
|           |                                   | ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and  | (1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM D6522-00 (Reapproved 2005) 1 3 (heated probe not necessary)                                  | (b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for formaldehyde or THC concentration.   |
|           |                                   | iii. Measure moisture content at the inlet and outlet of the control device as needed to determine formaldehyde or THC and O2 concentrations on a dry basis; and | (2) Method 4 of 40<br>CFR part 60,<br>appendix A-3, or<br>method 320 of 40<br>CFR part 63,<br>appendix A, or<br>ASTM D6348-03 1                                | (c) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.  |
|           |                                   | iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the   | (3) Method 320 or<br>323 of 40 CFR part<br>63, appendix A; or<br>ASTM D6348-03, <sup>1</sup><br><sup>3</sup> provided in<br>ASTM D6348-03<br>Annex A5 (Analyte | concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of  |

| For each .               | Complying with the requirement to   | You must  | Using   | According to the following requirements   |
|--------------------------|---|---|---|---|
|                          |   | inlet and the outlet of<br>the control device   | Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130 | the three 1-hour or longer runs.  |
|                          |   | v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device  | (4) (1) Method<br>25A, reported as<br>propane, of 40<br>CFR part 60,<br>appendix A-7                | (e) THC concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.   |
| 3.<br>Stationary<br>RICE | a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust | i. Select the sampling<br>port location and the<br>number/location of<br>traverse points at the<br>exhaust of the<br>stationary RICE; and |   | (a) For formaldehyde, CO, O2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half- |

| For each . | Complying with the requirement to | You must   | Using   | According to the following requirements   |
|------------|-----------------------------------|--|---|---|
|            |                                   |  |   | diameter criterion of section 11.1.1 of method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to section 8.1.2 of method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device. |
|            |                                   | ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and                     | or 3B of 40 CFR part 60, appendix A-2, or ASTM D6522-00   | (b) Measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.   |
|            |                                   | iii. Measure moisture content of the stationary RICE exhaust at the sampling port location as needed to determine formaldehyde or CO | (2) Method 4 of 40<br>CFR part 60,<br>appendix A-3, or<br>method 320 of 40<br>CFR part 63,<br>appendix A, or<br>ASTM D6348-03 1 | (c) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.   |

| For each . | Complying with the requirement to | You must  | Using  | According to the following requirements  |
|------------|-----------------------------------|---|--|--|
|            |                                   | and O <sub>2</sub><br>concentrations on a<br>dry basis; and                 |  |  |
|            |                                   | iv. Measure<br>formaldehyde at the<br>exhaust of the<br>stationary RICE; or | (3) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, <sup>1</sup> <sup>3</sup> provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130 | (d) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs. |
|            |                                   | v. Measure CO at the exhaust of the stationary RICE                         | (4) Method 10 of<br>40 CFR part 60,<br>appendix A-4,<br>ASTM D6522-00<br>(2005), <sup>1 3</sup> method<br>320 of 40 CFR part<br>63, appendix A, or<br>ASTM D6348-03 <sup>1</sup>   | (e) CO concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.                        |

You may also use methods 3A and 10 as options to ASTM-D6522-00 (2005).

<sup>&</sup>lt;sup>2</sup> You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

| For each .   | Complying with the requirement to | You must | Using | According to the following requirements |
|--|-----------------------------------|----------|-------|---|
| <sup>3</sup> Incorporated by reference, see § 63.14. |                                   |          |       |   |

[88 FR 18413, Mar. 29, 2023]

## Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

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

| For each  | Complying with the requirement to  | You have demonstrated initial compliance if  |
|---|--|--|
| 1. New or reconstructed non-<br>emergency 2SLB stationary RICE<br>>500 HP located at a major source<br>of HAP, new or reconstructed non-<br>emergency 4SLB stationary RICE<br>>250 HP located at a major source<br>of HAP, non-emergency stationary<br>CI RICE >500 HP located at a<br>major source of HAP, and existing<br>non-emergency stationary CI RICE<br>>500 HP located at an area source<br>of HAP | a. Reduce CO<br>emissions and using<br>oxidation catalyst,<br>and using a CPMS | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| 2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP  | using oxidation catalyst, and using a  | i. The average CO concentration<br>determined from the initial<br>performance test is less than or<br>equal to the CO emission limitation;<br>and  |
|   |  | ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and  |

| For each  | Complying with the requirement to                                  | You have demonstrated initial compliance if  |
|---|--|--|
|   |  | iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.  |
| 3. New or reconstructed non-<br>emergency 2SLB stationary RICE<br>>500 HP located at a major source<br>of HAP, new or reconstructed non-<br>emergency 4SLB stationary RICE<br>>250 HP located at a major source<br>of HAP, non-emergency stationary<br>CI RICE >500 HP located at a<br>major source of HAP, and existing<br>non-emergency stationary CI RICE<br>>500 HP located at an area source<br>of HAP | a. Reduce CO emissions and not using oxidation catalyst            | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test. |
| 4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP  | a. Limit the concentration of CO, and not using oxidation catalyst | i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and   |
|   |  | iii. You have recorded the approved operating parameters (if any) during the initial performance test.   |

| For each  |  | You have demonstrated initial compliance if  |
|---|--|--|
| 5. New or reconstructed non-<br>emergency 2SLB stationary RICE<br>>500 HP located at a major source<br>of HAP, new or reconstructed non-<br>emergency 4SLB stationary RICE<br>≥250 HP located at a major source<br>of HAP, non-emergency stationary<br>CI RICE >500 HP located at a<br>major source of HAP, and existing<br>non-emergency stationary CI RICE<br>>500 HP located at an area source<br>of HAP | a. Reduce CO<br>emissions, and using<br>a CEMS | i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and |
|   |  | iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.                                |
| 6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP  | and using a CEMS                               | i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at the outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and ii. You have conducted a   |
|   |  | performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and   |
|   |  | iii. The average concentration of CO calculated using § 63.6620 is less than or equal to the CO emission limitation. The initial test comprises  |

| For each   | Complying with the requirement to                            | You have demonstrated initial compliance if   |
|--|--|---|
|  |  | the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.  |
| 7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP | a. Reduce<br>formaldehyde<br>emissions and using<br>NSCR     | i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and |
|  |  | ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and   |
|  |  | iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.   |
| 8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP | a. Reduce<br>formaldehyde<br>emissions and not<br>using NSCR | i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and  |

| For each  | Complying with the requirement to  | You have demonstrated initial compliance if  |
|---|--|--|
|   |  | ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and   |
|   |  | iii. You have recorded the approved operating parameters (if any) during the initial performance test.   |
| 9. New or reconstructed non-<br>emergency stationary RICE >500<br>HP located at a major source of<br>HAP, new or reconstructed non-<br>emergency 4SLB stationary RICE<br>250 ≤ HP ≤ 500 located at a major<br>source of HAP, and existing non-<br>emergency 4SRB stationary RICE<br>>500 HP located at a major source<br>of HAP | a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR     | i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and |
|   |  | iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.  |
| 10. New or reconstructed non-<br>emergency stationary RICE >500<br>HP located at a major source of<br>HAP, new or reconstructed non-<br>emergency 4SLB stationary RICE<br>250≤HP≤500 located at a major<br>source of HAP, and existing non-<br>emergency 4SRB stationary RICE<br>>500 HP located at a major source<br>of HAP    | a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR | i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to      |

| For each  | Complying with the requirement to   | You have demonstrated initial compliance if  |
|---|---|--|
|   |   | the requirements in § 63.6625(b); and  |
|   |   | iii. You have recorded the approved operating parameters (if any) during the initial performance test.   |
| 11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300 <hp≤500 an="" area="" at="" hap<="" located="" of="" source="" td=""><td>a. Reduce CO emissions</td><td>i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.</td></hp≤500>  | a. Reduce CO emissions  | i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.   |
| 12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300 <hp≤500 an="" area="" at="" hap<="" located="" of="" source="" td=""><td>a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust</td><td>i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O<sub>2</sub>, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.</td></hp≤500> | a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust | i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.                                     |
| 13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year   | a. Install an oxidation catalyst  | i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ; |
|   |   | ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine  |

| For each  |                 | You have demonstrated initial compliance if  |
|---|-----------------|--|
|   |                 | if the catalyst inlet temperature exceeds 1350 °F.   |
| 14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install NSCR | i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more; |
|   |                 | ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.   |

[78 FR 6712, Jan. 30, 2013]

# Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

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

| For each   | Complying with the requirement to | You must demonstrate continuous compliance by  |
|--|-----------------------------------|--|
| 1. New or reconstructed non-<br>emergency 2SLB stationary RICE<br>>500 HP located at a major source<br>of HAP, new or reconstructed non-<br>emergency 4SLB stationary RICE | chinssions and using              | i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved <sup>a</sup> ; and ii. Collecting the catalyst inlet |

| For each   | Complying with the requirement to  | You must demonstrate continuous compliance by  |
|--|--|--|
| ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP   |  | temperature data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and   |
|  |  | iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and   |
|  |  | v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.   |
| 2. New or reconstructed non-<br>emergency 2SLB stationary RICE<br>>500 HP located at a major source<br>of HAP, new or reconstructed non-<br>emergency 4SLB stationary RICE<br>≥250 HP located at a major source<br>of HAP, and new or reconstructed<br>non-emergency CI stationary RICE<br>>500 HP located at a major source<br>of HAP | a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS | i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved <sup>a</sup> ; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and |
|  |  | iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.   |
| 3. New or reconstructed non-<br>emergency 2SLB stationary RICE<br>>500 HP located at a major source  | a. Reduce CO<br>emissions or limit the<br>concentration of CO                | i. Collecting the monitoring data according to § 63.6625(a), reducing the measurements to 1-hour   |

| For each   | Complying with the requirement to                        | You must demonstrate continuous compliance by  |
|--|--|--|
| of HAP, new or reconstructed non-<br>emergency 4SLB stationary RICE<br>≥250 HP located at a major source<br>of HAP, new or reconstructed non-<br>emergency stationary CI RICE<br>>500 HP located at a major source<br>of HAP, and existing non-<br>emergency stationary CI RICE<br>>500 HP | in the stationary<br>RICE exhaust, and<br>using a CEMS   | averages, calculating the percent reduction or concentration of CO emissions according to § 63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and |
|  |  | iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.   |
| 4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP   | a. Reduce<br>formaldehyde<br>emissions and using<br>NSCR | i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and   |
|  |  | ii. Reducing these data to 4-hour rolling averages; and  |
|  |  | iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and  |
|  |  | iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.  |

| For each   | Complying with the requirement to  | You must demonstrate continuous compliance by  |
|--|--|--|
| 5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP   | a. Reduce<br>formaldehyde<br>emissions and not<br>using NSCR   | i. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and  |
|  |  | ii. Reducing these data to 4-hour rolling averages; and  |
|  |  | iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.  |
| 6. Non-emergency 4SRB stationary RICE with a brake HP≥5,000 located at a major source of HAP   | a. Reduce<br>formaldehyde<br>emissions   | Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent. <sup>a</sup> |
| 7. New or reconstructed non-<br>emergency stationary RICE >500<br>HP located at a major source of<br>HAP and new or reconstructed non-<br>emergency 4SLB stationary RICE<br>250≤HP≤500 located at a major<br>source of HAP | a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR | i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and                                      |
|  |  | iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating  |

| For each  | Complying with the requirement to  | You must demonstrate continuous compliance by   |
|---|--|---|
|   |  | limitations for the catalyst inlet temperature; and   |
|   |  | v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.  |
| 8. New or reconstructed non-<br>emergency stationary RICE >500<br>HP located at a major source of<br>HAP and new or reconstructed non-<br>emergency 4SLB stationary RICE<br>250≤HP≤500 located at a major<br>source of HAP  | a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR | i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and          |
|   |  | iii. Reducing these data to 4-hour rolling averages; and  |
|   |  | iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.  |
| 9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary | a. Work or<br>Management<br>practices  | i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of |

| For each   | Complying with the requirement to   | You must demonstrate continuous compliance by   |
|--|---|---|
| CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE |   | the engine in a manner consistent with good air pollution control practice for minimizing emissions.  |
| 10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE   | a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst | i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and |
|  |   | ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and   |

| For each   | Complying with the requirement to   | You must demonstrate continuous compliance by   |  |
|--|---|---|--|
|  |   | iii. Reducing these data to 4-hour rolling averages; and  |  |
|  |   | iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and  |  |
|  |   | v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.  |  |
| 11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE | a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst | i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and |  |
|  |   | ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and  |  |
|  |   | iii. Reducing these data to 4-hour rolling averages; and  |  |
|  |   | iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.  |  |

| For each  | Complying with the requirement to   | You must demonstrate continuous compliance by   |
|---|---|---|
| 12. Existing limited use CI stationary RICE >500 HP | a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst     | i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and |
|   |   | ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and   |
|   |   | iii. Reducing these data to 4-hour rolling averages; and  |
|   |   | iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and  |
|   |   | v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.  |
| 13. Existing limited use CI stationary RICE >500 HP | a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst | i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below   |

| For each  | Complying with the requirement to | You must demonstrate continuous compliance by  |
|---|-----------------------------------|--|
|   |                                   | the CO or formaldehyde   |
|   |                                   | concentration limit; and   |
|   |                                   | ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and   |
|   |                                   | iii. Reducing these data to 4-hour rolling averages; and   |
|   |                                   | iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.   |
| 14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a. Install an oxidation           | i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O2; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F. |

| For each  | Complying with the requirement to | You must demonstrate continuous compliance by  |
|---|-----------------------------------|--|
| 15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year | a Install NSCR                    | i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O2, or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F. |

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

[78 FR 6715, Jan. 30, 2013]

### Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

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

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

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

| For each  | You must submit a | The report must contain               | You must submit the report  |
|---|-------------------|---------------------------------------|---|
| 4. Emergency stationary RICE that operate for the purposes specified in § 63.6640(f)(4)(ii) | Report            | a. The information in § 63.6650(h)(1) | i. Annually according to the requirements in § 63.6650(h)(2)-(3) and (i). |

[89 FR 70522, Aug. 30, 2024]

## Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ

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

| General provisions citation | Subject of citation                                | Applies<br>to<br>subpart | Explanation                            |
|-----------------------------|--|--------------------------|--|
| § 63.1                      | General applicability of the General Provisions    | Yes                      |  |
| § 63.2                      | Definitions  | Yes                      | Additional terms defined in § 63.6675. |
| § 63.3                      | Units and abbreviations                            | Yes                      |  |
| § 63.4                      | Prohibited activities and circumvention            | Yes                      |  |
| § 63.5                      | Construction and reconstruction                    | Yes                      |  |
| § 63.6(a)                   | Applicability                                      | Yes                      |  |
| § 63.6(b)(1)-(4)            | Compliance dates for new and reconstructed sources | Yes                      |  |
| § 63.6(b)(5)                | Notification                                       | Yes                      |  |
| § 63.6(b)(6)                | [Reserved]   |                          |  |

| General<br>provisions<br>citation | Subject of citation   | Applies<br>to<br>subpart | Explanation   |  |  |  |  |
|-----------------------------------|---|--------------------------|---|--|--|--|--|
| § 63.6(b)(7)                      | Compliance dates for new and reconstructed area sources that become major sources | Yes                      |   |  |  |  |  |
| § 63.6(c)(1)-(2)                  | Compliance dates for existing sources   | Yes                      |   |  |  |  |  |
| § 63.6(c)(3)-(4)                  | [Reserved]  |                          |   |  |  |  |  |
| § 63.6(c)(5)                      | Compliance dates for existing area sources that become major sources              | Yes                      |   |  |  |  |  |
| § 63.6(d)                         | [Reserved]  |                          |   |  |  |  |  |
| § 63.6(e)                         | Operation and maintenance   | No                       |   |  |  |  |  |
| § 63.6(f)(1)                      | Applicability of standards  | No                       |   |  |  |  |  |
| § 63.6(f)(2)                      | Methods for determining compliance  | Yes                      |   |  |  |  |  |
| § 63.6(f)(3)                      | Finding of compliance   | Yes                      |   |  |  |  |  |
| § 63.6(g)(1)-(3)                  | Use of alternate standard   | Yes                      |   |  |  |  |  |
| § 63.6(h)                         | Opacity and visible emission standards  | No                       | Subpart ZZZZ does not contain opacity or visible emission standards.              |  |  |  |  |
| § 63.6(i)                         | Compliance extension procedures and criteria                                      | Yes                      |   |  |  |  |  |
| § 63.6(j)                         | Presidential compliance exemption   | Yes                      |   |  |  |  |  |
| § 63.7(a)(1)-(2)                  | Performance test dates  | Yes                      | Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612. |  |  |  |  |

| General provisions citation | Subject of citation  | Applies<br>to<br>subpart | Explanation  |  |  |  |  |  |
|-----------------------------|--|--------------------------|--|--|--|--|--|--|
| § 63.7(a)(3)                | CAA section 114 authority  | Yes                      |  |  |  |  |  |  |
| § 63.7(b)(1)                | Notification of performance test                                     | Yes                      | Except that § 63.7(b)(1) only applies as specified in § 63.6645.                 |  |  |  |  |  |
| § 63.7(b)(2)                | Notification of rescheduling   | Yes                      | Except that § 63.7(b)(2) only applies as specified in § 63.6645.                 |  |  |  |  |  |
| § 63.7(c)                   | Quality assurance/test plan  | Yes                      | Except that § 63.7(c) only applies as specified in § 63.6645.                    |  |  |  |  |  |
| § 63.7(d)                   | Testing facilities   | Yes                      |  |  |  |  |  |  |
| § 63.7(e)(1)                | Conditions for conducting performance tests                          | No                       | Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620. |  |  |  |  |  |
| § 63.7(e)(2)                | Conduct of performance tests and reduction of data                   | Yes                      | Subpart ZZZZ specifies test methods at § 63.6620.                                |  |  |  |  |  |
| § 63.7(e)(3)                | Test run duration  | Yes                      |  |  |  |  |  |  |
| § 63.7(e)(4)                | Administrator may require other testing under section 114 of the CAA | Yes                      |  |  |  |  |  |  |
| § 63.7(f)                   | Alternative test method provisions                                   | Yes                      |  |  |  |  |  |  |
| § 63.7(g)                   | Performance test data analysis, recordkeeping, and reporting         | Yes                      |  |  |  |  |  |  |
| § 63.7(h)                   | Waiver of tests  | Yes                      |  |  |  |  |  |  |

| General<br>provisions<br>citation | Subject of citation                                    | Applies<br>to<br>subpart | Explanation  |  |  |  |  |
|-----------------------------------|--|--------------------------|--|--|--|--|--|
| § 63.8(a)(1)                      | Applicability of monitoring requirements               | Yes                      | Subpart ZZZZ contains specific requirements for monitoring at § 63.6625.               |  |  |  |  |
| § 63.8(a)(2)                      | Performance specifications                             | Yes                      |  |  |  |  |  |
| § 63.8(a)(3)                      | [Reserved]   |                          |  |  |  |  |  |
| § 63.8(a)(4)                      | Monitoring for control devices                         | No                       |  |  |  |  |  |
| § 63.8(b)(1)                      | Monitoring   | Yes                      |  |  |  |  |  |
| § 63.8(b)(2)-(3)                  | Multiple effluents and multiple monitoring systems     | Yes                      |  |  |  |  |  |
| § 63.8(c)(1)                      | Monitoring system operation and maintenance            | Yes                      |  |  |  |  |  |
| § 63.8(c)(1)(i)                   | Routine and predictable SSM                            | No                       |  |  |  |  |  |
| § 63.8(c)(1)(ii)                  | SSM not in Startup Shutdown<br>Malfunction Plan        | Yes                      |  |  |  |  |  |
| § 63.8(c)(1)(iii)                 | Compliance with operation and maintenance requirements | No                       |  |  |  |  |  |
| § 63.8(c)(2)-(3)                  | Monitoring system installation                         | Yes                      |  |  |  |  |  |
| § 63.8(c)(4)                      | Continuous monitoring system (CMS) requirements        | Yes                      | Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS). |  |  |  |  |
| § 63.8(c)(5)                      | COMS minimum procedures                                | No                       | Subpart ZZZZ does not require COMS.  |  |  |  |  |
| § 63.8(c)(6)-(8)                  | CMS requirements                                       | Yes                      | Except that subpart ZZZZ does not require COMS.  |  |  |  |  |
| § 63.8(d)                         | CMS quality control                                    | Yes                      |  |  |  |  |  |

| General provisions citation | Subject of citation   | Applies<br>to<br>subpart | Explanation   |  |  |  |  |
|-----------------------------|---|--------------------------|---|--|--|--|--|
| § 63.8(e)                   | CMS performance evaluation                                      | Yes                      | Except for § 63.8(e)(5)(ii), which applies to COMS.   |  |  |  |  |
|                             |   |                          | Except that § 63.8(e) only applies as specified in § 63.6645.   |  |  |  |  |
| § 63.8(f)(1)-(5)            | Alternative monitoring method                                   | Yes                      | Except that § 63.8(f)(4) only applies as specified in § 63.6645.  |  |  |  |  |
| § 63.8(f)(6)                | Alternative to relative accuracy test                           | Yes                      | Except that § 63.8(f)(6) only applies as specified in § 63.6645.  |  |  |  |  |
| § 63.8(g)                   | Data reduction  | Yes                      | Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640. |  |  |  |  |
| § 63.9(a)                   | Applicability and State delegation of notification requirements | Yes                      |   |  |  |  |  |
| § 63.9(b)(1)-(5)            | Initial notifications   | Yes                      | Except that § 63.9(b)(3) is reserved.   |  |  |  |  |
|                             |   |                          | Except that § 63.9(b) only applies as specified in § 63.6645.   |  |  |  |  |
| § 63.9(c)                   | Request for compliance extension                                | Yes                      | Except that § 63.9(c) only applies as specified in § 63.6645.   |  |  |  |  |

| General provisions citation | Subject of citation   | Applies to subpart | Explanation   |  |  |  |
|-----------------------------|---|--------------------|---|--|--|--|
| § 63.9(d)                   | Notification of special compliance requirements for new sources | Yes                | Except that § 63.9(d) only applies as specified in § 63.6645.   |  |  |  |
| § 63.9(e)                   | Notification of performance test                                | Yes                | Except that § 63.9(e) only applies as specified in § 63.6645.   |  |  |  |
| § 63.9(f)                   | Notification of visible emission (VE)/opacity test              | No                 | Subpart ZZZZ does not contain opacity or VE standards.  |  |  |  |
| § 63.9(g)(1)                | Notification of performance evaluation                          | Yes                | Except that § 63.9(g) only applies as specified in § 63.6645.   |  |  |  |
| § 63.9(g)(2)                | Notification of use of COMS data                                | No                 | Subpart ZZZZ does not contain opacity or VE standards.  |  |  |  |
| § 63.9(g)(3)                | Notification that criterion for alternative to RATA is exceeded | Yes                | If alternative is in use.  Except that § 63.9(g) only applies as specified in § 63.6645.  |  |  |  |
| § 63.9(h)(1)-(6)            | Notification of compliance status                               | Yes                | Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved. |  |  |  |
|                             |   |                    | Except that § 63.9(h) only applies as specified in § 63.6645.   |  |  |  |
| § 63.9(i)                   | Adjustment of submittal deadlines                               | Yes                |   |  |  |  |
| § 63.9(j)                   | Change in previous information                                  | Yes                |   |  |  |  |

| General provisions citation | Subject of citation                                   | Applies<br>to<br>subpart | Explanation   |  |  |  |
|-----------------------------|---|--------------------------|---|--|--|--|
| § 63.9(k)                   | Electronic reporting procedures                       | Yes                      | Only as specified in §§ 63.9(j), 63.6620, 63.6625, 63.6645, and 63.6650.        |  |  |  |
| § 63.10(a)                  | Administrative provisions for recordkeeping/reporting | Yes                      |   |  |  |  |
| § 63.10(b)(1)               | Record retention                                      | Yes                      | Except that the most recent 2 years of data do not have to be retained on site. |  |  |  |
| § 63.10(b)(2)(i)-<br>(v)    | Records related to SSM                                | No                       |   |  |  |  |
| § 63.10(b)(2)(vi)-<br>(xi)  | Records   | Yes                      |   |  |  |  |
| § 63.10(b)(2)(xii)          | Record when under waiver                              | Yes                      |   |  |  |  |
| §<br>63.10(b)(2)(xiii)      | Records when using alternative to RATA                | Yes                      | For CO standard if using RATA alternative.                                      |  |  |  |
| § 63.10(b)(2)(xiv)          | Records of supporting documentation                   | Yes                      |   |  |  |  |
| § 63.10(b)(3)               | Records of applicability determination                | Yes                      |   |  |  |  |
| § 63.10(c)                  | Additional records for sources using CEMS             | Yes                      | Except that $\S 63.10(c)(2)-(4)$ and $(9)$ are reserved.                        |  |  |  |
| § 63.10(d)(1)               | General reporting requirements                        | Yes                      |   |  |  |  |
| § 63.10(d)(2)               | Report of performance test results                    | Yes                      |   |  |  |  |
| § 63.10(d)(3)               | Reporting opacity or VE observations                  | No                       | Subpart ZZZZ does not contain opacity or VE standards.                          |  |  |  |

| General provisions citation | Subject of citation                               | Applies<br>to<br>subpart | Explanation  |  |  |  |  |
|-----------------------------|---|--------------------------|--|--|--|--|--|
| § 63.10(d)(4)               | Progress reports                                  | Yes                      |  |  |  |  |  |
| § 63.10(d)(5)               | Startup, shutdown, and malfunction reports        | No                       |  |  |  |  |  |
| § 63.10(e)(1) and (2)(i)    | Additional CMS Reports                            | Yes                      |  |  |  |  |  |
| § 63.10(e)(2)(ii)           | COMS-related report                               | No                       | Subpart ZZZZ does not require COMS.                                  |  |  |  |  |
| § 63.10(e)(3)               | Excess emission and parameter exceedances reports | No                       | Excess emissions and exceedance reporting is specified in § 63.6650. |  |  |  |  |
| § 63.10(e)(4)               | Reporting COMS data                               | No                       | Subpart ZZZZ does not require COMS.                                  |  |  |  |  |
| § 63.10(f)                  | Waiver for recordkeeping/reporting                | Yes                      |  |  |  |  |  |
| § 63.11                     | Flares  | No                       |  |  |  |  |  |
| § 63.12                     | State authority and delegations                   | Yes                      |  |  |  |  |  |
| § 63.13                     | Addresses   | Yes                      |  |  |  |  |  |
| § 63.14                     | Incorporation by reference                        | Yes                      |  |  |  |  |  |
| § 63.15                     | Availability of information                       | Yes                      |  |  |  |  |  |

[89 FR 70522, Aug. 30, 2024]

Appendix A to Subpart ZZZZ of Part 63—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

1.0 Scope and Application. What is this Protocol?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O<sub>2</sub>) concentrations in controlled and uncontrolled emissions from

existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

#### 1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O<sub>2</sub>).

| Analyte              | CAS<br>No.    | Sensitivity  |
|----------------------|---------------|--|
| Carbon monoxide (CO) |               | Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive. |
| Oxygen (O2)          | 7782-<br>44-7 |  |

#### 1.2 Applicability. When is this protocol acceptable?

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

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

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

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

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O<sub>2</sub>, or no more than twice the permitted CO level.

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

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

#### 2.0 Summary of Protocol

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O<sub>2</sub> gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g.,

heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

#### 3.0 Definitions

- 3.1 Measurement System. The total equipment required for the measurement of CO and O<sub>2</sub> concentrations. The measurement system consists of the following major subsystems:
- 3.1.1 **Data Recorder.** A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.
- 3.1.2 **Electrochemical** (**EC**) **Cell.** A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.
- 3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.
- 3.1.4 **Moisture Removal System.** Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.
- 3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.
- 3.2 **Nominal Range.** The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.
- 3.3 Calibration Gas. A vendor certified concentration of a specific analyte in an appropriate balance gas.
- 3.4 **Zero Calibration Error.** The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.
- 3.5 *Up-Scale Calibration Error*. The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.
- 3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

- 3.7 **Repeatability Check.** A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.
- 3.8 **Sample Flow Rate.** The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.
- 3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O<sub>2</sub> and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.
- 3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.
- 3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.
- 3.12 **Performance-Established Configuration.** The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.
- 4.0 Interferences.

When present in sufficient concentrations, NO and NO<sub>2</sub> are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

- 5.0 Safety. [Reserved]
- 6.0 Equipment and Supplies.
- 6.1 What equipment do I need for the measurement system?

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

- 6.2 Measurement System Components.
- 6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.
- 6.2.2 **Sample Line.** Non-reactive tubing to transport the effluent from the sample probe to the EC cell.
- 6.2.3 *Calibration Assembly (optional)*. A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.
- 6.2.4 **Particulate Filter** (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.
- 6.2.5 **Sample Pump.** A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.
- 6.2.8 *Sample Flow Rate Monitoring.* An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.
- 6.2.9 **Sample Gas Manifold (optional).** A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.
- 6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O<sub>2</sub> concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.
- 6.2.11 **Data Recorder.** A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O<sub>2</sub>; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

- 6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.
- 7.0 Reagents and Standards. What calibration gases are needed?
- 7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and  $O_2$ . Use CO calibration gases with labeled concentration values certified by the manufacturer to be within  $\pm 5$  percent of the label value. Dry ambient air (20.9 percent  $O_2$ ) is acceptable for calibration of the  $O_2$  cell. If needed, any lower percentage  $O_2$  calibration gas must be a mixture of  $O_2$  in nitrogen.
- 7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

#### 7.1.2 Up-Scale O<sub>2</sub> Calibration Gas Concentration.

Select an O<sub>2</sub> gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O<sub>2</sub>. When the average exhaust gas O<sub>2</sub> readings are above 6 percent, you may use dry ambient air (20.9 percent O<sub>2</sub>) for the up-scale O<sub>2</sub> calibration gas.

- 7.1.3 **Zero Gas.** Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO<sub>2</sub>).
- 8.0 Sample Collection and Analysis
- 8.1 Selection of Sampling Sites.
- 8.1.1 Control Device Inlet. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.
- 8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

- 8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the "sample conditioning phase" once per minute until constant readings are obtained. Then begin the "measurement data phase" and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the "measurement data phase" readings to calculate the average stack gas CO and O2 concentrations.
- 8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than  $\pm 10$  percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than  $\pm 3$  percent, as instructed by the EC cell manufacturer.
- 9.0 Quality Control (Reserved)
- 10.0 Calibration and Standardization
- 10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.
- 10.1.1 **Zero Calibration.** For both the O<sub>2</sub> and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.
- 10.1.2 **Zero Calibration Tolerance.** For each zero gas introduction, the zero level output must be less than or equal to  $\pm 3$  percent of the up-scale gas value or  $\pm 1$  ppm, whichever is less restrictive, for the CO channel and less than or equal to  $\pm 0.3$  percent O<sub>2</sub> for the O<sub>2</sub> channel.

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

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

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

#### 11.0 Analytical Procedure

The analytical procedure is fully discussed in Section 8.

#### 12.0 Calculations and Data Analysis

Determine the CO and O<sub>2</sub> concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the "measurement data phase".

#### 13.0 Protocol Performance

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

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the "measurement data phase". The maximum allowable deviation from the mean for each of the individual readings is  $\pm 2$  percent, or  $\pm 1$  ppm, whichever is less restrictive. Record the mean

value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

- **Example:** A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than  $\pm 2$  percent  $or \pm 1$  ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).
- 13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO<sub>2</sub> gas standards that are generally recognized as representative of diesel-fueled engine NO and NO<sub>2</sub> emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.
- 13.2.1 Interference Response. The combined NO and NO<sub>2</sub> interference response should be less than or equal to  $\pm 5$  percent of the up-scale CO calibration gas concentration.
- 13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.
- 13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.
- 13.3.2 Repeatability Check Calculations. Determine the highest and lowest average "measurement data phase" CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than  $\pm 3$  percent or  $\pm 1$  ppm of the up-scale gas value, whichever is less restrictive.
- 14.0 Pollution Prevention (Reserved)
- 15.0 Waste Management (Reserved)
- 16.0 Alternative Procedures (Reserved)
- 17.0 References
- (1) "Development of an Electrochemical Cell Emission Analyzer Test Protocol", Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.

- (2) "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers", EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.
- (3) "ICAC Test Protocol for Periodic Monitoring", EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.
- (4) "Code of Federal Regulations", Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1-4; 10.

| Table 1                  | : Append                  | lix A–                 | –Sar           | npling  | g Run          | Dat | a.             |      |                |                           |      |              |                        |            |
|--------------------------|---------------------------|------------------------|----------------|---------|----------------|-----|----------------|------|----------------|---------------------------|------|--------------|------------------------|------------|
| Facility                 | <i>I</i>                  | E                      | ngir           | ie I.D. | •              |     | I              | Date |                | _                         |      |              |                        |            |
| Run Type: (_) (X) Pre-Sa |                           | _)                     |                |         |                |     |                |      |                | _)                        |      |              |                        |            |
|                          |                           | Pre-Sample Calibration |                |         |                | าก  |                |      |                | Post-Sample Cal.<br>Check |      |              | Repeatability<br>Check |            |
|                          | Run#                      |                        | 1 1            |         | 2              | 2   | 3              | 3    | 4              | 4                         | Time | Scrub.<br>OK |                        | Flow- Rate |
|                          | Gas                       |                        | O <sub>2</sub> | CO      | O <sub>2</sub> | СО  | O <sub>2</sub> | СО   | O <sub>2</sub> | CO                        |      |              |                        |            |
|                          | Sample<br>Cond.<br>Phase  |                        |                |         |                |     |                |      |                |                           |      |              |                        |            |
|                          | "                         |                        |                |         |                |     |                |      |                |                           |      |              |                        |            |
|                          | "                         |                        |                |         |                |     |                |      |                |                           |      |              |                        |            |
|                          | "                         |                        |                |         |                |     |                |      |                |                           |      |              |                        |            |
|                          | Measurement<br>Data Phase |                        |                |         |                |     |                |      |                |                           |      |              |                        |            |
|                          | "                         |                        |                |         |                |     |                |      |                |                           |      |              |                        |            |
|                          | "                         |                        |                |         |                |     |                |      |                |                           |      |              |                        |            |

| Table 1: Appendix A—Sampling Run Data. |            |      |  |  |  |
|--|------------|------|--|--|--|
| Facility                               | Engine I.D | Date |  |  |  |
| "                                      |            |      |  |  |  |
| "                                      |            |      |  |  |  |
| <i>"</i>                               |            |      |  |  |  |
| <b>"</b>                               |            |      |  |  |  |
| "                                      |            |      |  |  |  |
|  |            |      |  |  |  |
| "                                      |            |      |  |  |  |
| "                                      |            |      |  |  |  |
| "                                      |            |      |  |  |  |
| Mean                                   |            |      |  |  |  |
| Refresh<br>Phase                       |            |      |  |  |  |
| "                                      |            |      |  |  |  |
| "                                      |            |      |  |  |  |
| "                                      |            |      |  |  |  |
| "                                      |            |      |  |  |  |

[78 FR 6721, Jan. 30, 2013]

### eCFR Content

#### **Appendix C**

### Subpart CCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Source: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

#### **What This Subpart Covers**

#### § 63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

#### § 63.11111 Am I subject to the requirements in this subpart?

- (a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.
- (b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in § 63.11116.
- (c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in § 63.11117.
- (d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in  $\S$  63.11118.
- (e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in § 63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in § 63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.
- (f) If you are an owner or operator of affected sources, as defined in <u>paragraph (a)</u> of this section, you are not required to obtain a permit under <u>40 CFR part 70</u> or <u>40 CFR part 71</u> as a result of being subject to this subpart. However, you must still apply for and obtain a permit under <u>40 CFR part 70</u> or <u>40 CFR part 71</u> if you meet one or more of the applicability criteria found in <u>40 CFR 70.3(a)</u> and <u>(b)</u> or <u>40 CFR 71.3(a)</u> and <u>(b)</u>.

- (g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.
- (h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.
- (i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.
- (j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to § 63.11116 of this subpart.
- (k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under § 63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

#### § 63.11112 What parts of my affected source does this subpart cover?

- (a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in § 63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.
- (b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in § 63.11111 at the time you commenced operation.
- (c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in § 63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

#### § 63.11113 When do I have to comply with this subpart?

- (a) If you have a new or reconstructed affected source, you must comply with this subpart according to <u>paragraphs (a)(1)</u> and <u>(2)</u> of this section, except as specified in <u>paragraph (d)</u> of this section.
- (1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.
- (2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.
- (b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.
- (c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in § 63.11111(c) or § 63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.
- (d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to <u>paragraphs</u> (d)(1) and (2) of this section.
- (1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.
- (2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.
- (e) The initial compliance demonstration test required under  $\S 63.11120(a)(1)$  and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.
- (1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.
- (2) If you have an existing affected source, you must conduct the initial compliance test as specified in <u>paragraphs (e)(2)(i)</u> or <u>(e)(2)(ii)</u> of this section.
- (i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in <u>paragraphs</u> (b) or (c) of this section.
- (ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

- (f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.
- (1) If your GDF is an existing facility, you must comply by January 24, 2014.
- (2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.
- (i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.
- (ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.
- [73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

#### **Emission Limitations and Management Practices**

#### § 63.11115 What are my general duties to minimize emissions?

Each owner or operator of an affected source under this subpart must comply with the requirements of <u>paragraphs (a)</u> and <u>(b)</u> of this section.

- (a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- (b) You must keep applicable records and submit reports as specified in § 63.11125(d) and § 63.11126(b).

[76 FR 4182, Jan. 24, 2011]

### § 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

- (a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
- (1) Minimize gasoline spills;
- (2) Clean up spills as expeditiously as practicable;

- (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- (b) You are not required to submit notifications or reports as specified in § 63.11125, § 63.11126, or <u>subpart A of this part</u>, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- (c) You must comply with the requirements of this subpart by the applicable dates specified in § 63.11113.
- (d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

### § 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

- (a) You must comply with the requirements in section § 63.11116(a).
- (b) Except as specified in <u>paragraph</u> (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in § 63.11132, and as specified in <u>paragraphs</u> (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.
- (1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.
- (2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.
- (3) Submerged fill pipes not meeting the specifications of <u>paragraphs (b)(1)</u> or <u>(b)(2)</u> of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.
- (c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in <u>paragraph (b)</u> of this section, but must comply only with all of the requirements in § 63.11116.
- (d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

- (e) You must submit the applicable notifications as required under § 63.11124(a).
- (f) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.
- [73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

### § 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

- (a) You must comply with the requirements in §§ 63.11116(a) and 63.11117(b).
- (b) Except as provided in <u>paragraph</u> (c) of this section, you must meet the requirements in either paragraph (b)(1) or <u>paragraph</u> (b)(2) of this section.
- (1) Each management practice in Table 1 to this subpart that applies to your GDF.
- (2) If, prior to January 10, 2008, you satisfy the requirements in both <u>paragraphs (b)(2)(i)</u> and <u>(ii)</u> of this section, you will be deemed in compliance with this subsection.
- (i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.
- (A) Achieves emissions reduction of at least 90 percent.
- (B) Operates using management practices at least as stringent as those in Table 1 to this subpart.
- (ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or <u>paragraph</u> (b)(2)(i)(B) of this section.
- (c) The emission sources listed in <u>paragraphs</u> (c)(1) through (3) of this section are not required to comply with the control requirements in <u>paragraph</u> (b) of this section, but must comply with the requirements in § 63.11117.
- (1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.
- (2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.
- (3) Gasoline storage tanks equipped with floating roofs, or the equivalent.
- (d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.
- (e) You must comply with the applicable testing requirements contained in § 63.11120.

- (f) You must submit the applicable notifications as required under § 63.11124.
- (g) You must keep records and submit reports as specified in §§ 63.11125 and 63.11126.
- (h) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

#### **Testing and Monitoring Requirements**

#### § 63.11120 What testing and monitoring requirements must I meet?

- (a) Each owner or operator, at the time of installation, as specified in § 63.11113(e), of a vapor balance system required under § 63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.
- (1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.
- (i) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see § 63.14).
- (ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in § 63.7(f).
- (2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in <u>paragraphs</u> (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.
- (i) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see § 63.14).
- (ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in § 63.7(f).
- (iii) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, *see* § 63.14).
- (b) Each owner or operator choosing, under the provisions of § 63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator

- or delegated authority under paragraph § 63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.
- (1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see § 63.14).
- (2) You must, during the initial performance test required under <u>paragraph (b)(1)</u> of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.
- (3) You must comply with the testing requirements specified in paragraph (a) of this section.
- (c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
- (d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in § 63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

#### Notifications, Records, and Reports

#### § 63.11124 What notifications must I submit and when?

- (a) Each owner or operator subject to the control requirements in § 63.11117 must comply with paragraphs (a)(1) through (3) of this section.
- (1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or no later than 120 days after the source becomes subject to this subpart, whichever is later, or at the time you become subject to the control requirements in § 63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in § 63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011, or no later than 120 days after the source becomes subject to this subpart, whichever is later. The Initial Notification must contain the information specified in paragraphs (a)(1)(i)

through (iii) of this section. The notification must be submitted to the applicable EPA Regional office and delegated state authority as specified in § 63.13.

- (i) The name and address of the owner and the operator.
- (ii) The address (i.e., physical location) of the GDF.
- (iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11117 that apply to you.
- (2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, within 60 days of the applicable compliance date specified in § 63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.
- (3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in § 63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.
- (b) Each owner or operator subject to the control requirements in § 63.11118 must comply with paragraphs (b)(1) through (5) of this section.
- (1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or no later than 120 days after the source becomes subject to this subpart, whichever is later, or at the time you become subject to the control requirements in § 63.11118. If your affected source is subject to the control requirements in § 63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011, or no later than 120 days after the source becomes subject to this subpart, whichever is later. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional office and delegated state authority as specified in § 63.13.
- (i) The name and address of the owner and the operator.
- (ii) The address (i.e., physical location) of the GDF.

- (iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11118 that apply to you.
- (2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, in accordance with the schedule specified in § 63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.
- (3) If, prior to January 10, 2008, you satisfy the requirements in both <u>paragraphs (b)(3)(i)</u> and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or <u>paragraph (b)(2)</u> of this subsection.
- (i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.
- (A) Achieves emissions reduction of at least 90 percent.
- (B) Operates using management practices at least as stringent as those in Table 1 to this subpart.
- (ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either <u>paragraphs</u> (b)(3)(i)(A) or (b)(3)(i)(B) of this section.
- (4) You must submit a Notification of Performance Test, as specified in § 63.9(e), prior to initiating testing required by § 63.11120(a) and (b).
- (5) You must submit additional notifications specified in § 63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011; 85 FR 73919, Nov. 19, 2020]

#### § 63.11125 What are my recordkeeping requirements?

- (a) Each owner or operator subject to the management practices in § 63.11118 must keep records of all tests performed under § 63.11120(a) and (b).
- (b) Records required under <u>paragraph (a)</u> of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

- (c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in § 63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.
- (1) The owner or operator must keep all vapor tightness testing records with the cargo tank.
- (2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.
- (i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.
- (ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (*e.g.*, via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.
- (d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.
- (1) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- (2) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

#### § 63.11126 What are my reporting requirements?

- (a) Each owner or operator subject to the management practices in § 63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under § 63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.
- (b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

#### Other Requirements and Information

#### § 63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

#### § 63.11131 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under <u>subpart E of this part</u>, the authorities contained in <u>paragraph (c)</u> of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or tribal agency.
- (c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.
- (1) Approval of alternatives to the requirements in §§ 63.11116 through 63.11118 and 63.11120.
- (2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f), as defined in § 63.90, and as required in this subpart.
- (3) Approval of major alternatives to recordkeeping and reporting under § 63.10(f), as defined in § 63.90, and as required in this subpart.

#### § 63.11132 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Dual-point vapor balance system means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

*Gasoline* means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

Gasoline cargo tank means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

*Motor vehicle* means any self-propelled vehicle designed for transporting persons or property on a street or highway.

*Nonroad engine* means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

*Nonroad vehicle* means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in § 63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

*Vapor balance system* means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

*Vapor-tight* means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Vapor-tight gasoline cargo tank means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in § 63.11092(f) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

# Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More<sup>1</sup>

| If you own or operate  | Then you must  |
|--|--|
| 1. A new, reconstructed, or existing GDF subject to § 63.11118 | Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).  |
|  | (a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.   |
|  | (b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in § 63.11132.   |
|  | (c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.   |
|  | (d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.  |
|  | (e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in § 63.11117(b).   |
|  | (f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.   |
|  | (g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 |

| If you own or operate  | Then you must   |  |
|--|---|--|
|  | cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.         |  |
|  | (h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation: |  |
|  | $Pf = 2e^{-500.887/v}$  |  |
|  | Where:  |  |
|  | Pf = Minimum allowable final pressure, inches of water.   |  |
|  | v = Total ullage affected by the test, gallons.   |  |
|  | e = Dimensionless constant equal to approximately 2.718.  |  |
|  | 2 = The initial pressure, inches water.   |  |
| 2. A new or reconstructed GDF,                               |   |  |
| or any storage tank(s)                                       | Equip your gasoline storage tanks with a dual-point vapor   |  |
| constructed after November 9,                                | balance system, as defined in § 63.11132, and comply with the   |  |
| 2006, at an existing affected facility subject to § 63.11118 | requirements of item 1 in this Table.   |  |
| 1  |   |  |

The management practices specified in this Table are not applicable if you are complying with the requirements in § 63.11118(b)(2), except that if you are complying with the requirements in § 63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

| If you own or operate | Then you must   |
|-----------------------|---|
| A gasoline            | Not unload gasoline into a storage tank at a GDF subject to the control                             |
| cargo tank            | requirements in this subpart unless the following conditions are met:                               |
|                       | (i) All hoses in the vapor balance system are properly connected,                                   |
|                       | (ii) The adapters or couplers that attach to the vapor line on the storage tank have                |
|                       | closures that seal upon disconnect,   |
|                       | (iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight, |
|                       | (iv) All tank truck vapor return equipment is compatible in size and forms a vapor-                 |
|                       | tight connection with the vapor balance equipment on the GDF storage tank, and                      |
|                       | (v) All hatches on the tank truck are closed and securely fastened.                                 |
|                       | (vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-                  |
|                       | tight gasoline cargo tanks. Documentation that the cargo tank has met the                           |
|                       | specifications of EPA Method 27 shall be carried with the cargo tank, as specified                  |
|                       | in § 63.11125(c).   |

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

| Citation     | Subject        | Brief description   | Applies to subpart CCCCCC                       |
|--------------|----------------|---|---|
| § 63.1       | Applicability  | Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications | Yes, specific requirements given in § 63.11111. |
| § 63.1(c)(2) | Title V Permit | Requirements for obtaining a title V permit from the applicable permitting authority  | Yes, § 63.11111(f) of subpart CCCCCC exempts    |

| Citation         | Subject   | Brief description   | Applies to subpart CCCCCC  |
|------------------|---|---|--|
|                  |   |   | identified area sources from the obligation to obtain title V operating permits.           |
| § 63.2           | Definitions   | Definitions for part 63 standards   | Yes, additional definitions in § 63.11132.   |
| § 63.3           | Units and Abbreviations   | Units and abbreviations for part 63 standards   | Yes.   |
| § 63.4           | Prohibited Activities and Circumvention                         | Prohibited activities; Circumvention, severability  | Yes.   |
| § 63.5           | Construction/Reconstruction                                     | Applicability; applications; approvals  | Yes, except that these notifications are not required for facilities subject to § 63.11116 |
| § 63.6(a)        | Compliance with Standards/Operation & Maintenance—Applicability | General Provisions apply<br>unless compliance extension;<br>General Provisions apply to<br>area sources that become major                                     | Yes.   |
| § 63.6(b)(1)-(4) | Compliance Dates for New and Reconstructed Sources              | Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f) | Yes.   |

| Citation         | Subject   | Brief description   | Applies to subpart CCCCCC                        |
|------------------|---|---|--|
| § 63.6(b)(5)     | Notification  | Must notify if commenced construction or reconstruction after proposal  | Yes.   |
| § 63.6(b)(6)     | [Reserved]  |   |  |
| § 63.6(b)(7)     | Compliance Dates for New and Reconstructed Area Sources That Become Major | Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source                            | No.  |
| § 63.6(c)(1)-(2) | Compliance Dates for Existing Sources                                     | Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension | No, § 63.11113 specifies the compliance dates.   |
| § 63.6(c)(3)-(4) | [Reserved]  |   |  |
| § 63.6(c)(5)     | Compliance Dates for<br>Existing Area Sources That<br>Become Major        | Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)   | No.  |
| § 63.6(d)        | [Reserved]  |   |  |
| 63.6(e)(1)(i)    | General duty to minimize emissions  | Operate to minimize emissions at all times; information Administrator will use to determine if operation and  | No. See § 63.11115 for general duty requirement. |

| Citation         | Subject   | Brief description   | Applies to subpart CCCCCC |
|------------------|---|---|---------------------------|
|                  |   | maintenance requirements were met.  |                           |
| 63.6(e)(1)(ii)   | Requirement to correct malfunctions ASAP                | Owner or operator must correct malfunctions as soon as possible.  | No.                       |
| § 63.6(e)(2)     | [Reserved]  |   |                           |
| § 63.6(e)(3)     | Startup, Shutdown, and<br>Malfunction (SSM) Plan        | Requirement for SSM plan;<br>content of SSM plan; actions<br>during SSM   | No.                       |
| § 63.6(f)(1)     | Compliance Except During SSM                            | You must comply with<br>emission standards at all times<br>except during SSM  | No.                       |
| § 63.6(f)(2)-(3) | Methods for Determining Compliance                      | Compliance based on performance test, operation and maintenance plans, records, inspection  | Yes.                      |
| § 63.6(g)(1)-(3) | Alternative Standard                                    | Procedures for getting an alternative standard  | Yes.                      |
| § 63.6(h)(1)     | Compliance with Opacity/Visible Emission (VE) Standards | You must comply with opacity/VE standards at all times except during SSM  | No.                       |
| § 63.6(h)(2)(i)  | Determining Compliance with Opacity/VE Standards        | If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter | No.                       |
| § 63.6(h)(2)(ii) | [Reserved]  |   |                           |

| Citation                      | Subject   | Brief description   | Applies to subpart CCCCCC |
|-------------------------------|---|---|---------------------------|
| § 63.6(h)(2)(iii)             | Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards                          | Criteria for when previous opacity/VE testing can be used to show compliance with this subpart  | No.                       |
| § 63.6(h)(3)                  | [Reserved]  |   |                           |
| § 63.6(h)(4)                  | Notification of Opacity/VE<br>Observation Date  | Must notify Administrator of anticipated date of observation  | No.                       |
| § 63.6(h)(5)(i),<br>(iii)-(v) | Conducting Opacity/VE<br>Observations   | Dates and schedule for conducting opacity/VE observations   | No.                       |
| § 63.6(h)(5)(ii)              | Opacity Test Duration and<br>Averaging Times  | Must have at least 3 hours of observation with 30 6-minute averages   | No.                       |
| § 63.6(h)(6)                  | Records of Conditions During Opacity/VE Observations  | Must keep records available and allow Administrator to inspect  | No.                       |
| § 63.6(h)(7)(i)               | Report Continuous Opacity<br>Monitoring System (COMS)<br>Monitoring Data From<br>Performance Test | Must submit COMS data with other performance test data  | No.                       |
| § 63.6(h)(7)(ii)              | Using COMS Instead of EPA<br>Method 9   | Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test | No.                       |
| § 63.6(h)(7)(iii)             | Averaging Time for COMS During Performance Test   | To determine compliance, must reduce COMS data to 6-minute averages   | No.                       |

| Citation         | Subject  | Brief description  | Applies to subpart CCCCCC |
|------------------|--|--|---------------------------|
| § 63.6(h)(7)(iv) | COMS Requirements                                | Owner/operator must demonstrate that COMS performance evaluations are conducted according to § 63.8(e); COMS are properly maintained and operated according to § 63.8(c) and data quality as § 63.8(d)   | No.                       |
| § 63.6(h)(7)(v)  | Determining Compliance with Opacity/VE Standards | COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered | No.                       |
| § 63.6(h)(8)     | Determining Compliance with Opacity/VE Standards | Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance   | No.                       |
| § 63.6(h)(9)     | Adjusted Opacity Standard                        | Procedures for Administrator to adjust an opacity standard   | No.                       |

| Citation          | Subject                              | Brief description   | Applies to subpart CCCCCC |
|-------------------|--------------------------------------|---|---------------------------|
| § 63.6(i)(1)-(14) | Compliance Extension                 | Procedures and criteria for<br>Administrator to grant<br>compliance extension   | Yes.                      |
| § 63.6(j)         | Presidential Compliance<br>Exemption | President may exempt any source from requirement to comply with this subpart  | Yes.                      |
| § 63.7(a)(2)      | Performance Test Dates               | Dates for conducting initial performance testing; must conduct 180 days after compliance date   | Yes.                      |
| § 63.7(a)(3)      | CAA Section 114 Authority            | Administrator may require a performance test under CAA section 114 at any time  | Yes.                      |
| § 63.7(b)(1)      | Notification of Performance<br>Test  | Must notify Administrator 60 days before the test   | Yes.                      |
| § 63.7(b)(2)      | Notification of Rescheduling         | If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay  | Yes.                      |
| § 63.7(c)         | Quality Assurance (QA)/Test<br>Plan  | Requirement to submit site-<br>specific test plan 60 days<br>before the test or on date<br>Administrator agrees with; test<br>plan approval procedures;<br>performance audit<br>requirements; internal and<br>external QA procedures for<br>testing | Yes.                      |

| Citation     | Subject  | Brief description   | Applies to subpart CCCCCC  |
|--------------|--|---|--|
| § 63.7(d)    | Testing Facilities                             | Requirements for testing facilities   | Yes.   |
| 63.7(e)(1)   | Conditions for Conducting<br>Performance Tests | Performance test must be conducted under representative conditions  | No, § 63.11120(c) specifies conditions for conducting performance tests. |
| § 63.7(e)(2) | Conditions for Conducting<br>Performance Tests | Must conduct according to this subpart and EPA test methods unless Administrator approves alternative   | Yes.   |
| § 63.7(e)(3) | Test Run Duration                              | Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used           | Yes.   |
| § 63.7(f)    | Alternative Test Method                        | Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method  | Yes.   |
| § 63.7(g)    | Performance Test Data<br>Analysis              | Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years | Yes.   |

| Citation         | Subject   | Brief description  | Applies to subpart CCCCCC |
|------------------|---|--|---------------------------|
| § 63.7(h)        | Waiver of Tests                                       | Procedures for Administrator to waive performance test   | Yes.                      |
| § 63.8(a)(1)     | Applicability of Monitoring Requirements              | Subject to all monitoring requirements in standard   | Yes.                      |
| § 63.8(a)(2)     | Performance Specifications                            | Performance Specifications in appendix B of 40 CFR part 60 apply   | Yes.                      |
| § 63.8(a)(3)     | [Reserved]  |  |                           |
| § 63.8(a)(4)     | Monitoring of Flares                                  | Monitoring requirements for flares in § 63.11 apply  | Yes.                      |
| § 63.8(b)(1)     | Monitoring  | Must conduct monitoring according to standard unless Administrator approves alternative  | Yes.                      |
| § 63.8(b)(2)-(3) | Multiple Effluents and<br>Multiple Monitoring Systems | Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup | No.                       |

| Citation                  | Subject  | Brief description   | Applies to subpart CCCCCC |
|---------------------------|--|---|---------------------------|
| § 63.8(c)(1)              | Monitoring System Operation and Maintenance                            | Maintain monitoring system in a manner consistent with good air pollution control practices   | No.                       |
| § 63.8(c)(1)(i)-<br>(iii) | Operation and Maintenance<br>of Continuous Monitoring<br>Systems (CMS) | Must maintain and operate each CMS as specified in § 63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in § 63.6(e)(3) | No.                       |
| § 63.8(c)(2)-(8)          | CMS Requirements   | Must install to get<br>representative emission or<br>parameter measurements; must<br>verify operational status before<br>or at performance test   | No.                       |
| § 63.8(d)                 | CMS Quality Control  | Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions                        | No.                       |
| § 63.8(e)                 | CMS Performance Evaluation   | Notification, performance evaluation test plan, reports   | No.                       |
| § 63.8(f)(1)-(5)          | Alternative Monitoring<br>Method                                       | Procedures for Administrator to approve alternative monitoring  | No.                       |
| § 63.8(f)(6)              | Alternative to Relative<br>Accuracy Test                               | Procedures for Administrator to<br>approve alternative relative<br>accuracy tests for continuous<br>emissions monitoring system<br>(CEMS)   | No.                       |

| Citation                     | Subject   | Brief description   | Applies to subpart CCCCCC |
|------------------------------|---|---|---------------------------|
| § 63.8(g)                    | Data Reduction  | COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average   | No.                       |
| § 63.9(a)                    | Notification Requirements   | Applicability and State delegation  | Yes.                      |
| § 63.9(b)(1)-(2),<br>(4)-(5) | Initial Notifications   | Submit notification within 120 days after effective date, or no later than 120 days after the source becomes subject to this subpart, whichever is later; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each | Yes.                      |
| § 63.9(c)                    | Request for Compliance Extension                                      | Can request if cannot comply<br>by date or if installed best<br>available control technology or<br>lowest achievable emission rate  | Yes.                      |
| § 63.9(d)                    | Notification of Special<br>Compliance Requirements<br>for New Sources | For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date  | Yes.                      |
| § 63.9(e)                    | Notification of Performance<br>Test                                   | Notify Administrator 60 days prior  | Yes.                      |

| Citation         | Subject                                 | Brief description   | Applies to subpart CCCCCC                              |
|------------------|---|---|--|
| § 63.9(f)        | Notification of VE/Opacity<br>Test      | Notify Administrator 30 days prior  | No.  |
| § 63.9(g)        | Additional Notifications when Using CMS | Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative                                     | Yes, however,<br>there are no<br>opacity<br>standards. |
| § 63.9(h)(1)-(6) | Notification of Compliance<br>Status    | Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority | Yes, however,<br>there are no<br>opacity<br>standards. |
| § 63.9(i)        | Adjustment of Submittal Deadlines       | Procedures for Administrator to approve change when notifications must be submitted   | Yes.   |
| § 63.9(j)        | Change in Previous<br>Information       | Must submit within 15 days after the change   | Yes.   |
| § 63.9(k)        | Notifications                           | Electronic reporting procedures   | Yes, only as specified in § 63.9(j).                   |
| § 63.10(a)       | Recordkeeping/Reporting                 | Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source   | Yes.   |
| § 63.10(b)(1)    | Recordkeeping/Reporting                 | General requirements; keep all records readily available; keep for 5 years  | Yes.   |

| Citation                      | Subject                | Brief description   | Applies to subpart CCCCCC  |
|-------------------------------|------------------------|---|--|
| § 63.10(b)(2)(i)              | Records related to SSM | Recordkeeping of occurrence and duration of startups and shutdowns                      | No.  |
| § 63.10(b)(2)(ii)             | Records related to SSM | Recordkeeping of malfunctions   | No. See § 63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction. |
| § 63.10(b)(2)(iii)            | Maintenance records    | Recordkeeping of maintenance<br>on air pollution control and<br>monitoring equipment    | Yes.   |
| §<br>63.10(b)(2)(iv)          | Records Related to SSM | Actions taken to minimize emissions during SSM  | No.  |
| § 63.10(b)(2)(v)              | Records Related to SSM | Actions taken to minimize emissions during SSM  | No.  |
| §<br>63.10(b)(2)(vi)-<br>(xi) | CMS Records            | Malfunctions, inoperative, out-<br>of-control periods                                   | No.  |
| §<br>63.10(b)(2)(xii)         | Records                | Records when under waiver   | Yes.   |
| § 63.10(b)(2)(xiii)           | Records                | Records when using alternative to relative accuracy test                                | Yes.   |
| §<br>63.10(b)(2)(xiv)         | Records                | All documentation supporting Initial Notification and Notification of Compliance Status | Yes.   |

| Citation                   | Subject                                 | Brief description  | Applies to subpart CCCCCC                                     |
|----------------------------|---|--|---|
| § 63.10(b)(3)              | Records                                 | Applicability determinations   | Yes.  |
| § 63.10(c)                 | Records                                 | Additional records for CMS   | No.   |
| § 63.10(d)(1)              | General Reporting Requirements          | Requirement to report  | Yes.  |
| § 63.10(d)(2)              | Report of Performance Test<br>Results   | When to submit to Federal or State authority   | Yes.  |
| § 63.10(d)(3)              | Reporting Opacity or VE<br>Observations | What to report and when  | No.   |
| § 63.10(d)(4)              | Progress Reports                        | Must submit progress reports on schedule if under compliance extension   | Yes.  |
| § 63.10(d)(5)              | SSM Reports                             | Contents and submission  | No. See § 63.11126(b) for malfunction reporting requirements. |
| § 63.10(e)(1)-<br>(2)      | Additional CMS Reports                  | Must report results for each<br>CEMS on a unit; written copy<br>of CMS performance<br>evaluation; two-three copies of<br>COMS performance evaluation                         | No.   |
| § 63.10(e)(3)(i)-<br>(iii) | Reports                                 | Schedule for reporting excess emissions  | No.   |
| § 63.10(e)(3)(iv)-(v)      | Excess Emissions Reports                | Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual | No.   |

| Citation                         | Subject                                    | Brief description   | Applies to subpart CCCCCC  |
|----------------------------------|--|---|--|
|                                  |  | reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)-(8) and 63.10(c)(5)-(13)  |  |
| § 63.10(e)(3)(iv)- (v)           | Excess Emissions Reports                   | Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)-(8) and 63.10(c)(5)-(13) | No, § 63.11130(K) specifies excess emission events for this subpart. |
| \$<br>63.10(e)(3)(vi)-<br>(viii) | Excess Emissions Report and Summary Report | Requirements for reporting excess emissions for CMS; requires all of the information  | No.  |

| Citation      | Subject                            | Brief description   | Applies to subpart CCCCCC |
|---------------|------------------------------------|---|---------------------------|
|               |                                    | in §§ $63.10(c)(5)-(13)$ and $63.8(c)(7)-(8)$                 |                           |
| § 63.10(e)(4) | Reporting COMS Data                | Must submit COMS data with performance test data              | No.                       |
| § 63.10(f)    | Waiver for Recordkeeping/Reporting | Procedures for Administrator to waive                         | Yes.                      |
| § 63.11(b)    | Flares                             | Requirements for flares                                       | No.                       |
| § 63.12       | Delegation                         | State authority to enforce standards                          | Yes.                      |
| § 63.13       | Addresses                          | Addresses where reports, notifications, and requests are sent | Yes.                      |
| § 63.14       | Incorporations by Reference        | Test methods incorporated by reference                        | Yes.                      |
| § 63.15       | Availability of Information        | Public and confidential information                           | Yes.                      |

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## eCFR Content