

DRAFT MINOR SOURCE AIR PERMIT

PERMIT NUMBER: 2198-AR-3

IS ISSUED TO:

Federal Bureau of Prisons - Federal Correctional Complex
1301 Dale Bumpers Road
Forrest City, AR 72335
St. Francis County
AFIN: 62-00118

THIS PERMIT IS THE ABOVE REFERENCED PERMITTEE'S AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DIVISION OF ENVIRONMENTAL QUALITY'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. § 8-4-101 *ET SEQ.*) AND THE RULES PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:	
Demetria Kimbrough	Date
Associate Director, Office of Air Quality	

Division of Environmental Quality

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List of Acronyms and Abbreviations

Ark. Code Ann. Arkansas Code Annotated

AFIN Arkansas DEQ Facility Identification Number

C.F.R. Code of Federal Regulations

CO Carbon Monoxide

COMS Continuous Opacity Monitoring System

HAP Hazardous Air Pollutant

Hp Horsepower

lb/hr Pound Per Hour

NESHAP National Emission Standards (for) Hazardous Air Pollutants

No. Number

NO_x Nitrogen Oxide

NSPS New Source Performance Standards

PM Particulate Matter

PM₁₀ Particulate Matter Equal To Or Smaller Than Ten Microns

PM_{2.5} Particulate Matter Equal To Or Smaller Than 2.5 Microns

SO₂ Sulfur Dioxide

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

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Section I: FACILITY INFORMATION

PERMITTEE: Federal Bureau of Prisons - Federal Correctional Complex

AFIN: 62-00118

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FACILITY ADDRESS: 1301 Dale Bumpers Road

Forrest City, AR 72335

MAILING ADDRESS: P.O. Box 7000

Forrest City, AR 72336-7000

COUNTY: St. Francis County

CONTACT NAME: Jared Hess

CONTACT POSITION: Facilities Manager

TELEPHONE NUMBER: (870) 630-6000

REVIEWING ENGINEER: Jesse Smith

UTM North South (Y): Zone 15: 3873053.76 m

UTM East West (X): Zone 15: 700629.34 m

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Section II: INTRODUCTION

Summary of Permit Activity

The Federal Bureau of Prisons operates a Federal Correctional Complex (FCC) in Forrest City, Arkansas. Air emissions from several combustion sources and furniture construction operations are permitted under a minor source air permit. With this modification, the facility is adding coating, staining, and topcoat operations, replacing a current emergency generator with two newer models, and adding an additional boiler. HAP emissions have also been added where appropriate for existing sources. Changes to permitted emissions are as follows: increase of 1.8 tpy PM/PM₁₀, decrease of 1.1 tpy SO₂, increase of 2.1 tpy VOC, increase of 0.2 tpy CO, increase of 1.6 tpy NO_x, increase of 4.82 tpy Single HAP, and increase of 8.31 tpy Total HAP.

Process Description

FCC Forrest City is a Federal Correctional complex operated by the United States Government under NAICS code 922140, Correctional Institutions. The facility is generally designed for the confinement, correction, and rehabilitation of adult offenders sentenced by the court.

The facility has a number of combustion sources. There are 23 natural gas fired boilers (SN-004 through SN-025 and SN-033) with no auxiliary fuel source. The facility also has three 14 MMBtu/hr natural gas-fired boilers (SN-001 through SN-003), which have the capability of burning #2 fuel oil as a back-up source. SN-001 through SN-003 are all subject to 40 CFR Part 60, Subpart Dc. These boilers are not subject to 40 CFR Part 63, Subpart JJJJJJ because they are defined as gas-fired boilers.

The facility has four diesel-fired generators classified for emergency use only (SN-027, SN-028, SN-044, and SN-045); these engines are not affected sources under 40 CFR Part 63, Subpart ZZZZ because they are defined as institutional emergency stationary RICE.

Many of the combustion sources are classified as insignificant activities. Insignificant activities in the B category include: 34 natural gas-fired water heaters (B-73); 48 natural gas-fired heating units (B-2); and 10 natural gas-fired clothes dryers (B-8).

The facility has one gasoline storage tank (SN-030) and eight diesel fuel/No. 2 fuel oil storage tanks, all of which are above ground. SN-030 is subject to federal regulation under 40 CFR Part 63, Subpart CCCCCC.

Some furniture gluing operations also take place at the facility. Gluing operations are permitted as SN-029. The facility is not permitted to use glues that contain hazardous air pollutants.

The facility also performs coating and spraying operations including a spray booth, curing, staining and topcoat operations (SN-031, SN-032, and SN-034 through SN-043) associated with wooden panels for office furnishings and courtroom seating.

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Rules and Regulations

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

Rules and Regulations
Arkansas Air Pollution Control Code, Rule 18, effective March 14, 2016
Rules of the Arkansas Plan of Implementation for Air Pollution Control, Rule 19, effective May 6, 2022
40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial- Commercial- Institutional Steam Generating Units (Appendix A)
40 CFR Part 63, Subpart CCCCCC - National Emission Standard for Hazardous Air Pollutants (NESHAP) for Gasoline Dispensing Facilities (Appendix B)
40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Total Allowable Emissions

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

TOTAL ALLOWABLE EMISSIONS			
Pollutant	Emiss	ion Rates	
Foliutant	lb/hr	tpy	
PM	7.9	7.3	
PM ₁₀	7.9	7.3	
PM _{2.5}	See Note*		
SO_2	46.4	15.9	
VOC	13.7	9.0	
СО	42.8	39.7	
NO _x	176.3 79.7		
Single HAP	10.27	4.82	
Total HAP	13.40	9.12	

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

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Section III: PERMIT HISTORY

2198-A: Was the initial permit for this facility, issued on March 5, 2010. The original

permit included annual permitted emissions of 5.5 tons of PM/PM₁₀, 17.0 tons of

SO₂, 5.7 tons of VOC, 39.5 tons of CO, and 78.1 tons of NO_x.

2198-AR-1: This permit was issued on November 7, 2014. With this modification, the facility included the provisions of 40 CFR Part 63, Subpart CCCCCC for the 12,000

gallon gasoline storage tank located at the facility. In addition, the gasoline tank was permitted as SN-030 and removed from the insignificant activities list.

Overall permitted annual emissions increased by 0.9 ton of VOC and 0.64 ton of

total combined HAPs.

2198-AR-2: This permit was issued on April 15, 2016. With this modification, the facility increased the annual throughput limit for the 12,000 gallon gasoline tank (SN-

030) from 24,000 gallon to 84,000 gallon per rolling 12 month period. The permitted annual emission rate increased by 0.3 tpy VOC and 0.17 tpy total

HAPs.

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Section IV: EMISSION UNIT INFORMATION

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. [Rule 19.501 *et seq.* 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
		PM_{10}	0.2	0.6
		SO_2	7.1	2.6
001	14 MMBtu/hr Boiler	VOC	0.2	0.4
		СО	1.2	5.3
		NO_x	2.0	6.8
		PM ₁₀	0.2	0.6
		SO_2	7.1	2.6
002	14 MMBtu/hr Boiler	VOC	0.2	0.4
		СО	1.2	5.3
		NO _x	2.0	6.8
		PM ₁₀	0.2	0.6
		SO_2	7.1	2.6
003	14 MMBtu/hr Boiler	VOC	0.2	0.4
		СО	1.2	5.3
		NO_x	2.0	6.8
		PM_{10}	0.1	2.4*
		SO_2	0.1	2.2*
004	0.525 MMBtu/hr Boiler	VOC	0.1	2.2*
		СО	0.1	14.2*
		NO_x	0.1	17.0*
		PM ₁₀	0.1	*
		SO_2	0.1	*
005	0.525 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.1	*
		NO _x	0.1	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
006	3.25 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.3	*
		NO_x	0.4	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
007	3.25 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.3	*
		NO _x	0.4	*

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SN	Description	Pollutant	lb/hr	tpy
		PM ₁₀	0.1	*
		SO_2	0.1	*
008	1.375 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.2	*
		NO_x	0.2	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
009	1.375 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.2	*
		NO_x	0.2	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
010	1.75 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.2	*
		NO_x	0.2	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
011	1.75 MMBtu/hr Boiler	VOC	0.1	*
	1,0 1,11,12,11,11, 2,11,12	CO	0.2	*
		NO_x	0.2	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
012	1.5 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.2	*
		NO_x	0.2	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
013	1.5 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.2	*
		NO_x	0.2	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
014	0.8 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.1	*
		NO_x	0.1	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
015	0.8 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.1	*
		NO_x	0.1	*
		PM ₁₀	0.1	*
016	0.35 MMBtu/hr Boiler	SO_2	0.1	*
		VOC	0.1	*

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SN	Description	Pollutant	lb/hr	tpy
		СО	0.1	*
		NO_x	0.1	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
017	0.35 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.1	*
		NO_x	0.1	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
018	2.75 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.3	*
		NO_x	0.3	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
019	2.75 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.3	*
		NO_x	0.3	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
020	2.75 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.3	*
		NO_x	0.3	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
021	2.75 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.3	*
		NO_x	0.3	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
022	2.75 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.3	*
		NO_x	0.3	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
023	2.75 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.3	*
		NO_x	0.3	*
		PM ₁₀	0.1	*
		SO_2	0.1	*
024	1.05 MMBtu/hr Boiler	VOC	0.1	*
		CO	0.1	*
		NO_x	0.2	*
025	1.05 MMBtu/hr Boiler	PM ₁₀	0.1	*

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SN	Description	Pollutant	lb/hr	tpy
		SO_2	0.1	*
		VOC	0.1	*
		CO	0.1	*
		NO_x	0.2	*
	GEN-1-FOR	PM ₁₀	1.6	0.4
	Emergency Diesel Generator	SO_2	9.0	2.3
027	(4RB/CI/2220hp)	VOC	1.6	0.4
	(installed 2001)	CO	12.3	3.1
	(filstaffed 2001)	NO_x	53.3	13.4
	GEN-2-FOR	PM_{10}	1.6	0.4
	Emergency Diesel Generator	SO_2	9.0	2.3
028	(4RB/CI/2220hp)	VOC	1.6	0.4
	(installed 2001)	CO	12.3	3.1
	(installed 2001)	NO_x	53.3	13.4
029	Unicor Gluing Operation	VOC	0.5	1.0
030	12,000 gallon Gasoline Tank	VOC	0.9	1.2
031	Englaced Spray Death	PM_{10}	0.1	0.2
031	Enclosed Spray Booth	VOC	1.5	0.3
032	Spray Booth Drying Oven	PM_{10}	0.1	0.2
		PM_{10}	0.1	0.1
		SO_2	0.1	0.1
033	2.5 MMBtu/hr Boiler	VOC	0.1	0.2
		CO	0.2	0.8
		NO_x	0.3	0.9
024	A-4 1 C4- : D - 41	PM ₁₀	0.1	0.2
034	Automated Staining Booth	VOC	3.2	1.5
035	Automated Coating Wiper (Stack #1)	PM ₁₀	0.1	0.1
036	Automated Coating Wiper (Stack #2)	PM ₁₀	0.1	0.1
037	Automated Stainer Oven (Stack #1)	PM ₁₀	0.1	0.2
038	Automated Stainer Oven (Stack #2)	PM ₁₀	0.1	0.2
020	Ì	PM ₁₀	0.1	0.2
039	Automated UV Topcoat Booth	VOC	0.3	0.2
040	Automated UV Topcoat Oven 3	PM_{10}	0.1	0.2
041	Automated UV Topcoat Oven 4	PM_{10}	0.1	0.2

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SN	Description	Pollutant	lb/hr	tpy
042	UV Topcoat Curing Oven (Stack #1)	PM ₁₀	0.1	0.1
043	UV Topcoat Curing Oven (Stack #2)	PM ₁₀	0.1	0.1
		PM ₁₀	0.3	0.1
	Emergency Diesel Generator	SO_2	2.4	0.6
044	(4RB/CI/2220hp)	VOC	0.6	0.2
	(installed 2020)	CO	5.0	1.3
		NO_x	29.3	7.3
		PM_{10}	0.3	0.1
	Emergency Diesel Generator	SO_2	2.4	0.6
045	(4RB/CI/2220hp)	VOC	0.6	0.2
	(installed 2020)	CO	5.0	1.3
		NO _x	29.3	7.3

^{*}Total annual emissions from SN-004 through SN-025.

2. The permittee shall not exceed the emission rates set forth in the following table. [Rule 18.801 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
		PM	0.2	0.6
001	14 MMBtu/hr Boiler	Single HAP	3.30	1.36
		Total HAP	4.11	2.11
		PM	0.2	0.6
002	14 MMBtu/hr Boiler	Single HAP	3.30	1.36
		Total HAP	4.11	2.11
		PM	0.2	0.6
003	14 MMBtu/hr Boiler	Single HAP	3.30	1.36
		Total HAP	4.11	2.11
		PM	0.1	2.4*
004	0.525 MMBtu/hr Boiler	Single HAP	0.01	0.47*
		Total HAP	0.01	1.71*
		PM	0.1	*
005	0.525 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.01	*
		PM	0.1	*
006	3.25 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.04	*
		PM	0.1	*
007	3.25 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.04	*

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SN	Description	Pollutant	lb/hr	tpy
		PM	0.1	*
008	1.375 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.02	*
		PM	0.1	*
009	1.375 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.02	*
		PM	0.1	*
010	1.75 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.02	*
		PM	0.1	*
011	1.75 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.02	*
		PM	0.1	*
012	1.5 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.02	*
		PM	0.1	*
013	1.5 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.02	*
		PM	0.1	*
014	0.8 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.01	*
		PM	0.1	*
015	0.8 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.01	*
		PM	0.1	*
016	0.35 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.01	*
		PM	0.1	*
017	0.35 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.01	*
		PM	0.1	*
018	2.75 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.04	*
		PM	0.1	*
019	2.75 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.04	*
		PM	0.1	*
020	2.75 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.04	*
		PM	0.1	*
021	2.75 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.04	*

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SN	Description	Pollutant	lb/hr	tpy
		PM	0.1	*
022	2.75 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.04	*
		PM	0.1	*
023	2.75 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.04	*
		PM	0.1	*
024	1.05 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.02	*
		PM	0.1	*
025	1.05 MMBtu/hr Boiler	Single HAP	0.01	*
		Total HAP	0.02	*
	GEN-1-FOR	PM	1.6	0.4
027	Emergency Diesel Generator	Single HAP	0.02	0.01
	(4RB/CI/2220hp)	Total HAP	0.11	0.03
	GEN-2-FOR	PM	1.6	0.4
028	Emergency Diesel Generator	Single HAP	0.02	0.01
	(4RB/CI/2220hp)	Total HAP	0.11	0.03
020	•	Single HAP	_	0.17
030	12,000 gallon Gasoline Tank	Total HAP	-	0.81
		PM	0.1	0.2
031	Enclosed Spray Booth	Single HAP	0.02	0.01
	1 2	Total HAP	0.02	0.01
032	Spray Booth Drying Oven	PM	0.1	0.2
		PM	0.1	0.1
033	2.5 MMBtu/hr Boiler	Single HAP	0.01	0.04
		Total HAP	0.03	0.13
		PM	0.1	0.2
034	Automated Staining Booth	Single HAP	0.04	0.01
		Total HAP	0.04	0.01
035	Automated Coating Wiper (Stack #1)	PM	0.1	0.1
036	Automated Coating Wiper (Stack #2)	PM	0.1	0.1
037	Automated Stainer Oven (Stack #1)	PM	0.1	0.2
038	Automated Stainer Oven (Stack #2)	PM	0.1	0.2
039	Automated UV Topcoat Booth	PM	0.1	0.2
040	Automated UV Topcoat Oven 3	PM	0.1	0.2

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SN	Description	Pollutant	lb/hr	tpy
041	Automated UV Topcoat Oven 4	PM	0.1	0.2
042	UV Topcoat Curing Oven (Stack #1)	PM	0.1	0.1
043	UV Topcoat Curing Oven (Stack #2)	PM	0.1	0.1
044	Emergency Diesel Generator (4RB/CI/2220hp) (installed 2020)	PM Single HAP Total HAP	0.3 0.02 0.11	0.1 0.01 0.03
045	Emergency Diesel Generator (4RB/CI/2220hp) (installed 2020)	PM Single HAP Total HAP	0.3 0.02 0.11	0.1 0.01 0.03

^{*}Total annual emissions from SN-004 through SN-025.

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN(s)	Limit	Regulatory Citation
001-003	5% (during natural gas combustion)	Rule 18.501
001-003	20% (during No. 2 FO combustion)	Rule 19.503
004-025, 033	5%	Rule 18.501
027, 028, 044, 045	20%	Rule 19.503
031, 032, 034-043	5%	Rule 19.503

- 4. The permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Rule #18, if the emission of the air contaminant constitutes air pollution within the meaning of Ark. Code Ann. §8-4-303. [Rule 18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 5. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [Rule 18.901 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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SN-001 through SN-003 Conditions

6. The permittee shall fire only pipeline quality natural gas or #2 fuel oil with a sulfur content no greater than 0.5% by weight in SN-001, SN-002, and SN-003. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

- 7. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #6. The permittee shall maintain records of the sulfur content of each #2 fuel oil delivery. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records on-site and make the records available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 8. The permittee shall not use more than 73,080 gallons of #2 fuel oil for sources SN-001, SN-002, and SN-003, each, per rolling 12-month period. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 9. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition #8. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee will keep the records onsite, and make the records available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 10. The permittee shall only fire #2 fuel oil in SN-001 through SN-003 during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. If the permittee fires #2 fuel oil for other reasons than those identified above, the boiler will become subject to 40 CFR Part 63, Subpart JJJJJJ and will have to immediately begin complying with applicable requirements of Subpart JJJJJJ. [Rule 19.304 and 40 C.F.R. § 63 Subpart JJJJJJ]
- 11. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #10. The permittee shall document each use of #2 fuel oil, the purpose of the use, and the duration of #2 fuel oil usage. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The records shall be maintained on-site and made available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

SN-004 through SN-025 and SN-033 Conditions

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12. The permittee shall fire sources SN-004 through SN-025 and SN-033 only with pipeline quality natural gas. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

13. The permittee will maintain on site a listing of boilers included in sources SN-004 through SN-025. This listing will include, as a minimum, source numbers, serial numbers, and maximum design heat input, in BTU/hr. Individual boilers in this group may be replaced and new boiler equipment added without notification to the department, provided that: (a) the total maximum design heat input for all boilers in this group does not exceed 37.7MM BTU/hr; (b) that the replacement boilers are fired by pipeline natural gas only; (c) that no individual boiler has a maximum design heat input equal to or greater than 10 MM BTU/hr; and (d) that the replacement does not violate any regulations promulgated by the EPA. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

SN-027, SN-028, SN-044, and SN-045 Conditions

- 14. The permittee shall not operate the emergency generator (SN-027, SN-028, SN-044, and SN-045) in excess of 500 total hours (emergency and non-emergency) per engine per rolling 12 month period in order to demonstrate compliance with the annual emission rate limits. SN-026, SN-027, and SN-028 shall be equipped with non-resettable hour meters. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with Rule 19 §19.602 and other applicable regulations. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 15. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition #14. The permittee shall update the 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 and made available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 16. SN-027 and SN-028 shall only fire #2 fuel oil with sulfur content no greater than 0.5% by weight. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 17. The permittee shall maintain monthly records of the sulfur content of each #2 fuel oil delivery to demonstrate compliance with Specific Condition #16. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records onsite and make the records available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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NSPS IIII Conditions

18. SN-044 and SN-045 are subject to 40 C.F.R. § 60 Subpart IIII. The permittee shall comply with all applicable provisions of 40 C.F.R. § 60 Subpart IIII which includes, but is not limited to, Specific Conditions #19 through #30. [Rule 19.304 and 40 C.F.R. § 60 Subpart IIII]

- 19. The provisions of 40 C.F.R. Part 60 Subpart IIII are applicable to owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines. For the purposes of 40 C.F.R. Part 60 Subpart IIII, the date that construction commences is the date the engine is ordered by the owner or operator. [Rule 19.304 and 40 C.F.R. §60.4200(a)(2)(i)]
- 20. 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. [Rule 19.304 and 40 C.F.R. §60.4205(b)]
- 21. Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a). [Rule 19.304 and 40 C.F.R. §60.4207(a)]
- 22. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [Rule 19.304 and 40 C.F.R. §60.4207(b)]
- 23. Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section. [Rule 19.304 and 40 C.F.R. §60.4207(c)]
- 24. 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. [Rule 19.304 and 40 C.F.R. §60.4209(a)]
- 25. 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. [Rule 19.304 and 40 C.F.R. §60.4209(b)]

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26. 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 parts 89, 94 and/or 1068, as they apply to you.

[Rule 19.304 and 40 C.F.R. §60.4211(a)]

- 27. 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. [Rule 19.304 and 40 C.F.R. §60.4211(c)]
- 28. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
 - 1. There is no time limit on the use of emergency stationary ICE in emergency situations.
 - 2. You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and

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transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

- ii. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- iii. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- 3. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - 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

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authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [Rule 19.304 and 40 C.F.R. §60.4211(f)]

- 29. 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.

[Rule 19.304 and 40 C.F.R. §60.4211(g)]

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30. 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. [Rule 19.304 and 40 C.F.R. §60.4214(b)]

SN-029 Conditions

- 31. The permittee shall use no more than 185,860 lb of adhesives per rolling 12-month period in the Unicor Gluing Operation. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 32. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #30. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records onsite and make the records available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 33. The permittee may use various adhesives in the Unicor Gluing Operation, but the VOC content of any adhesive used shall not exceed 1.0 % by weight. Any adhesives used shall not contain hazardous air pollutants (HAPs). [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 34. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #33. These records shall consist of up-to-date MSDS documents for each of the adhesives used. The permittee shall keep the records onsite and make the records available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

SN-030 Conditions

35. The permittee shall not exceed a throughput of 84,000 gallons of gasoline per rolling 12-month period in SN-030. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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36. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #35. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records onsite and make the records available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

NSPS Dc Conditions

- 37. Sources SN-001, SN-002, and SN-003 are subject to the provisions of 40 CFR Part 60, Subpart A General Provisions and 40 CFR Part 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units due to dates of installation. A copy of Subpart Dc has been included in Appendix A of this permit. [Rule 19.304 and 40 C.F.R. § 60 Subpart Dc]
- 38. The permittee shall record and maintain records of the amount of natural gas and diesel fuel used each month for SN-001, SN-002, and SN-003, individually. 40 CFR Part 60, Subpart Dc requires facilities to record the daily amounts of fuel used. However, the Department has been granted permission to only require monthly recording when the boiler burns only natural gas or #2 fuel oil. This determination may be found in the EPA's Determination Detail (Control Number: 9300003). The amount of natural gas used may be computed from hours of operation multiplied by maximum design gas input in scf/hr. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 39. All records of natural gas usage and #2 fuel oil usage at SN-001, SN-002, and SN-003 shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [Rule 19.304 and 40 C.F.R. § 60.48c(i)]

NESHAP CCCCC Conditions

- 40. SN-030 is subject to 40 CFR Part 63, Subpart CCCCCC. The permittee shall comply with all applicable provisions of 40 CFR Part 63, Subpart CCCCCC which includes, but is not limited to Specific Conditions 41 through 46. The compliance date of existing sources was January 10, 2011. [Rule 19.304 and 40 C.F.R. § 63 Subpart CCCCCC]
- 41. SN-030 has a reported throughput of less than 10,000 gallons per month; therefore, SN-030 is subject and must comply with the requirements of 40 CFR §63.11116. [Rule 19.304 and 40 C.F.R. § 63.11111(b)]
- 42. The permittee, upon request by the Administrator, shall demonstrate that their monthly throughput is less than the 10,000 gallon threshold level. These records shall be kept for a period of 5 years. [Rule 19.304 and 40 C.F.R. § 63.11111(e)]

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43. If SN-030's throughput ever reaches or exceeds 10,000 gallons per month, SN-030 will be subject and remain subject to the requirements for sources that process 10,000 gallons or more per month, even if the affected source's throughput later falls below 10,000 gallons per month. [Rule 19.304 and 40 C.F.R. § 63.11111(i)]

- 44. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [Rule 19.304 and 40 C.F.R. § 63.11115(a)]
- 45. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [Rule 19.304 and 40 C.F.R. § 63.11116(a)]
 - a. Minimize gasoline spills;
 - b. Clean up spills as expeditiously as practicable;
 - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- 46. The permittee is not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of 40 CFR Part 63, but the permittee must have records available within 24 hours of a request by the Administrator to document the facility's gasoline throughput. [Rule 19.304 and 40 C.F.R. § 63.11116(b)]

SN-031, SN-032, and SN-034 through SN-043 Conditions

- 47. The permittee shall not exceed a throughput of 3,190 gallons of water-reducible wood stain, 5,780 gallons of waterborne ultraviolet top coating, or 2,320 gallons of lacquer clear coating per rolling 12-month period in SN-031. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 48. The permittee shall not exceed a throughput of 14,000 gallons of water-reducible wood stain per rolling 12-month period in SN-034. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 49. The permittee shall not exceed a throughput of 25,000 gallons of waterborne ultraviolet top coating per rolling 12-month period in SN-039. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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50. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #47, #48, and #49. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee shall keep the records onsite and make the records available to Department personnel upon request. [Rule 19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

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Section V: 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 Rule 18 and Rule 19 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 December 1, 2008. [Rule 19.408 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

Description	Category
DAY-TNK-1 500 gal diesel	A-3
DAY-TNK-2 500 gal diesel	A-3
FUEL-DAY 500 gal diesel	A-3
TANK-1 12,000 gal diesel	A-13
TANK-3 8,000 gal diesel	A-3
TNK-1 15,500 gal #2 fuel oil	A-13
TNK-2 20,000 gal diesel	A-13

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Section VI: GENERAL CONDITIONS

- 1. Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Rule 18 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 Rule 18 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 that specify and reference Arkansas Pollution Control & Ecology Commission Rule 18 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.
- 2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the rules promulgated under the Act. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 3. The permittee shall notify the Division of Environmental Quality in writing within thirty (30) days after each of the following events: commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [Rule 19.704 and/or Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [Rule 19.410(B) and/or Rule 18.309(B) and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 5. The permittee must keep records for five years to enable the Division of Environmental Quality to determine compliance with the terms of this permit such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Division of Environmental Quality may use the records, at the discretion of the Division of Environmental Quality, to determine compliance with the conditions of the permit. [Rule 19.705 and/or Rule 18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Division of Environmental Quality electronically using https://eportal.adeq.state.ar.us or mail them to the address below. [Rule 19.705 and/or Rule 18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

Division of Environmental Quality Office of Air Quality

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ATTN: Compliance Inspector Supervisor

5301 Northshore Drive

North Little Rock, AR 72118-5317

- 7. The permittee shall test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or 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) existing equipment already operating according to the time frames set forth by the Division of Environmental Quality. 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 must submit compliance test results to the Division of Environmental Quality within sixty (60) calendar days after the completion of testing. [Rule 19.702 and/or Rule 18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 8. The permittee shall provide: [Rule 19.702 and/or Rule 18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
 - 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
- 9. The permittee shall operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee shall maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [Rule 19.303 and/or Rule 18.1104 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Division of Environmental Quality may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [Rule 19.601 and/or Rule 18.1101 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
 - a. The permittee demonstrates to the satisfaction of the Division of Environmental Quality that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.
 - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, overnight delivery, or online at https://eportal.adeq.state.ar.us) to the Division of Environmental Quality by the

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end of the next business day after the occurrence or the discovery of the occurrence.

- c. The permittee must submit to the Division of Environmental Quality, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.
- 11. The permittee shall allow representatives of the Division of Environmental Quality upon the presentation of credentials: [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
 - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act;
 - c. To inspect any monitoring equipment or monitoring method required in this permit;
 - d. To sample any emission of pollutants; and
 - e. To perform an operation and maintenance inspection of the permitted source.
- 12. The Division of Environmental Quality issued this permit in reliance upon the statements and presentations made in the permit application. The Division of Environmental Quality has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 13. The Division of Environmental Quality may revoke or modify this permit when, in the judgment of the Division of Environmental Quality, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the rules promulgated the Arkansas Water and Air Pollution Control Act. [Rule 19.410(A) and/or Rule 18.309(A) and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Division of Environmental Quality and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Division of Environmental Quality denies the request to transfer within thirty (30) days of the receipt of the

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disclosure statement. The Division of Environmental Quality may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [Rule 19.407(B) and/or Rule 18.307(B) and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]

- 15. This permit shall be available for inspection on the premises where the control apparatus is located. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 16. This permit authorizes only those pollutant emitting activities addressed herein. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 17. This permit supersedes and voids all previously issued air permits for this facility. [Rule 18 and/or Rule 19 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. § 8-4-304 and 8-4-311]
- 18. The permittee must pay all permit fees in accordance with the procedures established in Rule 9. [Ark. Code Ann. § 8-1-105(c)]
- 19. 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.

[Rule 18.314(A) and/or Rule 19.416(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]

- 20. 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;

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- 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.

[Rule 18.314(B) and/or Rule 19.416(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]

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

[Rule 18.314(C) and/or Rule 19.416(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]

22. Any credible evidence based on sampling, monitoring, and reporting may be used to determine violations of applicable emission limitations. [Rule 18.1001, Rule 19.701, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

Appendix A

40 C.F.R. Part 60 Subpart Dc

Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source:72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

- (a) Except as provided in <u>paragraphs</u> (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).
- (b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, § 60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.
- (c) Steam generating units that meet the applicability requirements in <u>paragraph (a)</u> of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§ 60.42c, § 60.43c, § 60.44c, § 60.45c, § 60.46c, or § 60.47c) during periods of combustion research, as defined in § 60.41c.
- (d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under § 60.14.
- (e) Affected facilities (*i.e.* heat recovery steam generators and fuel heaters) that are associated with stationary combustion turbines and meet the applicability requirements of <u>subpart KKKK</u> of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators, fuel heaters, and other affected facilities that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/h) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/h) heat input of fossil fuel. If the heat recovery steam generator, fuel heater, or other affected facility is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)
- (f) Any affected facility that meets the applicability requirements of and is subject to subpart AAAA or <u>subpart CCCC</u> of this part is not subject to this subpart.
- (g) Any facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject to this subpart.

- (h) Affected facilities that also meet the applicability requirements under subpart J or <u>subpart</u> <u>Ja of this part</u> are subject to the PM and NO_X standards under this subpart and the SO₂ standards under subpart J or <u>subpart</u> Ja of this part, as applicable.
- (i) Temporary boilers are not subject to this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.41c Definitions.

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

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see § 60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.*, the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17), diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see § 60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see § 60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see § 60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see § 60.17).

Dry flue gas desulfurization technology means a SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under § 60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means:

- (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
- (2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see § 60.17); or
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel

and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO₂ emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

- (1) The equipment is attached to a foundation.
- (2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.
- (3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- (4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.42c Standard for sulfur dioxide (SO₂).

- (a) Except as provided in <u>paragraphs</u> (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.
- (b) Except as provided in <u>paragraphs</u> (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that:
 - (1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:
 - (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO₂ emission rate (80 percent reduction); nor
 - (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO₂ emissions limit or the 90 percent SO₂ reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.
 - (2) Combusts only coal and that uses an emerging technology for the control of SO₂ emissions shall neither:
 - (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 50 percent (0.50) of the potential SO₂ emission rate (50 percent reduction); nor
 - (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO₂ reduction requirement specified in this paragraph and the emission limit determined pursuant to <u>paragraph (e)(2)</u> of this section.

- (c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).
 - (1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/h) or less;
 - (2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.
 - (3) Affected facilities located in a noncontinental area; or
 - (4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.
- (d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.
- (e) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the following:
 - (1) The percent of potential SO_2 emission rate or numerical SO_2 emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that
 - (i) Combusts coal in combination with any other fuel;
 - (ii) Has a heat input capacity greater than 22 MW (75 MMBtu/h); and
 - (iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and
 - (2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_{s} = \frac{\left(K_{a}H_{a} + K_{b}H_{b} + K_{c}H_{c}\right)}{\left(H_{a} + H_{b} + H_{c}\right)}$$

Where:

 $E_s = SO_2$ emission limit, expressed in ng/J or lb/MMBtu heat input;

 $K_a = 520 \text{ ng/J } (1.2 \text{ lb/MMBtu});$

 $K_b = 260 \text{ ng/J } (0.60 \text{ lb/MMBtu});$

 $K_c = 215 \text{ ng/J } (0.50 \text{ lb/MMBtu});$

 H_a = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

 H_b = Heat input from the combustion of coal in an affected facility subject to <u>paragraph (b)(2)</u> of this section, in J (MMBtu); and

 H_c = Heat input from the combustion of oil, in J (MMBtu).

- (f) Reduction in the potential SO_2 emission rate through fuel pretreatment is not credited toward the percent reduction requirement under <u>paragraph</u> (b)(2) of this section unless:
 - (1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO₂ emission rate; and
 - (2) Emissions from the pretreated fuel (without either combustion or post-combustion SO₂ control) are equal to or less than the emission limits specified under <u>paragraph (b)(2)</u> of this section.
- (g) Except as provided in <u>paragraph (h)</u> of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.
- (h) For affected facilities listed under <u>paragraphs</u> (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f), as applicable.
 - (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

- (2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).
- (3) Coal-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).
- (4) Other fuels-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).
- (i) The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.
- (j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.43c Standard for particulate matter (PM).

- (a) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:
 - (1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.
 - (2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.
- (b) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

- (1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or
- (2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.
- (c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).
- (d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)

- (1) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.
- (2) As an alternative to meeting the requirements of <u>paragraph (e)(1)</u> of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:
 - (i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and
 - (ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

- (3) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.
- (4) An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under § 60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO₂ emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

- (a) Except as provided in <u>paragraphs</u> (g) and (h) of this section and § 60.8(b), performance tests required under § 60.8 shall be conducted following the procedures specified in <u>paragraphs</u> (b), (c), (d), (e), and (f) of this section, as applicable. <u>Section 60.8(f)</u> does not apply to this section. The 30-day notice required in § 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.
- (b) The initial performance test required under § 60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO₂ emission limits under § 60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.
- (c) After the initial performance test required under <u>paragraph</u> (b) of this section and § 60.8, compliance with the percent reduction requirements and SO₂ emission limits under § 60.42c is based on the average percent reduction and the average SO₂ emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO₂ emission rate are calculated to show compliance with the standard.
- (d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of <u>appendix A of this part</u> are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average SO_2 emission rate (E_{ao}). The hourly averages used

to compute the 30-day averages are obtained from the CEMS. Method 19 of <u>appendix A of this</u> <u>part</u> shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B of <u>appendix A</u> of this part.

- (e) If coal, oil, or coal and oil are combusted with other fuels:
 - (1) An adjusted E_{ho} (E_{ho}) is used in Equation 19–19 of Method 19 of <u>appendix A of this part</u> to compute the adjusted E_{ao} (E_{ao}). The E_{ho} 0 is computed using the following formula:

$$E_{bo} \phi = \frac{E_{bo} - E_{ob} (1 - X_{b})}{X_{b}}$$

Where:

 $E_{ho}o = Adjusted E_{ho}, ng/J (lb/MMBtu);$

E_{ho} = Hourly SO₂ emission rate, ng/J (lb/MMBtu);

 $E_{\rm w}=SO_2$ concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of <u>appendix A of this part</u>, ng/J (lb/MMBtu). The value $E_{\rm w}$ for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure $E_{\rm w}$ if the owner or operator elects to assume $E_{\rm w}=0$.

 X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

- (2) The owner or operator of an affected facility that qualifies under the provisions of § 60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.
- (f) Affected facilities subject to the percent reduction requirements under § 60.42c(a) or (b) shall determine compliance with the SO₂ emission limits under § 60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:
 - (1) If only coal is combusted, the percent of potential SO₂ emission rate is computed using the following formula:

$$%P_{e} = 100 \left(1 - \frac{%R_{e}}{100}\right) \left(1 - \frac{%R_{p}}{100}\right)$$

Where:

 $%P_s = Potential SO_2$ emission rate, in percent;

 $%R_g = SO_2$ removal efficiency of the control device as determined by Method 19 of <u>appendix A</u> of this part, in percent; and

 $%R_f = SO_2$ removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

- (2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph(f)(1) of this section are used, except as provided for in the following:
 - (i) To compute the $%P_s$, an adjusted $%R_g$ ($%R_g$ o) is computed from E_{ao} o from <u>paragraph</u> (e)(1) of this section and an adjusted average SO₂ inlet rate (E_{ai} o) using the following formula:

$$\%R_{e}o = 100\left(1 - \frac{E_{io}^{o}}{E_{io}^{o}}\right)$$

Where:

 $%R_{go} = Adjusted %R_{g}$, in percent;

 $E_{ao}o = Adjusted E_{ao}$, ng/J (lb/MMBtu); and

 $E_{aio} = Adjusted average SO₂ inlet rate, ng/J (lb/MMBtu).$

(ii) To compute E_{ai}o, an adjusted hourly SO₂ inlet rate (E_{hi}o) is used. The E_{hi}o is computed using the following formula:

$$E_b \circ = \frac{E_b - E_o (1 - X_b)}{X_b}$$

Where:

 $E_{hio} = Adjusted E_{hi}, ng/J (lb/MMBtu);$

E_{hi} = Hourly SO₂ inlet rate, ng/J (lb/MMBtu);

 $E_{\rm w} = SO_2$ concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of <u>appendix A of this part</u>, ng/J (lb/MMBtu). The value $E_{\rm w}$ for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure $E_{\rm w}$ if the owner or operator elects to assume $E_{\rm w} = 0$; and

 X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

- (g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under § 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under § 60.46c(d)(2).
- (h) For affected facilities subject to § 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in § 60.48c(f), as applicable.
- (i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO₂ standards under § 60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.
- (j) The owner or operator of an affected facility shall use all valid SO₂ emissions data in calculating % P_s and E_{ho} under <u>paragraphs</u> (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under § 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating % P_s or E_{ho} pursuant to <u>paragraphs</u> (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

- (a) The owner or operator of an affected facility subject to the PM and/or opacity standards under § 60.43c shall conduct an initial performance test as required under § 60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.
 - (1) Method 1 of <u>appendix A of this part</u> shall be used to select the sampling site and the number of traverse sampling points.
 - (2) Method 3A or 3B of appendix A–2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A–3 of this part or 17 of appendix A–6 of this part.
 - (3) Method 5, 5B, or 17 of <u>appendix A of this part</u> shall be used to measure the concentration of PM as follows:
 - (i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.
 - (ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.
 - (iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.
 - (4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.
 - (5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ± 14 °C (320 ± 25 °F).
 - (6) For determination of PM emissions, an oxygen (O₂) or carbon dioxide (CO₂) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

- (7) For each run using Method 5, 5B, or 17 of <u>appendix A of this part</u>, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:
 - (i) The O₂ or CO₂ measurements and PM measurements obtained under this section,
 - (ii) The dry basis F factor, and
 - (iii) The dry basis emission rate calculation procedure contained in Method 19 of <u>appendix</u> A of this part.
- (8) Method 9 of appendix A–4 of this part shall be used for determining the opacity of stack emissions.
- (b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under § 60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.
- (c) In place of PM testing with Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.
 - (1) Notify the Administrator 1 month before starting use of the system.
 - (2) Notify the Administrator 1 month before stopping use of the system.
 - (3) The monitor shall be installed, evaluated, and operated in accordance with § 60.13 of subpart A of this part.
 - (4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under § 60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

- (5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under § 60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.
- (6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.
- (7) At a minimum, valid CEMS hourly averages shall be obtained as specified in <u>paragraph</u> (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.
 - (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (ii) [Reserved]
- (8) The 1-hour arithmetic averages required under <u>paragraph (c)(7)</u> of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under $\S 60.13(e)(2)$ of <u>subpart A of this part</u>.
- (9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of <u>paragraph (c)(7)</u> of this section are not met.
- (10) The CEMS shall be operated according to Performance Specification 11 in <u>appendix B</u> of this part.
- (11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O₂ (or CO₂) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.
 - (i) For PM, Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall be used; and
 - (ii) For O2 (or CO₂), Method 3A or 3B of appendix A–2 of this part, as applicable shall be used.
- (12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.
- (13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using

other monitoring systems as approved by the Administrator or EPA Reference Method 19 of <u>appendix A of this part</u> to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

- (14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in § 60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (i.e., reference method) data and performance test (i.e., compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/ert tool.html/) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.
- (d) The owner or operator of an affected facility seeking to demonstrate compliance under § 60.43c(e)(4) shall follow the applicable procedures under § 60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/h).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.46c Emission monitoring for sulfur dioxide.

- (a) Except as provided in <u>paragraphs</u> (d) and (e) of this section, the owner or operator of an affected facility subject to the SO₂ emission limits under § 60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO₂ concentrations and either O₂ or CO₂ concentrations at the outlet of the SO₂ control device (or the outlet of the steam generating unit if no SO₂ control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under § 60.42c shall measure SO₂ concentrations and either O₂ or CO₂ concentrations at both the inlet and outlet of the SO₂ control device.
- (b) The 1-hour average SO₂ emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under § 60.42c. Each 1-hour average SO₂ emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under § 60.13(h)(2). Hourly SO₂ emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.
- (c) The procedures under § 60.13 shall be followed for installation, evaluation, and operation of the CEMS.
 - (1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of <u>appendix B of this part</u>.

- (2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.
- (3) For affected facilities subject to the percent reduction requirements under § 60.42c, the span value of the SO₂ CEMS at the inlet to the SO₂ control device shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted, and the span value of the SO₂ CEMS at the outlet from the SO₂ control device shall be 50 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.
- (4) For affected facilities that are not subject to the percent reduction requirements of § 60.42c, the span value of the SO₂ CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.
- (d) As an alternative to operating a CEMS at the inlet to the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under <u>paragraph (a)</u> of this section, an owner or operator may elect to determine the average SO₂ emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under <u>paragraph (a)</u> of this section, an owner or operator may elect to determine the average SO₂ emission rate by using Method 6B of <u>appendix A of this part</u>. Fuel sampling shall be conducted pursuant to either <u>paragraph (d)(1)</u> or <u>(d)(2)</u> of this section. Method 6B of <u>appendix A of this part</u> shall be conducted pursuant to <u>paragraph (d)(3)</u> of this section.
 - (1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO₂ input rate.
 - (2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.
 - (3) Method 6B of <u>appendix A of this part</u> may be used in lieu of CEMS to measure SO₂ at the inlet or outlet of the SO₂ control system. An initial stratification test is required to verify the adequacy of the Method 6B of <u>appendix A of this part</u> sampling location. The stratification test shall consist of three paired runs of a suitable SO₂ and CO₂ measurement train operated

at the candidate location and a second similar train operated according to the procedures in § 3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

- (e) The monitoring requirements of <u>paragraphs (a)</u> and <u>(d)</u> of this section shall not apply to affected facilities subject to $\S 60.42c(h) (1), (2), \text{ or } (3)$ where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under $\S 60.48c(f)$, as applicable.
- (f) The owner or operator of an affected facility operating a CEMS pursuant to <u>paragraph (a)</u> of this section, or conducting as-fired fuel sampling pursuant to <u>paragraph (d)(1)</u> of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

- (a) Except as provided in <u>paragraphs</u> (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under § 60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in § 60.43c(c) that is not required to use a COMS due to <u>paragraphs</u> (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A—4 of this part and the procedures in § 60.11 to demonstrate compliance with the applicable limit in § 60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either <u>paragraphs</u> (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A—4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.
 - (1) Except as provided in <u>paragraph (a)(2)</u> and <u>(a)(3)</u> of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in <u>paragraph (a)</u> of this section according to the applicable schedule in <u>paragraphs</u>

- (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.
 - (i) If no visible emissions are observed, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;
 - (ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;
 - (iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or
 - (iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.
- (2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.
 - (i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A–7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.*, 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.*, 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.*, 90 seconds) or conduct a new Method 9 of appendix A–4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in § 60.45c(a)(8).
 - (ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during

which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

- (3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.
- (b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of <u>appendix B of this part</u>. The span value of the opacity COMS shall be between 60 and 80 percent.
- (c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO2 or PM emissions and that are subject to an opacity standard in § 60.43c(c) are not required to operate a COMS if they follow the applicable procedures in § 60.48c(f).
- (d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in § 60.45c(c). The CEMS specified in paragraph § 60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- (e) Owners and operators of an affected facility that is subject to an opacity standard in § 60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO₂, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

- (1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.
 - (i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in § 60.58b(i)(3) of subpart Eb of this part.
 - (ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).
 - (iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in $\S 60.13(h)(2)$.
 - (iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.
- (2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.
- (3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.
- (4) You must record the CO measurements and calculations performed according to <u>paragraph (e)</u> of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.
- (f) An owner or operator of an affected facility that is subject to an opacity standard in § 60.43c(c) is not required to operate a COMS provided that the affected facility meets the conditions in either paragraphs (f)(1), (2), or (3) of this section.
 - (1) The affected facility uses a fabric filter (baghouse) as the primary PM control device and, the owner or operator operates a bag leak detection system to monitor the performance of the fabric filter according to the requirements in section § 60.48Da of this part.

- (2) The affected facility uses an ESP as the primary PM control device, and the owner or operator uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the requirements in section § 60.48Da of this part.
- (3) The affected facility burns only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and the owner or operator operates the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§ 60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under § 60.48c(c).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.48c Reporting and recordkeeping requirements.

- (a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:
 - (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
 - (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.
 - (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
 - (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.
- (b) The owner or operator of each affected facility subject to the SO₂ emission limits of § 60.42c, or the PM or opacity limits of § 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

- (c) In addition to the applicable requirements in § 60.7, the owner or operator of an affected facility subject to the opacity limits in § 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.
 - (1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in <u>paragraphs</u> (c)(1)(i) through (iii) of this section.
 - (i) Dates and time intervals of all opacity observation periods;
 - (ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - (iii) Copies of all visible emission observer opacity field data sheets;
 - (2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in <u>paragraphs</u> (c)(2)(i) through (iv) of this section.
 - (i) Dates and time intervals of all visible emissions observation periods;
 - (ii) Name and affiliation for each visible emission observer participating in the performance test;
 - (iii) Copies of all visible emission observer opacity field data sheets; and
 - (iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.
 - (3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator
- (d) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall submit reports to the Administrator.
- (e) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.
 - (1) Calendar dates covered in the reporting period.

- (2) Each 30-day average SO₂ emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.
- (4) Identification of any steam generating unit operating days for which SO₂ or diluent (O₂ or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
- (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
- (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
- (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.
- (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of <u>appendix B of this</u> part.
- (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.
- (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under <u>paragraph (f)(1), (2), (3)</u>, or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
- (f) Fuel supplier certification shall include the following information:
 - (1) For distillate oil:

- (i) The name of the oil supplier;
- (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c; and
- (iii) The sulfur content or maximum sulfur content of the oil.
- (2) For residual oil:
 - (i) The name of the oil supplier;
 - (ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;
 - (iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and
 - (iv) The method used to determine the sulfur content of the oil.
- (3) For coal:
 - (i) The name of the coal supplier;
 - (ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);
 - (iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and
 - (iv) The methods used to determine the properties of the coal.
- (4) For other fuels:
 - (i) The name of the supplier of the fuel;
 - (ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and
 - (iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)

- (1) Except as provided under <u>paragraphs</u> (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
- (2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
- (3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.
- (h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under § 60.42c or § 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.
- (i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.
- (j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

Appendix B

40 C.F.R. Part 63 Subpart CCCCCC

National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline
Dispensing Facilities

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

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

What This Subpart Covers

§ 63.11110 What is the purpose of this subpart?

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

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

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

under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

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

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

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

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in § 63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

- (b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in § 63.11111 at the time you commenced operation.
- (c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in § 63.2.
- (d) An affected source is an existing affected source if it is not new or reconstructed.

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

- (a) If you have a new or reconstructed affected source, you must comply with this subpart according to <u>paragraphs (a)(1)</u> and (2) of this section, except as specified in <u>paragraph (d)</u> of this section.
 - (1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.
 - (2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.
- (b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.
- (c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in § 63.1111(c) or § 63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.
- (d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to <u>paragraphs</u> (d)(1) and (2) of this section.
 - (1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.
 - (2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.
- (e) The initial compliance demonstration test required under \S 63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.
 - (1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.
 - (2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

- (i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in <u>paragraphs</u> (b) or (c) of this section.
- (ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.
- (f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.
 - (1) If your GDF is an existing facility, you must comply by January 24, 2014.
 - (2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.
 - (i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.
 - (ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

Emission Limitations and Management Practices

§ 63.11115 What are my general duties to minimize emissions?

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

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

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

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

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

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

- (a) You must comply with the requirements in section § 63.11116(a).
- (b) Except as specified in <u>paragraph (c)</u> of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in § 63.11132, and as specified in <u>paragraphs (b)(1), (b)(2)</u>, or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.
 - (1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.

- (2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.
- (3) Submerged fill pipes not meeting the specifications of <u>paragraphs</u> (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.
- (c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in <u>paragraph (b)</u> of this section, but must comply only with all of the requirements in § 63.11116.
- (d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- (e) You must submit the applicable notifications as required under § 63.11124(a).
- (f) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

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

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

- (a) You must comply with the requirements in §§ 63.11116(a) and 63.11117(b).
- (b) Except as provided in <u>paragraph</u> (c) of this section, you must meet the requirements in either paragraph (b)(1) or <u>paragraph</u> (b)(2) of this section.
 - (1) Each management practice in Table 1 to this subpart that applies to your GDF.
 - (2) If, prior to January 10, 2008, you satisfy the requirements in both <u>paragraphs (b)(2)(i)</u> and (ii) of this section, you will be deemed in compliance with this subsection.
 - (i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.
 - (A) Achieves emissions reduction of at least 90 percent.
 - (B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

- (ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.
- (c) The emission sources listed in <u>paragraphs</u> (c)(1) through (3) of this section are not required to comply with the control requirements in <u>paragraph</u> (b) of this section, but must comply with the requirements in § 63.11117.
 - (1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.
 - (2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.
 - (3) Gasoline storage tanks equipped with floating roofs, or the equivalent.
- (d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.
- (e) You must comply with the applicable testing requirements contained in § 63.11120.
- (f) You must submit the applicable notifications as required under § 63.11124.
- (g) You must keep records and submit reports as specified in §§ 63.11125 and 63.11126.
- (h) You must comply with the requirements of this subpart by the applicable dates contained in § 63.11113.

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

Testing and Monitoring Requirements

§ 63.11120 What testing and monitoring requirements must I meet?

- (a) Each owner or operator, at the time of installation, as specified in § 63.11113(e), of a vapor balance system required under § 63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.
 - (1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

- (i) California Air Resources Board Vapor Recovery Test Procedure TP–201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see § 63.14).
- (ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in § 63.7(f).
- (2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.
 - (i) California Air Resources Board Vapor Recovery Test Procedure TP–201.3,— Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see § 63.14).
 - (ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in § 63.7(f).
 - (iii) Bay Area Air Quality Management District Source Test Procedure ST–30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, see § 63.14).
- (b) Each owner or operator choosing, under the provisions of § 63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph § 63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.
 - (1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP—201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see § 63.14).
 - (2) You must, during the initial performance test required under <u>paragraph (b)(1)</u> of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.
 - (3) You must comply with the testing requirements specified in <u>paragraph (a)</u> of this section.
- (c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based

on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in § 63.11092(f).

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

Notifications, Records, and Reports

§ 63.11124 What notifications must I submit and when?

- (a) Each owner or operator subject to the control requirements in § 63.11117 must comply with paragraphs (a)(1) through (3) of this section.
 - (1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or no later than 120 days after the source becomes subject to this subpart, whichever is later, or at the time you become subject to the control requirements in § 63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in § 63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011, or no later than 120 days after the source becomes subject to this subpart, whichever is later. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional office and delegated state authority as specified in § 63.13.
 - (i) The name and address of the owner and the operator.
 - (ii) The address (i.e., physical location) of the GDF.
 - (iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11117 that apply to you.
 - (2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, within 60 days of the applicable compliance date specified in § 63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be

- submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.
- (3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in § 63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.
- (b) Each owner or operator subject to the control requirements in § 63.11118 must comply with paragraphs (b)(1) through (5) of this section.
 - (1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or no later than 120 days after the source becomes subject to this subpart, whichever is later, or at the time you become subject to the control requirements in § 63.11118. If your affected source is subject to the control requirements in § 63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in § 63.11132, you must submit the Initial Notification by May 24, 2011, or no later than 120 days after the source becomes subject to this subpart, whichever is later. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional office and delegated state authority as specified in § 63.13.
 - (i) The name and address of the owner and the operator.
 - (ii) The address (i.e., physical location) of the GDF.
 - (iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of § 63.11118 that apply to you.
 - (2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in § 63.13, in accordance with the schedule specified in § 63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.
 - (3) If, prior to January 10, 2008, you satisfy the requirements in both <u>paragraphs (b)(3)(i)</u> and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or <u>paragraph (b)(2)</u> of this subsection.

- (i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.
 - (A) Achieves emissions reduction of at least 90 percent.
 - (B) Operates using management practices at least as stringent as those in Table 1 to this subpart.
- (ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either <u>paragraphs (b)(3)(i)(A)</u> or (b)(3)(i)(B) of this section.
- (4) You must submit a Notification of Performance Test, as specified in § 63.9(e), prior to initiating testing required by § 63.11120(a) and (b).
- (5) You must submit additional notifications specified in § 63.9, as applicable.

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

§ 63.11125 What are my recordkeeping requirements?

- (a) Each owner or operator subject to the management practices in § 63.11118 must keep records of all tests performed under § 63.11120(a) and (b).
- (b) Records required under <u>paragraph (a)</u> of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.
- (c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in § 63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.
 - (1) The owner or operator must keep all vapor tightness testing records with the cargo tank.
 - (2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.
 - (i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.
 - (ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (e.g., via e-mail or facsimile) to the Administrator's delegated

representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

- (d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.
 - (1) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
 - (2) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

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

§ 63.11126 What are my reporting requirements?

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

[76 FR 4183, Jan. 24, 2011]

Other Requirements and Information

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

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

§ 63.11131 Who implements and enforces this subpart?

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

§ 63.11132 What definitions apply to this subpart?

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

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

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

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

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or

highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

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

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

Nonroad engine means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

Nonroad vehicle means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in § 63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Vapor balance system means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

Vapor-tight means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Vapor-tight gasoline cargo tank means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in § 63.11092(f) of this part.

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

Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing

Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More¹

If you own or operate	Then you must
1. A new, reconstructed, or existing GDF subject to § 63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in § 63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in § 63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and

If you own or operate	Then you must
	0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:
	$Pf = 2e^{-500.887/v}$
	Where:
	Pf = Minimum allowable final pressure, inches of water.
	v = Total ullage affected by the test, gallons.
	e = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in § 63.11132, and comply with the requirements of item 1 in this Table.

facility subject to § 63.11118

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

¹ The management practices specified in this Table are not applicable if you are complying with the requirements in § 63.11118(b)(2), except that if you are complying with the requirements in § 63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor- tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vaportight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in § 63.11125(c).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.1	Applicability	standard established: permit	Yes, specific requirements given in § 63.11111.
§ 63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the	Yes, § 63.11111(f) of

Citation	Subject	Brief description	Applies to subpart CCCCCC
		applicable permitting authority	subpart CCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§ 63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in § 63.11132.
§ 63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§ 63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
§ 63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to § 63.11116
§ 63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§ 63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
		commences for CAA section 112(f)	
§ 63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§ 63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, § 63.11113 specifies the compliance dates.
§ 63.6(c)(3)–(4)	[Reserved]		
§ 63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§ 63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to	No. See § 63.11115 for general duty

Citation	Subject	Brief description	Applies to subpart CCCCCC
		determine if operation and maintenance requirements were met.	requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§ 63.6(e)(2)	[Reserved]		
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§ 63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§ 63.6(f)(2)–(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§ 63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§ 63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§ 63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.6(h)(2)(ii)	[Reserved]		
§ 63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§ 63.6(h)(3)	[Reserved]		
§ 63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§ 63.6(h)(5)(i), (iii)–(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§ 63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§ 63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
§ 63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§ 63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§ 63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to § 63.8(e); COMS are properly maintained and operated according to § 63.8(c) and data quality as § 63.8(d)	No.
§ 63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§ 63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§ 63.6(i)(1)– (14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§ 63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§ 63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§ 63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§ 63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§ 63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§ 63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site- specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, § 63.11120(c) specifies conditions for conducting performance tests.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§ 63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§ 63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§ 63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§ 63.7(h)	Waiver of Tests	Procedures for Administrator to	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
		waive performance test	
§ 63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§ 63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in § 63.11 apply	Yes.
§ 63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§ 63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
§ 63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.8(c)(1)(i)– (iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in § 63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in § 63.6(e)(3)	No.
§ 63.8(c)(2)–(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§ 63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.
§ 63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§ 63.8(f)(1)–(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§ 63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
		computed over at least 4 equally spaced data points; data that cannot be used in average	
§ 63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§ 63.9(b)(1)– (2), (4)–(5)	Initial Notifications	Submit notification within 120 days after effective date, or no later than 120 days after the source becomes subject to this subpart, whichever is later; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§ 63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
§ 63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§ 63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§ 63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§ 63.9(g)	Additional Notifications	Notification of performance evaluation; notification about	Yes, however, there are no

Citation	Subject	Brief description	Applies to subpart CCCCCC
	when Using CMS	use of COMS data; notification that exceeded criterion for relative accuracy alternative	opacity standards.
§ 63.9(h)(1)–(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§ 63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§ 63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§ 63.9(k)	Notifications	Electronic reporting procedures	Yes, only as specified in § 63.9(j).
§ 63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§ 63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§ 63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. See § 63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
§ 63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
§ 63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§ 63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§ 63.10(b)(2)(vi)– (xi)	CMS Records	Malfunctions, inoperative, out- of-control periods	No.
§ 63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§ 63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§ 63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§ 63.10(b)(3)	Records	Applicability determinations	Yes.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.10(c)	Records	Additional records for CMS	No.
§ 63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§ 63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§ 63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§ 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§ 63.10(d)(5)	SSM Reports	Contents and submission	No. See § 63.11126(b) for malfunction reporting requirements.
§ 63.10(e)(1)– (2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
§ 63.10(e)(3)(i)– (iii)	Reports	Schedule for reporting excess emissions	No.
§ 63.10(e)(3)(iv)— (v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
		year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)–(8) and 63.10(c)(5)–(13)	
§ 63.10(e)(3)(iv)— (v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§ 63.8(c)(7)–(8) and 63.10(c)(5)–(13)	No, § 63.11130(K) specifies excess emission events for this subpart.
§ 63.10(e)(3)(vi)– (viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§ 63.10(c)(5)–(13) and 63.8(c)(7)–(8)	No.

Citation	Subject	Brief description	Applies to subpart CCCCCC
§ 63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§ 63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§ 63.11(b)	Flares	Requirements for flares	No.
§ 63.12	Delegation	State authority to enforce standards	Yes.
§ 63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§ 63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§ 63.15	Availability of Information	Public and confidential information	Yes.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011; 85 FR 73919, Nov. 19, 2020]

Appendix C

40 C.F.R. Part 60 Subpart IIII

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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

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

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

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

than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

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

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

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for nonemergency 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 nonemergency 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 <u>paragraphs (a)</u> through (c) of this section, stationary non-emergency CI ICE identified in <u>paragraphs (a)</u> and (c) of this section may be certified to the provisions of <u>40 CFR part 1042</u> for commercial engines that are applicable for the engine's model year, displacement, power density, and maximum engine power if the engines will be used solely in either or both of the following locations:
 - (1) Remote areas of Alaska; and
 - (2) Marine offshore installations.
- (g) Notwithstanding the requirements in <u>paragraphs (a)</u> through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in <u>paragraphs (a)</u> through (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 (AECDs) as specified in 40 CFR 1039.665 must meet the

Tier 1 certification emission standards for new nonroad CI engines in 40 CFR part 1039, appendix I, while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

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

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

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

(c) [Reserved]

- (d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.
- (e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the appropriate Tier 2 emission standards for new marine CI engines as described in 40 CFR part 1042, appendix I, for all pollutants, for the same displacement and rated power:
 - (1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;
 - (2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;
 - (3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and
 - (4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.
- (f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.120, 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 <u>paragraphs</u> (a) through (d) of this section, stationary emergency CI ICE identified in <u>paragraphs</u> (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 <u>paragraphs</u> (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 <u>paragraphs (g)(1)</u> and (2) of this section may instead continue to be certified to the previous tier of standards in 40 CFR part 1042. The previous tier is Tier 3 in most cases; however, the previous tier is Tier 2 if there are no Tier 3 standards specified for engines of a certain size or power rating.

- (1) Remote areas of Alaska; and
- (2) Marine offshore installations.
- (h) Notwithstanding the requirements in <u>paragraphs</u> (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 <u>paragraphs</u> (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 nonemergency 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 NOx in the stationary CI internal combustion engine exhaust to the following:
 - (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
 - (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
 - (3) 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 · $n^{-0.20}$ 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 $\S\S 60.4204$ and $\S 60.4205$ over the entire life of the engine.

[76 FR 37969, June 28, 2011]

§ 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 $\S 60.4211$.

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

particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

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

Compliance Requirements

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

- (a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §§ 60.4201(a) through (c) and 60.4202(a), (b), and (d) using the certification procedures required in 40 CFR part 1039, subpart C, and must test their engines as specified in 40 CFR part 1039. For the purposes of this subpart, engines certified to the standards in Table 1 to this subpart shall be subject to the same certification procedures required for engines certified to the Tier 1 standards in 40 CFR part 1039, appendix I. For the purposes of this subpart, engines certified to the standards in Table 4 to this subpart shall be subject to the same certification procedures required for engines certified to the Tier 1 standards in 40 CFR part 1039, appendix I, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.
- (b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §§ 60.4201(d) and (e) and 60.4202(e) and (f) using the certification procedures required in 40 CFR part 1042, subpart C, and must test their engines as specified in 40 CFR part 1042.
- (c) Stationary CI internal combustion engine manufacturers must meet the requirements of <u>40 CFR 1039.120</u>, <u>1039.125</u>, <u>1039.130</u>, and <u>1039.135</u> and <u>40 CFR part 1068</u> for engines that are certified to the emission standards in <u>40 CFR part 1039</u>. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of <u>40 CFR part 1042</u> for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to <u>paragraphs</u> (c)(1) through (3) of this section.
 - (1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.
 - (2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the

year listed in table 3 to this subpart) must be labeled according to <u>paragraphs</u> (c)(2)(i) through (iii) of this section:

- (i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.
- (ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.
- (iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.
- (3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.
 - (i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR part 1039 or 1042, as appropriate.
 - (ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR part 1039 or 1042, as appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.
 - (iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.
- (d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing

stationary engines in the averaging, banking, and trading provisions applicable for such engines under those parts.

- (e) Manufacturers of engine families discussed in <u>paragraph (d)</u> of this section may meet the labeling requirements referred to in <u>paragraph (c)</u> of this section for stationary CI ICE by either adding a separate label containing the information required in <u>paragraph (c)</u> 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 <u>paragraph (g)</u> of this section:
 - (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
 - (2) Change only those emission-related settings that are permitted by the manufacturer; and
 - (3) Meet the requirements of 40 CFR part 1068, as they apply to you.
- (b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(a) or § 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.
 - (1) Purchasing an engine certified to emission standards for the same model year and maximum engine power as described in 40 CFR parts 1039 and 1042, as applicable. The engine must be installed and configured according to the manufacturer's specifications.
 - (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
 - (3) Keeping records of engine manufacturer data indicating compliance with the standards.
 - (4) Keeping records of control device vendor data indicating compliance with the standards.

- (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.
- (d) If you are an owner or operator and must comply with the emission standards specified in § 60.4204(c) or § 60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.
 - (1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.
 - (2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in <u>paragraphs (d)(2)(i)</u> through (v) of this section.
 - (i) Identification of the specific parameters you propose to monitor continuously;
 - (ii) A discussion of the relationship between these parameters and NO_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 <u>paragraphs (f)(1)</u> through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (2) You may operate your emergency stationary ICE for the purpose specified in <u>paragraph</u> (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by <u>paragraph</u> (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this <u>paragraph</u> (f)(2).
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii)–(iii) [Reserved]

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in <u>paragraph</u> (f)(2) of this section. Except as provided in <u>paragraph</u> (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 AECDs for qualified emergency situations as allowed by 40 CFR 1039.665.

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

Testing Requirements for Owners and Operators

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

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

(a) The performance test must be conducted according to the in-use testing procedures in <u>40</u> CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to <u>40 CFR part 1042</u>, 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 <u>40 CFR part 1039</u>, appendix I, or with Tier 2 emission standards as

described in 40 CFR part 1042, appendix I, may follow the testing procedures specified in § 60.4213, as appropriate.

- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE subject to Tier 2 or Tier 3 emission standards as described in 40 CFR part 1039, appendix I, or Tier 2 emission standards as described in 40 CFR part 1042, appendix I, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard, determined from the following equation:

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

Where:

STD = The standard specified for that pollutant in $\frac{40 \text{ CFR part } 1039}{40 \text{ CFR part } 1039}$ or $\frac{1042}{40 \text{ cFR part } 1039}$, 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 <u>paragraphs (a)</u> through <u>(f)</u> 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 <u>paragraphs</u> (d)(1) through (3) of this section.
 - (1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

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

Where:

 C_i = concentration of NO_X or PM at the control device inlet,

 C_0 = 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 (O₂) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO₂) using the procedures described in <u>paragraph (d)(3)</u> of this section.

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

Where:

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

 C_d = Measured concentration of NO_X or PM, uncorrected.

5.9 = 20.9 percent O₂-15 percent O₂, the defined O₂ correction value, percent.

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

- (3) If pollutant concentrations are to be corrected to 15 percent O₂ and CO₂ concentration is measured in lieu of O₂ concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in <u>paragraphs (d)(3)(i)</u> through (iii) of this section.
 - (i) Calculate the fuel-specific F₀ value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209_{F_a}}{F_c}$$
 (Eq. 4)

Where:

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

0.209 = Fraction of air that is O₂, 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 ($dsef/10^6$ Btu).

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

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂, as follows:

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

Where:

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

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

(iii) Calculate the NO_X and PM gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

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

Where:

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

 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:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}}$$
 (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:

$$ER = \frac{C_{adj} \times Q \times T}{KW-hour}$$
 (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.
 - (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) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.
- (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).

[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]

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 <u>paragraph (c)</u> of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in remote areas of Alaska may meet the requirements of this subpart by manufacturing and installing engines meeting the Tier 2 or Tier 3 emission standards described in <u>40 CFR part 1042</u> for the same model year, displacement, and maximum engine power, as appropriate, rather than the otherwise applicable requirements of <u>40 CFR part 1039</u>, as indicated in <u>§§ 60.4201(f)</u> and 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 <u>40 CFR 1068.10</u> and <u>1068.11</u> apply for engine manufacturers. For others, the general confidential business information (CBI) provisions apply as described in <u>40 CFR</u> 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 $\S 60.4211(f)$.
- (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]

	Emission standards for stationary pre-2007 model year engines with a							
	displacement of <10	displacement of <10 liters per cylinder and 2007–2010 model year engines						
Maximum	>2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder							
engine power	in g/KW-hr (g/HP-hr)							
	$NMHC + NO_X$	НС	NO _X	CO	PM			
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)			

Maximum engine power	displacement of <10	2007–2010 mo	model year engines with a 07–2010 model year engines ent of <10 liters per cylinder ar)		
	$NMHC + NO_X$	НС	NO_X	CO	PM
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)	
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

¹Manufacturers 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)	$NMHC + NO_X$	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011 +	7.5 (5.6)		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)
	2011 +	7.5 (5.6)		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)
	2011 +	7.5 (5.6)		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)
	2011 +1	4.7 (3.5)		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)
	2011 +1	4.7 (3.5)		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)
	2010 +2	4.0 (3.0)		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)
	2009 +3	4.0 (3.0)		0.20 (0.15)

Maximum engine power	Model year(s)	$NMHC + NO_X$	CO	PM
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	$2009 + ^3$	4.0 (3.0)		0.20 (0.15)
450\(\leq KW\(\leq 560\) (600\(\leq HP\(\leq 750\))	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008 +	6.4 (4.8)		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.

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	5) 2013
56≤KW<130 (75≤HP<1	75) 2012
KW≥130 (HP≥175)	2011

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.

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

[As stated in \S 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.

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

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

Each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥ 30 liters per cylinder	a. Reduce NOx emissions by 90 percent or more;	i. Select the sampling port location and number/location of traverse points at the inlet and outlet of the control device;		(a) For NOx, O 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

 $^{^2}$ Torque: NFPA certified nameplate HP for 100 percent point. All points should be ± 2 percent of engine percent load value.

Each	Complying with the requirement to	You must	Using	According to the following requirements
				diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A–1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A–4.
		ii. Measure O ₂ at the inlet and outlet of the control device;	(1) Method 3, 3A, or 3B of <u>40</u> <u>CFR part 60,</u> <u>appendix A</u> –2	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for NO _X concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the	(2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of	(c) Measurements to determine moisture content must be made at the same time as the

Each	Complying with the requirement to	You must	Using	According to the following requirements
		control device; and	40 CFR part 63, appendix A, or ASTM D 6348– 03 (incorporated by reference, see § 60.17)	measurements for NO _X concentration.
		iv. Measure NO _X at the inlet and outlet of the control device.	(3) Method 7E of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NOx concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NOx in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and number/location of traverse points at the exhaust of the stationary internal combustion engine;		(a) For NOx, 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-

Each	Complying with the requirement to	You must	Using	According to the following requirements
				diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location;	(1) Method 3, 3A, or 3B of <u>40</u> <u>CFR part 60,</u> <u>appendix A-2</u>	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurement for NO _X concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO _X concentration.
		iv. Measure NO _X at the exhaust of the	(3) Method 7E of 40 CFR part 60,	(d) NO _X concentration must be at 15 percent

Each	Complying with the requirement to	You must	Using	According to the following requirements
		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)	O ₂ , dry basis. Results of this test consist of the average of the 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;	(1) Method 1 or 1A of <u>40 CFR</u> part 60, appendix <u>A</u> -1	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
	iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.	
		iv. Measure PM at the inlet and outlet of the control device.	(4) Method 5 of 40 CFR part 60, appendix A-3	(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.

Each	Complying with the requirement to	You must	Using	According to the following requirements
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine.	(4) Method 5 of 40 CFR part 60, appendix A-3	(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.

[<u>79 FR 11251</u>, 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	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	Yes	
§ 60.4	Address	Yes	
§ 60.5	Determination of construction or modification	Yes	
§ 60.6	Review of plans	Yes	
§ 60.7	Notification and Recordkeeping	Yes	Except that $\S 60.7$ only applies as specified in $\S 60.4214(a)$.
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§ 60.9	Availability of information	Yes	
§ 60.10	State Authority	Yes	
§ 60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§ 60.12	Circumvention	Yes	

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.13	Monitoring requirements	Yes	Except that $\S 60.13$ only applies to stationary CI ICE with a displacement of (≥ 30 liters per cylinder.
§ 60.14	Modification	Yes	
§ 60.15	Reconstruction	Yes	
§ 60.16	Priority list	Yes	
§ 60.17	Incorporations by reference	Yes	
§ 60.18	General control device requirements	No	
§ 60.19	General notification and reporting requirements	Yes	