



DIVISION OF ENVIRONMENTAL QUALITY

DRAFT OPERATING AIR PERMIT

PERMIT NUMBER: 2087-AOP-R5

IS ISSUED TO:

Craighead County Solid Waste Disposal Authority (SWDA)
238 County Road 476
Jonesboro, AR 72404
Craighead County
AFIN: 16-00199

PURSUANT TO THE RULES OF THE ARKANSAS OPERATING AIR PERMIT PROGRAM, RULE 26: 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 10, 2021 AND May 9, 2026

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

Signed:

Demetria Kimbrough
Deputy Director, Office of Air Quality

Date

Table of Contents

SECTION I: FACILITY INFORMATION	4
SECTION II: INTRODUCTION	5
Summary of Permit Activity	5
Process Description	5
Rules and Regulations	6
Emission Summary	7
SECTION III: PERMIT HISTORY	9
SECTION IV: SPECIFIC CONDITIONS	10
SN-01	10
Title 8. Environmental Law: Requirements for Landfills Conditions	11
SN-02a and SN-02b	17
SN-03	18
NESHAP 40 C.F.R. § 63 Subpart ZZZZ Conditions	19
NSPS 40 C.F.R. § 60 Subpart IIII Conditions	19
SN-04	23
SECTION V: COMPLIANCE PLAN AND SCHEDULE	25
SECTION VI: PLANTWIDE CONDITIONS	26
Regulation 21 – Asbestos Abatement	27
Permit Shield	29
SECTION VIII: GENERAL PROVISIONS	32
Appendix A: 8 CAR § Part 41 - Requirements for Landfills	
Appendix B: Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
Appendix C: Subpart IIII – Standards of Performance for Stationary Compressions Ignition Internal Combustion Engines	

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 _x	Nitrogen Oxide
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate Matter Equal To Or Smaller Than Ten Microns
PM _{2.5}	Particulate Matter Equal To Or Smaller Than 2.5 Microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

SECTION I: FACILITY INFORMATION

PERMITTEE: Craighead County Solid Waste Disposal Authority
(SWDA)

AFIN: 16-00199

PERMIT NUMBER: 2087-AOP-R5

FACILITY ADDRESS: 238 County Road 476
Jonesboro, AR 72404

MAILING ADDRESS: P.O Box 16777
Jonesboro, AR 72404

COUNTY: Craighead County

CONTACT NAME: Angela Sparks

CONTACT POSITION: Chief Executive Officer

TELEPHONE NUMBER: (870) 972-6353

REVIEWING ENGINEER: Thamoda Crossen

UTM North South (Y): Zone 15: 3954897.83 m

UTM East West (X): Zone 15: 709282.53 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Craighead County Solid Waste Disposal Authority (CCSWDA) operates a Class 1 Municipal Solid Waste Landfill at 238 County Road 476, Jonesboro, Arkansas 72404. The facility submitted a modification application to replace the currently permitted 750 scfm flare with a 1,500 scfm utility flare (SN-04). Also, Regulation Subpart WWW: *Standards of Performance for Municipal Solid Waste Landfill* has been replaced with 8 CAR § Part 41 - *Requirements for Landfills*.

The permitted emission increases in this Title V modification include 0.1 tpy of PM/PM₁₀, 3.4 tpy of SO₂, 0.6 tpy of VOC, 56.6 tpy of CO, 6.1 tpy of NO_x and 2.48 tpy of Total HAPs.

Process Description

The Craighead County Solid Waste Facility is a Class I landfill. Municipal solid waste (MSW) is collected from Craighead County and the City of Jonesboro by municipal and private haulers.

Once municipal solid waste (MSW) is placed in the landfill, it is compacted and covered with soil. The anaerobic decomposition of organic wastes within the landfill produces a biogas commonly referred to as landfill gas (LFG). Particulate emissions are generated during on-site earthmoving operations resulting from the excavation and placement of daily cover over the freshly placed waste at the landfill's working face. The primary gas produced during this phase of decomposition is carbon dioxide. As the oxygen supply is depleted, facultative bacteria continue the decomposition process. Eventually anaerobic bacteria become the predominate means of waste decomposition. Methane and carbon dioxide are produced at about a 50-50 ratio as the decomposition process proceeds in the facultative and anaerobic stages. Other components present in the gas include hydrogen sulfide and non-methane organic compounds (NMOC). Some NMOC are volatile organic compounds (VOC) and/or hazardous air pollutants (HAP). These fugitive landfill gases are quantified under SN-01.

The facility installed a LFG collection system in 2016 at the Legacy landfill. The LFG collection system collects landfill gas to be routed to the Utility Flare (SN-04) for combustion. Fugitive dust emissions arise from vehicle traffic on unpaved (SN-02a) and paved (SN-02b) roads at the landfill. A diesel emergency generator (SN-03) provides emergency power to the onsite Authority offices. There are additionally a number of tanks which collect leachate water from the landfill, as well as an underground diesel storage tank and a pair of small tanks used to store new and used lube oil. The tanks qualify as insignificant activities.

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

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
8 CAR § Part 41 - <i>Requirements for Landfills</i>
40 C.F.R. § 63 Subpart ZZZZ – <i>National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>
40 C.F.R. § 60 Subpart IIII — <i>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines</i>

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.

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	14.4	61.9
		PM ₁₀	4.0	16.5
		PM _{2.5}	See Note*	
		SO ₂	0.7	6.2
		VOC	3.9	17.3
		CO	4.0	70.9
		NO _x	4.9	15.5
HAPs**		Methyl Chloroform****	0.02	0.08
		Methylene Chloride****	0.29	1.22
		Tetrachloroethylene****	0.15	0.64
		Single HAP**	0.84	3.66
		Total HAPs**	2.83	13.09
Air Contaminants ***		Acetone***	0.11	0.42
		Hydrogen Sulfide (H ₂ S)***	0.31	1.31
		Chlorodifluoromethane***	0.04	0.12
		Dichlorodifluoromethane***	0.46	2.01
01	Uncontrolled Landfill Gas Emissions	VOC	3.7	16.2
		CO	1.0	4.0
		Acetone	0.10	0.41
		Hydrogen Sulfide (H ₂ S)	0.29	1.25
		Chlorodifluoromethane	0.03	0.11
		Dichlorodifluoromethane	0.45	1.97
		Methyl Chloroform	0.01	0.07
		Methylene Chloride	0.28	1.21
		Tetrachloroethylene	0.14	0.62
		Single HAP	0.84	3.66
		Total HAPs	2.42	10.62
02a	Unpaved Roads	PM	4.3	18.5
		PM ₁₀	1.2	5.0
02b	Paved Roads	PM	9.2	39.9
		PM ₁₀	1.9	8.0

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
03	Diesel Emergency Generator (2.64 MMBtu/hr)	PM	0.1	0.1
		PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.7	0.2
		NO _x	2.9	0.8
		Total HAPs	0.02	0.01
04	Utility Flare	PM	0.8	3.4
		PM ₁₀	0.8	3.4
		SO ₂	1.4	6.1
		VOC	0.3	1.0
		CO	15.3	66.7
		NO _x	3.4	14.7
		Acetone	0.002	0.002
		Benzene	0.001	0.003
		Chlorodifluoromethane	0.001	0.002
		Dichlorodifluoromethane	0.009	0.04
		Methyl Chloroform	0.03	0.01
		Methylene Chloride	0.01	0.01
		Tetrachloroethylene	0.01	0.02
		Hydrogen Chloride (HCl)	0.35	1.51
		Hydrogen Fluoride (HF)	0.17	0.75
		Hydrogen Sulfide (H ₂ S)	0.015	0.06
		Single HAP	0.35	1.51
		Total HAPs	0.39	2.46

*PM_{2.5} limits are source specific, if required. Not all sources have PM_{2.5} limits.

**HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

*** Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

****Organic HAPs not included in VOCs total.

SECTION III: PERMIT HISTORY

2087-AOP-R0 issued June 15, 2005 was the first Title V permit for this facility. The permitted emission limits were 102.7 tpy PM, 23.9 tpy PM 10, 10.3 tpy VOC, and 8.06 tpy combined HAPs.

2087-AOP-R1 was issued on September 10, 2010. This permit modification was to renew the facility's Title V. The emission calculations and site sampling were updated. This resulted in the emission increase of 22.1 tpy VOC and decrease of 43.6 tpy PM, AND 5.0 tpy PM10.

2087-AOP-R2 was issued on July 7, 2015. This permitting action renewed the facility's Title V air permit. The facility also requested to add an emergency generator which is subject to 40 C.F.R § 63 Subpart ZZZZ and 40 C.F.R § 60 Subpart IIII. Permitted emissions were increased by 0.8 tpy NOx, 0.1 tpy SO₂, 4.2 tpy CO, and 1.62 tpy Total HAPs. Permitted emissions were decreased by 0.5 tpy PM, 5.8 tpy PM10, and 16.1 tpy VOC.

2087-AOP-R3 was issued on January 30, 2017. This permit modification was to install a flare to provide odor control, gas migration control, and to avoid future impacts to areas of the landfill that are going to be permanently capped. Permitted emission were increased by 3.3 tpy PM/PM10, 2.7 tpy SO₂, 0.4 tpy VOC, 10.1 tpy CO, 8.6 tpy NOx and 0.41 Total HAPs.

2087-AOP-R4 was issued on May 10th, 2021. This permitting issuance completes renewal requirements of Arkansas Regulation 26 and 40 C.F.R. Part 70. With this renewal application, the permit shield is updated, General Provision #27 is added, and minor emission calculations are corrected. The permitted emission increases in this Title V renewal include 0.4 tpy VOC, and 0.41 Total HAPs. Permitted emission decreases include 0.1 tpy PM.

SECTION IV: SPECIFIC CONDITIONS

SN-01

Landfill Gas Generation

Source Description

The landfill will operate to a maximum capacity of 4,298,687 Mg of in-place waste. This source is affected by 8 CAR Part 41, Subpart *Requirements for Landfills*. The monitoring requirements of this subpart show that NMOC emissions are below 50 Mg per year. Collection and control equipment is therefore not required; only the monitoring reporting and recordkeeping outlined in the following conditions are required.

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 through Specific Condition #3. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
01	Uncontrolled Landfill Gas Emission	VOC	3.7	16.2
		CO	1.0	4.0

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Condition #3. [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
01	Uncontrolled Landfill Gas Emission	Acetone	0.10	0.42
		Chlorodifluoromethane	0.03	0.12
		Dichlorodifluoromethane	0.45	1.97
		Hydrogen Sulfide (H ₂ S)	0.29	1.25
		Methyl Chloroform	0.02	0.07
		Methylene Chloride	0.28	1.21
		Tetrachloroethylene	0.14	0.62
		Single HAP	0.84	3.66
		Total HAPs	2.42	10.62

3. The permittee shall not accept more than 4,298,687 Mg of solid waste at the facility during the lifetime of the landfill. [8 CAR § 40-503, 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]

4. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #3. 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 Department personnel upon request, and submitted in accordance with General Provision #7. [8 CAR § 40-503 and 40 C.F.R. § 52 Subpart E]

Title 8. Environmental Law: Requirements for Landfills Conditions

5. This facility is subject to and shall comply with the provision of 8 CAR Part 41, Subpart *Requirements for Landfills*. The landfill accepted waste after November 8, 1987, has the capacity for future deposition, and commenced construction before July 17, 2014. [8 CAR § 41-1601 and 8 CAR § 41-1603]
6. Physical or operational changes made to a municipal solid waste landfill subject to this subpart are not considered a modification or reconstruction under this subpart if the changes are made solely to comply with this subpart [8 CAR § 41-1604(d)]
7. The permittee shall [8 CAR § 41-1607(a)]:
 - a. Prepare an initial NMOC emission rate report using the emission rate calculation procedures specified in 40 C.F.R. § 60.35f (a) (Appendix A); [8 CAR § 41-1607(a)(1)]
 - b. Recalculate the NMOC emission rate annually in accordance with the procedures specified in 40 C.F.R. § 60.35f(a), except as provided in 40 C.F.R. § 60.38f(c)(3); and [8 CAR § 41-1607(a)(2)]
 - c. Follow the procedures specified in 40 C.F.R. § 60.33f (e)(1) through (3). [8 CAR § 41-1607(a)(3)]
8. The permittee shall install, maintain, and operate a collection and control system meeting the requirements specified in 40 C.F.R. § 60.33f(b)(1) through (3) and 40 C.F.R. § 60.33f(c)(1) through (4), except as provided in 40 C.F.R. § 60.24, within thirty (30) months after: [8 CAR § 41-1608(a)]
 - a. The first NMOC emission rate report for a landfill in which the NMOC emission rate equals or exceeds thirty-four (34) megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than thirty-four (34) megagrams per year; [8 CAR § 41-1608(a)(1)]
 - b. The first NMOC emission rate report in the closed landfill subcategory in which the NMOC emission rate equals or exceeds fifty (50) megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than fifty (50) megagrams per year; or [8 CAR § 41-1608(a)(2)]
 - c. The most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds thirty-four megagrams per year based on Tier 2, if the Tier 4 surface emission monitoring shows a surface methane emission concentration of five hundred (500) parts per million methane or greater. [8 CAR § 41-1608(a)(3)]

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

9. The permittee shall ensure that each collection system installed to comply with this subpart shall meet the requirements specified in: [8 CAR § 41-1608(b)]
 - a. 40 C.F.R. § 60.33f(b)(2) and 40 C.F.R. § 60.40f(a) through (c) for active collection systems; or [8 CAR § 41-1608(b)(1)]
 - b. 40 C.F.R. § 60.33f(b)(3) for passive collection systems. [8 CAR § 41-1608(b)(2)]
10. The permittee shall ensure that each control system installed to comply with this subpart shall meet the requirements specified in 40 C.F.R. § 60.33f(c)(1) through (4) except as provided in 40 C.F.R. § 60.24. [8 CAR § 41-1608(c)]
11. A collection and control system required under this subpart may be capped, removed, or decommissioned if the criteria specified in 40 C.F.R. § 60.33f(f)(1) through (4) are met. [8 CAR § 41-1608(d)]
12. The permittee subject to the requirement to install and operate a gas emission collection and control system pursuant to this subpart shall complete planning, awarding of contracts, installing, and starting up of municipal solid waste landfill gas emission collection and control equipment within thirty (30) months after the date an NMOC emission rate report shows [8 CAR § 41-1609(a)]
 - a. NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills; [8 CAR § 41-1609(a)(1)]
 - b. NMOC emissions equal to or exceeding fifty (50) megagrams per year for closed landfills; or : [8 CAR § 41-1609(a)(2)]
 - c. A methane surface emission concentration equal to or exceeding five hundred (500) parts per million based on Tier 4 surface emissions monitoring. [8 CAR § 41-1609(a)(3)]
13. The permittee subject to the requirement to install and operate a gas emission collection and control system pursuant to this subpart shall comply with the increments of progress listed in Table 41.16.1. [8 CAR § 41-1609(b)]

Increments of Progress		
Increment	Date if Using Tiers 1, 2, or 3	Date if Using Tier 4
Increment 1: Submit final collection and control system design plan to the Division in accordance with	Twelve (12) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills or NMOC	Twelve (12) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill

Increments of Progress		
Increment	Date if Using Tiers 1, 2, or 3	Date if Using Tier 4
8 CAR § 41-1610	emissions equal to or exceeding fifty (50) megagrams for closed landfills	
Increment 2: Submit notice to the Division that on-site construction of collection and control system has begun	Twenty-four (24) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Twenty-four (24) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill
Increment 3: Submit notice to the Division that on-site construction of collection and control system is complete	Thirty (30) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding to thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Thirty (30) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill
Increment 4: Final compliance with 8 CAR § 41-1608	Thirty (30) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding to thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Thirty (30) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill

14. The permittee shall submit to the Division a site-specific design plan for each gas collection and control system required under this subpart. The collection and control system design plan shall be prepared and approved by a professional engineer and shall comply with the requirements specified in 40 C.F.R. § 60.38f(d)(1) - (7). [8 CAR § 41-1610(a)(1 and 2)]
15. Upon receipt of an initial design plan, the Division shall review the information submitted and either approve it, disapprove it, or request that additional information be submitted. If the Division does not approve or disapprove the design plan, or does not request that additional information be submitted, within ninety (90) days of receipt, then the owner or operator may continue with implementation of the design plan at their own risk. [8 CAR § 41-1610 (C)]
16. If the owner or operator chooses to demonstrate compliance with the emission control requirements of this subpart by using a treatment system as defined in 40 C.F.R. § 60.41f,

then the owner or operator shall prepare a site-specific treatment system monitoring plan that meets the requirements specified in 40 C.F.R. § 60.39f(b)(5). [8 CAR § 41-1610(D)]

17. The owner or operator of a municipal solid waste landfill with a gas collection and control system used to comply with this subpart shall meet the operating, compliance, and monitoring requirements by:
 - a. Compliance with the requirements of 40 C.F.R. § 60.34f(a) through (g), 40 C.F.R. § 60.36f(a) through (e), and 40 C.F.R. § 60.37f(a) through (h); or [8 CAR § 41-1611(a)(1)]
 - b. Compliance with the requirements of 40 C.F.R. § 63.1958, 40 C.F.R. § 63.1960, and 40 C.F.R. § 63.1961. [8 CAR § 41-1611(a)(2)]
18. If the owner or operator chooses to demonstrate compliance with the requirements of this subpart as provided under subdivision (a)(2) of this section, the owner or operator:
 - a. Shall submit to the Division the twenty-four-hour high temperature report required under 40 C.F.R. § 63.1981(k); and [8 CAR § 41-1611(b)(1)]
 - b. May no longer use the provisions referenced in subdivision (a)(1) of this section to comply with operating, compliance, and monitoring requirements of this subpart. [8 CAR § 41-1611(b)(2)]
19. The permittee shall comply with the initial and annual performance test report provisions specified in 40 C.F.R. § 60.38f(h) and (i). [8 CAR § 41-1612 and 40 C.F.R. § 60.38f(h) and (i)]
20. If the permittee employs leachate recirculation or added liquids based on a Research, Development, and Demonstration permit (issued through Resource Conservation and Recovery Act, subtitle D, part 258) within the last 10 years must submit to the Administrator, annually, following the procedure specified in 60.38f(j)(2), the following information: [8 CAR § 41-1614 and 40 C.F.R. § 60.38f(l)]
 - a. Volume of leachate recirculated (gallons per year) and the reported basis of those estimates (records or engineering estimates). [40 C.F.R. § 60.38f(l)(1)]
 - b. Total volume of all other liquids added (gallons per year) and the reported basis of those estimates (records or engineering estimates). [40 C.F.R. § 60.38f(l)(2)]
 - c. Surface area (acres) over which the leachate is recirculated (or otherwise applied). [40 C.F.R. § 60.38f(l)(3)]
 - d. Surface area (acres) over which any other liquids are applied. [40 C.F.R. § 60.38f(l)(4)]
 - e. The total waste disposed (megagrams) in the areas with recirculated leachate and/or added liquids based on on-site records to the extent data are available, or engineering estimates and the reported basis of those estimates. [40 C.F.R. § 60.38f(l)(5)]

- f. The annual waste acceptance rates (megagrams per year) in the areas with recirculated leachate and/or added liquids, based on on-site records to the extent data are available, or engineering estimates. [40 C.F.R. § 60.38f(l)(6)]
 - g. The initial report must contain items in § 60.38f(l)(1) through (6) per year for the most recent 365 days as well as for each of the previous 10 years, to the extent historical data are available in on-site records, and the report must be submitted no later than: [40 C.F.R. § 60.38f(l)(7)]
 - i. September 27, 2017, for landfills that commenced construction, modification, or reconstruction after July 17, 2014 but before August 29, 2016; or
 - ii. 365 days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction after August 29, 2016.
 - h. Subsequent annual reports must contain items in § 60.38f(l)(1) through (6) for the 365-day period following the 365-day period included in the previous annual report, and the report must be submitted no later than 365 days after the date the previous report was submitted. [40 C.F.R. § 60.38f(l)(8)]
 - i. Landfills in the closed landfill subcategory are exempt from reporting requirements contained in § 60.38f(l)(1) through (7). [40 C.F.R. § 60.38f(l)(9)]
 - j. Landfills may cease annual reporting of items in § 60.38f(l)(1) through (6) once they have submitted the closure report in § 60.38f(f). [40 C.F.R. § 60.38f(l)(10)]
- 21. The permittee shall comply with applicable recordkeeping requirements specified in 40 C.F.R. § 60.39f (a) through (j). [8 CAR § 41-1615 and 40 C.F.R. § 60.39f]
- 22. The permittee shall submit, as applicable, the following reports electronically in accordance with the procedures specified in 40 C.F.R. § 60.38f(j): [8 CAR § 41-1616 and 40 C.F.R. § 60.38f(j)]
 - a. NMOC emission rate reports required under 8 CAR § 41-1607; [8 CAR § 41-1616(a)]
 - b. Performance testing reports required under 8 CAR § 41-1612; and [8 CAR § 41-1616(b)]
 - c. Liquids addition reports required under 8 CAR § 41-1614. [8 CAR § 41-1616(c)]
- 23. The permittee shall comply with the test methods and procedures, as applicable, specified in 40 C.F.R. § 60.35f(a) through (e). [8 CAR § 41-1617 and 40 C.F.R. § 60.35f(a-e)]
- 24. The permittee must submit according to 40 C.F.R. § 60.38f (k)(1) and (2). If complying with the operational provisions of §§ 63.1958, 63.1960, and 63.1961, as allowed at §§ 60.34f, 60.36f, and 60.37f, the owner or operator must follow the corrective action and the corresponding timeline reporting requirements in § 63.1981(j) in lieu of § 60.38f (k)(1) and (2). [8 CAR § 41-1618.and 40 C.F.R. § 60.38f (k)]

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

- a. For corrective action that is required according to § 60.36f(a)(3)(iii) or (a)(5)(iii) and is expected to take longer than 120 days after the initial exceedance to complete, the permittee must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit) or above. The Administrator must approve the plan for corrective action and the corresponding timeline. [40 C.F.R. § 60.38f (k)(1)]
- b. For corrective action that is required according to § 60.36f(a)(3)(iii) or (a)(5)(iii) and is not completed within 60 days after the initial exceedance, the permittee must submit a notification to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance. [40 C.F.R. § 60.38f (k)(2)]

SN-02a and SN-02b
(Unpaved and Paved Roads)

Source Description

This source accounts for particulate (dust) emissions which result from the operation of vehicles and equipment over the paved and unpaved roads located at the site, as well as the operation of equipment over the landfill surface.

Specific Conditions

25. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Condition #27. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
02a	Unpaved Roads	PM ₁₀	1.2	5.0
02b	Paved Roads	PM ₁₀	1.9	8.0

26. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Condition #27. [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
02a	Unpaved Roads	PM	4.3	18.5
02b	Paved Roads	PM	9.2	39.9

27. The permittee shall operate on-site water dispersion equipment (such as a water truck) or in-place passive dust control measures as necessary to prevent visible emissions from extending beyond the property boundary. [8 CAR § 40-601 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
28. The permittee shall use water sprays or other techniques as necessary to control fugitive emissions by implementing the watering plan approved pursuant to Specific Condition #27. [8 CAR § 40-601 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
29. 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). [8 CAR § 40-601 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN-03
 Diesel Emergency Generator
 (2.64 MMBtu/hr)

Source Description

SN-03 is rated at 382 HP CI emergency generator. The generator was installed in 2006 and it is subject to 40 C.F.R. § 60 Subpart IIII and 40 C.F.R. § 63 Subpart ZZZZ.

Specific Conditions

30. The permittee shall not exceed the emission rates set forth in the following table. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
03	Diesel Emergency Generator (2.64 MMBtu/hr)	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.7	0.2
		NO _x	2.9	0.8

31. The permittee shall not exceed the emission rates set forth in the following table. [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
03	Diesel Emergency Generator (2.64 MMBtu/hr)	PM	0.1	0.1
		Total HAPs	0.02	0.01

32. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [8 CAR § 41-403 and 40 C.F.R. § 52 Subpart E]

SN	Limit	Regulatory Citation
03	20%	8 CAR § 41-403 and 40 C.F.R. § 52 Subpart E

33. The permittee shall not operate the emergency generator SN-03 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 § 41-501 and other applicable regulations. [8 CAR § 40 and 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]

34. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #33. 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 § 40-904 and 40 C.F.R. § 52 Subpart E]

NESHAP 40 C.F.R. § 63 Subpart ZZZZ Conditions

35. Emergency Generator SN-03 is subject to the provisions of 40 CFR § 63 Subpart ZZZZ – National Emissions Standards for Stationary Reciprocating Internal Combustion Engines. Compliance with subpart ZZZZ shall be demonstrated through compliance with requirements of 40 CFR § 60 Subpart IIII. [8 CAR § 40-201 and 40 C.F.R. § 63, Subpart ZZZZ]

NSPS 40 C.F.R. § 60 Subpart IIII Conditions

36. Emergency Generator SN-03 is subject to the provisions of 40 CFR Part 60, Subpart IIII- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The permittee shall demonstrate compliance with the requirement of 40 C.F.R. § 60 Subpart IIII. [8 CAR § 40-201 and 40 C.F.R. § 60.4200 (a)(2)]
37. The permittee must comply with the emission standards in Table 1 to this subpart and must comply with the emission standards in 40 CFR § 94.8(a)(1). [8 CAR § 40-201 and 40 C.F.R. § 60.4205(a)]

Table 1 to Subpart IIII					
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 _x	HC	NO _x	CO	PM
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

38. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine. [8 CAR § 40-903 and 40 C.F.R. § 60.4206]
39. The permittee shall only purchase diesel fuel that meets the requirements of 40 CFR § 80.510 for nonroad diesel fuel. Records of purchased fuel specifications are to be maintained on-site and made available to Department personnel upon request. [8 CAR § 40-903 and 40 C.F.R. § 60.4207]
40. The permittee must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained)

prior to October 1, 2010, may be used until depleted. [8 CAR § 40-903 and 40 C.F.R. § 60.4207(b)]

41. The permittee shall install a non-resettable hour meter for the Emergency Generator SN-03 prior to startup of the engine. [8 CAR § 40-903 and 40 C.F.R. § 60.4209]
42. The permittee must comply with the emission standards specified in Subpart § 60.4211 and the must do all of the following, except as permitted under paragraph (g) of § 60.4211.
 - a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
 - b. Change only those emission-related settings that are permitted by the manufacturer; and
 - c. Meet the requirements of 40 CFR §§ 89, 94 and/or 1068, as they apply to you. [8 CAR § 40-903 and 40 C.F.R. § 60.4211(a)]
43. The permittee must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of § 60.4211.
 - 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.
 - 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 this subpart and these methods must have been followed correctly.
 - c. Keeping records of engine manufacturer data indicating compliance with the standards.
 - d. Keeping records of control device vendor data indicating compliance with the standards.
 - 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 § 40-903 and 40 C.F.R. § 60.4211(b)]
44. The permittee must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of § 60.4211.
 - a. Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §§ 60.4204(e) or 60.4205(f), as applicable. [8 CAR § 40-903 and 40 C.F.R. § 60.4211(b)]
45. The permittee must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of § 60.4211. In order for the engine to be considered an emergency stationary ICE under this Subpart §60.4211, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of § 60.4211, is prohibited. If the permittee does not operate the engine

according to the requirements in paragraphs (f)(1) through (3) of § 60.4211, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- d. There is no time limit on the use of emergency stationary ICE in emergency situations.
- e. You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - ii. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - iii. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- f. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - 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.
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 § 40-903 and 40 C.F.R. § 60.4211(f)]

46. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:

- g. 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 § 40-903 and 40 C.F.R. § 60.4211(g)(2)]

47. The permittee shall maintain records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [8 CAR § 40-903 and 40 C.F.R. § 60.4214(b)]

SN-04
Utility Flare

Source Description

The Utility Flare is a candlestick flare with a design flow capacity of approximately 1,500 standard cubic feet per minute (scfm) of landfill gas. The Utility Flare combusts landfill gas from the Legacy Landfill to provide odor control and gas migration control.

Specific Conditions

48. 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 Conditions #52. [8 CAR § 41-401 et seq. and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
04	Utility Flare	PM ₁₀	0.8	3.3
		SO ₂	1.4	6.1
		VOC	0.3	1.0
		CO	15.3	66.7
		NO _x	3.4	14.7

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 Conditions #52. [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
04	Utility Flare	PM	0.8	3.4
		Acetone	0.002	0.002
		Benzene	0.001	0.003
		Chlorodifluoromethane	0.001	0.002
		Dichlorodifluoromethane	0.009	0.04
		Methyl Chloroform	0.01	0.01
		Methylene Chloride	0.01	0.01
		Tetrachloroethylene	0.01	0.01
		Hydrogen Chloride (HCl)	0.35	1.51
		Hydrogen Fluoride (HF)	0.17	0.75
		Hydrogen Sulfide (H ₂ S)	0.015	0.06
		Single HAP	0.35	1.51
		Total HAPs	0.56	2.46

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

50. Visible emissions may not exceed the limits specified in the table below. Compliance with this condition shall be demonstrated through the use of landfill gas as the only fuel combusted and compliance with Specific Condition #36.

SN	Limit	Regulatory Citation
04	0%	8 CAR § 40-401

51. The flare (SN-04) shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. EPA Reference Methods 22 shall be used to determine compliance with the visible emission provisions of the flare. Compliance with this condition will be demonstrated via an initial performance test of the flare. [8 CAR § 40-401 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
52. The permittee must operate the flare (SN-04) flame within the design limitations and manufacturer's specifications. The pilot flames may be lit by landfill gas, natural gas, or propane. [8 CAR § 40-105 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Craighead County Solid Waste Disposal Authority (SWDA) 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.

SECTION VI: PLANTWIDE CONDITIONS

2. 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]
3. 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]
4. 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]
5. 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]
6. 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]
7. 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]

8. 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]

Regulation 21 – Asbestos Abatement

9. The permittee is subject to and shall comply with Regulation 21, *Arkansas Asbestos Abatement Regulation*, §11.2 Standards for Waste Disposal Sites. [8 CAR §860-101, and 40 C.F.R. § 60.752]
 10. The permittee of an active waste disposal site that received asbestos-containing waste material from a source covered by Regulation 21 shall meet the following requirements: At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:
 - a. Be covered with at least 6 inches of compacted nonasbestos-containing material; or
 - b. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particulate dust by the dust suppression agent manufacturers to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Director. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.
 - c. Use an alternative emissions control method that has received prior written approval by the Director demonstrating the following criteria:
 - i. The alternative method will control asbestos emissions equivalent to currently required methods;
 - i. The suitability of the alternative method for the intended application;
 - ii. The alternative method will not violate other regulations; and
 - iii. The alternative method will not result in increased water pollution, land pollution, or occupational hazards.
- [20 CAR § 860-505]
9. The permittee shall maintain waste shipment records (WSR) of all asbestos-containing waste material received: [8 CAR § 41-101 and 8 CAR §860-105 (B)(i-vii)]
 - a. Maintain waste shipment records (WSR), using a form with the following information:
 - i. The name, address, and telephone number of the waste generator;
 - ii. The name, address, and telephone number of the transporter(s);

- iii. The quantity of the asbestos-containing waste material in tons;
 - iv. The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the Department Official responsible for administering the Asbestos program for the waste generator (identified in the WSR, and, if different the local, State, or EPA regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the WSR along with the report; and
 - v. The date of the receipt.
 - b. The permittee shall as soon as possible and no longer than 30 days after receipt of the asbestos-containing waste, send a copy of the signed WSR to the waste generator. [8 CAR §860-505 (B)(ii)]
 - c. The permittee shall check the WSR that accompanies each asbestos-containing waste shipment that arrives at the waste disposal site for accuracy of the quantity of waste designated and attempt to reconcile any discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee will immediately report in writing to the specific agency responsible for administering the NESHAP program for the waste generator. Describe the discrepancy and attempts to reconcile it, and submit a copy of the WSR along with the report. [8 CAR § 41-101 and 8 CAR §860-505 (B)(iii)]
 - d. Furnish upon request and make available during normal business hours for inspection by the Department, all records required under Regulation 21, §11.2. [8 CAR §860-505 (B)(iv)]
 - e. The permittee shall maintain a copy of all records and reports required by Regulation 21, §11.2 on-site for at least 2 years. [8 CAR §860-505 (B)(v)]
 - f. Maintain until landfill closure, records of the location, depth and area, and quantity in tons of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area. [8 CAR §860-505 (B)(vi)]
 - g. Submit to the Director, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.
[8 CAR §860-505 (B)(vii)]
10. The permittee shall notify the Department in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at the waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Department at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. The following information shall be included in the notice:
- a. Schedule starting and completion dates;
 - b. Reason for disturbing the waste;

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

- c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material (if deemed necessary, the Department may require changes in the emission control procedures to be used); and
 - d. Location of any temporary storage site and the final disposal site.
- [8 CAR §860-505 (C)(i-iv)]
11. Within 60 days of a site becoming inactive, the permittee shall record a notation, in accordance with Arkansas State law, on the deed to the facility property and on any other instrument that would normally be examined during a title search. This notation will in perpetuity notify any potential purchaser of the property that:
- a. The land has been used for the disposal of asbestos-containing waste material; and
 - b. The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in Reg.21.11.2(B)(vi) have been filed with the Department.
- [8 CAR §860-505 (D)(i-ii)]

Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated February 10, 2015.

Applicable Regulations

Source No.	Regulation	Description
Facility	Arkansas Regulation 19	Regulations of the Arkansas Plan of Implementation for Air Pollution Control
Facility	Arkansas Regulation 26	Regulations of the Arkansas Operating Air Permit Program
Facility	Arkansas Regulation 21	Arkansas Asbestos Abatement Regulation
Facility	8 CAR Part 41	Standards of Requirements for Landfills
Facility	40 C.F.R. § 61, Subpart M	National Emissions Standards for Asbestos
SN-03	40 C.F.R. § 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
SN-03	40 C.F.R. § 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated February 10, 2015.

Inapplicable Regulations

Source No.	Regulation	Description
Facility	40 CFR § 52.21	Prevention of significant deterioration of air quality
Facility	40 CFR § 60 Subpart Cc	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills
Facility	40 CFR § 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

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 August 23rd, 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
Lube Oil Tank	A-2
Used Lube Oil Tank	A-2
6,500 gallon Leachate Tank	A-3
9,000 gallon Leachate Tank	A-3
10,000 gallon Leachate Tank	A-3
Cover Material Truck Loading and Dumping	A-13
12,000 gallon Diesel Storage Tank	A-13

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 § 42-601(2)]
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 § 42-306]
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 § 42-601(1)(C)]
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 § 42-601(3)(C)]

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 § 42-601(3)(C)(ii)]
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 § 42-104 must certify all required reports. The permittee will send the reports electronically using <https://portal.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 § 42-601(3)(D)(i)]

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 § 41-501), 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;

- 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 § 41-501, 8 CAR § 41-502, 8 CAR § 42-601(3)(D)(ii), 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), Rule 8 CAR § 42-601(5), 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 § 42-601(6)(A)]
- 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 § 42-601(6)(B)]
- 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

- planned changes or anticipated noncompliance does not stay any permit condition. [40 C.F.R. § 70.6(a)(6)(iii) and 8 CAR § 42-601(6)(C)]
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 § 42-601(6)(D)]
 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 § 42-601(6)(E)]
 15. The permittee must pay all permit fees in accordance with the procedures established in 8 CAR pt. 12. [40 C.F.R. § 70.6(a)(7) and 8 CAR § 42-601(7)]
 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 § 42-601(8)]
 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 § 42-601(9)(B)(i)]
 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 § 42-602(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 § 42-104. [40 C.F.R. § 70.6(c)(1) and 8 CAR § 42-603(1)]
 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 § 42-603(2)]
 - 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;

- 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 § 42-603(5)(B)(iii)]
 - 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 § 42-604(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

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 § 40-214(a), 8 CAR § 41-316(a), 8 CAR § 42-913(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 § 40-214(b), 8 CAR § 41-316(b), 8 CAR § 42-913(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:

- d. The request does not violate a federal requirement;
- e. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
- f. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

Craighead County Solid Waste Disposal Authority (SWDA)

Permit #: 2087-AOP-R5

AFIN: 16-00199

[8 CAR § 40-214(c), 8 CAR § 41-316(c), 8 CAR § 42-913(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 § 40-901, 8 CAR § 41-601, 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

8 CAR § Part 41 - Requirements for Landfills

Title 8. Environmental Law

Chapter I. Arkansas Pollution Control and Ecology Commission, Department of Energy and Environment

Subchapter D. Air Quality

Part 41. Rules of the Arkansas Plan of Implementation for Air Pollution Control

Subpart 1. Title, Intent, and Purpose — Definitions

8 CAR § 41-101. Title.

The following part, adopted in accordance with the provisions of Subchapter 2 of the Arkansas Water and Air Pollution Control Act, Arkansas Code § 8-4-201 et seq., shall be known as "Rules of the Arkansas Plan of Implementation for Air Pollution Control", hereinafter referred to as "8 CAR pt. 41".

8 CAR § 41-102. Applicability.

This part is applicable to any stationary source that has the potential to emit any federally regulated air pollutant.

8 CAR § 41-103. Intent and construction.

(a)(1) The purpose and intent of this part, as amended, is to provide a clear delineation of those rules that are promulgated by the Arkansas Pollution Control and Ecology Commission in satisfaction of certain requirements of the Clean Air Act, and the federal regulations stemming therefrom.

(2) Federal programs that the Division of Environmental Quality is responsible for administering include, but are not limited to:

(A) The attainment and maintenance of the national ambient air quality standards (40 C.F.R. pt. 50);

(B) Certain delegated subparts of the new source performance standards (40 C.F.R. pt. 60);

(C) Provisions designed for the prevention of significant deterioration (40

C.F.R. § 52.21);

(D) Minor new source review as described in Subpart 3 of this part (40 C.F.R. pt. 51); and

(E) Certain delegated subparts of the national emission standards for hazardous air pollutants (40 C.F.R. pts. 61 and 63).

(3) This subsection shall not be construed as limiting the future delegation of federal programs to the division for administration.

(b)(1) This part, as amended, is further intended to limit the federal enforceability of its requirements to only those mandated by federal law.

(2) This part, as amended, is also intended to facilitate a permit system for stationary sources within the state, which permit shall provide which provisions are federally enforceable and which provisions are state enforceable.

(c)(1) This part, as amended, presumes a single-permit system, encompassing both federal and state requirements.

(2) A regulated facility that is subject to permitting under this part shall be required to apply for and comply with only one (1) permit, even though that permit may contain conditions derived from the federal mandates contained in this part, as well as conditions predicated solely on state law.

(3) This part, through construction or implication, shall not support the conclusion that all conditions of a permit have become federally enforceable because the permit contains provisions derived from this part.

(4) Permits or permit conditions issued under the authority of state law, or enforcement issues arising out of state law, shall not be federally enforceable.

(d)(1) To the extent consistent with state law and efficient protection of the state's air quality, this part shall be construed in a manner that promotes:

(A) A streamlined permitting process;

(B) Mitigation of regulatory costs; and

(C) Flexibility in maintaining compliance with federal mandates.

(2) Any applicable documents (e.g., "White Papers", regulatory preambles, or interpretive memoranda) issued by the United States Environmental Protection Agency

that are consistent with this part and the legislative intent of state laws governing air pollution control (Arkansas Code § 8-4-301 et seq.) are aids for construing the requirements of this part.

(3) Any procedure applicable to major sources that promotes operational flexibility are presumed to be authorized by this part unless manifestly inconsistent with its substantive terms.

(e) Nothing in this part shall be construed as curtailing the division's or commission's authority under state law.

8 CAR § 41-104. Severability.

(a) If any provision of this part is determined to be invalid, such invalidity shall not affect other provisions of this part.

(b) If federal legislation or a federal court stays, invalidates, delays the effective date of, or otherwise renders unenforceable, in whole or in part, the United States Environmental Protection Agency's regulation of greenhouse gases, then the provisions of this part concerning greenhouse gases based thereon shall be stayed and shall not be enforceable until such time as the Arkansas Pollution Control and Ecology Commission makes a final decision on whether or not to revise this part due to the federal legislation or federal court order.

8 CAR § 41-105. Incorporation by reference.

Unless a contrary intent is expressly stated, any adoption or descriptive reference to a law or federal regulation shall be construed as though the reference law were set forth in this part line-by-line, word-for-word as it existed on the effective date of this part.

8 CAR § 41-106. Definitions.

(a) Terms and phrases used in this part that are not explicitly defined herein shall have the same meaning as those terms that are used in the Clean Air Act.

(b) For purposes of this part:

(1) "Actual emissions" means the quantity of federally regulated air pollutants emitted from a stationary source considering emissions control equipment and actual hours of source operation or amount of material processed;

(2) "Clean Air Act" means the federal Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.;

(3)(A) "CO₂ equivalent emissions" means an amount of greenhouse gases emitted, and shall be computed by multiplying the mass amount of emissions in tons per year, for each of the six (6) greenhouse gases in the pollutant greenhouse gases, by the gas's associated global warming potential published at Table A-1 to Subpart A of 40 C.F.R. pt. 98, "Global Warming Potentials", and summing the resultant value for each to compute a tons-per-year of CO₂ equivalent emissions.

(B) Table A-1 to Subpart A of 40 C.F.R. pt. 98 is incorporated by reference as of January 1, 2015;

(4) "Commission" means the Arkansas Pollution Control and Ecology Commission;

(5) "Construction" means fabrication, erection, or installation of equipment (see also 40 C.F.R. § 60.2, 40 C.F.R. § 51.165, and 40 C.F.R. § 52.21);

(6) "Control apparatus" means any device that prevents, controls, detects, or records the emission of any federally regulated air pollutants;

(7)(A) "Division" means the Division of Environmental Quality, or its successor.

(B) When reference is made in this part to actions taken by or with reference to the Division of Environmental Quality, the reference is to the staff of the Division of Environmental Quality acting at the direction of the Director of the Division of Environmental Quality;

(8) "Director" means the Director of the Division of Environmental Quality, or its successor, acting directly or through the staff of the Division of Environmental Quality;

(9) "Emission limitation" and "emission standard" mean a requirement established by the Division of Environmental Quality or the Administrator of the United States Environmental Protection Agency that limits the emissions of federally regulated

air pollutants on a continuous basis, including any requirements that limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction;

(10) "Emission unit" means any article, machine, equipment, operation, or contrivance that emits or has the potential to emit any federally regulated air pollutant;

(11) "EPA" means the United States Environmental Protection Agency;

(12) "Equipment" means any device, except equipment used for any mode of vehicular transportation, capable of causing the emission of a federally regulated air pollutant into the open air, and any stack, conduit, flue, duct, vent, or similar device connected or attached to or serving the equipment;

(13) "Federally regulated air pollutant" means the following:

(A) Nitrogen oxides or any volatile organic compounds;

(B) Any pollutant for which a national ambient air quality standard has been promulgated;

(C) Except as provided in subdivision (b)(13)(E) of this section, any pollutant that is subject to any standard promulgated under the Clean Air Act, as of the effective date of this part;

(D) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Clean Air Act, as of the effective date of this part; and

(E) Greenhouse gases, except that greenhouse gases shall not be a federally regulated air pollutant unless the greenhouse gas emissions are:

(i) From a stationary source emitting or having the potential to emit seventy-five thousand (75,000) tons per year or more of CO₂ equivalent emissions; and

(ii) Regulated under Subpart 8 of this part;

(14)(A) "Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(B) Those emissions are those that, according to customary and good engineering practice, considering technological and economic feasibility, could not pass through a stack, chimney, vent, or other functionally equivalent opening, except that the Division of Environmental Quality will utilize the definition of fugitive emissions for

those industries for which an approved United States Environmental Protection Agency definition exists under federal law or regulation and that are meeting that law or regulation;

(15) "Greenhouse gases" means the aggregate group of six (6) greenhouse gases:

- (A) Carbon dioxide;
- (B) Nitrous oxide;
- (C) Methane;
- (D) Hydrofluorocarbons;
- (E) Perfluorocarbons; and
- (F) Sulfur hexafluoride;

(16) "Hazardous air pollutant" means any air pollutant listed pursuant to § 112 of the Clean Air Act as of the effective date of this part;

(17) "Modification" means any physical change in, or change in the method of operation of, a stationary source that increases the emission rate of any federally regulated air pollutant over permitted rates or that results in the emission of a federally regulated air pollutant not previously emitted, except that:

(A) Routine maintenance, repair, and replacement shall not be considered a physical change; and

(B) The following shall not be considered a change in the method of operation:

(i) Any change in the production rate, if such change does not exceed the permitted operating capacity of the source;

(ii) Any change in the hours of operation, as long as it does not violate applicable air permit conditions; or

(iii) The use of an alternate fuel or raw material, as long as it does not violate applicable air permit conditions.

(C) De minimis changes, as defined in 8 CAR § 41-307(c), and changes in ownership shall not be considered;

(18) "National ambient air quality standards" means those ambient air quality

standards promulgated by the United States Environmental Protection Agency in 40 C.F.R. pt. 50 as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on October 26, 2015 (80 FR 65292), as set forth in Appendix B of this part;

(19) "National ambient air quality standards state implementation plan", as defined by Arkansas Code § 8-4-303, means a state implementation plan that specifies measures to be used in the implementation of the state's duties under the Clean Air Act for the attainment and maintenance of a specified national ambient air quality standard in each air quality control region or portion of an air quality control region within the state;

(20) "Opacity" means the degree to which air emissions reduce the transmission of light and obscure the view of an object in the background;

(21) "Operator" means any person who leases, operates, controls, or supervises any equipment affected by this part;

(22) "Owner" means any person who has legal or equitable title to any source, facility, or equipment affected by this part;

(23) "Part 70 source" means any stationary source subject to the permitting requirements of Rules of the Arkansas Operating Air Permit Program, 8 CAR pt. 42;

(24) "Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter equal to or less than one hundred (100) micrometers;

(25) "Particulate matter emissions" means all particulate matter, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternate method, specified in 40 C.F.R. pt. 60, Appendix A, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on February 27, 2014 (79 FR 11257), or by a test method specified in this part or any supplement thereto, with the exception of condensable particulate matter;

(26) "Person" means any individual or other legal entity or their legal representative or assignee;

(27) "PM_{2.5}" means particulate matter with an aerodynamic diameter less than or equal to a nominal two and one-half (2.5) micrometers as measured by a reference method based on Appendix L of 40 C.F.R. pt. 50 as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on October 17, 2006 (71 FR 61226), or by an approved regional method designated in accordance with Appendix C of 40 C.F.R. pt. 53;

(28) "PM_{2.5} emissions" means PM_{2.5} emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternate method, specified in 40 C.F.R. pt. 51, Appendix M, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on April 2, 2014 (79 FR 18452), or by a test method specified in this part or any supplement thereto;

(29) "PM₁₀" means particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured by a reference method based on Appendix J of 40 C.F.R. pt. 50 as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on August 7, 1987 (52 FR 29467), or by an equivalent method designated in accordance with 40 C.F.R. pt. 53 as of December 8, 1984;

(30) "PM₁₀ emissions" means PM₁₀ emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternate method, specified in 40 C.F.R. pt. 51, Appendix M, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on April 2, 2014 (79 FR 18452), or by a test method specified in this part or any supplement thereto;

(31)(A) "Potential to emit" means the maximum capacity of a stationary source to emit a federally regulated air pollutant under its physical and operational design.

(B) Any physical or operational limitation on the capacity of the source to emit a federally regulated air pollutant, including, but not limited to, 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 only if the

limitation or the effect it would have on emissions is enforceable to the extent it is regulated by the Clean Air Act.

(C) Secondary air emissions do not count in determining the potential to emit of a stationary source;

(32) "Responsible official" means one (1) of the following:

(A) For a corporation, a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative or such person if the representative is responsible for the overall operation of one (1) or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than two hundred fifty (250) persons or have gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) in second quarter 1980 United States dollars; or

(ii) The delegation of authority to such representative is approved in advance by the Division of Environmental Quality;

(B) For a partnership or sole proprietorship, a general partner or the proprietor, respectively;

(C)(i) For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official.

(ii) For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the United States Environmental Protection Agency); or

(D) For acid rain sources:

(i) The designated representative insofar as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; and

(ii) The designated representative for any other purposes under Part 70;

(33) "Rule 8" means Arkansas Pollution Control and Ecology Commission Regulation No. 8 until it is amended to replace the term "regulation" with "rule." After that time, "Rule 8" means Arkansas Pollution Control and Ecology Commission Rule 8;

(34) "Rule 18" means Arkansas Pollution Control and Ecology Commission Regulation No. 18, until it is amended to replace the term "regulation" with "rule." After that time, "Rule 18" means Arkansas Pollution Control and Ecology Commission Rule 18;

(35) "Rule 26" means Arkansas Pollution Control and Ecology Commission Regulation No. 26, until it is amended to replace the term "regulation" with "rule." After that time, "Rule 26" means Arkansas Pollution Control and Ecology Commission Rule 26;

(36) "Secondary emissions" means those emissions of federally regulated air pollutants that, although associated with a source, are not emitted from the source itself;

(37) "Shutdown" means the cessation of operation of equipment;

(38) "Startup" means the setting in operation of equipment;

(39) "State implementation plan", as defined at Arkansas Code § 8-4-303, means a plan that specifies measures to be used in the implementation of the state's duties under the Clean Air Act, and that is developed by the Division of Environmental Quality and submitted to the United States Environmental Protection Agency for review and approval;

(40) "Stationary source" means any building, structure, facility, or installation that emits or may emit any federally regulated air pollutant;

(41)(A) "Title I modification" means any modification as defined under any regulation promulgated pursuant to Title I of the Clean Air Act.

(B) De minimis changes under this part, changes to state-only permit requirements, administrative permit amendments, and changes to the insignificant activities list are not Title I modifications;

(42) "Twelve-month period" means a period of twelve (12) consecutive months determined on a rolling basis with a new twelve-month period beginning on the

first day of each calendar month; and

(43)(A) "Volatile organic compounds" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions.

(B) This includes any organic compound other than the following, which have been determined to have negligible photochemical reactivity:

- (i) Acetone;
- (ii) Methane;
- (iii) Ethane;
- (iv) Methylene chloride (dichloromethane);
- (v) 1,1,1-trichloroethane (methyl chloroform);
- (vi) Tetrachloroethylene (perchloroethylene);
- (vii) 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
- (viii) Trichlorofluoromethane (CFC-11);
- (ix) Dichlorodifluoromethane (CFC-12);
- (x) Chlorodifluoromethane (HCFC-22);
- (xi) Trifluoromethane (HFC-23);
- (xii) 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114);
- (xiii) Chloropentafluoroethane (CFC-115);
- (xiv) 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
- (xv) 1,1,1,2-tetrafluoroethane (HFC-134a);
- (xvi) 1,1-dichloro 1-fluoroethane (HCFC-141b);
- (xvii) 1-chloro-1,1-difluoroethane (HCFC-142b);
- (xviii) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
- (xix) Pentafluoroethane (HFC-125);
- (xx) 1,1,2,2-tetrafluoroethane (HFC-134);
- (xxi) 1,1,1-trifluoroethane (HFC-143a);
- (xxii) 1,1-difluoroethane (HFC-152a);
- (xxiii) Parachlorobenzotrifluoride (PCBTf);

(xxiv) Cyclic, branched, or linear completely methylated siloxanes;
 (xxv) 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);
 (xxvi) 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);
 (xxvii) 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);
 (xxviii) Difluoromethane (HFC-32);
 (xxix) Fluoroethane (ethyl fluoride or HFC-161);
 (xxx) 1,1,1,3,3,3-hexafluoropropane (HFC-236fa);
 (xxxi) 1,1,2,2,3-pentafluoropropane (HFC-245ca);
 (xxxii) 1,1,2,3,3-pentafluoropropane (HFC 245ea);
 (xxxiii) 1,1,1,2,3-pentafluoropropane (HFC-245eb);
 (xxxiv) 1,1,1,3,3-pentafluoropropane (HFC-245fa);
 (xxxv) 1,1,1,2,3,3-hexafluoropropane (HFC-236ea);
 (xxxvi) 1,1,1,3,3-pentafluorobutane (HFC-365mfc);
 (xxxvii) Chlorofluoromethane (HCFC-31);
 (xxxviii) 1-chloro-1-fluoroethane (HCFC-151a);
 (xxxix) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);
 (xl) 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$ or HFE-7100);
 (xli) 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($((CF_3)_2CFCF_2OCH_3)$);
 (xlii) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$ or HFE-7200);
 (xliii) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($((CF_3)_2CFCF_2OC_2H_5)$);
 (xliv) Methyl acetate;
 (xlv) 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane ($n-C_3F_7OCH_3$ or HFE-7000);
 (xlvi) 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500);
 (xlvii) 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea);

(xlviii) Methyl formate (HCOOCH₃);

(xlix) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300);

(l) Propylene carbonate;

(li) Dimethyl carbonate;

(lii) (1E)-1,3,3,3-tetrafluoroprop-1-ene (HFO-1234ze);

(liii) HCF₂OCF₂H (HFE-134);

(liv) HCF₂OCF₂OCF₂H (HFE-236cal2);

(lv) HCF₂OCF₂CF₂OCF₂H (HFE-338pcc13);

(lvi) HCF₂OCF₂OCF₂CF₂OCF₂H (H-Galden 1040x or H-Galden ZT 130 [or 150 or 180]);

(lvii) (1E)-1-chloro-3,3,3-trifluoroprop-1-ene;

(lviii) 2,3,3,3-tetrafluoropropene;

(lix) 2-amino-2-methyl-1-propanol;

(lx) T-butyl acetate;

(lxi) Cis-1,1,1,4,4,4-hexafluorobut-2-ene (HFO-1336mz-Z); and

(lxii) Perfluorocarbon compounds that fall into these classes:

(a) Cyclic, branched, or linear, completely fluorinated alkanes;

(b) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(c) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(d) Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(C)(i) For purposes of determining compliance with emission limits, volatile organic compounds are measured by the test methods in the approved state implementation plan or 40 C.F.R. pt. 60, Appendix A, as applicable.

(ii) Where such a method also measures compounds with negligible photochemical reactivity, these negligibly reactive compounds may be excluded as volatile organic compounds if the amount of such compounds is accurately quantified,

and such exclusion is approved by the Division of Environmental Quality.

(D) As a precondition to excluding these compounds as volatile organic compounds or at any time thereafter, the Division of Environmental Quality may require an owner or operator of a stationary source to provide monitoring or testing methods and results demonstrating, to the satisfaction of the Division of Environmental Quality, the amount of negligibly reactive compounds in the emissions from the stationary source.

(E) [Reserved].

Subpart 2. Protection of the National Ambient Air Quality Standards

8 CAR § 41-201. Purpose.

(a) The purpose of this subpart is to state the responsibilities of the Division of Environmental Quality and regulated sources in meeting and maintaining the national ambient air quality standards.

(b) If any area of the state is determined to be in violation of the national ambient air quality standards, all applicable requirements contained in the Clean Air Act, as amended, and all regulations promulgated thereto shall be met by the division.

8 CAR § 41-202. Division responsibilities.

The Division of Environmental Quality shall be responsible for taking the following precautions to prevent the national ambient air quality standards from being exceeded:

(1) Ambient air monitoring in any area that can reasonably be expected to be in excess of the national ambient air quality standards.

(2)(A) Computer modeling of regulated air pollutant emissions for any area that can reasonably be expected to be in excess of the national ambient air quality standards, and review of the ambient air impacts of any new or modified source of federally regulated air emission that is the subject of the requirements of this part.

(B) All computer modeling shall be performed using United States Environmental Protection Agency-approved models, and using averaging times

commensurate with averaging times stated in the national ambient air quality standards.

8 CAR § 41-203. Regulated sources responsibilities.

Any source subject to the provisions of this part shall be responsible for taking the following precautions to prevent the national ambient air quality standards from being exceeded:

(1) When required by law or this part, obtaining a permit from the Division of Environmental Quality prior to construction of a new source of federally regulated air pollutant emissions or prior to the modification of an existing source of air emissions;

(2) Operating equipment in such a manner as to meet any applicable permit requirement or any applicable rules; and

(3)(A) Repairing malfunctioning equipment and pollution control equipment as quickly as possible.

(B) If the malfunctioning equipment is causing, or contributing to, a violation of the national ambient air quality standards as determined by computer modeling, the source is responsible for ceasing operations of the affected equipment until such time that it is repaired.

8 CAR § 41-204. Delegated federal programs.

(a)(1) Sources subject to this part shall also comply with all federal programs that the Division of Environmental Quality is responsible for administering, including:

(A) Certain delegated subparts of the new source performance standards (40 C.F.R. pt. 60);

(B) Provisions designed for the prevention of significant deterioration (40 C.F.R. § 52.21); and

(C) Certain delegated subparts of the national emission standards for hazardous air pollutants (40 C.F.R. pts. 61 and 63).

(2) These delegated subparts only apply to major sources.

(b) There are subparts that apply to minor sources, but the division has not

requested delegation of them as of April 28, 2006.

Subpart 3. Minor Source Review

8 CAR § 41-301. General applicability.

No person shall cause or permit the operation, construction, or modification of a stationary source whose actual emissions are:

- (1) Seventy-five (75) tons per year or more of carbon monoxide;
- (2) Forty (40) tons per year or more of nitrogen oxides;
- (3) Forty (40) tons per year or more of sulfur dioxide;
- (4) Forty (40) tons per year or more of volatile organic compounds;
- (5) Ten (10) tons per year or more of direct PM_{2.5};
- (6) Fifteen (15) tons per year or more of PM₁₀;
- (7) One-half (0.5) ton per year or more of lead;
- (8) Two (2) tons per year or more of any single hazardous air pollutant; or
- (9) Five (5) tons per year or more of any combination of hazardous air pollutants without first obtaining a permit from the Division of Environmental Quality pursuant to the provisions of this subpart.

8 CAR § 41-302. Approval criteria.

No permit shall be granted or modified under this subpart unless the owner/operator demonstrates to the reasonable satisfaction of the Division of Environmental Quality that the stationary source will be constructed or modified to operate without resulting in a violation of applicable portions of this part or without interfering with the attainment or maintenance of a national ambient air quality standard.

8 CAR § 41-303. Owner/operator's responsibilities.

Issuance of a permit by the Division of Environmental Quality does not affect the responsibility of the owner/operator to comply with applicable portions of this part.

8 CAR § 41-304. Required information.

(a) **General.** Application for a permit shall be made on such forms and contain such information as the Division of Environmental Quality may reasonably require, including but not limited to:

(1) Information on the nature and amounts of federally regulated air pollutants to be emitted by the stationary source; and

(2) Such information on the location, design, and operation of the stationary source as the division may reasonably require.

(b) **Duty to supplement submittal.** If, while processing an application that has been determined to be complete, the division determines that additional information is necessary to evaluate or take final action on that application, the division may request such information in writing and set a reasonable deadline for a response.

(c) **Duty to correct submittal.**

(1) Any owner/operator who fails to submit any relevant facts or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

(2) In addition, an applicant shall provide additional information as necessary to address any relevant requirements that become applicable to the stationary source before final action is taken on its application.

8 CAR § 41-305. Action on application.

(a) **Technical review.** The Division of Environmental Quality will review the application submitted under this subpart in order to ensure to their reasonable satisfaction that:

(1) The stationary source will be constructed or modified to operate without interfering with attainment or maintenance of a national ambient air quality standard;

(2) The stationary source will be constructed or modified to operate without violating any applicable regulation adopted by the United States Environmental Protection Agency pursuant to §§ 111, 112, and 114 of the Clean Air Act, as amended;

(3) The stationary source will be constructed or modified to operate without resulting in a violation of any applicable provisions of this part;

(4) The emission rate calculations are complete and accurate; and

(5) If the facility wishes to measure and/or monitor operating parameters rather than actual emissions, the application describes a process that will be used to ensure that the calculations are translated into enforceable limits on operational parameters rather than emissions.

(b) Proposed action.

(1) If the division initially determines the requirements of subsection (a) of this section are met, they shall prepare a draft permit that:

(A) Contains such conditions as are necessary to comply with this part;
and

(B) Addresses all federally regulated air pollutant emissions and all federally regulated air pollutant emitting equipment at the stationary source except pollutants or equipment specifically exempt.

(2)(A) If the division initially determines the requirements of this subpart are not met, they shall prepare a notice of intent to deny.

(B) This notice will state the reasons for the division's denial of the stationary source's submittal.

(3) Except as provided in 8 CAR § 41-307, the public shall have an opportunity to comment on the division's proposed permit decision in accordance with 8 CAR § 41-306.

(4)(A) Within ninety (90) days of receipt by the division of an initial permit application, or an application for a major modification that contains such information as required by the division (unless said period is extended by mutual agreement between the division and the applicant), the division shall notify the applicant in writing of its draft permitting decision.

(B)(i) If the division fails to take action on the application within the prescribed timeframes, the aggrieved applicant may petition the Arkansas Pollution Control and Ecology Commission for relief from division inaction.

(ii) The commission shall either grant or deny the petition within forty-five (45) days of its submittal.

(c) Final action.

(1) The division shall take final action on a permit application after the close of the public comment period.

(2) The division shall notify in writing the owner/operator and any person that submitted a written comment of the division's final action and the division's reasons for its final action.

8 CAR § 41-306. Public participation.

(a) **General.** No permit shall be issued, denied, or modified unless the public has first had an opportunity to comment on the information submitted by the owner/operator and the Division of Environmental Quality's analysis, as demonstrated by the permit record, of the effect of construction or modification on ambient air quality, including the division's proposed approval or disapproval of the permit.

(b) Public availability of information.

(1) For purposes of this section, opportunity to comment shall include, at a minimum:

(A) Availability for the public inspection in at least one (1) location in the area where the source is located, or proposes to locate, and in the division's central offices of the division's draft decision, information submitted by the owner/operator, and any information developed by the division in support of its draft permit decision;

(B) A thirty-day period for submittal of public comment (beginning on the date of the latest newspaper notice, ending on the date thirty (30) days later);

(C)(i) A publication in a newspaper of general circulation in the area where the source is located or proposes to locate, and in a state publication designed to give general public notice.

(ii) Such notice shall, as a minimum, describe the locations at which the information submitted by the owner/operator and the division's analysis of this information may be inspected and the procedure for submitting public comment; and

(D) A copy of the notice, required pursuant to this subsection, shall be sent to the owner/operator and to the:

(i) Regional Administrator of the United States Environmental Protection Agency;

(ii) Mayor of the community where the stationary source is proposed to be constructed or modified;

(iii) County judge of the county where the equipment is proposed to be constructed or modified; and

(iv) Appropriate air pollution control agencies of adjoining states if the construction or modification of the source will impact air quality in adjoining states.

(2) Public comments addressing the technical merits of the permit application and the division's analysis of the effect of the proposed emissions on air quality submitted in accordance with procedures in the public notice shall be considered by the division prior to taking final action on the permit application.

8 CAR § 41-307. Permit amendments.

(a) Administrative permit amendments.

(1) An administrative permit amendment is a permit revision that:

(A) Corrects a typographical error;

(B) Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change in the source;

(C) Requires more frequent monitoring or reporting by the permittee;

(D) Incorporates a change in the permit involving the retiring of equipment or emission units, or the decrease of permitted emissions from equipment or emission units; or

(E) Incorporates a change to the facility's insignificant activities list.

(2) The Division of Environmental Quality shall revise the permit as expeditiously as practicable and may incorporate such revisions without providing notice to the public.

(3) The applicant may implement the changes addressed in the request for an administrative amendment immediately upon approval.

(b) Change in ownership.

(1) Permits issued under this part shall remain freely transferable, provided the applicant for the transfer:

(A) Notifies the Director of the Division of Environmental Quality at least thirty (30) days in advance of the proposed transfer date on such forms as the director may reasonably require; and

(B)(i) Submits a disclosure statement, or other such documents as required by the division.

(ii) The disclosure statement shall include but not be limited to the following information:

(a) The full name, business address, and Social Security number or tax i.d. number of the applicant and all affiliated persons;

(b) The full name and business address of any legal entity in which the applicant holds a debt or equity interest of at least five percent (5%) or which is a parent company or subsidiary of the applicant, and a description of the ongoing organizational relationships as they may impact operations within the state;

(c) A description of the experience and credentials of the applicant, including any past or present permits, licenses, certifications, or operational authorizations relating to environmental regulation;

(d) A listing and explanation of any civil or criminal legal actions by governmental agencies involving environmental protection laws or regulations against the applicant and affiliated persons in the ten (10) years immediately preceding the filing of the application, including:

(1) Administrative enforcement actions resulting in the imposition of sanctions;

(2) Permit or license revocations or denials issued by any state or federal authority;

(3) Actions that have resulted in a finding or a settlement of

a violation; and

(4) Actions that are pending;

(e) A listing of any federal environmental agency and any other environmental agency outside this state that has or has had regulatory responsibility over the applicant; and

(f) Any other information the director may require that relates to the competency, reliability, or responsibility of the applicant and affiliated persons.

(iii) The following persons or entities are not required to file a disclosure statement:

(a)(1) Governmental entities, consisting only of subdivisions or agencies of the federal government, agencies of the state government, counties, municipalities, or duly authorized regional solid waste authorities as defined by law.

(2) This exemption shall not extend to improvement districts or any other subdivision of government which is not specifically instituted by an act of the General Assembly; and

(b) Applicants for a general permit to be issued by the division pursuant to its authority to implement the National Pollutant Discharge Elimination System for stormwater discharge or any other person or entity the Arkansas Pollution Control and Ecology Commission may by rule exempt from the submission of a disclosure statement.

(2) Nothing in this section, including the exemptions listed herein, shall be construed as a limitation upon the authority of the director to deny a permit based upon a history of noncompliance to any applicant or for other just cause.

(3)(A) Any applicant that is a publicly held company required to file periodic reports under the Securities and Exchange Act of 1934, or a wholly owned subsidiary of a publicly held company, shall not be required to submit a disclosure statement, but shall submit the most recent annual and quarterly reports required by the Securities and Exchange Commission which provide information regarding legal proceedings in which the applicant has been involved.

(B) The applicant shall submit such other information as the director may

require that relates to the competency, reliability, or responsibility of the applicant and affiliated persons.

(4) The director may deny the issuance or transfer of any permit, license, certification, or operational authority if he or she finds, based upon the disclosure statement and other investigation that he or she deems appropriate, that:

(A) The applicant has a history of noncompliance with the environmental laws or rules of this state or any other jurisdiction;

(B) An applicant who owns or operates other facilities in the state is not in substantial compliance with, or on a legally enforceable schedule that will result in compliance with, the environmental laws or rules of this state; or

(C) A person with a history of noncompliance with environmental laws or rules of this state or any other jurisdiction is affiliated with the applicant to the extent of being capable of significantly influencing the practices or operations of the applicant that could have an impact upon the environment.

(5) Public notice requirements shall not apply to changes in ownership or changes in name.

(6) Denial of a permit transfer shall constitute a final permitting decision of the director and may be appealed to the Arkansas Pollution Control and Ecology Commission.

(c) De minimis changes.

(1) A proposed change to a facility will be considered de minimis if:

(A) Minimal judgment is required to establish the permit requirements for the change; and

(B) The change will result in a trivial environmental impact.

(2) The environmental impact of a proposed change generally will be considered trivial if the emission increase, based on the differences between the sum of the proposed permitted rates for all emissions units and the sum of previously permitted emission rates for all units will either:

(A) Be less than the following amounts:

(i) Seventy-five (75) tons per year of carbon monoxide;

- (ii) Forty (40) tons per year of:
 - (a) Nitrogen dioxides;
 - (b) Sulfur dioxides; or
 - (c) Volatile organic compounds;
 - (iii) Twenty-five (25) tons per year of particulate matter emissions;
 - (iv) Ten (10) tons per year of direct PM_{2.5};
 - (v) Fifteen (15) tons per year of PM₁₀ emissions; and
 - (vi) One-half (0.5) a ton per year of lead; or
- (B) Result in an air quality impact less than:

Pollutant	<i>De Minimis</i> Concentration	Averaging Time
carbon monoxide	Five hundred (500) micrograms per cubic meter	Eight-hour
nitrogen dioxide	Ten (10) micrograms per cubic meter	Annual
PM _{2.5}	Two (2) micrograms per cubic meter	Twenty-four-hour
PM ₁₀	Eight (8) micrograms per	Twenty-four-hour

	cubic meter	
sulfur dioxide	Eighteen (18) micrograms per cubic meter	Twenty-four- hour
lead	One-tenth (0.1) micrograms per cubic meter	Three-month

(3) [Reserved].

(4) The following changes will not be considered de minimis changes:

(A) Any increase in the permitted emission rate at a stationary source without a corresponding physical change or change in the method of operation at the source;

(B) Any change that would result in a violation of the Clean Air Act;

(C) Any change seeking to change a case-by-case determination of an emission limitation established pursuant to Best Available Control Technology, § 112(g), § 112(i)(5), § 112(j), or § 111(d) of the Clean Air Act;

(D) A change that would result in a violation of any provision of this part;

(E) Any change in a permit term, condition, or limit that a source has assumed to avoid an applicable requirement to which the source would otherwise be subject;

(F) Any significant change or relaxation to existing testing, monitoring, reporting, or recordkeeping requirements; or

(G) Any proposed change that requires more than minimal judgment to determine eligibility.

(5)(A) A source may not submit multiple applications for de minimis changes

that are designed to conceal a larger modification that would not be considered a de minimis change.

(B) The division will require such multiple applications be processed as a permit modification with public notice and reconstruction requirements.

(C) Deliberate misrepresentation may be grounds for permit revocation.

(6) The applicant may implement de minimis changes immediately upon approval by the division.

(7)(A) The division shall revise the permit as expeditiously as practicable and may incorporate de minimis changes without providing notice to the public.

(B) The applicant may implement de minimis changes immediately upon approval by the division.

8 CAR § 41-308. Exemption from permitting.

(a) **Insignificant activities.** Stationary sources and activities listed in Appendix A of this part shall be considered to be insignificant and will not require a permit under this subpart or be included in a source's permit.

(b) **Grandfathering.** Stationary sources operating prior to June 30, 1975, and that have not been modified since, will not be required to obtain a permit under this subpart.

8 CAR § 41-309. [Reserved].

8 CAR § 41-310. Permit revocation and cancellation.

(a) **Revocation.** Any permit issued under this part is subject to revocation, suspension, or modification in whole or in part, for cause, including without limitation:

(1) Violation of any condition of the permit;

(2) Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; or

(3) Change in any applicable rule or change in any preexisting condition affecting the nature of the emission that requires either a temporary or permanent

reduction or elimination of the permitted emission.

(b) **Cancellation.** The Director of the Division of Environmental Quality may cancel a permit if the construction or modification is not begun within eighteen (18) months from the date of the permit issuance or if the work involved in the construction or modification is suspended for a total of eighteen (18) months or more.

8 CAR § 41-311. General permits.

(a) General authority.

(1) The Division of Environmental Quality may, after notice and opportunity for public participation provided under this subpart, issue a general permit covering numerous similar sources.

(2) The criteria for the review and approval of permits under this subpart shall be used for general permits as well.

(3) Any general permit shall comply with all requirements applicable to other permits and shall identify criteria by which sources may qualify for the general permit.

(4) They shall also include enforceable emission limitations or other control measures, means, or techniques, as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this part.

(5) To sources that qualify, the division shall grant the conditions and terms of the general permit.

(6) The source shall be subject to enforcement action for operation without a permit if the source is later determined not to qualify for the conditions and terms of the general permit.

(b) Application.

(1) Sources that would qualify for a general permit must apply to the division for coverage under the terms of the general permit or must apply for a permit consistent with this subpart.

(2) The division may grant a source's request for authorization to operate under a general permit, but such a grant shall not be a final permit action for purposes of judicial review.

(3)(A) When any application for the issuance of a new permit or a modification of an existing permit is filed with the division, the division shall cause notice of the application to be published in a newspaper of general circulation in the county in which the proposed facility is to be located.

(B) The notice required by subdivision (b)(3)(A) of this section shall advise that any interested person may request a public hearing on the permit application by giving the division a written request within ten (10) days of the publication of the notice.

(C) Should a hearing be deemed necessary by the division, or in the event the division desires such a hearing, the division shall schedule a public hearing and shall, by first-class mail, notify the applicant and all persons who have submitted comments of the date, time, and place thereof.

8 CAR § 41-312. Dispersion modeling.

(a) The following shall apply when dispersion or other air quality modeling is used to meet the requirements of this subpart.

(b) **General.** All applications of air quality modeling involved in this subpart shall be based on the applicable models, data bases, and other requirements specified in Appendix W of 40 C.F.R. pt. 51, Guideline on Air Quality Models.

(c) Substitution.

(1) Where an air quality model specified in the Guideline on Air Quality Models is inappropriate, the model may be modified or another model substituted.

(2) Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific pollutant or type of stationary source.

(3) Written approval of the Administrator of the United States Environmental Protection Agency must be obtained for any modification or substitution.

8 CAR § 41-313. Confidentiality.

(a) Information that constitutes a trade secret shall be held confidential and

segregated from the public files of the Division of Environmental Quality if requested in writing by the permit applicant in accordance with this section.

(b) For purposes of this section, "trade secret" means any information, including formula, pattern, compilation, program, device, method, technique, process, or rate of production that:

(1) Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through, proper means by other persons who can obtain economic value from its disclosure or use; and

(2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

(c)(1) In order to establish entitlement to confidentiality, the applicant must submit a sworn affidavit to the division that is subject to public scrutiny that describes in a manner that does not reveal trade secrets the processes or market conditions that support the applicant's confidentiality claim in the terms of subdivisions (b)(1) and (2) of this section.

(2) This affidavit must also recite the following:

The applicant agrees to act as an indispensable party and to exercise extraordinary diligence in any legal action arising from the Division's denial of public access to the documents or information claimed herein to be a trade secret.

(3) If an applicant anticipates numerous permit modifications that may involve regulatory review of trade secrets, it may submit an omnibus affidavit establishing the prerequisites of subdivisions (b)(1) and (2) of this section and reference this document in future confidentiality claims.

(d)(1) Confidentiality claims shall be afforded interim protected status until the division determines whether the requirements of subsection (c) of this section are satisfied.

(2)(A) The division shall make such determination prior to the issuance of any

permit or publication of any draft permit.

(B) In the event the division does not make such determination prior to permit issuance, the information shall be deemed confidential until a request is made.

(3)(A) If a third-party request to review information claimed as confidential is received before the division provides its written determination concerning the claim, the division shall not release such information before notifying the applicant of the request.

(B) The division shall notify the applicant of the request and the division's determination on the confidentiality claim at least two (2) business days before releasing the information, at which time the applicant may choose to supplement its affidavit supporting confidentiality or seek legal recourse.

(e)(1) For any permit application submitted subject to a claim of trade secret, the applicant shall provide two (2) copies of the application:

(A) One (1) prominently marked as confidential; and

(B) Another that is subject to public review with confidential information excised.

(2) The division will not accept applications that are deemed totally confidential except under extraordinary circumstances guaranteeing future disclosure at a meaningful time for public review.

8 CAR § 41-314. Operational flexibility — Applicant's duty to apply for alternative scenarios.

(a)(1) The permit applicant shall apply for any reasonably anticipated alternative stationary source operating scenarios at the time of permit application.

(2) The Division of Environmental Quality shall include approved alternative operating scenarios in the permit.

(b) The permittee may implement any operating scenario allowed in the permit without the need for a permit revision or notification to the division.

8 CAR § 41-315. Changes resulting in no emissions increases.

(a) A permittee may make a change to a stationary source that contravenes permit

terms without a permit revision if the change:

- (1) Is not a Title I modification;
- (2) Does not exceed emissions allowable under the permit, whether expressed therein as a rate of emissions or in the terms of total emissions;
- (3) Does not violate applicable requirements; and
- (4) Does not violate federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

(b) The permittee shall provide written notice to the Division of Environmental Quality at least seven (7) days prior to implementing the proposed changes allowed under subsection (a) of this section, or such shorter timeframe that the division allows for emergencies.

(c)(1) The permittee and the division shall attach each such notice pursuant to subsection (b) of this section to their copy of the relevant permit.

- (2) For each such change, the written notice shall include:
 - (A) A brief description of the change to the permitted stationary source;
 - (B) The date the change will occur;
 - (C) Any change in emissions; and
 - (D) Any permit term or condition that is no longer applicable as a result of the change.

8 CAR § 41-316. Permit flexibility.

(a)(1) The Division of Environmental Quality may grant an extension to any testing, compliance, or other date in the permit.

(2) No extensions shall be authorized until the permittee of the stationary source receives written approval from the division.

(3) The division may grant such a request, at its discretion, in the following circumstances:

- (A) The permittee of the stationary source makes such a request in writing at least fifteen (15) days in advance of the deadline specified in the stationary

source's permit;

(B) The extension does not violate a federal requirement;

(C) The permittee of the stationary source demonstrates the need for the extension; and

(D) The permittee of the stationary source documents that all reasonable measures have been taken to meet the current deadline and documents reasons the current deadline cannot be met.

(b)(1) The division may grant a request to allow temporary emissions and/or testing that would otherwise exceed a permitted emission rate, throughput requirement, or other limit in a stationary source's permit.

(2) No such activities shall be authorized until the permittee of the stationary source receives written approval from the division.

(3) The division may grant such a request, at its discretion, in the following circumstances:

(A) The permittee of the stationary source makes such a request in writing at least thirty (30) days in advance of the date that temporary emissions and/or testing would otherwise exceed a permitted emission rate, throughput requirement, or other limit in a stationary source's permit;

(B) Such a request does not violate a federal requirement;

(C) Such a request is temporary in nature;

(D) Such a request will not result in a condition of air pollution as defined in 8 CAR § 40-105 of the Arkansas Air Pollution Code, 8 CAR pt. 40;

(E) The request contains such information necessary for the division to evaluate the request, including without limitation, quantification of such emissions and the date and time such emission will occur;

(F) Such a request will result in increased emissions less than five (5) tons of any individual criteria pollutant, one (1) ton of any single hazardous air pollutant, and two and one-half (2.5) tons of total hazardous air pollutants; and

(G) The permittee of the stationary source maintains records of the dates and results of such temporary emissions and/or testing.

(c)(1) The division may grant a request to allow an alternative to the monitoring specified in a stationary source's permit.

(2) No such activities shall be authorized until the permittee of the stationary source receives written approval from the division.

(3) The division may grant such a request, at its discretion, in the following circumstances:

(A) The permittee operator of the stationary source makes such a request in writing at least thirty (30) days in advance of the first date that the monitoring alternative will be used;

(B) Such a request does not violate a federal requirement;

(C) The monitoring alternative provides an equivalent or greater degree of actual monitoring to the requirements in the stationary source's permit; and

(D) Any such request for an alternative monitoring method, if approved by the division, is incorporated into the next permit modification application by the permittee of the stationary source.

8 CAR § 41-317. Registration.

(a)(1) Sources currently holding permits issued pursuant to this part but whose emissions are below the permitting thresholds of 8 CAR § 41-301, and above the registration thresholds of 8 CAR § 40-215, may elect to continue to operate under their existing Part 41 permit or they may submit a registration under 8 CAR § 40-215 and request their Part 41 permit to be terminated.

(2) The Part 41 permit shall remain in effect until terminated.

(3) If a source takes no action, the Part 41 permit shall remain in effect.

(b) A source otherwise subject to registration under 8 CAR § 40-215 may elect to instead operate under a permit issued in accordance with 8 CAR § 41-302.

Subpart 4. General Emissions Limitations Applicable to Equipment

8 CAR § 41-401. Purpose.

(a) The purpose of this subpart is to define the general federally regulated air pollutant emissions limitations applicable to all equipment subject to this part.

(b) Stricter specific limitations may be required in applicable permits if such limitations are necessary to comply with federal law or regulations that are in effect as of the effective date of this part.

8 CAR § 41-402. General rules.

No person shall cause or permit the construction or modification of equipment that would cause or allow the following standards or limitations to be exceeded:

- (1) Any national ambient air quality standard as defined herein;
- (2) Any ambient air increment pursuant to Subpart 8 of this part;
- (3) Any applicable emission limitation promulgated by the United States Environmental Protection Agency; or
- (4) Any applicable emission limitation promulgated by the Division of Environmental Quality in this part.

8 CAR § 41-403. Visible emission rules.

(a) No person shall cause or permit visible emissions (other than uncombined water vapor) from equipment identified hereunder and that was installed and in operation, or for which a permit had been issued by the Division of Environmental Quality prior to January 30, 1972, to exceed the following limitations:

(1) Emissions shall not exceed forty percent (40%) opacity, except that emissions greater than forty percent (40%) opacity will be allowed for not more than six (6) minutes in the aggregate in any consecutive sixty-minute period, provided such emissions will not be permitted more than three (3) times during any twenty-four-hour period.

(b) No person shall cause or permit visible emissions (other than uncombined water vapor) from new equipment identified hereunder that was installed or permitted by the division after January 30, 1972, to exceed the following limitations or to exceed any applicable visible emission limitations of the new source performance standards

promulgated by the United States Environmental Protection Agency:

(1) For incinerators and fuel-burning equipment, exclusively, emissions shall not exceed twenty percent (20%) opacity except that emissions greater than twenty percent (20%) opacity but not exceeding sixty percent (60%) opacity will be allowed for not more than six (6) minutes in the aggregate in any consecutive sixty-minute period, provided such emissions will not be permitted more than three (3) times during any twenty-four-hour period; and

(2) For equipment used in a manufacturing process, emissions shall not exceed twenty percent (20%).

(c) Opacity of visible emissions shall be determined using United States Environmental Protection Agency Method 9 (40 C.F.R. pt. 60, Appendix A).

8 CAR § 41-404. Stack height/dispersion rules.

(a) The stack height provisions of 40 C.F.R. § 51.118 are incorporated by reference.

(b) The definition of “stack”, “a stack in existence”, “dispersion technique”, “good engineering practice”, “nearby”, and “excessive concentration” are defined in 40 C.F.R. § 51.100(ff) – (kk) and are incorporated into this subpart by reference.

8 CAR § 41-405. Revised emissions limitation.

(a)(1) The emissions limitations contained within this part and applicable permits are for the purpose of assuring the attainment and maintenance of the national ambient air quality standards and have been established within the framework of information presently available to the Division of Environmental Quality.

(2) As additional and more precise information becomes available, the emission limitations and reporting procedures of this subpart may be amended as described below:

(A)(i) More restrictive limitations to protect the national ambient air quality standards.

(ii) In accordance with the provisions of the federal Clean Air Act, as

amended, and the federal regulations promulgated pursuant to the Clean Air Act, as amended, the emission limitations and reporting procedures of this subpart or any applicable permits may be further amended and made more restrictive where the Director of the Division of Environmental Quality finds more restrictive measures are necessary to assure maintenance of the national ambient air quality standards; and

(B)(i) Less restrictive limitations.

(ii) Any person subject to the emission limitations contained in this part or in a permit may petition the director for a less stringent limitation on the grounds that the existing limitation cannot be met when considering physical, economical, or technological constraints.

(iii) In no case shall the director approve a less stringent limitation if it would cause a violation of the national ambient air quality standards.

(iv) The director shall not approve a less stringent limitation if it violates a federal emission standard or regulation, unless approved according to applicable federal regulations.

(3) The director shall take into account the following factors when making such determinations:

(A) The process, fuels, and raw materials available and to be employed in the facility involved;

(B) The engineering aspects of the application of various types of control techniques that have been adequately demonstrated;

(C) Process and fuel changes;

(D) The respective costs of the application of all such control techniques, process changes, alternative fuels, etc.; and

(E) Locational and siting considerations.

(b) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Subpart 5. Upset and Emergency Conditions

8 CAR § 41-501. Upset conditions.

(a)(1) For purposes of this subpart, “upset condition” means exceedances of applicable emission limitations lasting thirty (30) or more minutes, in the aggregate, during a twenty-four-hour period, unless otherwise specified in an applicable permit or rule (such as new source performance standards).

(2) All upset conditions resulting in a violation of an applicable permit or rule shall be reported to the Division of Environmental Quality.

(b)(1) Any source exceeding an emission limit established by this part or applicable permit shall be deemed in violation of this part or permit and shall be subject to enforcement action.

(2) The division may forego enforcement action for federally regulated air pollutant emissions given that the person responsible for the source of the excess emissions does the following:

(A) Demonstrates to the satisfaction of the division that the emissions resulted from:

(i) Equipment malfunction or upset and are not the result of negligence or improper maintenance; or

(ii) Physical constraints on the ability of a source to comply with the emission standard, limitation, or rate during startup or shutdown; and

(iii) That all reasonable measures have been taken to immediately minimize or eliminate the excess emissions;

(B) Reports such occurrence or upset or breakdown of equipment to the division by the end of the next business day after the discovery of the occurrence; and

(C) Submits to the division, at its request, a full report of such occurrence, including the identification of and location of the process and control equipment involved in the upset and including a statement of all known causes and the scheduling and nature of the actions to be taken to eliminate future occurrences or to minimize the amount by which said limits are exceeded and to reduce the length of time for which

said limits are exceeded.

8 CAR § 41-502. Emergency conditions.

(a)(1) An “emergency” means any situation arising from the sudden and reasonably unforeseeable events beyond the control of the source, including natural disasters, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the upset condition.

(2) An “emergency” shall not include noncompliance to the extent caused by:

- (A) Improperly designed equipment;
- (B) Lack of preventive maintenance;
- (C) Careless or improper operation; or
- (D) Operator error.

(b)(1) An emergency constitutes a complete affirmative defense to an action brought for noncompliance with such technology-based limitations if the following conditions are met.

(2) The affirmative defense of emergency shall demonstrate through properly signed contemporaneous operating logs or such other relevant evidence that:

(A) An emergency occurred and that the permittee can identify the cause or causes of the emergency;

(B) The permitted facility was at the time being properly operated;

(C) During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(D)(i) The permittee submitted notice of the upset to the Division of Environmental Quality by the end of the next business day after the emergency.

(ii) This notice must contain:

(a) A description of the emergency;

(b) Any steps taken to mitigate emissions; and

(c) Corrective actions taken.

Subpart 6. Sampling, Monitoring, and Reporting Requirements

8 CAR § 41-601. Purpose.

(a) The purpose of this subpart is to generally define the powers of the Division of Environmental Quality in requiring sampling, monitoring, and reporting requirements at stationary sources.

(b) The division shall enforce all properly incorporated and delegated federal testing requirements at a minimum.

(c) Any credible evidence based on sampling, monitoring, and reporting may be used to determine violations of applicable emission limitations.

8 CAR § 41-602. Air emissions sampling.

Any stationary source subject to this part shall be subject to the following requirements:

(1) **Sampling ports.** To provide any sampling ports, at the request of the Division of Environmental Quality, required for federally regulated air pollutant emissions sampling, including safe and easy access to such ports;

(2) **Sampling.**

(A) To conduct federally regulated air pollutant emissions sampling, at the request of the division, to determine the rate, opacity, composition, and/or contaminant concentration of the emissions.

(B) All compliance testing shall be done at the expense of the permittee by an independent firm, unless otherwise approved by the division.

(C) Sampling shall not be required for those pollutants with continuous emissions monitors;

(3) **Averaging times.** All compliance testing averaging times shall be consistent with the averaging times of the applicable federally regulated air pollutant emissions limitations stated in the applicable permit, which in no case shall be greater

than the minimum averaging times of the applicable national ambient air quality standards;

(4) Process rates.

(A) Unless otherwise approved by the division, all federally regulated air pollutant emissions sampling shall be performed with the equipment being tested operating at least at ninety percent (90%) of its permitted capacity.

(B) Emissions results shall be extrapolated to correlate with one hundred percent (100%) of permitted capacity to determine compliance;

(5) Testing timeframes. Any equipment that is to be tested at the request of the division shall be tested in accordance with the following timeframes:

(A) Equipment to be constructed or modified shall be tested within sixty (60) days after achieving its maximum permitted production rate, but no later than one hundred eighty (180) days after its initial startup; and

(B) Equipment already operating shall be tested according to the timeframes set forth by the division; and

(6) Testing methods and records.

(A) The division shall require that all applicable testing be performed using the methods described in:

(i) 40 C.F.R. pt. 51, Appendix M, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on April 2, 2014 (79 FR 18452);

(ii) 40 C.F.R. pt. 60, Appendix A, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on February 27, 2014 (79 FR 11257);

(iii) 40 C.F.R. pt. 61, Appendix B, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on October 17, 2000 (65 FR 62161); and

(iv) 40 C.F.R. pt. 63, Appendix A, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on December 29, 1992 (57 FR 62002).

(B) The division, with the concurrence of the United States Environmental Protection Agency, may approve, at its discretion, alternate sampling methods that are equivalent to the specified methods.

(C) The results of such tests shall be submitted to the division within the timeframes and on such forms as required by the division and federal regulations.

(D) The owner or operator of the equipment shall retain the results of such tests for at least five (5) years and shall make the results available to any agents of the division or the United States Environmental Protection Agency during regular business hours.

8 CAR § 41-603. Continuous emissions monitoring.

Any stationary source subject to this part shall, as required by federal law and upon request of the Division of Environmental Quality:

(1)(A) Install, calibrate, operate, and maintain equipment to continuously monitor or determine federally regulated air pollutant emissions in accordance with:

(i) Applicable performance specifications in 40 C.F.R. pt. 60, Appendix B, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on February 27, 2014 (79 FR 11271);

(ii) Quality assurance procedures in 40 C.F.R. pt. 60, Appendix F, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on February 27, 2014 (79 FR 11274); and

(iii) Other methods and conditions that the division, with the concurrence of the United States Environmental Protection Agency, shall prescribe.

(B) Any source listed in a category in 40 C.F.R. pt. 51, Appendix P, as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on November 7, 1986 (51 FR 40675), or in 40 C.F.R. pt. 60 as of August 30, 1992, shall adhere to all continuous emissions monitoring or alternative continuous emission monitoring requirements stated therein, if applicable;

and

(2) Report the data collected by the monitoring equipment to the division at such intervals and on such forms as the division shall prescribe, in accordance with 40 C.F.R. pt. 51, Appendix P, Section 4.0 (Minimum Data Requirements) as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on November 7, 1986 (51 FR 40675), and any other applicable reporting requirements promulgated by the United States Environmental Protection Agency.

8 CAR § 41-604. Notice of completion.

For equipment for which a new permit or major permit modification is required, the Division of Environmental Quality shall be notified in writing within thirty (30) days of the following events:

- (1) The date of commencement of construction or modification; and
- (2) The date of commencement of operation of the equipment.

8 CAR § 41-605. Recordkeeping and reporting requirements.

(a) Any stationary source subject to this part shall, upon request by the Division of Environmental Quality:

(1)(A) Maintain records on the nature and amounts of federally regulated air pollutants emitted to the air by the equipment in question.

(B) All records, including compliance status reports and excess emissions measurements shall be retained for at least five (5) years, and shall be made available to any agent of the division or United States Environmental Protection Agency during regular business hours; and

(2) Supply the following information, correlated in units of the applicable emissions limitations, to the division:

(A) General process information related to the emissions of federally regulated air pollutants into the air; and

(B) Emissions data obtained through sampling or continuous emissions

monitoring.

(b)(1) Information and data shall be submitted to the division by a responsible official on such forms and at such time intervals as prescribed by applicable federal regulations or the division.

(2) Reporting periods shall be a twelve-month period.

(c)(1) Each emission inventory is to be accompanied by a certifying statement, signed by the owner or owners or operator or operators and attesting that the information contained in the inventory is true and accurate to the best knowledge of the certifying official.

(2) The certification shall include the full name, title, signature, date of signature, and telephone number of the certifying official.

8 CAR § 41-606. Public availability of emissions data.

Emissions data obtained by the Division of Environmental Quality shall be correlated in units of applicable emissions limitations and be made available to the public at the division's central offices during normal business hours.

Subpart 7. 111(d) Designated Facilities

8 CAR § 41-701. Purpose.

The purpose of this subpart is to establish rules for designated pollutants emitted from designated facilities in accordance with Section 111(d) of the Clean Air Act.

8 CAR § 41-702. Permit emissions limitations.

(a) No person shall cause or permit emissions from equipment located at facilities described in this subpart to be exceeded.

(b) Future permit conditions may place more stringent emissions limitations on the equipment that shall supersede the limitations of this section.

8 CAR § 41-703. [Reserved].

8 CAR § 41-704. Kraft pulp mills.

(a) Subsections (b) and (c) of this section and the total reduced sulfur emissions limitations contained in Table 41.7.1 are applicable to equipment located at the following kraft pulp mills:

- (1) Evergreen Packaging (AFIN 35-00016);
- (2) Green Bay Packaging, Arkansas Kraft Division (AFIN 15-00001);
- (3) Twin Rivers Pine Bluff, LLC (AFIN 35-00017);
- (4) Georgia-Pacific Corporation (AFIN 02-00013);
- (5) Domtar A.W. (AFIN 41-00002); and
- (6) Clearwater Paper Corporation (AFIN 21-00036).

(b)(1) The owner or operator of designated facilities listed in Table 41.7.1 shall test compliance with total reduced sulfur emissions limitations using EPA Method 16 at intervals of no longer than five (5) years following the previous compliance test.

(2) Data reduction shall be performed as set forth in 40 C.F.R. § 60.8.

(3) Compliance testing is not required for equipment with a total reduced sulfur continuous emissions monitor.

(c)(1) The owner or operator of any equipment located at the designated facilities specified under subsection (a) of this section shall conduct total reduced sulfur continuous monitoring in accordance with the requirements of 40 C.F.R. § 60.284, date of installation notwithstanding.

(2) The continuous monitoring systems shall be operated according to the provisions of 40 C.F.R. § 60.284 by April 1, 1993, except that continuous emissions monitors for affected lime kilns shall be installed and certified by January 1, 1994.

Table 41.7.1 Kraft Pulp Mill TRS Emission Limits			
AFIN	Facility	Equipment	TRS Concentration (parts per million [ppm])

35-00016	Twin Rivers Pine Bluff, LLC	recovery furnace	Forty (40) parts per million
		lime kiln	Forty (40) parts per million
		smelt dissolving tank	0.0168 grams per kilogram
15-00001	Green Bay Packaging, Arkansas Kraft Division	recovery furnace	Forty (40) parts per million
		lime kiln	Forty (40) parts per million
		smelt dissolving tank	0.0168 grams per kilogram
35-00017	Mondi Pine Bluff	recovery furnace	One hundred (100) parts per million
		lime kiln	Forty (40) parts per million
		smelt dissolving tank	0.0168 grams per kilogram

02-00013	Georgia Pacific Corporation	recovery furnace	Five (5) parts per million
		lime kiln	Eight (8) parts per million
		smelt dissolving tank	0.0168 grams per kilogram

41-00002	Domtar A.W.	recovery furnace	Five (5)parts per million
		lime kiln	Eight (8) parts per million
		smelt dissolving tank	0.0168 grams per kilogram
21-00036	Clearwater Paper Corporation	recovery furnace	Five (5) parts per million
		lime kiln	Twenty (20) parts per million
		smelt dissolving tank	0.0168 grams per kilogram

Recovery Furnaces—measured as hydrogen sulfide on a dry basis and on a twelve-hour average, corrected to eight percent (8%) by volume oxygen.

Lime Kilns—measured as hydrogen sulfide on a dry basis and on a twelve-hour average, corrected to ten percent (10%) volume oxygen.

Smelt Dissolving Tanks—measured as grams hydrogen sulfide per kilogram black liquor solids on a twelve-hour average.

Digesters and Evaporators—efficient incineration of non-condensable gases (at least twelve hundred degrees Fahrenheit [1200°F] for at least one-half [0.5] of one [1] second).

Subpart 8. Prevention of Significant Deterioration Rules of the Arkansas Plan of Implementation for Air Pollution Control

8 CAR § 41-801. Title.

This subpart, adopted in accordance with the provisions of Part 2 of the Arkansas Water and Air Pollution Control Act at Arkansas Code § 8-4-101 et seq., shall be known as "Prevention of Significant Deterioration Rules of the Arkansas Plan of Implementation for Air Pollution Control", hereinafter referred to, respectively, as the "Prevention of Significant Deterioration Rules".

8 CAR § 41-802. Purposes.

Promulgation and enforcement of this subpart is intended to further the purposes of the state implementation plan and this part, including, but not limited to, acceptance of delegation by the United States Environmental Protection Agency of authority for enforcement of rules governing the prevention of significant deterioration of air quality and rules governing the protection of visibility in mandatory Class I federal areas.

8 CAR § 41-803. Definitions.

(a) As used in this subpart:

(1)(A) "Advance notification" (of a permit application) means any written communication that establishes the applicant's intention to construct, and that provides the Division of Environmental Quality with sufficient information to determine that the proposed source may constitute a major new source or major modification, and that such source may affect any mandatory Class I federal area, including, but not limited to:

- (i) Submittal of a draft or partial permit application;
- (ii) A prevention of significant deterioration monitoring plan; or
- (iii) A sufficiently detailed letter.

(B) "Advance notification" does not include general inquiries about Arkansas Pollution Control and Ecology Commission rules;

(2) "Regulated new source review pollutant" means the following:

- (A)(i) Any pollutant for which a national ambient air quality standard has

been adopted under 8 CAR § 41-106 and any pollutant identified under this subdivision (a)(2)(A) as a constituent or precursor for such pollutant.

(ii) Precursors identified by the division for purposes of new source review are the following:

(a) Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and unclassifiable areas;

(b) Sulfur dioxide is a precursor to PM_{2.5} in all attainment and unclassifiable areas; and

(c) Nitrogen oxides are presumed to be precursors to PM_{2.5} in all attainment and unclassifiable areas, unless Arkansas demonstrates to the Administrator of the United States Environmental Protection Agency's satisfaction or the United States Environmental Protection Agency demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM_{2.5} concentrations.

(iii) Volatile organic compounds are presumed not to be precursors to PM_{2.5} in any attainment or unclassifiable area, unless Arkansas demonstrates to the Administrator of the United States Environmental Protection Agency's satisfaction or the United States Environmental Protection Agency demonstrates that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient PM_{2.5} concentrations;

(B) Any pollutant that is subject to any standard promulgated under Section 111 of the Clean Air Act;

(C) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Clean Air Act;

(D) Any pollutant that otherwise is subject to regulation under the Clean Air Act;

(E) Notwithstanding subdivisions (a)(2)(A) – (D) of this section, the term "regulated new source review pollutant" shall not include any or all hazardous air pollutants either listed in Section 112 of the Clean Air Act, or added to the list pursuant to Section 112(b)(2) of the Clean Air Act, and that have not been delisted pursuant to

Section 112(b)(3) of the Clean Air Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Clean Air Act; and

(F)(i) PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

(ii) As of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on Thursday, October 25, 2012 (77 FR 65107), such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in prevention of significant deterioration permits.

(iii) Compliance with emissions limitations for PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan.

(iv) Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this subpart; and

(3) "Subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision of the federal Clean Air Act, or a nationally applicable regulation codified by the Administrator of the United States Environmental Protection Agency pursuant to 40 C.F.R., Chapter 1, Subchapter C, and adopted herein, that requires actual control of the quantity of emissions of that pollutant and that such a control requirement has taken effect and is operative to control, limit, or restrict the quantity of emissions of that pollutant released from the regulated activity.

(b)(1) All other terms used herein shall have the same meaning as set forth in 8 CAR § 41-106 or in 40 C.F.R. § 52.21(b) (prevention of significant deterioration) and 40 C.F.R. § 51.301 (Protection of Visibility) as of October 20, 2010, and adopted in 8 CAR § 41-804, unless manifestly inconsistent with the context in which they are used.

(2) Wherever there is a difference between the definitions in 8 CAR § 41-106 and those listed in 40 C.F.R. § 52.21(b) and 40 C.F.R. § 51.301, the federal definitions

as listed in 40 C.F.R. § 52.21(b), as adopted in 8 CAR § 41-804 and subdivisions (a)(1), (2), and (3) of this section, and 40 C.F.R. § 51.301 as of October 20, 2010, shall apply.

(c) The definition for “routine maintenance, repair and replacement” in 40 C.F.R. § 52.21(b)(2)(iii)(a) is not incorporated.

8 CAR § 41-804. Adoption of rules.

(a)(1) Except where manifestly inconsistent with the provisions of the Clean Air Act, as amended, or with federal regulations adopted pursuant thereto, and as amended specifically herein by subsections (b), (c), (d), (e), (f), and (g) of this section, the Division of Environmental Quality shall have those responsibilities and that authority, with reference to the State of Arkansas, granted to the Administrator of the United States Environmental Protection Agency under 40 C.F.R. § 52.21(a)(2) – (bb), as in effect on November 29, 2005, which are hereby incorporated herein by reference with the exception of:

(A)(i) 40 C.F.R. § 52.21(aa), which is incorporated by reference as in effect on August 13, 2012, except for instances in the sections of 40 C.F.R. § 52.21(aa) where 40 C.F.R. § 52.21(b)(49) is referenced.

(ii) In those instances, subsection (g) of this section shall apply;

(B) 40 C.F.R. § 52.21(r)(6), which is incorporated by reference as of the effective date of the federal final rule published by the United States Environmental Protection Agency in the Federal Register on December 21, 2007 (72 FR 72607);

(C) 40 C.F.R. §§ 52.21(b)(23), 52.21(i)(5)(ii), and 52.21(i)(5)(iii), which are incorporated by reference as of May 16, 2008;

(D) 40 C.F.R. §§ 52.21(b)(14)(i) (major source baseline date), 52.21(b)(14)(ii) (minor source baseline date), 52.21(b)(14)(iii), 52.21(b)(15) (baseline area), 52.21(c) (ambient air increments), 52.21(k)(1) (source impact analysis requirements), and 52.21(p) (requirements for sources impacting federal Class I areas), which are incorporated herein by reference as of October 20, 2010; and

(E) 40 C.F.R. §§ 52.21(b)(49), 52.21(b)(50), 52.21(b)(55 – 58), 52.21(i)(9), and 52.21(cc), which are not incorporated herein.

(2) In the absence of a specific imposition of responsibility or grant of authority, the division shall be deemed to have that responsibility and authority necessary to attain the purposes of the state implementation plan, this subpart, and the applicable federal regulations, as incorporated herein by reference.

(b)(1) Exclusions from the consumption of increments, as provided in 40 C.F.R. § 51.166(f)(1)(iii) as of November 29, 2005, shall be effective immediately.

(2) Submission of the state implementation plan under the Governor's signature constitutes a request by the Governor for this exclusion.

(c) In addition to the requirements of 40 C.F.R. § 52.21(o) as of November 29, 2005, the following requirements, designated as subdivisions (c)(1), (2), (3), and (4) of this section, shall also apply:

(1) Where air quality impact analyses required under this subpart indicate that the issuance of a permit for any major stationary source or for any major modification would result in the consumption of more than fifty percent (50%) of any available annual increment or eighty percent (80%) of any short-term increment, the person applying for such a permit shall submit to the division an assessment of the following factors:

(A) Effects that the proposed consumption would have upon the industrial and economic development within the area of the proposed source; and

(B) Alternatives to such consumption, including alternative siting of the proposed source or portions thereof;

(2) The assessment required under subdivision (c)(1) of this section shall be made part of the application for permit and shall be made available for public inspection as provided in 40 C.F.R. § 52.21(q) as of November 29, 2005;

(3) The assessment required under subdivision (c)(1) of this section shall be in detail commensurate with the degree of proposed increment consumption, both in terms of the percentage of increment consumed and the area affected; and

(4)(A) The assessment required under subdivision (c)(1) of this section may be made effective where a proposed source would cause an increment consumption less than that specified in said subdivision (c)(1) of this section if the Director of the Division

of Environmental Quality finds that unusual circumstances exist in the area of the proposed source that warrant such an assessment.

(B) The director shall notify the applicant in writing of those circumstances that warrant said assessment.

(C) The Arkansas Pollution Control and Ecology Commission may rescind or modify the director's action upon a showing by the applicant that the circumstances alleged by the director either do not exist or do not warrant the aforementioned assessment.

(d) In addition to the requirements of 40 C.F.R. § 52.21(p)(1) as of October 20, 2010, the following requirements shall also apply:

(1)(A) Impacts on mandatory Class I federal areas include impacts on visibility.

(B) The preliminary determination that a source may affect air quality or visibility in a mandatory Class I federal area shall be made by the division, based on screening criteria agreed upon by the division and the Federal Land Manager.

(e) In all instances wherein the aforesaid 40 C.F.R. § 51.301 and 40 C.F.R. § 52.21 refer to the Administrator of the United States Environmental Protection Agency or the United States Environmental Protection Agency, the reference, for the purposes of subsection (a) of this section, shall be deemed to mean the division, unless the context plainly dictates otherwise, except in the following sections:

(1) Exclusion from increment consumption: 40 C.F.R. § 52.21(f)(1)(v), (f)(3), and (f)(4)(I);

(2) Redesignation: 40 C.F.R. § 52.21(g)(1), (g)(2), (g)(4), (g)(5), and (g)(6); and

(3) Air quality models: 40 C.F.R. § 52.21(l)(2).

(f) Redesignation of air quality areas in Arkansas shall comply with Arkansas Code § 8-3-101 et seq.

(g)(1) For the purpose of the regulation of greenhouse gases, only the standards and requirements promulgated by the United States Environmental Protection Agency as of June 3, 2010, related to the permitting of greenhouse gas emissions shall apply to the requirements of 40 C.F.R. § 52.21, as of November 29, 2005, incorporated by reference at subsection (a) of this section.

(2) The following definitions and requirements shall also apply:

(A)(i) "Emissions increase" as used in subdivisions (g)(2)(D) and (E) of this section, means that both a significant emissions increase (as calculated using the procedures in 40 C.F.R. § 52.21(a)(2)(iv), as of November 29, 2005), and a significant net emissions increase (as defined in 40 C.F.R. § 52.21(b)(3), as of November 29, 2005, and 40 C.F.R. § 52.21(b)(23), as of November 29, 2005), occur.

(ii)(a) For the pollutant greenhouse gases, an emissions increase shall be based on tons per year of CO₂ equivalent emissions, and shall be calculated assuming the pollutant greenhouse gases is a regulated new source review pollutant.

(b) "Significant" is defined as seventy-five thousand (75,000) tons per year of CO₂ equivalent emissions instead of applying the value in 40 C.F.R. § 52.21(b)(23)(ii), as of November 29, 2005;

(B) "Greenhouse gases" means the air pollutant defined as the aggregate group of six (6) greenhouse gases, carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation except as provided in subdivisions (g)(2)(D) and (E) of this section, and shall not be subject to regulation if the stationary source:

(i) Maintains its total plant-wide emissions below the greenhouse gas plant-wide applicability limitations level;

(ii) Meets the requirements in 40 C.F.R § 52.21(aa)(1) – (aa)(15) as outlined in subdivision (a)(1)(A) of this section; and

(iii) Complies with the greenhouse gases plant-wide applicability limitations contained in the permit;

(C) "Tons per year of CO₂ equivalent emissions", for purposes of subdivisions (g)(2)(A), (D), and (E) of this section, shall represent an amount of greenhouse gases emitted, and shall be computed as follows:

(i) Multiplying the mass amount of emissions in tons per year, for each of the six (6) greenhouse gases in the pollutant greenhouse gases, by each gas's associated global warming potential published at Table A-1 to Subpart A of 40 C.F.R. pt. 98 – Global Warming Potentials; and

(ii) Sum the resultant values from this subdivision (g)(2)(C) for each gas to compute tons per year of CO₂ equivalent emissions;

(D) Beginning January 2, 2011, the pollutant greenhouse gases is subject to regulation if:

(i) The stationary source is a new major stationary source for a regulated new source review pollutant that is not greenhouse gases, and also will emit or will have the potential to emit greenhouse gases at seventy-five thousand (75,000) tons per year of CO₂ equivalent emissions or more; or

(ii) The stationary source is an existing major stationary source for a regulated new source review pollutant that is not greenhouse gases, and also will have an emissions increase of a regulated new source review pollutant, and an emissions increase of greenhouse gases of seventy-five thousand (75,000) tons per year of CO₂ equivalent emissions or more; and

(E) [Reserved].

(h) The following shall apply when dispersion or other air quality modeling is used to meet the requirements of this subpart:

(1)(A) General.

(B) All applications of air quality modeling involved in this subpart shall be based on the applicable models, databases, and other requirements specified in Appendix W of 40 C.F.R. pt. 51, Guideline on Air Quality Models; and

(2)(A) Substitution.

(B)(i) Where an air quality model specified in the Guideline on Air Quality Models is inappropriate, the model may be modified or another model substituted.

(ii) Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific pollutant or type of stationary source.

(iii) Written approval of the Administrator of the United States Environmental Protection Agency must be obtained for any modification or substitution.

Subpart 9. Rules for the Control of Volatile Organic Compounds in Pulaski

County

8 CAR § 41-901. Title.

This subpart, adopted in accordance with the provisions of the Arkansas Water and Air Pollution Control Act, Arkansas Code § 8-4-101 et seq., as amended, and pursuant to the provisions of the Clean Air Act, shall be known as the "Rules for the Control of Volatile Organic Compounds".

8 CAR § 41-902. Purpose.

This subpart is designed to provide for the attainment and maintenance of the National Ambient Air Quality Standards national ambient air quality standards for ozone in those areas of Arkansas which have been designated as nonattainment areas by the United States Environmental Protection Agency pursuant to the Clean Air Act and are further designed to bring this part into compliance with the provisions of the Clean Air Act.

8 CAR § 41-903. Definitions.

(a)(1) Terms and phrases used in this subpart which are not explicitly defined herein shall have the same meaning as those terms used in 8 CAR § 41-106 or, if not defined in 8 CAR § 41-106, as those terms defined in the Clean Air Act.

(2) Unless manifestly inconsistent therewith, terms and phrases used herein shall have the same meaning as used in the Arkansas Water and Air Pollution Control Act, Arkansas Code § 8-4-101 et seq., and the Clean Air Act.

(b) When used in this subpart, the following definitions apply:

(1)(A) "Cutback asphalt" means asphalt cement which has been liquefied by blending with petroleum solvents (diluent).

(B) Upon exposure to atmospheric conditions, the diluents evaporate, leaving the asphalt cement to perform its function; and

(2) "Prime coat" means the first of two (2) or more films of coating applied to a metal surface.

8 CAR § 41-904. [Reserved].

8 CAR § 41-905. Provisions for specific processes.

(a) [Reserved].

(b) [Reserved].

(c) **Cutback asphalt.** No person shall mix, use, or apply cutback asphalt for roadway paving except where the cutback asphalt is used solely as a penetrating prime coat or when the maximum ambient temperature on the day of application is less than fifteen degrees Celsius (15° C) (fifty-nine degrees Fahrenheit (59° F)).

Subpart 10. Major Source Permitting Procedures

8 CAR § 41-1001. Permitting procedure for Part 70 source.

An owner or operator of a Part 70 source subject to Rules of the Arkansas Operating Air Permit Program, 8 CAR pt. 42, shall be required to have their permit applications processed in accordance with the procedures contained in 8 CAR pt. 42.

Subpart 11. [Reserved]

Subpart 12. Stage I Vapor Recovery

8 CAR § 41-1201. Purpose.

The purpose of this subpart is to limit emissions of volatile organic compounds from gasoline stored in stationary dispensing tanks and from gasoline delivered into such tanks.

8 CAR § 41-1202. Applicability.

(a) This subpart applies to all gasoline dispensing facilities and gasoline service stations and to delivery vessels delivering gasoline to a gasoline dispensing facility or

gasoline service station in a nonattainment area.

(b) This subpart applies to all persons owning or operating a gasoline distribution facility or gasoline service station in a nonattainment area.

8 CAR § 41-1203. Definitions.

As used in this subpart:

(1)(A) "Coaxial system" means the delivery of the product to the stationary storage tank and the recovery of vapors from the stationary storage tank occurs through a single coaxial fill tube that is a tube within a tube.

(B) Product is delivered through the inner tube, and vapor is recovered through the annular space between the walls of the inner tube and outer tube;

(2) "Delivery vessel" means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities;

(3) "Dual point system" means the delivery of the product to the stationary storage tank and the recovery of vapors from the stationary storage tank occurs through two (2) separate openings in the storage tank and two (2) separate hoses between the tank truck and the stationary storage tank;

(4)(A) "Gasoline" means any petroleum distillate or blend of petroleum distillates with other combustible liquids that is used as a fuel for internal combustion engines and has a Reid vapor pressure of four pounds per square inch (4.0 psi) or greater.

(B) This does not include diesel fuel or liquefied petroleum gas;

(5) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks;

(6) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks;

(7)(A) "Independent small business marketer" means a person engaged in the marketing of gasoline unless such person:

(i) Is a refiner or controls, is controlled by, or is under common

control with a refiner or is otherwise directly or indirectly affiliated with a refiner or with a person who controls, is controlled by, or is under common control with a refiner, unless the sole affiliation referred to is by means of a supply contract or an agreement or contract to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner or any such person; or

(ii) Receives less than fifty percent (50%) of his or her annual income from refining or marketing of gasoline.

(B) For purposes of this subpart, the term "refiner" shall not include any refiner whose total refinery capacity (including the refinery capacity of any person who controls, is controlled by, or is under common control with, such refiner) does not exceed sixty-five thousand (65,000) barrels per day.

(C) For purposes of this section, "control" of a corporation means ownership of more than fifty percent (50%) of its stock;

(8) "Leak free" means a condition in which there is no liquid gasoline escape or seepage of more than three (3) drops per minute from gasoline storage, handling, and ancillary equipment, including, but not limited to, seepage and escapes from aboveground fittings;

(9) "Line" means any pipe suitable for transferring gasoline;

(10) "Nonattainment area" means a county or counties designated by the United States Environmental Protection Agency as not meeting the national ambient air quality standards for ozone;

(11) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed;

(12) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility;

(13) "Poppeted vapor recovery adaptor" means a vapor recovery adaptor that automatically and immediately closes itself when the vapor return line is disconnected and maintains a tight seal when the vapor return line is not connected;

(14) "Stationary storage tank" means a gasoline storage container that is a permanent fixture;

(15) "Submerged fill pipe" means any fill pipe with a discharge opening that is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or that is entirely submerged when the level of the liquid is:

(A) Six inches (6") above the bottom of the tank if the tank does not have a vapor recovery adaptor; or

(B)(i) Twelve inches (12") above the bottom of the tank if the tank has a vapor recovery adaptor.

(ii) If the opening of the submerged fill pipe is cut at a slant, the distance is measured from the top of the slanted cut to the bottom of the tank;

(16) "Throughput" means the amount of gasoline dispensed at a facility; and

(17) "Vapor tight" means a condition in which an organic vapor analyzer or a combustible gas detector at a potential volatile organic compounds leak source shows either less than ten thousand parts per million (10,000 ppm) when calibrated with methane, or less than twenty percent (20%) of the lower explosive limit when calibrated and operated according to the manufacturer's specifications.

8 CAR § 41-1204. Exemptions.

This subpart does not apply to:

(1) Transfers made to storage tanks at gasoline dispensing facilities or gasoline service stations equipped with floating roofs or their equivalent;

(2) Stationary storage tanks with a capacity of not more than five hundred fifty gallons (550 gals.), if the tanks are equipped with a submerged fill pipe;

(3) Stationary storage tanks used exclusively for the fueling of implements of normal farm operations;

(4) Facilities selling less than ten thousand gallons (10,000 gals.) of gasoline per month;

(5) Independent small business marketers of gasoline selling less than fifty thousand gallons (50,000 gals.) per month; and

(6) Any other facility or use exempted by state or federal statute.

8 CAR § 41-1205. Prohibited activities.

No person may cause, allow, or permit the transfer of gasoline from any delivery vessel into any stationary storage tank unless such transfer complies with the following requirements:

(1) The stationary storage tank is equipped with a submerged fill pipe and the vapors displaced from the tank during filling are controlled by a vapor control system as described herein;

(2) The vapor control system is in good working order and is connected and operating with a vapor-tight connection;

(3) The vapor control system is properly maintained and any damaged or malfunctioning components or elements of design have been repaired, replaced, or modified;

(4) Gauges, meters, or other specified testing devices are maintained in proper working order;

(5) All loading lines and vapor lines of delivery vessels and vapor collection systems are equipped with fittings that are leak-tight and vapor-tight;

(6) All hatches on the delivery vessel are kept closed and securely fastened;
and

(7) The stationary storage tank has been tested, no less than annually, on a schedule acceptable to the Director of the Division of Environmental Quality according to the test methods required herein.

8 CAR § 41-1206. Recordkeeping.

The following records shall be maintained for not less than two (2) years and the same shall be made available for inspection by the Division of Environmental Quality:

(1) The scheduled date for maintenance and testing, and the date that a malfunction was detected;

(2) The date the maintenance and testing was performed or the malfunction corrected;

(3) The date the component or element of design of the control system was repaired, replaced, or modified; and

(4) Monthly totals of gallons of gasoline sold by the facility.

8 CAR § 41-1207. Inspections.

(a) The premises of any gasoline dispensing facility or gasoline service station shall be available for inspection by representatives of the Division of Environmental Quality.

(b) The process of transfer of gasoline from any delivery vessel into any stationary storage tank shall be subject to observation and inspection by representatives of the division.

8 CAR § 41-1208. Vapor recovery systems.

(a) The vapor control system required by 8 CAR § 41-1205 shall include one (1) or more of the following:

(1) A vapor-tight line from the stationary storage tank to the delivery vessel and:

(A) For a coaxial vapor recovery system, either a poppeted or unpoppeted vapor recovery adaptor; or

(B) For a dual point vapor recovery system, a poppeted vapor recovery adaptor; or

(2) A refrigeration-condensation system or equivalent designed to recover or destroy at least ninety percent (90%) by weight of the organic compounds in the displaced vapor.

(b) If an unpoppeted vapor recovery adaptor is used, the tank liquid fill connection shall remain covered either with a vapor-tight cap or a vapor return line except when the vapor return line is being connected or disconnected.

(c) If an unpoppeted vapor recovery adaptor is used, the unpoppeted vapor recovery adaptor shall be replaced with a poppeted vapor recovery adaptor when the tank is replaced or upgraded.

(d)(1) Where vapor lines from the storage tanks are manifolded, poppeted vapor

recovery adapters shall be used.

(2) No more than one (1) tank is to be loaded at a time if the manifold vapor lines have a nominal pipe size of less than three inches (3").

(3) If the manifold vapor lines have a nominal pipe size of three inches (3") or larger, then two (2) tanks at a time may be loaded.

(e) Vent lines on stationary storage tanks shall have pressure release valves or restrictors.

8 CAR § 41-1209. Gasoline delivery vessels.

(a) Gasoline delivery vessels shall be designed and maintained to be vapor-tight during loading and unloading operations and during transport.

(b) Gasoline delivery vessels shall be tested, no less than annually, on a schedule acceptable to the Director of the Division of Environmental Quality according to the test methods required herein.

(c) Gasoline delivery vessels shall sustain a pressure change of no more than seven hundred fifty (750) pascals (three inches (3") of H₂O) in five (5) minutes when pressurized to a gauge pressure of four thousand five hundred (4,500) pascals (eighteen inches (18") of H₂O) or evacuated to a gauge pressure of one thousand five hundred (1,500) pascals (six inches (6") of H₂O) during testing.

8 CAR § 41-1210. Owner/operator responsibility.

(a) It shall be the responsibility of owners and operators of gasoline dispensing facilities and gasoline service stations to assure compliance with this subpart and to disallow the transfer from any delivery vessel that does not comply with those requirements of this subpart applicable to delivery vessels.

(b) It shall be the responsibility of owners, operators, and drivers of delivery vessels to assure compliance with this subpart and to refuse to transfer from any delivery vessel that does not comply with those requirements of this subpart applicable to delivery vessels.

(c) It shall be the responsibility of owners and operators of gasoline dispensing

facilities and gasoline service stations to properly maintain, repair, replace, modify, and test the vapor recovery system components of stationary storage tanks regulated herein.

(d) It shall be the responsibility of owners and operators of gasoline dispensing facilities, gasoline service stations, and gasoline delivery vehicles to repair and retest equipment within fifteen (15) days of a test that exceeds the limitations set forth herein.

8 CAR § 41-1211. Test methods.

(a) Test method for leak detection:

(1) Within four (4) hours prior to monitoring, the organic vapor analyzer or combustible gas detector shall be suitably calibrated in a manner and with the gas specified by the manufacturer for twenty percent (20%) of the lower explosive limit response, or calibrated with methane for a ten thousand parts per million (10,000 ppm) response;

(2) The probe inlet shall be two and one-half centimeters (2.5 cm) or less from the potential leak source when searching for leaks; and

(3)(A) The highest detector reading and location for each incident of detected leakage shall be recorded, along with the date, time, and name of the person performing the testing.

(B) If no gasoline vapor is detected, that fact shall be recorded.

(b)(1) Control efficiency of vapor recovery systems and vapor collection/processing systems shall be determined according to EPA Method 2A and either EPA Method 25A or 25B.

(2) EPA Method 2B shall be used for vapor incineration devices.

(c)(1) Vapor pressure of gasoline shall be determined using American Society for Testing and Materials (ASTM) Method D323-94 or ASTM Method D4953-93.

(2) Method D323-94 shall be used for gasoline either containing no oxygenates or MTBE (methyl ethyl butyl ether) as the sole oxygenate.

(3) Method D4953-93 shall be used for oxygenated gasoline.

8 CAR § 41-1212. Effective date.

(a) The requirements of this subpart shall be effective within nonattainment areas one (1) year after the designation by the United States Environmental Protection Agency of an area as a nonattainment area.

(b) In the case of an independent small business marketer with sales of fifty thousand gallons (50,000 gals.) or more per month, this subpart shall be phased in as follows:

(1) Thirty-three percent (33%) of facilities shall be in compliance at the end of the first year;

(2) Sixty-six percent (66%) at the end of the second year; and

(3) One hundred percent (100%) at the end of the third year.

Subpart 13. [Reserved]

Subpart 14. Best Available Retrofit Technology

8 CAR § 41-1401. Purpose.

This subpart establishes certain best available retrofit control technology requirements and compliance provisions pursuant to 40 C.F.R. § 51.308 as of June 22, 2007.

8 CAR § 41-1402. Definitions.

For purposes of this subpart, the definitions contained in 40 C.F.R. § 51.301, as in effect on June 22, 2007, are incorporated by reference.

8 CAR § 41-1403. [Reserved].

8 CAR § 41-1404. [Reserved].

8 CAR § 41-1405. Best available retrofit technology requirements.

(a) SWEPCO Flint Creek Power Plant (AFIN 04-00107) shall comply with best available retrofit technology requirements for particulate matter at SN-01 by meeting the existing permitted particulate matter emission limit as of October 15, 2007.

(b) [Reserved].

(c) [Reserved].

(d) [Reserved].

(e) Entergy Arkansas, Inc. White Bluff (AFIN 35-00110) shall comply with best available retrofit technology requirements for particulate matter at Unit 1 (SN-01) and Unit 2 (SN-02) by meeting existing permitted particulate matter emission limits for the respective units as of October 15, 2007.

(f) [Reserved].

(g) [Reserved].

(h) [Reserved].

(i) [Reserved].

(j) [Reserved].

(k) [Reserved].

(l) Entergy Arkansas, Inc. Lake Catherine (AFIN 30-00011) shall comply with best available retrofit technology requirements for particulate matter when burning natural gas at Unit 4 Boiler (SN-03) by meeting the existing permitted particulate matter emission limit as of October 15, 2007.

8 CAR § 41-1406. Compliance provisions.

The owner or operator of each stationary source subject to 8 CAR § 41-1405 shall:

(1) Comply with the applicable emission limit as expeditiously as practicable, but in no event later than five (5) years after the United States Environmental Protection Agency approval of the emission limit into the Arkansas state implementation plan;

(2) Properly operate and maintain the control equipment necessary to comply with the applicable emission limitations set forth in 8 CAR § 41-1405;

(3) Establish and implement procedures to ensure that the control equipment necessary to comply with the applicable emission limitations set forth in 8 CAR § 41-1405 is properly operated and maintained; and

(4) Demonstrate compliance with the applicable emission limitations listed in 8 CAR § 41-1405 in accordance with the provisions of Subpart 6 of this part.

Subpart 15. [Reserved]

Subpart 16. 111(d) Requirements for Landfills

8 CAR § 41-1601. Purpose.

(a) This subpart establishes standards of performance, monitoring, recordkeeping, and reporting requirements for the control of designated pollutants from municipal solid waste landfills pursuant to 40 C.F.R. pt. 60, subpt. Cf.

(b) Requirements under this subpart shall not affect an owner's or operator's requirements under Solid Waste Management Rules, 8 CAR pt. 60.

8 CAR § 41-1602. Definitions.

(a) For the purposes of this subpart, the definitions in 40 C.F.R. § 60.41f are incorporated by reference except the definition of NMOC.

(b) "NMOC" means nonmethane organic compounds, as measured according to the provisions of 40 C.F.R. § 60.35f.

8 CAR § 41-1603. Applicability.

This subpart applies to each municipal solid waste landfill that:

(1) Accepted waste after November 8, 1987, or has capacity for future waste deposition; and

(2) Commenced construction, reconstruction, or modification on or before July 17, 2014.

8 CAR § 41-1604. Requirement to obtain a permit.

(a) The owner or operator of a municipal solid waste landfill subject to this subpart with a design capacity greater than or equal to two and one-half million (2,500,000) megagrams or two and one-half million (2,500,000) cubic meters and that is not otherwise subject to Part 70 shall obtain a Part 70 permit in accordance with the procedures of Rules of the Arkansas Operating Air Permit Program, 8 CAR pt. 42, by no later than ninety (90) days after the effective date of United States Environmental Protection Agency approval of this subpart.

(b) The owner or operator of a municipal solid waste landfill subject to this subpart with a design capacity less than two and one-half million (2,500,000) megagrams or two and one-half million (2,500,000) cubic meters is not subject to the requirement to obtain a Part 70 permit under this subpart and may instead obtain a permit in accordance with this part if the municipal solid waste landfill is not otherwise subject to Part 70.

(c) If a municipal solid waste landfill subject to this subpart becomes a closed landfill and is not otherwise subject to Part 70, the owner or operator is no longer subject to the requirement to maintain a Part 70 permit if the following conditions are met:

(1) The landfill was never subject to the requirement to install, maintain, and operate a gas collection and control system under 40 C.F.R. § 60.33f; or

(2) The landfill meets the conditions for control system removal or decommissioning specified in 40 C.F.R. § 60.33f(f).

(d) Physical or operational changes made to a municipal solid waste landfill subject to this subpart are not considered a modification or reconstruction under this subpart if the changes are made solely to comply with this subpart.

(e) The permit of each municipal solid waste landfill subject to this subpart shall be subject to reopening to incorporate the applicable requirements of this subpart in accordance with the procedures of this part for municipal solid waste landfills not subject to the requirement to obtain a Part 70 permit, or in accordance with the procedures of 8 CAR pt. 42 for municipal solid waste landfills required to obtain a Part

70 permit.

8 CAR § 41-1605. Exemption from reporting requirements for closed landfills.

The owner or operator of a closed landfill subject to this subpart is not subject to the requirement to submit the following reports if the owner or operator submitted the reports to the Division of Environmental Quality or the United States Environmental Protection Agency under the provisions of 40 C.F.R. pt. 60, subpt. WWW or 40 C.F.R. pt. 62, subpt. GGG on or before July 17, 2014:

- (1) Initial design capacity report required under 8 CAR § 41-1606(a)(1);
- (2) Initial or subsequent NMOC emission rate report required under 8 CAR § 41-1607, if the most recent NMOC emission rate report indicated the NMOC emissions were below fifty (50) megagrams per year;
- (3) Collection and control system design plan required under 8 CAR § 41-1610;
- (4) Closure report required under 8 CAR § 41-1613;
- (5) Equipment removal report required under 8 CAR § 41-1613;
- (6) Initial annual report required under 8 CAR § 41-1612; and
- (7) Initial performance test report required under 8 CAR § 41-1612.

8 CAR § 41-1606. Design capacity reports.

(a)(1) For each municipal solid waste landfill subject to this subpart having a design capacity less than two and one-half million (2,500,000) megagrams by mass or two and one-half million (2,500,000) cubic meters by volume, the owner or operator shall submit to the Division of Environmental Quality an initial design capacity report that meets the requirements of 40 C.F.R. § 60.38f(a).

(2) The owner or operator may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values.

(3) The owner or operator shall document and submit any density conversions with the design capacity report.

(b) If the maximum design capacity of a landfill increases such that the maximum

design capacity is equal to or exceeding two and one-half million (2,500,000) megagrams by mass or two and one-half million (2,500,000) cubic meters by volume:

(1) The owner or operator shall submit to the division an amended design capacity report within ninety (90) days of the increase in maximum design capacity; and

(2) The owner or operator shall obtain a Part 70 permit in accordance with the procedures of Rules of the Arkansas Operating Air Permit Program, 8 CAR pt. 42, and comply with 8 CAR §§ 41-1607 and 41-1608.

8 CAR § 41-1607. NMOC emission rate reports.

(a) For each municipal solid waste landfill subject to this subpart having a design capacity equal to or exceeding two and one-half million (2,500,000) megagrams by mass or two and one-half million (2,500,000) cubic meters by volume, the owner or operator shall:

(1) Prepare an initial NMOC emission rate report using the emission rate calculation procedures specified in 40 C.F.R. § 60.35f(a);

(2) Recalculate the NMOC emission rate annually in accordance with the procedures specified in 40 C.F.R. § 60.35f(a), except as provided in 40 C.F.R. § 60.38f(c)(3); and

(3) Follow the procedures specified in 40 C.F.R. § 60.33f(e)(1) – (3).

(b)(1) For demonstrations using the Tier 4 provisions of 40 C.F.R. § 60.35f(a)(6), the owner or operator shall notify the Division of Environmental Quality of the date or dates upon which the owner or operator intends to demonstrate that site-specific surface methane emissions are below five hundred parts per million (500 ppm) methane.

(2) The notification shall include a description of the wind barrier to be used during the surface emission monitoring described in the notification.

(3) The notification must be postmarked or delivered to the division not less than thirty (30) days prior to the date or dates on which surface emissions monitoring is scheduled to occur.

8 CAR § 41-1608. Standards of performance.

(a) **Requirement to install, maintain, and operate a gas collection and control system.** The owner or operator of a municipal solid waste landfill subject to this subpart shall install, maintain, and operate a collection and control system meeting the requirements specified in 40 C.F.R. § 60.33f(b)(1) – (3) and 40 C.F.R. § 60.33f(c)(1) – (4), except as provided in 40 C.F.R. § 60.24, within thirty (30) months after:

(1) The first NMOC emission rate report for a landfill in which the NMOC emission rate equals or exceeds thirty-four (34) megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than thirty-four (34) megagrams per year;

(2) The first NMOC emission rate report in the closed landfill subcategory in which the NMOC emission rate equals or exceeds fifty (50) megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than fifty (50) megagrams per year; or

(3) The most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds thirty-four megagrams per year based on Tier 2, if the Tier 4 surface emission monitoring shows a surface methane emission concentration of five hundred parts per million (500 ppm) methane or greater.

(b) **Collection system standards.** The owner or operator shall ensure that each collection system installed to comply with this subpart shall meet the requirements specified in:

(1) 40 C.F.R. § 60.33f(b)(2) and 40 C.F.R. § 60.40f(a) – (c) for active collection systems; or

(2) 40 C.F.R. § 60.33f(b)(3) for passive collection systems.

(c) **Control system standards.** The owner or operator shall ensure that each control system installed to comply with this subpart shall meet the requirements specified in 40 C.F.R. § 60.33f(c)(1) – (4) except as provided in 40 C.F.R. § 60.24.

(d) **Collection and control system removal requirements.** A collection and

control system required under this subpart may be capped, removed, or decommissioned if the criteria specified in 40 C.F.R. § 60.33f(f)(1) – (4) are met.

8 CAR § 41-1609. Compliance schedule and increments of progress for gas collection and control systems.

(a) The owner or operator of each municipal solid waste landfill subject to the requirement to install and operate a gas emission collection and control system pursuant to this subpart shall complete planning, awarding of contracts, installing, and starting up of municipal solid waste landfill gas emission collection and control equipment within thirty (30) months after the date an NMOC emission rate report shows:

(1) NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills;

(2) NMOC emissions equal to or exceeding fifty (50) megagrams per year for closed landfills; or

(3) A methane surface emission concentration equal to or exceeding five hundred parts per million (500 ppm) based on Tier 4 surface emissions monitoring.

(b) The owner or operator of each municipal solid waste landfill subject to this subpart shall comply with the increments of progress listed in Table 41.16.1.

Table 41.16.1 Increments of Progress		
Increment	Date if Using Tiers 1, 2, or 3	Date if Using Tier 4
Increment 1: Submit final collection and control system design plan to the Division in accordance with	Twelve (12) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills or NMOC emissions equal	Twelve (12) months after the first measured concentration of methane million or greater from the surface of the landfill

8 CAR § 41-1610	to or exceeding fifty (50) megagrams for closed landfills	
Increment 2: Submit notice to the Division that on-site construction of collection and control system has begun	Twenty-four (24) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Twenty-four (24) months after the First measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill
Increment 3: Submit notice to the Division that on-site construction of collection and control system is complete	Thirty (30) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding to thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Thirty (30) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill
Increment 4: Final compliance with 8 CAR § 41-1608	Thirty (30) months after initial NMOC emission rate report or the first annual emission rate report showing NMOC emissions equal to or exceeding to thirty-four (34) megagrams per year for active landfills or NMOC emissions equal to or exceeding fifty (50) megagrams for closed landfills	Thirty (30) months after the first measured concentration of methane of five hundred (500) parts per million or greater from the surface of the landfill

8 CAR § 41-1610. Collection and control system design plan.

(a)(1) The owner or operator shall submit to the Division of Environmental Quality a site-specific design plan for each gas collection and control system required under this subpart.

(2) The collection and control system design plan shall be prepared and approved by a professional engineer and shall comply with the requirements specified in 40 C.F.R. § 60.38f(d)(1) – (7).

(b) The owner or operator of a municipal solid waste landfill who has already been required to submit a design plan under this subpart under 40 C.F.R. pt. 60, subpt. WWW, or under 40 C.F.R. pt. 62, subpt. GGG, must submit a revised design plan to the division as specified in 40 C.F.R. § 60.38f(e)(1) and (2).

(c)(1) Upon receipt of an initial or revised design plan, the division shall review the information submitted and either approve it, disapprove it, or request that additional information be submitted.

(2) If the division does not approve or disapprove the design plan, or does not request that additional information be submitted, within ninety (90) days of receipt, then the owner or operator may continue with implementation of the design plan at their own risk.

(d) If the owner or operator chooses to demonstrate compliance with the emission control requirements of this subpart using a treatment system as defined in 40 C.F.R. § 60.41f, then the owner or operator shall prepare a site-specific treatment system monitoring plan that meets the requirements specified in 40 C.F.R. § 60.39f(b)(5).

8 CAR § 41-1611. Operating, compliance, and monitoring requirements for gas collection and control systems.

(a) The owner or operator of a municipal solid waste landfill with a gas collection and control system used to comply with this subpart shall meet the operating, compliance, and monitoring requirements of this subpart by:

(1) Compliance with the requirements of 40 C.F.R. § 60.34f(a) – (g), 40 C.F.R.

§ 60.36f(a) – (e), and 40 C.F.R. § 60.37f(a) – (h); or

(2) Compliance with the requirements of 40 C.F.R. § 63.1958, 40 C.F.R. § 63.1960, and 40 C.F.R. § 63.1961.

(b) If the owner or operator chooses to demonstrate compliance with the requirements of this subpart as provided under subdivision (a)(2) of this section, the owner or operator:

(1) Shall submit to the Division of Environmental Quality the twenty-four-hour high temperature report required under 40 C.F.R. § 63.1981(k); and

(2) May no longer use the provisions referenced in subdivision (a)(1) of this section to comply with operating, compliance, and monitoring requirements of this subpart.

8 CAR § 41-1612. Performance testing reports.

The initial and annual performance test report provisions specified in 40 C.F.R. § 60.38f(h) and (i) are incorporated by reference.

8 CAR § 41-1613. Closure and equipment removal reports.

The closure report and equipment removal report provisions specified in 40 C.F.R. § 60.38f(f) and (g) are incorporated by reference.

8 CAR § 41-1614. Liquids addition reports.

The liquids addition reporting requirements specified in 40 C.F.R. § 60.38f(l) are incorporated by reference.

8 CAR § 41-1615. Recordkeeping requirements.

The recordkeeping provisions specified in 40 C.F.R. § 60.39f(a) – (j) are incorporated by reference.

8 CAR § 41-1616. Electronic reporting of certain reports.

The owner or operator of a municipal solid waste landfill subject to this subpart

shall submit, as applicable, the following reports electronically in accordance with the procedures specified in 40 C.F.R. § 60.38f(j):

- (1) NMOC emission rate reports required under 8 CAR § 41-1607;
- (2) Performance testing reports required under 8 CAR § 41-1612; and
- (3) Liquids addition reports required under 8 CAR § 41-1614.

8 CAR § 41-1617. Test methods and procedures.

The test methods and procedures provisions specified in 40 C.F.R. § 60.35f(a) – (e) are incorporated by reference.

8 CAR § 41-1618. Corrective actions.

The corrective action and the corresponding timeline requirements specified in 40 C.F.R. § 60.38f(k) are incorporated by reference.

Subpart 17. Effective Date

8 CAR § 41-1701. Effective date.

This part is effective ten (10) days after filing with the:

- (1) Secretary of State;
- (2) Arkansas State Library; and
- (3) Bureau of Legislative Research.

Appendix A. Insignificant Activities List

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/316/8CARpt.41AppendixA.pdf>

Appendix B. National Ambient Air Quality Standards List

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/317/8CARpt.41AppendixB.pdf>

Appendix B

Subpart *ZZZZ* – National Emissions Standards for Hazardous Air Pollutants for Stationary
Reciprocating Internal Combustion Engines

This content is from the eCFR and is authoritative but unofficial.

Title 40 —Protection of Environment

Chapter I —Environmental Protection Agency

Subchapter C —Air Programs

Part 63 —National Emission Standards for Hazardous Air Pollutants for Source Categories

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

Source: 57 FR 61992, Dec. 29, 1992, unless otherwise noted.

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

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

§ 63.6585 Am I subject to this subpart?

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

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

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?

§ 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?

§ 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?

§ 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?

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

General Compliance Requirements

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

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?

§ 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?

§ 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?

§ 63.6615 When must I conduct subsequent performance tests?

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

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

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

Continuous Compliance Requirements

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

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

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

§ 63.6650 What reports must I submit and when?

§ 63.6655 What records must I keep?

§ 63.6660 In what form and how long must I keep my records?

Other Requirements and Information

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

§ 63.6670 Who implements and enforces this subpart?

§ 63.6675 What definitions apply to this subpart?

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

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

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 $\geq$ 250 HP Located at a Major Source of HAP Emissions

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 $\geq$ 250
HP Located at a Major Source of HAP Emissions, Existing CI
Stationary RICE >500 HP

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 $\leq$ 500 HP Located at a Major
Source of HAP Emissions

Table 2d to Subpart ZZZZ of Part 63

Requirements for Existing Stationary RICE Located at Area
Sources of HAP Emissions

Table 3 to Subpart ZZZZ of Part 63

Subsequent Performance Tests

Table 4 to Subpart ZZZZ of Part 63

Requirements for Performance Tests

Table 5 to Subpart ZZZZ of Part 63

Initial Compliance With Emission Limitations, Operating
Limitations, and Other Requirements

Table 6 to Subpart ZZZZ of Part 63

Continuous Compliance With Emission Limitations, and Other
Requirements

Table 7 to Subpart ZZZZ of Part 63

Requirements for Reports

Table 8 to Subpart ZZZZ of Part 63

Applicability of General Provisions to Subpart ZZZZ

Appendix A to Subpart ZZZZ of Part 63

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

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 paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in § 63.6675, which includes operating according to the provisions specified in § 63.6640(f).
 - (1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate 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 § 63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013; 87 FR 48607, 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 paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of § 63.6645(f).
 - (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 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013; 87 FR 48607, 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 paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary

non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

- (1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).
- (2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.
 - (i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.
 - (ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.
 - (iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.
- (c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:
 - (1) Change oil every 1,000 hours of operation or 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, 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 paragraphs (d)(1) through (5) of this section.
 - (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
 - (2) The test must not be older than 2 years.

- (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.
- (5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[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 paragraphs (b)(1) through (4) 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 § 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:

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

Where:

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

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

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

- (2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

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

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

Where:

F_O = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ 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, dsm³/J (dscf/10⁶ Btu).

F_C = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10⁶ Btu)

- (ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂, as follows:

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

Where:

X_{CO2} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂—15 percent O₂, the defined O₂ correction value, percent.

- (iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

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

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O₂.

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

X_{CO_2} = CO₂ correction factor, percent.

%CO₂ = Measured CO₂ 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 paragraphs (g)(1) 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 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013; 89 FR 70516, 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 O₂ or CO₂ according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.
 - (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 CO₂ 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 paragraphs (b)(1) 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 paragraph (b) 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 paragraphs (b)(1)(i) 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 paragraphs (b)(1) 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 O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ 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 O₂ 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 O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ 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 O₂ 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 paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, 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 paragraph (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (ii)-(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 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013; 87 FR 48607, 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 oaqpscbi@epa.gov, and as described in paragraph (h)(2) 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 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), 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 paragraphs (c)(1) 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 paragraphs (c)(1) through (8) of this section and the information in paragraphs (d)(1) 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 paragraphs (c)(1) 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 § 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 paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) 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) (<https://cdx.epa.gov/>). 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 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013; 87 FR 48607, Aug. 10, 2022; 89 FR 70517, 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 paragraphs (b)(1) through (3) of this section.
 - (1) Records described in § 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 paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the 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 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013; 87 FR 48607, Aug. 10, 2022; 89 FR 70518, 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 § 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 § 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 § 63.10(f) and as defined in § 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 CO₂.

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 CO₂.

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 (NO_x) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_x, CO, and volatile organic compounds (VOC) into CO₂, 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 subpart HH of this part, the potential to emit provisions in § 63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, 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 C₃H₈.

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

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

- (2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.
- (i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.
 - (ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.
 - (iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.
- (3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

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 NO_x (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

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 subpart PPPPP of 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 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013; 87 FR 48608, 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 stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	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. ¹

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂	

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) 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 ₂ and using NSCR;	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F. ¹
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP	Comply with any operating limitations approved by the Administrator.

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

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and not using NSCR.	

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) 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 stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O ₂ . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O ₂ until June 15, 2007	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. ¹
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O ₂	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

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 580 ppbvd or less at 15 percent O ₂	

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) 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 RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. ¹
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of

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

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
oxidation catalyst 3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and 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.	a. water from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.¹ Comply with any operating limitations approved by the Administrator.

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

[78 FR 6707, 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 RICE and black start stationary CI RICE ¹	a. Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first ². 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 ³	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ³

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

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

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

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 stationary CI RICE <100 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 ². 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 ³	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O ₂	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O ₂ ; or	

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

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
5. Non-Emergency, non-black start stationary CI RICE >500 HP	b. Reduce CO emissions by 70 percent or more a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O₂; or b. Reduce CO emissions by 70 percent or more	
6. Emergency stationary SI RICE and black start stationary SI RICE. ¹	a. Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;² 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 necessary³	

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

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;² 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 necessary³	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <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;² b. Inspect spark plugs every 4,320 hours of	

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

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	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 4,320 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary ³	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O ₂	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O ₂	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O ₂	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or	

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

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	less at 15 percent O ₂	

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

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

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

[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 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;¹ 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	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.

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

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

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	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O ₂ ; or b. Reduce CO emissions by 70 percent or more	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O ₂ ; or b. Reduce CO emissions by 70 percent or more	
4. Emergency stationary CI RICE and black start stationary CI RICE. ²	a. Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first; ¹ b. Inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes	

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

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

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

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
6. Non-emergency, non-black start 2SLB stationary RICE	within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary a. Change oil and filter every 4,320 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;¹ 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; and c. Inspect all hoses and belts every 4,320 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary	

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or within 1 year + 30 days of the previous change, whichever comes first; ¹ 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 belts every 1,440 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or within 1 year + 30 days of the previous	

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

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

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 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year 10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	change, whichever comes first;¹ b. Inspect spark plugs every 2,160 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 belts every 2,160 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary Install an oxidation catalyst to reduce HAP emissions from the stationary RICE a. Change oil and filter every 1,440 hours of operation or within 1 year + 30 days of the previous	

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

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

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

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
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 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	within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 2,160 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary Install NSCR to reduce HAP emissions from the 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;¹ b. Inspect spark plugs every 1,440 hours of operation or	

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and 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	

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

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

[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 $\geq$ 250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. ¹
2. 4SRB stationary RICE $\geq$ 5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. ¹
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. ¹
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

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

[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, 4SLB, and CI stationary 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 ii. Measure the O₂ 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)	(a) For 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-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. (b) Measurements to determine O₂ must be made at the same time as the measurements for CO concentration.

¹ You may also use methods 3A and 10 as options to ASTM-D6522-00 (2005).

² 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.

³ Incorporated by reference, see § 63.14.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
2. 4SRB stationary RICE	a. Reduce formaldehyde or THC emissions	iii. Measure the CO at the inlet and the outlet of the control device; and	(2) ASTM D6522-00 (Reapproved 2005) ^{1 2 3} (heated probe not necessary) or method 10 of 40 CFR part 60, appendix A-4	(c) The CO concentration must be at 15 percent O ₂ , dry basis.
		iv. Measure moisture content at the inlet and outlet of the control device as needed to determine CO and O ₂ concentrations on a dry basis	(3) Method 4 of 40 CFR part 60, appendix A-3, or method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03 ^{1 3}	(d) Measurements to determine moisture content must be made at the same time and location as the measurements for CO concentration.
		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 ₂ , 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

¹ You may also use methods 3A and 10 as options to ASTM-D6522-00 (2005).

² 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.

³ Incorporated by reference, see § 63.14.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		ii. Measure O₂ at the inlet and outlet of the control device; and 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 iv. If demonstrating compliance	(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) (2) Method 4 of 40 CFR part 60, appendix A-3, or method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03^{1 3} (3) Method 320 or 323 of 40 CFR	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. (b) Measurements to determine O₂ concentration must be made at the same time as the measurements for formaldehyde or THC concentration. (c) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration. (d) Formaldehyde concentration must be at 15 percent O₂, dry basis. Results of this test consist of the average of the

¹ You may also use methods 3A and 10 as options to ASTM-D6522-00 (2005).

² 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.

³ Incorporated by reference, see § 63.14.

For each . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device	part 63, appendix A; or ASTM D6348-03, ^{1 3} 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	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 25A, reported as propane, of 40 CFR part 60, appendix A-7	(e) THC concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary	i. Select the sampling port location and the number/ location of traverse points		(a) For formaldehyde, CO, O ₂ , 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

¹ You may also use methods 3A and 10 as options to ASTM-D6522-00 (2005).

² 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.

³ Incorporated by reference, see § 63.14.

For each . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
	RICE exhaust	at the exhaust of the stationary RICE; and		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 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 ₂ concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM D6522-00 (Reapproved 2005) ^{1 3} (heated probe not necessary)	(b) Measurements to determine O ₂ concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location as	(2) Method 4 of 40 CFR part 60, appendix A-3, or method 320 of 40 CFR part 63,	(c) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.

¹ You may also use methods 3A and 10 as options to ASTM-D6522-00 (2005).

² 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.

³ Incorporated by reference, see § 63.14.

For each . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		needed to determine formaldehyde or CO and O₂ concentrations on a dry basis; and iv. Measure formaldehyde at the exhaust of the stationary RICE; or v. Measure CO at the exhaust of the stationary RICE	appendix A, or ASTM D6348-03^{1 3} (3) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03,^{1 3} 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 (4) Method 10 of 40 CFR part 60, appendix A-4, ASTM D6522-00 (2005),^{1 3} method 320	(d) Formaldehyde 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. (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.

² 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.

³ Incorporated by reference, see § 63.14.

For each . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
			of 40 CFR part 63, appendix A, or ASTM D6348-03 ¹ ₃	

¹ You may also use methods 3A and 10 as options to ASTM-D6522-00 (2005).

² 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.

³ 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-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

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

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions, and using a CEMS	operating parameters (if any) during the initial performance test. i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O₂ or CO₂ 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 the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde	i. The average reduction of emissions of formaldehyde

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
	emissions and using NSCR	determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB	a. Limit the concentration of formaldehyde in the stationary	i. The average formaldehyde concentration, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
stationary RICE >500 HP located at a major source of HAP	RICE exhaust and using oxidation catalyst or NSCR	ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O₂, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
that are operated more than 24 hours per calendar year 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	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; ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F. 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 O₂, 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-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved ^a ; and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $\geq$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 3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS a. Reduce CO emissions or	drop across the catalyst is within the operating limitation established during the performance test. i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved ^a; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test. i. Collecting the monitoring data

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP	limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	according to § 63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to § 63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and ii. Reducing these

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
6. Non-emergency 4SRB stationary RICE with a brake HP $\geq 5,000$ located at a major source of HAP 7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP	a. Reduce formaldehyde emissions a. Limit the concentration of formaldehyde in the stationary	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. Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent.^a i. Conducting semiannual performance tests for formaldehyde to demonstrate that your

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
	RICE exhaust and using oxidation catalyst or NSCR	emissions remain at or below the formaldehyde concentration limit ^a; and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed ^a After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.	a. Limit the concentration	i. Conducting semiannual

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP	of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit ^a ; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE ≤ 500 HP located at a major source of HAP, existing non-emergency stationary RICE < 100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤ 300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE 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	instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. 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

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
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,	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. i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
	and not using oxidation catalyst	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.
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration	i. Conducting performance tests every 8,760 hours or 5 years,

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
	of CO in the stationary RICE exhaust, and using an oxidation catalyst	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

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
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	demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test. 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;

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

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	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. 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

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

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

[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 $100 \leq \text{HP} \leq 500$ 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 $250 \leq \text{HP} \leq 500$ 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 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)(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). 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 . . .
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 b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and c. Any problems or errors suspected with the meters	i. Annually, according to the requirements in § 63.6650. i. See item 2.a.i. 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).
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 to subpart	Explanation
§ 63.1	General applicability of the General Provisions	Yes	Additional terms defined in § 63.6675.
§ 63.2	Definitions	Yes	
§ 63.3	Units and abbreviations	Yes	
§ 63.4	Prohibited activities and circumvention	Yes	
§ 63.5	Construction and reconstruction	Yes	
§ 63.6(a)	Applicability	Yes	
§ 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes	
§ 63.6(b)(5)	Notification	Yes	
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes	
§ 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes	
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes	
§ 63.6(d)	[Reserved]		
§ 63.6(e)	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	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(h)	Opacity and visible emission standards	No	
§ 63.6(i)	Compliance extension procedures and criteria	Yes	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.6(j)	Presidential compliance exemption	Yes	
§ 63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3)	CAA section 114 authority	Yes	
§ 63.7(b)(1)	Notification of performance test	Yes	Except that § 63.7(b)(1) only applies as specified in § 63.6645.
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that § 63.7(b)(2) only applies as specified in § 63.6645.
§ 63.7(c)	Quality assurance/test plan	Yes	Except that § 63.7(c) only applies as specified in § 63.6645.
§ 63.7(d)	Testing facilities	Yes	
§ 63.7(e)(1)	Conditions for conducting performance tests	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	
§ 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	Yes	

General provisions citation	Subject of citation	Applies to subpart	Explanation
	operation and maintenance		
§ 63.8(c)(1)(i)	Routine and predictable SSM	No	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown 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	
§ 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	Yes	Except that § 63.9(c) only applies as

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

General provisions citation	Subject of citation	Applies to subpart	Explanation
63.10(b)(2)(xii)	waiver		
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes	
§ 63.10(b)(3)	Records of applicability determination	Yes	
§ 63.10(c)	Additional records for sources using CEMS	Yes	Except that § 63.10(c)(2)-(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes	
§ 63.10(d)(2)	Report of performance test results	Yes	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	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 (O₂) 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 (O₂).

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

1.2 Applicability. When is this protocol acceptable?

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

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

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

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

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O₂, 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 O₂ 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 O₂ 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 O₂ 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 NO₂ 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 O₂ 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 O₂; 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 O₂. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ± 5 percent of the label value. Dry ambient air (20.9 percent O₂) is acceptable for calibration of the O₂ cell. If needed, any lower percentage O₂ calibration gas must be a mixture of O₂ 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 O₂ Calibration Gas Concentration.**
- Select an O₂ 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 O₂. When the average exhaust gas O₂ readings are above 6 percent, you may use dry ambient air (20.9 percent O₂) for the up-scale O₂ 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., CO₂).

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

9.0 Quality Control (Reserved)

10.0 Calibration and Standardization

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

- 10.1.1 Zero Calibration.** For both the O₂ and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

- 10.1.2 Zero Calibration Tolerance.** For each zero gas introduction, the zero level output must be less than or equal to ± 3 percent of the up-scale gas value or ± 1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ± 0.3 percent O₂ for the O₂ channel.

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

- 10.1.4 Up-Scale Calibration Error.** The mean of the difference of the "measurement data phase" readings from the reported standard gas value must be less than or equal to ± 5 percent or ± 1 ppm for CO or ± 0.5 percent O₂, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single "measurement data phase" reading must be less than or equal to ± 2 percent or ± 1 ppm for CO or ± 0.5 percent O₂, 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 O₂ concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the “measurement data phase”.

13.0 Protocol Performance

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

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

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

- 13.2 Interference Check.** Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO₂ gas standards that are generally recognized as representative of diesel-fueled engine NO and NO₂ 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 NO₂ interference response should be less than or equal to ± 5 percent of the up-scale CO calibration gas concentration.

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

- 13.3.1 **Repeatability Check Procedure.** Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.
- 13.3.2 **Repeatability Check Calculations.** Determine the highest and lowest average “measurement data phase” CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ±3 percent or ±1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 Pollution Prevention (Reserved)

15.0 Waste Management (Reserved)

16.0 Alternative Procedures (Reserved)

17.0 References

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

TABLE 1: APPENDIX A—SAMPLING RUN DATA.

	Facility_____	Engine I.D._____	Date_____	
Run	(-)	(-)	(-)	(-)
Type:				
(X)	Pre-Sample Calibration	Stack Gas Sample	Post-Sample Cal. Check	Repeatability Check

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

[78 FR 6721, Jan. 30, 2013]

Appendix C

Subpart IIII – Standards of Performance for Stationary Compressions Ignition Internal
Combustion Engines

This content is from the eCFR and is authoritative but unofficial.

Title 40 —Protection of Environment

Chapter I —Environmental Protection Agency

Subchapter C —Air Programs

Part 60 —Standards of Performance for New Stationary Sources

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

Source: 36 FR 24877, Dec. 23, 1971, unless otherwise noted.

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

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

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?

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

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

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?

§ 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?

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

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?

Other Requirements for Owners and Operators

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

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

Compliance Requirements

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

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

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?

§ 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?

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?

Special Requirements

- § 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?
- § 60.4216 What requirements must I meet for engines used in Alaska?
- § 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

General Provisions

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

Definitions

- § 60.4219 What definitions apply to this subpart?

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

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

Table 3 to Subpart IIII of Part 60

Certification Requirements for Stationary Fire Pump Engines

Table 4 to Subpart IIII of Part 60

Emission Standards for Stationary Fire Pump Engines

Table 5 to Subpart IIII of Part 60

Labeling and Recordkeeping Requirements for New Stationary
Emergency Engines

Table 6 to Subpart IIII of Part 60

Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

Table 7 to Subpart IIII of Part 60

Requirements for Performance Tests for Stationary CI ICE With
a Displacement of ≥ 30 Liters per Cylinder

Table 8 to Subpart IIII of Part 60

Applicability of General Provisions to Subpart IIII

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 paragraphs (a)(1) 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 1039.104, 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 1042.115, 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 paragraphs (a) through (c) of this section, stationary non-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 following locations:
 - (1) Remote areas of Alaska; and
 - (2) Marine offshore installations.
- (g) Notwithstanding the requirements in paragraphs (a) 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 paragraphs (a) through (e) 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 (AECs) 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 AEC 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 AEC 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 paragraphs (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 paragraphs (a) 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 paragraphs (a) 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_x 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_x 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_x 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 ($6.7 \cdot n^{-0.20}$ 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 paragraphs (a) 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 NO_x 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_x 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 paragraphs (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 §§ 60.4204 and 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

§ 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 § 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 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135 and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 1042 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 paragraphs (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 paragraphs (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 paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (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 40 CFR 1068.240 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 paragraphs (d)(2)(i) 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_x 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_x 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 paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, 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 paragraph (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (ii)-(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 paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

- (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 AECs 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 paragraphs (a) 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:

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

Where:

STD = The standard specified for that pollutant in 40 CFR part 1039 or 1042, as applicable.

- (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 § 60.4204(a), § 60.4205(a), or § 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 paragraphs (a) 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 § 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 paragraphs (d)(1) through (3) of this section.
 - (1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

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

Where:

C_i = concentration of NO_x or PM at the control device inlet,

C_o = concentration of NO_x or PM at the control device outlet, and

R = percent reduction of NO_x or PM emissions.

- (2) You must normalize the NO_x or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{\text{adj}} = C_d \frac{5.9}{20.9 - \% \text{ O}_2} \quad (\text{Eq. 3})$$

Where:

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

C_d = Measured concentration of NO_x or PM, uncorrected.

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

$\% \text{O}_2$ = Measured O_2 concentration, dry basis, percent.

- (3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

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

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 4})$$

Where:

F_o = 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_2 , 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 ($\text{dscf}/10^6 \text{ Btu}$).

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

- (ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2 , as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 5})$$

Where:

X_{CO_2} = 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_x and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

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

Where:

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

C_d = Measured concentration of NO_x or PM, uncorrected.

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

- (e) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 7 of this section:

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

Where:

ER = Emission rate in grams per KW-hour.

C_d = Measured NO_x concentration in ppm.

1.912×10^{-3} = Conversion constant for ppm NO_x 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:

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

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = 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 paragraphs (a)(1)(i) through (v) of this section. Beginning on February 26, 2025, submit the notification electronically according to paragraph (g) 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) (<https://cdx.epa.gov/>). 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 paragraph (g) 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 paragraphs (f)(1) and (2) 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 (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) 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 paragraph (g) 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 oaqpscbi@epa.gov, 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 oaqpscbi@epa.gov 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 paragraphs (i)(1) 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_x 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_x 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 paragraph (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 40 CFR part 1042 for the same model year, displacement, and maximum engine power, as appropriate, rather than the otherwise applicable requirements of 40 CFR part 1039, as indicated in §§ 60.4201(f) and 60.4202(g).

- (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 81 FR 44219, July 7, 2016; 86 FR 34359, 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 40 CFR 1068.10 and 1068.11 apply for engine manufacturers. For others, the general confidential business information (CBI) provisions apply as described in 40 CFR part 2.

[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 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	HC	NO _x	CO	PM
KW<8	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)

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 _x	HC	NO _x	CO	PM
(HP<11)					
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (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 § 60.4202(A)(1), YOU MUST COMPLY WITH THE FOLLOWING EMISSION STANDARDS]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO _x + NMHC	CO	PM
KW<8 (HP<11)	2008 +	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008 +	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO _x + NMHC	CO	PM
19≤KW<37 (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 power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d) ¹
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

¹ 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)		
		NMHC + NO _x	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)
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	2008 and	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)

¹ 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.

² 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.

³ 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.

Maximum engine power	Model year(s)	Emission standards for stationary fire pump engines in g/KW-hr (g/HP-hr)		
		NMHC + NO _x	CO	PM
(300≤HP<600) 225≤KW<450	earlier 2009 + ³	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)
(300≤HP<600) 450≤KW≤560	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
(600≤HP≤750) 450≤KW≤560	2009 +	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)
(600≤HP≤750) 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)

¹ 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.

² 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.

³ 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 ¹	Torque (percent) ²	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

¹ Engine speed: ± 2 percent of point.

² Torque: NFPA certified nameplate HP for 100 percent point. All points should be ± 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 ≥ 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 _x 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 NO _x , O ₂ , 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

Each	Complying with the requirement to	You must	Using	According to the following requirements
		ii. Measure O₂ at the inlet and outlet of the control device; iii. If necessary, measure moisture content at the inlet and outlet of the control device; and iv. Measure NO_x at the inlet and outlet of the control device.	(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 (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) (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)	testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4. (b) Measurements to determine O₂ concentration must be made at the same time as the measurements for NO_x concentration. (c) Measurements to determine moisture content must be made at the same time as the measurements for NO_x concentration. (d) NO_x 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. (a) For NO_x, 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
	b. Limit the concentration of NO _x in the stationary CI internal combustion	i. Select the sampling port location and number/ location of traverse		

Each	Complying with the requirement to	You must	Using	According to the following requirements
	engine exhaust.	points at the exhaust of the stationary internal combustion engine; ii. Determine the O₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and iv. Measure NO_x at the exhaust of	(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 (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) (3) Method 7E of 40 CFR part 60,	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-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. (b) Measurements to determine O₂ concentration must be made at the same time as the measurement for NO_x concentration. (c) Measurements to determine moisture content must be made at the same time as the measurement for NO_x concentration. (d) NO_x concentration must be at 15 percent O₂, dry basis. Results of this test consist of the average of the

Each	Complying with the requirement to	You must	Using	According to the following requirements
		the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points; ii. Measure O ₂ at the inlet and outlet of the control device; iii. If necessary, measure moisture content at the inlet and outlet of the control device; and iv. Measure PM at the inlet and outlet of the control device.	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1 (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 (3) Method 4 of 40 CFR part 60, appendix A-3 (4) Method 5 of 40 CFR part 60, appendix A-3	(a) Sampling sites must be located at the inlet and outlet of the control device. (b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration. (c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration. (d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the	i. Select the	(1) Method 1	(a) If using a control device, the

Each	Complying with the requirement to	You must	Using	According to the following requirements
	concentration of PM in the stationary CI internal combustion engine exhaust	sampling port location and the number of traverse points; ii. Determine the O₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and iv. Measure PM at the exhaust of the stationary internal combustion engine.	or 1A of 40 CFR part 60, appendix A-1 (2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 (3) Method 4 of 40 CFR part 60, appendix A-3 (4) Method 5 of 40 CFR part 60, appendix A-3	sampling site must be located at the outlet of the control device. (b) Measurements to determine O₂ concentration must be made at the same time as the measurements for PM concentration. (c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration. (d) PM 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.

[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 Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	Yes	Additional terms defined in § 60.4219.
§ 60.2	Definitions	Yes	
§ 60.3	Units and abbreviations	Yes	
§ 60.4	Address	Yes	
§ 60.5	Determination of construction or modification	Yes	
§ 60.6	Review of plans	Yes	Except that § 60.7 only applies as specified in § 60.4214(a).
§ 60.7	Notification and Recordkeeping	Yes	
§ 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	Requirements are specified in subpart IIII.
§ 60.10	State Authority	Yes	
§ 60.11	Compliance with standards and maintenance requirements	No	
§ 60.12	Circumvention	Yes	Except that § 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§ 60.13	Monitoring requirements	Yes	
§ 60.14	Modification	Yes	
§ 60.15	Reconstruction	Yes	
§ 60.16	Priority list	Yes	
§ 60.17	Incorporations by reference	Yes	
§ 60.18	General control device requirements	No	
§ 60.19	General notification and reporting	Yes	

General Provisions citation	Subject of citation	Applies to subpart	Explanation
	requirements		