



## ARKANSAS ENERGY & ENVIRONMENT

December 14, 2021

Via email to: dale.fentress@gerdau.com  
john.kelleher@gerdau.com & First Class Mail

Dale Fentress  
Environmental Manager  
Gerdau MacSteel Inc.  
P.O. Box 1592  
Fort Smith, AR 72902

Re: Notice of Final Permitting Decision; Permit No. 0693-AOP-R13

Dear Mr. Fentress,

After considering the application, any public comments, and other applicable materials as required by APC&EC Reg.8.211 and Ark. Code Ann. § 8-4-101 *et seq.*, this notice of final permitting decision is provided for:

Gerdau MacSteel Inc.  
5225 Planters Road  
Fort Smith, AR 72916

Permit Number: 0693-AOP-R13

Permitting Decision: approval with permit conditions as set forth in final Permit No. 0693-AOP-R13

Accessing the Permitting Decision and Response to Comments, if any:  
<https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/Air/0693-AOP-R13.pdf>.

Accessing the Statement of Basis:  
<https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/Air/0693-AOP-R13-SOB.pdf>.

The permitting decision is effective on the date stated in the attached Certificate of Service unless a Commission review has been properly requested under Arkansas Pollution Control & Ecology Commission's Administrative Procedures, Regulation No. 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as

**ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT**

provided under Chapter Six of Regulation No. 8. Such a request shall be in the form and manner required by Reg.8.603, including filing a written Request for Hearing with the Commission secretary at 3800 Richards Rd, North Little Rock, Arkansas 72117. If you have any questions about filing the request, please call the Commission at 501-682-7890.

This permit is your authority to construct, operate, and maintain the equipment and control apparatus as set forth in your application initially received on 2/1/2021.

Sincerely,

A handwritten signature in black ink, appearing to read "William K. Montgomery", with a stylized flourish at the end.

William K. Montgomery  
Associate Director, Office of Air Quality, Division of Environmental Quality  
5301 Northshore Drive, North Little Rock, AR 72118-5317

Enclosure: Certificate of Service  
cc: rkalinowsky@sidockgroup.com

**CERTIFICATE OF SERVICE**

I, Thomas Rheaume, hereby certify that the final permit decision notice has been mailed by first class mail to Gerdau MacSteel Inc., P.O. Box 1592, Fort Smith, AR, 72902, on this  
\_\_\_\_ 14th \_\_\_\_ day of \_\_\_\_\_ December \_\_\_\_\_, 2021.

\_\_\_\_\_  
Thomas Rheaume, Senior Operations Manager, Office  
of Air Quality



**DIVISION OF ENVIRONMENTAL QUALITY**

**OPERATING AIR PERMIT**

**PERMIT NUMBER: 0693-AOP-R13**

**IS ISSUED TO:**

Gerdau MacSteel Inc.  
5225 Planters Road  
Fort Smith, AR 72916  
Sebastian County  
**AFIN: 66-00274**

PURSUANT TO THE REGULATIONS OF THE ARKANSAS OPERATING AIR PERMIT PROGRAM, REGULATION 26: THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

December 14, 2021

AND

December 13, 2026

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

**Signed:**

A handwritten signature in black ink, appearing to read "William K. Montgomery", written over a horizontal line.

William K. Montgomery  
Associate Director, Office of Air Quality  
Division of Environmental Quality

December 14, 2021

Date



Table of Contents

<b>SECTION I: FACILITY INFORMATION .....</b>	<b>4</b>
<b>SECTION II: INTRODUCTION .....</b>	<b>5</b>
<b>Summary of Permit Activity .....</b>	<b>5</b>
<b>Process Description .....</b>	<b>5</b>
<b>Regulations .....</b>	<b>5</b>
<b>Emission Summary .....</b>	<b>6</b>
<b>SECTION III: PERMIT HISTORY .....</b>	<b>11</b>
<b>SECTION IV: SPECIFIC CONDITIONS .....</b>	<b>15</b>
SN-01 and SN-12 .....	15
SN-02 .....	23
SN-03 .....	25
SN-04, SN-05, SN-11 .....	27
SN-10 .....	29
SN-13 .....	31
SN-15, SN-25, and SN-27 .....	33
SN-21 .....	34
SN-22 and SN-38 .....	35
SN-23 .....	37
SN-24 .....	38
SN-26 .....	39
SN-14 and SN-29 .....	40
SN-30 .....	41
SN-31 .....	43
SN-33, 34, 35, and 36 .....	45
SN-37 .....	48
<b>SECTION V: COMPLIANCE PLAN AND SCHEDULE .....</b>	<b>49</b>
<b>SECTION VI: PLANTWIDE CONDITIONS .....</b>	<b>50</b>
<b>SECTION VII: INSIGNIFICANT ACTIVITIES .....</b>	<b>52</b>
<b>SECTION VIII: GENERAL PROVISIONS .....</b>	<b>54</b>
Appendix A	
Appendix B	
Appendix C	
Appendix D	
Appendix E	

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

#### List of Acronyms and Abbreviations

Ark. Code Ann.	Arkansas Code Annotated
AFIN	Arkansas DEQ Facility Identification Number
C.F.R.	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
HAP	Hazardous Air Pollutant
Hp	Horsepower
lb/hr	Pound Per Hour
NESHAP	National Emission Standards (for) Hazardous Air Pollutants
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO <sub>x</sub>	Nitrogen Oxide
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter Equal To Or Smaller Than Ten Microns
PM <sub>2.5</sub>	Particulate Matter Equal To Or Smaller Than 2.5 Microns
SNAP	Significant New Alternatives Program (SNAP)
SO <sub>2</sub>	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

## **SECTION I: FACILITY INFORMATION**

PERMITTEE:	Gerdau MacSteel Inc.
AFIN:	66-00274
PERMIT NUMBER:	0693-AOP-R13
FACILITY ADDRESS:	5225 Planters Road Fort Smith, AR 72916
MAILING ADDRESS:	P.O. Box 1592 Fort Smith, AR 72902
COUNTY:	Sebastian County
CONTACT NAME:	Dale Fentress
CONTACT POSITION:	Environmental Manager
TELEPHONE NUMBER:	(479) 629-4043
REVIEWING ENGINEER:	Shawn Hutchings
UTM North South (Y):	Zone 15: 3907864.86 m
UTM East West (X):	Zone 15: 374946.61 m

## **SECTION II: INTRODUCTION**

### **Summary of Permit Activity**

Gerdau MacSteel operates a scrap steel recycling mill near Fort Smith, in Sebastian County, Arkansas. MacSteel produces approximately 250 grades of steel including alloy, carbon, and resulfurized steels primarily from steel scrap using the electric arc furnace (EAF) process. This permit is the Title V renewal for the facility. HAP emissions increased 3.08 tpy due to changes in emissions factors and standardized permit practices.

### **Process Description**

In general, raw materials, including scrap, fluxes, iron carbide, direct reduced iron, hot briquetted iron, pig iron, and other materials, are brought to the facility by rail or truck. Scrap and flux are charged to EAFs and melted by application of electric current through the mixture. Molten metal is poured into a ladle and transferred by an overhead crane to a ladle refining station. Once the molten steel is transferred to the ladle refining station, additional alloys and reagents are added to adjust the chemistry.

From the ladle refining station, the steel is transferred to the stir station and vacuum tank degassers. At the stir station, the steel is stirred by the introduction of argon gas into the bottom of the ladle. Additional alloys also may be added to adjust the chemistry. The steel is then transferred to the vacuum tank degassers. At the degassers, dissolved gases are removed by subjecting the steel to a vacuum. Heat also may be added to the steel with the use of electric arcs.

After leaving the degasser, the steel is transferred to a caster where it is drained from the ladle into a tundish and then into the molds. At the caster, the steel solidifies to a round bar. The bars are cut to length and transferred to either the “as cast” cooling bed or directly to the reheat furnace. Bars transferred to the “as cast” cooling bed are sold or stored for future processing.

In the reheat furnace, the steel bars are heated to the temperature required for rolling. The bars are then rolled to a smaller diameter. Bars exiting the rolling mill are cut to length and transferred to the “rolled product” cooling bed. The bars are then deburred and bundled for shipment, for further processing in the heat treat furnaces and/or bar turner.

### **Regulations**

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective March 14, 2016
Rules of the Arkansas Plan of Implementation for Air Pollution Control, Rule 19, effective August 6, 2020

Gerdau MacSteel Inc.  
 Permit #: 0693-AOP-R13  
 AFIN: 66-00274

Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective March 14, 2016
40 CFR 52.21, <i>Prevention of Significant Deterioration</i>
New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart AAa - <i>Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983</i>
NSPS, 40 CFR Part 60, Subpart Dc, <i>Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units</i>
40 CFR Part 63, Subpart ZZZZ, <i>National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>
40 CFR Part 63, Subpart YYYYYY, <i>National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steel Making Facilities</i>
40 CFR Part 64, <i>Compliance Assurance Monitoring (CAM)</i>

### Emission Summary

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

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	45.5	149.9
		PM <sub>10</sub>	46.4	162.5
		PM <sub>2.5</sub>	41.7	152.3
		SO <sub>2</sub>	109.8	340
		VOC	33.8	88.4
		CO	469	1699.6
		NO <sub>x</sub>	139.3	334.2
		Lead	0.32	1.02
HAPs		HAPs	8.54	10.41
01 12	Melt Shop Baghouse 1 Melt Shop Baghouse 2	PM	27.4	109.2
		PM <sub>10</sub>	31.4	123.9
		PM <sub>2.5</sub>	31.4	123.9
		SO <sub>2</sub>	90.3	331.6
		VOC	12.7	44.7
		CO	421.4	1547.4
		NO <sub>x</sub>	43.9	161.1
		Lead	0.3	1.0
		HAPs	1.1	4.1

Gerdau MacSteel Inc.  
 Permit #: 0693-AOP-R13  
 AFIN: 66-00274

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
02	Reheat Furnace	PM	0.7	2.7
		PM <sub>10</sub>	0.7	2.7
		PM <sub>2.5</sub>	0.7	2.7
		SO <sub>2</sub>	0.1	0.2
		VOC	0.2	0.6
		CO	1.6	6.9
		NO <sub>x</sub>	6.3	27.6
		HAPs	0.1	0.4
03	Boiler	PM	0.7	2.7
		PM <sub>10</sub>	0.7	2.7
		PM <sub>2.5</sub>	0.7	2.7
		SO <sub>2</sub>	0.1	0.2
		VOC	0.2	0.6
		CO	1.6	6.9
		NO <sub>x</sub>	6.3	27.6
		HAPs	0.1	0.4
04	Heat Treat Furnace 1	PM	0.6	2.3
		PM <sub>10</sub>	0.6	2.3
		PM <sub>2.5</sub>	0.6	2.3
		SO <sub>2</sub>	0.5	2.0
		VOC	0.5	2.0
		CO	1.3	5.7
		NO <sub>x</sub>	5.2	22.4
		HAPs	0.1	0.3
05	Heat Treat Furnace 2	PM	0.6	2.3
		PM <sub>10</sub>	0.6	2.3
		PM <sub>2.5</sub>	0.6	2.3
		SO <sub>2</sub>	0.1	0.2
		VOC	0.2	0.5
		CO	1.4	5.9
		NO <sub>x</sub>	5.4	23.6
		HAPs	0.1	0.4
10	Deburring Line	PM	0.2	0.8
		PM <sub>10</sub>	0.2	0.8
		PM <sub>2.5</sub>	0.2	0.8
11	Heat Treat Furnace 3	PM	0.9	3.9
		PM <sub>10</sub>	0.9	3.9
		PM <sub>2.5</sub>	0.9	3.9
		SO <sub>2</sub>	0.1	0.2
		VOC	0.2	0.8

Gerdau MacSteel Inc.  
 Permit #: 0693-AOP-R13  
 AFIN: 66-00274

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		CO	6.0	26.2
		NO <sub>x</sub>	5.0	21.7
		HAPs	0.2	0.6
13	Vacuum Arc Degreaser	PM	0.6	2.1
		PM <sub>10</sub>	0.6	2.1
		PM <sub>2.5</sub>	0.6	2.1
		SO <sub>2</sub>	0.2	0.6
		CO	17.2	74.9
		NO <sub>x</sub>	0.2	0.6
14	Caster Steam Exhaust 1	PM	0.5	0.8
		PM <sub>10</sub>	0.3	0.8
		PM <sub>2.5</sub>	0.3	0.8
15	Bar Turner Building	VOC	1.7	6.1
21	Scrap Bar Cutting	PM	0.2	0.8
		PM <sub>10</sub>	0.2	0.8
		PM <sub>2.5</sub>	0.2	0.8
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.3
		CO	0.3	1.0
		NO <sub>x</sub>	1.1	4.8
		HAPs	0.02	0.09
22	Slag Processing	PM	2.4	0.3
		PM <sub>10</sub>	1.0	0.2
		Lead	0.01	0.01
		HAPs	0.27	0.31
23	Hydraulic Fluid Usage	VOC	3.6	14.4
24	Painting/Labeling of Steel Bars	VOC	7.5	3.8
		HAPs	6.3	3.2
25	Bar Turner Building 2	VOC	1.7	6.1
26	Car Bottom Furnace	PM	0.1	0.2
		PM <sub>10</sub>	0.1	0.2
		PM <sub>2.5</sub>	0.1	0.2
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.2
		CO	0.5	1.9
		NO <sub>x</sub>	1.5	6.6
		HAPs	0.01	0.05

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
27	Bar Turner Building 3	VOC	1.7	6.1
29	Caster Steam Exhaust 2	PM	1.3	5.6
		PM <sub>10</sub>	1.3	5.6
		PM <sub>2.5</sub>	1.3	5.6
30	53 MMBtu/hr Natural Gas Fired Boiler	PM	0.4	1.8
		PM <sub>10</sub>	0.4	1.8
		PM <sub>2.5</sub>	0.4	1.8
		SO <sub>2</sub>	0.1	0.2
		VOC	0.3	1.3
		CO	4.5	19.5
		NO <sub>x</sub>	5.3	23.2
		HAPs	0.1	0.5
31	Lime Storage Silo System	PM	0.1	0.2
		PM <sub>10</sub>	0.1	0.2
		PM <sub>2.5</sub>	0.1	0.2
33	Emergency Diesel Engine	PM	0.7	0.2
		PM <sub>10</sub>	0.7	0.2
		PM <sub>2.5</sub>	0.7	0.2
		SO <sub>2</sub>	0.7	0.2
		VOC	0.7	0.2
		CO	2.0	0.5
		NO <sub>x</sub>	9.3	2.4
		HAPs	0.01	0.01
34	Emergency Diesel Engine	PM	0.7	0.2
		PM <sub>10</sub>	0.7	0.2
		PM <sub>2.5</sub>	0.7	0.2
		SO <sub>2</sub>	0.7	0.2
		VOC	0.7	0.2
		CO	2.0	0.5
		NO <sub>x</sub>	9.3	2.4
		HAPs	0.01	0.01
35	Emergency Diesel Engine	PM	0.7	0.2
		PM <sub>10</sub>	0.7	0.2
		PM <sub>2.5</sub>	0.7	0.2
		SO <sub>2</sub>	0.7	0.2
		VOC	0.7	0.2
		CO	2.0	0.5
		NO <sub>x</sub>	9.3	2.4
		HAPs	0.01	0.01



Gerdau MacSteel Inc.  
 Permit #: 0693-AOP-R13  
 AFIN: 66-00274

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
36	Emergency Diesel Engine	PM	1.0	0.3
		PM <sub>10</sub>	1.0	0.3
		PM <sub>2.5</sub>	1.0	0.3
		SO <sub>2</sub>	16.0	4.0
		VOC	1.0	0.3
		CO	7.2	1.8
		NO <sub>x</sub>	31.2	7.8
		HAPs	0.01	0.01
SN-37	Roadway Emissions	PM	4.4	12.6
		PM <sub>10</sub>	3.8	11.2
		PM <sub>2.5</sub>	0.5	1.3
SN-38	Powerscreen	PM	1.3	0.7
		PM <sub>10</sub>	0.4	0.1
		Lead	0.01	0.01
		HAPs	0.10	0.02

\*PM<sub>2.5</sub> limits are source specific, if required. Not all sources have PM<sub>2.5</sub> limits.

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

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

### SECTION III: PERMIT HISTORY

Minor Source **Permit 693-A** was issued on October 1, 1982, with emissions of each criteria pollutant permitted at less than 100 tons per year.

**Permit 693-AR-1** was issued on January 3, 1990, allowing the installation of a new ladle furnace.

PSD **Permit 693-AR-2** was issued on October 28, 1993. This permit was a result of testing on the baghouse exhaust which showed emissions greater than 100 tons per year for NO<sub>x</sub>, PM/PM<sub>10</sub>, CO, and SO<sub>2</sub>. The minor source baseline date was triggered by the submittal of that PSD application. The minor source baseline date is January 8, 1993 for Sebastian County.

On April 5, 1994, permit **693-AR-3** was issued so that automated steel bar deburring equipment could be installed. This permit was a minor modification. A collection system, consisting of both a cyclone and a fabric filter, was installed to control emissions from this source. This was an 8,500 cfm system. The manufacturer's estimated emission rate was 0.0025 gr/scfm or 0.18 lb/hr.

On January 27, 1995, **Permit 693-AR-4** was issued for the installation of a spark arrestor in the Ladle Metallurgical Furnace duct. An investigation in the cause of failing a recent particulate test of the baghouse revealed that an increased amount of spark carry over from the LMF was damaging the filter media in the baghouse. None of the emission rates were affected by that modification.

**Permit 693-AOP-R0** was issued on February 18, 1998, and allowed the installation and operation of a second baghouse to control emissions from the melt shop, increasing steel production from 74 to 86 tons per hour, incorporating minor emission sources previously not permitted (heat treat #3 and bar turner #2), and revising emission factors based on continuous emission monitoring data and changes to AP-42 for natural gas combustion. This permit was the second PSD permit and the first Title V permit for this facility. A summary of the PSD review for permit 693-AOP-R0 is presented below.

#### **Summary of PSD review for air permit 693-AOP-R0**

The following describes the PSD review required for issuance of Permit 693-AOP-R0. These issues are presented here for information purposes only, and are not part of this modification.

MacSteel is considered a major stationary source under the PSD regulations. Permit 693-AOP-R0 included sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM/PM<sub>10</sub>), and lead (Pb) emission increases of 185.3 tpy, 308.7 tpy, 47.6 tpy, 75.7 tpy, 0.68 tpy, respectively. These increases exceeded the PSD significance levels and were subject to PSD review. Emission increases of 23.3 tpy volatile organic compounds (VOC) were below the significance level, therefore, VOC emissions were not subject to PSD review.

The PSD regulations mandate that a case-by-case Best Available Control Technology (BACT) analysis be performed on all sources which were directly associated with enhancing the mill's steel production and heat treat furnace #3. The BACT determination is summarized below.

Summary of BACT Determination			
Source	Description	Pollutant	Control Technology
SN-01 SN-12	Electric Arc Furnaces (2 baghouses)	PM/PM <sub>10</sub>	Fabric Filter
		SO <sub>2</sub>	Use of high quality scrap
		CO	Side draft hood system
		NO <sub>x</sub>	Oxyfuel natural gas burners
		Pb	Fabric Filter
SN-06	Caster	PM/PM <sub>10</sub>	Routed to baghouse
SN-11	Heat Treat Furnace #3	PM/PM <sub>10</sub>	Combustion of natural gas
		SO <sub>2</sub>	Combustion of natural gas
		CO	Good combustion practices
		NO <sub>x</sub>	Ultra low-NO <sub>x</sub> burners
SN-22	Slag processing and storage piles	PM/PM <sub>10</sub>	Water spray on transfer points and slag dumping area
SN-07	Ladle Metallurgy Furnace (LMF)	PM/PM <sub>10</sub>	Routed to Fabric Filters (SN-01 and SN-12)

**Permit 693-AOP-R1** was issued on December 11, 1998. It consisted of adding a car bottom furnace (heat input of 5 MMBtu/hr), changing the hydraulic fluid used from ethylene glycol to diethylene glycol, including an alternative status inspection procedure for the melt shop baghouses, and adding sources to the insignificant source list.

**Permit 693-AOP-R2** was issued on December 4, 2000. It included removal of the hourly steel production limit of 86 tons per hour which was justified by the requirement to operate continuous emission monitors on the two EAF baghouses. The permit also included newly calculated emission limits for affected sources using an hourly production rate of 92 tph. The annual steel production limit remained unchanged. The increase of steel production to 92 tph resulted in a facility wide increase of 0.1 tpy of PM/PM<sub>10</sub>, 0.3 tpy of SO<sub>2</sub>, 0.3 tpy of NO<sub>x</sub>, 4.6 tpy of CO, 4.5 tpy of VOC, and 0.3 tpy of HAPs.

**Permit 693-AOP-R3** was issued on March 9, 2001. It included the addition of two new buildings to be located on the property immediately south of the existing facility. These buildings include one new source, Bar Turner Building #3, and one insignificant source, bar straighteners. The potential to emit for the new source was 5.6 tons per year of VOC.

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

**Permit 693-AOP-R4** was issued on March 27, 2002. In this modification MacSteel was permitted to construct a second steam exhaust (SN-29) for the caster area to remove excess steam within the building. The current steam exhaust (SN-14), which is currently listed as an insignificant activity, must also be included in the permit as a source. The annual emission for SN-14 was 0.66 tpy, and the annual emission for SN-29 was 5 tpy. The permittee maintained all limits and recordkeeping requirements as stated in the past permit.

**Permit 693-AOP-R5** was issued on August 7, 2003. In this permitting action MacSteel was issued its first renewal to the original Title V Operating Permit. A Compliance Assurance Monitoring (CAM) Plan was submitted, approved, and incorporated into the conditions of the permit. The CAM affected sources at this facility were the Melt Shop Baghouses (SN-01 and SN-12).

Other permit actions included were incorporation of two minor modifications approved on November 12, 2002, and January 31, 2003. The first of these minor modifications allowed the installation and operation of a 53 MM Btu/hr natural gas-fired boiler (SN-30). Limited operation of SN-30 was required as not to exceed Title V minor modification criteria. The second minor modification allowed the use of landfill gas at the Heat Treat Furnace (SN-04). Both of these permit changes caused increased emissions in the form of the typical products of combustion.

A modification was also included in this permit action. This modification allowed the unlimited use of the boiler allowed by the minor modification approved on November 12, 2002 (installation of SN-30 mentioned above). Unlimited operation of SN-30 did not trigger PSD review.

**Permit 693-AOP-R6** was issued on August 24, 2004. This modification incorporated provisions approved in a minor modification acceptance letter dated February 14, 2004. It allowed the permittee to melt up to 15,000 lbs of turnings or machine shop borings per heat of steel at the Melt Shop (SN-01 and SN-12). Preliminary test runs, approved by the Air Division – Enforcement Branch, have shown that emissions are not affected by this change in operation. CEMS operated at the affected sources will continue to be operated to further demonstrate compliance with permitted limits.

**Permit 693-AOP-R7** was issued on November 9, 2005. This permit modification allowed MacSteel to install twin vacuum tank degassers (VTD) to replace the existing vacuum arc degasser (VAD). Due to process and steam capability, only one VTD can be operated at a time, limiting emissions to the same level as the currently permitted VAD. The steam condenser tank and steam exhaust tank were relocated. MacSteel also installed a new lime silo which vents to the existing baghouse, SN-01. This permit also increased the 24-hour average steel production rate from 92 to 98 tons per hour (tph). This increase was possible due to a lower caster “saw level floor” and lower caster saws which increase the metallurgical height of the caster. This will increase the caster speed, which in turn can achieve higher steel production. The annual production limit of 631,584 tons per year was not changed. This change resulted in slight emissions increases at SN-13, SN-14, SN-15, SN-22, SN-23, SN-24, SN-25, SN-27 and SN-29.

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

Quanex also requested the following: revise permit conditions 66 and 67 for miscellaneous process-related painting/labeling (SN-24); remove the designation of “Safety Kleen” from the parts washers in the Insignificant Activities list; add two roughing stands to the rolling mill operations listed in the Insignificant Activities list; add one hot saw for rolled product to the Insignificant Activities list; and increase slag production from 72,800 to 87,780 tons per year. These changes resulted in increases in permitted emission rates of 1.6 tpy PM/PM<sub>10</sub>, 0.1 tpy SO<sub>2</sub>, 2.8 tpy VOC, 4.6 tpy CO, and 0.1 tpy NO<sub>x</sub>.

**Permit 693-AOP-R8** was issued on February 16, 2007. This modification added one new 10.0 MMBtu/hr natural gas-fired ladle preheater (exhausts to SN-01 and SN-12); permitted an existing 7.0 MMBtu/hr ladle preheater (exhausts to SN-01 and SN-12); updated the capacity of the three existing permitted ladle preheaters to 7.0 MMBtu/hr (exhaust to SN-01 and SN-12); added a new lime silo with baghouse (SN-31); and added a baghouse for the lime transfer system (exhausts to SN-01 and SN-12). In addition, Specific Condition #73b was updated in accordance with changes to 40 CFR Part 60, Subpart Dc.

**Permit 693-AOP-R9** was issued on May 27, 2011. This permit was the Title V renewal for the facility. Changes to this permit included: Adding existing Emergency Diesel Engines as sources due to MACT applicability, adding MACT Subpart YYYYYY requirements, adding roadway emissions, and allowing SN-21 to cut scrap from offsite.

**Permit 693-AOP-R10** was issued November 25, 2014. MacSteel added an A-7 Insignificant Activity to the insignificant activities list in this permitting action.

**Permit 693-AOP-R11** was issued August 29, 2016. This permit was the Title V renewal for the facility. It also incorporated an increase in operation at the Melt Shop. PM<sub>2.5</sub> was permitted for the first time at 153.1 tpy. All other pollutants decreased or did not change.

**Permit 693-AOP-R12** was issued on June 16, 2021. This permit was a minor modification to change slag processors and replace, SN-22, slag processing and to add a powerscreen, SN-38. Permitted emissions increased 0.02 tpy of lead and 0.33 tpy of HAPs. All other pollutants stayed the same or were lowered.

## **SECTION IV: SPECIFIC CONDITIONS**

### **SN-01 and SN-12 Melt Shop Baghouse 1 and 2**

#### **Source Description**

Scrap iron and steel and scrap substitutes are received by rail and truck. After unloading, the scrap is either stored in stockpiles or loaded into furnace charging buckets. The scrap, lime, alloys, and coke/coal are charged into one of two electric arc furnaces (EAFs). Lime and carbon (fluxes) are handled and stored in bulk form. Charging and melting cycles are staggered between the furnaces. There are no limitations which would preclude tapping both furnaces at the same time or charging one furnace while tapping the other. The combined capacity of the two EAFs is 98 tons of steel per hour. The two EAFs are subject to NSPS-AAa.

The two EAFs operate in a batch mode. During normal operation, cold scrap metal, scrap substitutes, coke/coal, and lime are charged into the brick-lined EAFs (15 feet in diameter) powered by transformers and auxiliary natural gas-fired oxy fuel burners. The charging and melting cycles are staggered between the furnaces. After charging the furnace(s), the lid or roof of the EAF(s) is swung into position and a large electrical potential is applied to the carbon electrodes. The combination of the heat from the arcing process, chemical energy from oxygen lances, and the heat from the auxiliary burners melt the scrap into molten steel. As the scrap begins to melt, the temperature of the exhaust gas from the EAF(s) increases appreciably. When the melting is complete and oxygen lancing is performed, the temperature of the molten steel can approach 3,000°F. This operational cycle is repeated approximately every 90 minutes.

The capture system for exhaust gases from the EAFs is comprised of furnace side draft hoods and an overhead roof exhaust system via a canopy hood. The side draft hood on each furnace encompasses the electrodes and other furnace roof penetrations. Side draft hoods were installed as original equipment in 1984 to allow the furnaces to operate under positive pressure which prevents reoxidation of the steel during the refining process. These hoods are the primary emission capture mechanism during furnace roof-on operations. During roof-off operations (charging and tapping) and cooling of the captured gases from the side-draft hoods, emission control is accomplished by regulating the gas flow rate through the roof canopies which enables the system to control the exit gas temperature to the baghouse inlets.

After the steel is melted, it is refined at the ladle refining station through the addition of alloys and reagents, along with heat. Emissions from the refining process are collected by a side-draft hood and ducted through a spark arrestor and into the melt shop baghouse (SN-01). Fugitive emissions from the refining process are collected by melt shop baghouses (SN-01 and SN-12). Refined steel is conveyed to a stir station where argon gas is added to the bottom of the ladle. At this stage, additional alloys can be added. The steel is then conveyed to one of two vacuum arc degassers (SN-13) where dissolved gases are removed through application of a vacuum. Emissions from the stir station and vacuum tank degassers (door open) are collected with hoods

and ducted to the baghouses. Emissions from the vacuum tank degassers are collected by the steam injector when the door is closed.

After the temperature and composition of the molten steel is adjusted at the vacuum degassers, the molten steel is transferred to the continuous caster. The molten steel is poured from the ladle into a tundish, which funnels the molten steel into a mold. The steel solidifies as it passes through the water-cooled mold, providing immediate cooling of the outer skin. At this point, the center of the steel is still molten. The caster produces round bars. Emissions from the continuous caster are captured by the canopy hood and ducted to the melt shop baghouses (SN-01, SN-12). This hood is estimated to capture 100% of emissions generated at the caster. Exhausts from the caster cooling zones and caster hot saws are released to the atmosphere through vents SN-14 and SN-29.

Molten metal is tapped from the EAFs into a ladle and transported to the ladle metallurgy furnace (LMF). The LMF station is used primarily to adjust the composition and temperature of the steel. The processes conducted at the LMF station include the injection/addition of alloys, fluxes, and non-ferrous metals. Emissions from the LMF station can be either gaseous or in particulate form. Particulate emissions are generally attributed to dust associated with fluxes, slag, and various additives. Gaseous emissions are generally associated with the oxidation of metals. Emissions from the LMF are captured by the side-draft hood and ducted to the EAF baghouse (SN-01). Fugitive emissions from the LMF are collected by melt shop baghouses (SN-01 and SN-12).

MacSteel utilizes four natural gas-fired tundish preheaters, each with a maximum heat input capacity of 1.2 MMBtu/hr. These units are used to raise the temperature of the tundishes prior to transfer of molten steel to the ladles. Low-NO<sub>x</sub> burners are used in the preheaters to minimize emissions of nitrogen oxides. The tundish preheaters emit natural gas combustion by-products which are captured by the roof canopy system and ducted to the EAF baghouses (SN-01 and SN-12).

*Ladle preheaters.* MacSteel incorporates five natural gas-fired ladle preheaters, four with a maximum heat input of 7.0 MMBtu/hr and one with a maximum heat input capacity of 10.0 MMBtu/hr. These units are used to raise the temperature of the ladles prior to transfer of molten steel to the ladles. Low-NO<sub>x</sub> burners are used in the preheaters to minimize emissions of nitrogen oxides. Emissions from these preheaters are vented to the melt shop baghouses and are addressed in the section discussing emission points SN-01 and SN-12.

*Ladle Dryout, Refractory Dryers.* MacSteel utilizes numerous ladles and tundishes. Each ladle or tundish requires a certain amount of refractory brick. After time, the refractory lining in the ladles and tundishes needs to be replaced. The removal of the refractory lining is accomplished using jack hammers. This operation is associated with the emission of small amounts of particulate in the building. As such refractory removal is considered an insignificant activity. After removal of the old refractory lining, new refractory is applied and cured. The mill incorporates one (1) natural gas-fired ladle dryout with a maximum heat input capacity of 1.2

Gerdau MacSteel Inc.  
 Permit #: 0693-AOP-R13  
 AFIN: 66-00274

MMBtu/hr and six (6) natural gas-fired refractory dryers each with maximum heat input capacity of 1.2 MMBtu/hr.

Emissions from the Caster, Ladle Metallurgy Furnace (LMF), Tundish Preheaters, Ladle Dryout, Refractory Dryers, and Ladle Preheaters, are vented to the EAF baghouses (SN-01 and SN-12).

The dust collection equipment for the two EAFs, LMF, caster, stir station, vacuum arc degassers, and other melt shop emission sources consists of two multi-compartment, positive pressure baghouses (SN-01 and SN-12). Each module contains multiple filter bags, with all necessary reverse-air bag cleaning mechanisms, flow control, and material transfer and removal equipment. The design of the baghouses allows for on-line maintenance and cleaning. The air-moving mechanism for the systems consists of multiple blowers. SN-01 has a single exhaust stack, while SN-12 has a roof monitor vent along the length of the roof.

#### Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table.  
 [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-01 SN-12	Melt Shop Baghouse 1 and 2	PM	27.4	109.2
		PM <sub>10(filterable)</sub>	27.4	109.2
		SO <sub>2</sub>	90.3	331.6
		CO	421.4	1547.4
		NO <sub>x</sub>	43.9	161.1
		Lead	0.3	1.0

2. The permittee shall not exceed the emission rates set forth in the following table. The HAPs below exclude lead. [Reg.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
SN-01 SN-12	Melt Shop Baghouse 1 and 2	HAPs	1.1	4.1

3. The combined emissions from SN-01 and SN-12 shall not exceed the values in the following table. Compliance with this condition will be shown by compliance with Specific Conditions 4 and 6. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Pollutant	lb/hr	tpy
SN-01 SN-12	PM <sub>10(total)</sub>	31.4	123.9
	PM <sub>2.5</sub>	31.4	123.9
	VOC	12.7	44.7



4. The permittee shall measure the particulate emissions every twenty four months from the melt shop baghouse SN-01 using Method 5, and the melt shop baghouse SN-12 using method 5D. The permittee shall also conduct test for condensable particulate emissions concurrently using EPA reference Method 202. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf). Each test shall consist of three runs. The test runs on both baghouses shall be conducted simultaneously, unless inclement weather interferes. The permittee shall report all emissions measured as PM<sub>10</sub> or may conduct separate PM<sub>10</sub> testing using EPA Reference Method 201 or 201A as found in 40 CFR Part 51, Appendix M. These tests shall be conducted in accordance with Plantwide Condition 3 and on the permittee's current testing schedule. To demonstrate compliance with the filterable particulate limit (0.0018 gr/dscf and 27.4 lb/hr), the concentration of particulate matter shall be determined using the following equation:

$$CST = \frac{\{C_1 * Q_1 + C_2 * Q_2\}}{\{Q_1 + Q_2\}}$$

where: CST= average concentration of filterable particulate matter

C<sub>1</sub> = concentration of PM from SN-01 (gr/dscf)

C<sub>2</sub> = concentration of PM from SN-12 (gr/dscf)

Q<sub>1</sub> = flow rate of stack gas from SN-01 (dscf/hr)

Q<sub>2</sub> = flow rate of stack gas from SN-12 (dscf/hr)

[Reg.19.304 and 40 C.F.R. § 60.275a(e), 40 CFR Part 64, and 40 CFR 60.275a(e)]

5. The average concentration of filterable particulate matter from SN-01 and SN-12 calculated using the equation in Specific Condition 4 (CST) shall not exceed 0.0018 gr/dscf. [Reg.19.501 *et seq.*, Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]
6. The permittee shall measure the VOC emissions from the melt shop baghouse SN-01 using Method 25A, and the melt shop baghouse SN-12 using Method 25A every twenty four months. The test runs on both baghouses shall be done simultaneously. These tests shall be conducted in accordance with Plantwide Condition 3 and on the permittee's current testing schedule. [Reg.19.702 and 40 C.F.R. § 52 Subpart E]
7. The permittee shall not emit any gases from SN-01 or SN-12 with an average opacity of 3% or greater, as measured by EPA Reference Method 9. Visible emission observations shall be conducted on SN-12 at least once-per-day by a certified visible emission observer when at least one of the furnaces is operating in the melting and refining period, unless inclement weather prevents. It shall be noted on the observation form that the readings were taken during the melting and refining period. These observations shall be performed for at least three 6-minute periods. [Reg.19.304 and 40 C.F.R. § 60.272a(a)(2); Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E; and 40 C.F.R. § 64]

8. The permittee shall not emit any gases from the melt shop due solely to the operations of the EAFs with an opacity of 6% or greater, as measured by EPA Reference Method 9 during the particulate testing. The permittee shall be responsible for these observations and shall keep records showing compliance with this condition. These observations shall be performed for at least three 6-minute periods. [Reg.19.304 and 40 C.F.R. § 60.272a(a)(3); Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E; and 40 C.F.R. § 64]
9. The permittee shall not emit any gases from the dust handling systems servicing the EAF baghouses with an opacity of 10% or greater. The permittee shall conduct weekly observations of the opacity from the dust handling system, and keep a record of these observations. If visible emissions are detected, then the permittee shall conduct three 6-minute opacity readings on the equipment where visible emissions were observed in accordance with EPA Reference Method 9. The results of these observations shall be kept on site and made available for inspection upon request. For the purposes of this condition, the dust handling system consists of the baghouse dust hoppers, the dust-conveying equipment, any central dust storage equipment, the dust-treating equipment (e.g., pug mill, pelletizer), dust transfer equipment (from storage to truck), and any secondary control devices used with the dust transfer equipment. [Reg.19.304 and 40 C.F.R. § 60.272a(b) and 40 C.F.R. § 64]
10. The permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from SN-01. The opacity shall not exceed 3% based on a 6-minute average. This monitor shall be operated in accordance with the *Arkansas Continuous Emission Monitoring Systems Conditions* as found in appendices of this permit. [Reg.19.304 and 40 C.F.R. § 60.273a(a) and 40 C.F.R. § 64]
11. The permittee shall perform monthly operational status inspections of the equipment that is important to the total capture system. This inspection shall include observations of the physical appearance of the exterior of the capture system for the presence of holes or leaks, on a monthly basis. The permittee shall also continuously monitor the flow rates to the two EAF baghouses using existing flow monitors which were installed on the baghouses. The permittee shall use these flow rates to continuously determine if fan erosion, dust accumulation on the interior of the ducts, or damper positions is unacceptable. For the purposes of this condition, unacceptable operation shall be defined as flow rates less than the baseline flow rate determined during the semiannual particulate testing. Operation at flow rates during any period less than the most recently determined baseline flow rate may be considered unacceptable operation and maintenance of the capture system. Operation at such values shall be reported to the Department semiannually. [Reg.19.304 and 40 C.F.R. §§ 60.274a(d), 60.276a(c) and 64]
12. The permittee shall, during any emission testing on the baghouses, monitor and record the following information for all heats covered by the tests:
  - a. Charge weights and materials, and tap weights and materials.

- b. Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing.
- c. Control device operation log.
- d. Continuous monitor and Reference Method 9 data.

[Reg.19.304 and 40 C.F.R. §§ 60.274a(h) and 64]

13. The permittee shall install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through both baghouses (SN-01 and SN-12). The flow monitors may be installed in any appropriate location such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of  $\pm 10\%$  over its normal operating range and shall be calibrated according to the manufacturer's instructions. This monitor shall be operated in accordance with the *Arkansas Continuous Emission Monitoring Systems Conditions* as found in appendices of this permit.  
[Reg.19.304 and 40 C.F.R. § 60.274a(b)]
14. The permittee shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) for each baghouse (SN-01 and SN-12). The CEMS shall measure and record the concentrations of CO, NO<sub>x</sub>, and SO<sub>2</sub> leaving each baghouse, simultaneously. Both systems shall be operated in accordance with the *Arkansas Continuous Emission Monitoring Systems Conditions* as found in the appendices of this permit. [Reg.19.703, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
15. The combined CO, NO<sub>x</sub>, and SO<sub>2</sub> emissions from SN-01 and SN-12 shall not exceed the values listed in Specific Condition 1. The averaging time for compliance purposes with hourly limits shall be 3-hour rolling averages, such that a new 3-hour average is computed every hour. Compliance with the tons/year emission rates shall be determined on a monthly basis based on a rolling 12-month total of the CEMS data. The permittee shall submit reports in accordance with General Provision 7. [Reg.19.501 *et seq.*, Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]
16. The permittee shall demonstrate compliance with the lead emission limits by either measuring the lead concentration in the baghouse dust then calculating lead emissions by multiplying the measured filterable particulate emissions by the lead concentration percentage in the baghouse dust or performing stack testing using Reference Method 12 simultaneously on both baghouses. These demonstrations shall be conducted every 24 months. Stack testing shall be conducted in accordance with Plantwide Condition 3.  
[Reg.19.702 and 40 C.F.R. § 52 Subpart E]
17. The permittee shall not exceed 20,000 pounds of turnings or machine shop borings per heat of steel. The turnings/ borings shall contain no free oils. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

18. The permittee shall maintain monthly records to demonstrate compliance with the turnings/ borings limit of Specific Condition 17. A monthly average shall be used by dividing the total pounds of turnings/ borings melted that month by the total number of heats performed during that month. Records shall be updated by the 15<sup>th</sup> day following the month to which they pertain. Records shall be kept onsite, made available to Department personnel upon request, and submitted in accordance with General Provision 7. [Reg.19.705 and 40 C.F.R. § 52 Subpart E]
19. The permittee shall not exceed 688,000 tons per year of steel production based on a rolling 12-month total. Compliance with this condition shall be demonstrated on a monthly basis by totaling the steel production for the previous 12 months. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E and Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
20. The permittee shall maintain records on site of the tonnage of steel produced during each month to verify compliance with Specific Condition 19. The permittee shall submit reports in accordance with General Provision 7. [Reg.19.705 and 40 C.F.R. § 52 Subpart E]
21. The permittee shall combust only pipeline quality natural gas in the tundish preheaters, ladle dryout, ladle preheaters, and refractory dryers. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E and Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
22. The permittee shall for metallic scrap utilized in the EAF prepare and implement a pollution prevention plan as required in §63.10685(a)(1) or the scrap restrictions of §63.10685(a)(2). [Reg.19.304 and 40 C.F.R. § 63 Subpart YYYYYY]
23. The permittee shall for scrap containing motor vehicle scrap participate in and purchase motor vehicle scrap from providers who participate in a program for the removal of mercury switches as required in §63.10685(b)(2) that is approved by the Administrator of 40 CFR Part 63, Subpart YYYYYY or certify the scrap does not contain motor vehicle scrap. For scrap that does not contain motor vehicle scrap the permittee must maintain records of documentation that the scrap does not contain motor vehicle scrap. [Reg.19.304 and 40 C.F.R. § 63 Subpart YYYYYY]
24. The permittee shall maintain the records required in §63.10 and records which demonstrate compliance with the requirements of the pollution prevention plan and scrap restrictions of Specific Condition 22 and with the mercury requirements in Specific Condition 23. Additionally the permittee must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch program. If the motor vehicle scrap is purchased from a broker, the permittee must maintain records identifying each broker and documentation that all scrap provided by the broker was provided by other scrap providers who participate in an approved mercury switch removal program. [Reg.19.304 and 40 C.F.R. § 63 Subpart YYYYYY]

25. The permittee must submit semiannual compliance reports to the Administrator of 40 CFR Part 63, Subpart YYYYYY for the control of contaminants from scrap according to the requirements of §63.10(3). The report must clearly identify any deviation from the requirements of §63.10685(a) and (b) outlined in Specific Conditions 22 and 23. [Reg.19.304 and 40 C.F.R. § 63 Subpart YYYYYY]
26. The permittee must install, operate, and maintain a capture system that collects the emissions from each EAF and conveys the collected emissions to a pollutant control device for the removal of particulate matter. [Reg.19.304 and 40 C.F.R. § 63 Subpart YYYYYY]
27. The permittee must not discharge from SN-01 or SN-12 any gasses from an EAF which exhibit a 6% opacity or greater or contain in excess of 0.0052 gr/dscf. [Reg.19.304 and 40 C.F.R. § 63 Subpart YYYYYY]
28. The permittee must monitor the baghouses, SN-01 and SN-12 according to the compliance assurance monitoring requirements outlined in Specific Conditions 7, 10, 11, 12, and 13. [Reg.19.304 and 40 C.F.R. § 64]
29. The permittee shall submit reports as required by § 64.9(a). These records shall include: Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and a description of the actions taken to implement a QIP during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [Reg.19.304 and 40 C.F.R. § 64]
30. The permittee shall submit reports as required by § 64.9(b). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions [Reg.19.304 and 40 C.F.R. § 64])

SN-02  
Reheat Furnace

Source Description

The rolling process is initiated at the reheat furnace and proceeds into the rolling mill. The reheat furnace has a maximum heat input capacity of 45 MMBtu/hr which is supplied by natural gas combustion. Waste gas is pulled through a recuperator and exhausted to a stack. In the furnace, the steel bars are heated to a uniform rolling temperature. The furnace incorporates low-NO<sub>x</sub> burners to minimize emissions of NO<sub>x</sub>. Good combustion practices are utilized to minimize emissions of CO. The furnace has one exhaust stack, identified as SN-02. This source is not subject to NSPS-Dc because the reheat furnace does not fit the definition of a steam generating unit as defined in the subpart.

Specific Conditions

31. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 35. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-02	Reheat Furnace	PM	0.7	2.7
		PM <sub>10</sub>	0.7	2.7
		SO <sub>2</sub>	0.1	0.2
		CO	1.6	6.9
		NO <sub>x</sub>	6.3	27.6

32. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 35. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-02	Reheat Furnace	PM <sub>2.5</sub>	0.7	2.7
		VOC	0.2	0.6

33. The permittee shall not exceed the emission rates set forth in the following table. The HAPs below exclude lead. [Reg.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
SN-02	Reheat Furnace	HAPs	0.1	0.4

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

34. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 35. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Limit	Regulatory Citation
02	5%	Reg.19.901 <i>et seq.</i> and 40 C.F.R. § 52 Subpart E

35. The permittee shall combust only pipeline quality natural gas at SN-02. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E and Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

SN-03  
Boiler

Source Description

MacSteel utilizes a boiler to provide process steam and heat to the mill. The boiler has a maximum heat input capacity of 45 MMBtu/hr that is supplied by natural gas combustion. This source is not subject to NSPS-Dc since it was constructed before June 9, 1989.

Specific Conditions

36. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 40. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-03	Boiler	PM	0.7	2.7
		PM <sub>10</sub>	0.7	2.7
		SO <sub>2</sub>	0.1	0.2
		CO	1.6	6.9
		NO <sub>x</sub>	6.3	27.6

37. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 40. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-03	Boiler	PM <sub>2.5</sub>	0.7	2.7
		VOC	0.2	0.6

38. The permittee shall not exceed the emission rates set forth in the following table. The HAPs below exclude lead. [Reg.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
SN-03	Boiler	HAPs	0.1	0.4

39. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 40. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]



Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

SN	Limit	Regulatory Citation
03	5%	Reg.19.901 <i>et seq.</i> and 40 C.F.R. § 52 Subpart E

40. The permittee shall combust only pipeline quality natural gas at SN-03. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

SN-04, SN-05, SN-11  
 Heat Treat Furnaces

Source Description

MacSteel incorporates three natural gas fired heat treat furnaces with maximum heat input capacities of 36.6, 38.4, and 65 MMBtu/hr, respectively, to relieve structural tension from the steel bars and for chemistry adjustments. Each heat treat furnace has an individual stack; identified as SN-04, SN-05, and SN-11. Heat treat furnaces 1-3 are not subject to NSPS-Dc because these furnaces do not meet the definition of a steam generating unit as defined in this subpart.

Specific Conditions

41. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 45. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-04	Heat Treat Furnace	PM	0.6	2.3
		PM <sub>10</sub>	0.6	2.3
		SO <sub>2</sub>	0.5	2.0
		CO	1.3	5.7
		NO <sub>x</sub>	5.2	22.4
SN-05	Heat Treat Furnace	PM	0.6	2.3
		PM <sub>10</sub>	0.6	2.3
		SO <sub>2</sub>	0.1	0.2
		CO	1.4	5.9
		NO <sub>x</sub>	5.4	23.6
SN-11	Heat Treat Furnace	PM	0.9	3.9
		PM <sub>10</sub>	0.9	3.9
		SO <sub>2</sub>	0.1	0.2
		CO	6.0	26.2
		NO <sub>x</sub>	5.0	21.7

42. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 45. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
04	Heat Treat Furnace	PM <sub>2.5</sub>	0.6	2.3
		VOC	0.5	2.0

SN	Description	Pollutant	lb/hr	tpy
05	Heat Treat Furnace	PM <sub>2.5</sub>	0.6	2.3
		VOC	0.2	0.5
11	Heat Treat Furnace	PM <sub>2.5</sub>	0.9	3.9
		VOC	0.2	0.8

43. The permittee shall not exceed the emission rates set forth in the following table. The HAPs below exclude lead. [Reg.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
04	Heat Treat Furnace	HAPs	0.1	0.3
05	Heat Treat Furnace 2	HAPs	0.1	0.4
11	Heat Treat Furnace	HAPs	0.2	0.6

44. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 45. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Limit	Regulatory Citation
04	5%	Reg.19.901 <i>et seq.</i> and 40 C.F.R. § 52 Subpart E
05	5%	Reg.19.901 <i>et seq.</i> and 40 C.F.R. § 52 Subpart E
11	5%	Reg.19.901 <i>et seq.</i> and 40 C.F.R. § 52 Subpart E

45. The permittee shall combust only pipeline quality natural gas at SN-04, SN-05 and SN-11. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E and Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

SN-10  
 Automated Deburring Line

Source Description

After the bars are cut, an automated deburring line is used to remove burrs from the end of bars and to blunt sharp edges. PM emissions associated with this operation are vented to a cyclone and then to a negative-pressure baghouse.

Specific Conditions

46. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 5. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-10	Automated Deburring Line	PM <sub>10</sub>	0.2	0.8
		PM <sub>2.5</sub>	0.2	0.8

47. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 5. [Reg.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
SN-10	Automated Deburring Line	PM	0.2	0.8

48. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 49. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Limit	Regulatory Citation
10	5%	Reg.18.501

49. The permittee shall conduct weekly observations of the opacity from this source. These observations shall be conducted by a person familiar with the facility's visible emissions. If the permittee detects visible emissions in excess of the limit set forth in the above Specific Condition, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements by

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

performing a reading in accordance with EPA Method 9. The permittee shall maintain records of all observations, the cause of any visible emissions and the corrective action taken. The permittee must keep these records on site and make them available to Department personnel upon request. [Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN-13  
 Vacuum Tank Degassers-Steam Injector Condenser

Source Description

After steel is refined in the LMF, it is transferred to a stir station and then to one of two vacuum tank degassers. At the degassers, dissolved gases are removed from the steel through the application of a vacuum. In the degassers, heat may also be added with electric arcs. Emissions from the degassers are collected by a hood and ducted to the EAF baghouses when the door is open (arcing mode). Exhaust from a steam injector condenser (SN-13) occurs when the door is closed (degassing and arcing under partial pressure modes). Emissions from the steam injector condenser were estimated using stack tests. The emission rates, based upon the tests, and adjusted for maximum operation, are presented in the table below.

Specific Conditions

50. The permittee shall not exceed the emission rates set forth in the following table.  
 [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-13	Vacuum Tank Degassers-Steam Injector Condenser	PM	0.6	2.1
		PM <sub>10</sub>	0.6	2.1
		SO <sub>2</sub>	0.2	0.6
		CO	17.2	74.9
		NO <sub>x</sub>	0.2	0.6

51. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition 5. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-13	Vacuum Tank Degassers-Steam Injector Condenser	PM <sub>2.5</sub>	0.6	2.1

52. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 53.

SN	Limit	Regulatory Citation
13	20%	Reg.19.901 <i>et seq.</i> and 40 C.F.R. § 52 Subpart E

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

53. The permittee shall conduct weekly observations of the opacity from this source. These observations shall be conducted by a person familiar with the facility's visible emissions. If the permittee detects visible emissions in excess of the limit set forth in the above Specific Condition, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements by performing a reading in accordance with EPA Method 9. The permittee shall maintain records of all observations, the cause of any visible emissions and the corrective action taken. The permittee must keep these records on site and make them available to Department personnel upon request. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

SN-15, SN-25, and SN-27  
Bar Turner Buildings

Source Description

Operations including bar turning, bar polishing, and bar buffing are conducted in the bar turning buildings. These operations require the use of soluble oils and mineral oils. VOC emissions associated with Bar Turning Buildings #1 and #2, SN-15 and SN-25, exhaust through a fan into the heat treat building and then through a roof exhaust fan which exhausts to the atmosphere. VOC from Building #3, SN-27, exhausts from the roof monitor.

Specific Conditions

54. The permittee shall not exceed the emission rates set forth in the following table.  
[Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
15	Bar Turner Building #1	VOC	1.7	6.1
25	Bar Turner Building #2	VOC	1.7	6.1
27	Bar Turner Building #3	VOC	1.7	6.1



SN-21  
 Scrap Bar Cutting

Source Description

Scrap steel bars from the caster, rolling mill, finishing line, straighteners, bar turner, and from off site are torch-cut into smaller pieces (approximately 3 foot lengths) for recharging in the EAFs. The steel bars are transported to the cutting area via rail cars. The bars are loaded onto a roller table. The cutting is accomplished using two hand-held natural gas/oxygen torches.

Specific Conditions

55. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 58. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-21	Scrap Bar Cutting	PM <sub>10</sub>	0.2	0.8
		PM <sub>2.5</sub>	0.2	0.8
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.3
		CO	0.3	1.0
		NO <sub>x</sub>	1.1	4.8

56. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 58. [Reg.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
SN-21	Scrap Bar Cutting	PM	0.2	0.8
		HAPs	0.02	0.09

57. The opacity from SN-21 shall not exceed 5%, as measured by EPA Reference Method 9. Compliance with this condition shall be demonstrated through compliance with Specific Condition 58. [Reg.18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
58. The permittee shall not exceed a total heat input capacity of 10.8 MMBtu/hr at SN-21. The permittee shall fire only pipeline quality natural gas at SN-21. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

SN-22 and SN-38  
Slag Processing

Source Description

Slag generated during the melting and casting operations is poured on the ground in contained areas within the steelworks building under the dust collecting roof canopies. The hot slag is dug out of these areas and deposited in large dump trucks for transportation to the slag processing area. Emissions from the dump truck loading area are controlled by overhead water sprays. Approximately 75 percent of the slag is returned to the scrap storage area as reclaimed steel. The remaining 25 percent is crushed and passed by a magnet to remove steel fines. The remaining material is conveyed to a screening station and sorted by size. At the slag processing area, the slag is first dumped and allowed to cool. During this time, water is continuously sprayed on the slag. When sufficiently cooled, the wet slag is loaded out of the slag pit/cooling area and is placed into a feeder. Next, the slag is screened to remove various metallics and additionally screened for size separation. This screening process is associated with a number of belt-type conveyors. Water sprays are used to minimize PM emissions from all open-air slag processing operations. The sprays have an estimated efficiency of 95 percent. Dust generated during the "dig out" is contained and collected via building and roof canopies.

The Powerscreen is used when the slag plant is down. The engine on the powerscreen is a mobile engine and as such is not in the permit.

Specific Conditions

59. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions 62 and 63. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-22	Slag Processing	PM <sub>10</sub>	1.0	0.2
		Lead	0.01	0.01
SN-38	Powerscreen	PM <sub>10</sub>	0.4	0.1
		Lead	0.01	0.01

60. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions 62 and 63. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

SN	Description	Pollutant	lb/hr	tpy
SN-22	Slag Processing	PM	2.4	0.3
		HAPs	0.27	0.31
SN-38	Powerscreen	PM	1.3	0.7
		HAPs	0.10	0.02

61. The opacity from SN-22 and SN-38 shall not exceed 20%, as measured by EPA Reference Method 9. SN-22 source shall include slag dumping, wind erosion of slag pits and processed slag piles, slag loadout to feeder for subsequent processing, slag processing including various conveying and sizing operations, and vehicle/equipment traffic on unpaved roads. Compliance with this condition shall be demonstrated through compliance with Specific Condition 62. [Reg.19.503 and 40 C.F.R. § 52 Subpart E]
62. The permittee shall pre-wet the slag material prior to loading it into slag processing plants SN-22 and SN-38. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]
63. The permittee shall not process more than 93,568 tons of slag per year based on a rolling 12 month total. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
64. The permittee shall keep records of the amount of slag processed each month and each 12 month period. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Reg.19.705 and 40 C.F.R. § 52 Subpart E]

SN-23  
Hydraulic Fluid Usage

Source Description

The mill utilizes various hydraulic fluids. One such fluid contains diethylene glycol which is not an air toxic, is used in equipment in the melt shop. The diethylene glycol additive serves to minimize the risk of fires or explosions in this equipment.

Specific Conditions

65. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 66. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-23	Hydraulic Fluid Usage	VOC	3.6	14.4

66. The permittee shall maintain monthly records of the VOC used in SN-23. These records shall include the monthly total and consecutive 12-month rolling total. The amount not accounted for shall be considered emissions. These records shall be kept on site and made available to Department personnel upon request. A copy of the records shall be submitted in accordance with General Provision 7. [Reg.19.705 and 40 C.F.R. § 52 Subpart E]

SN-24  
Miscellaneous Process-Related Painting/Labeling

Source Description

A color coding is painted on each steel bar using aerosol spray paint. The maximum annual paint use at the mill is estimated to be approximately 15,000 lbs. The volatile portion of the paints and carrier solvents can be released to the atmosphere during their application. To estimate these emissions, the VOC and HAP content of the paint and solvents was used in conjunction with the maximum annual throughput of paint and solvent.

Specific Conditions

67. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions 69. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-24	Miscellaneous Process-Related Painting/Labeling	VOC	7.5	3.8

68. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions 69. [Reg.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
SN-24	Miscellaneous Process-Related Painting/Labeling	HAPs	6.3	3.2

69. The permittee shall keep the MSDS sheet for the paints being used on site and available for inspection by Department personnel upon request. The permittee shall maintain monthly records to demonstrate compliance with the HAP and VOC emission rates of Specific Conditions 67 and 68. These records shall contain the total monthly usage of each paint and solvent, the VOC and HAP contents, and calculations of the total monthly amount of VOCs and HAPs used, and the consecutive 12 month rolling total of the VOC and HAPs used at this source. These records shall be updated by the 15<sup>th</sup> day of the month following the month to which the records pertain. A copy of these records shall be kept on site and made available to Department personnel upon request. Records shall be submitted in accordance with General Provision 7. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

SN-26  
 Car Bottom Furnace

Source Description

MacSteel operates a car bottom furnace. The furnace is needed for specialized heat treating of steel bars. The furnace is fired with natural gas and has a maximum heat input rate of 5 MMBtu/hr. The car bottom furnace will emit natural gas combustion by-products to the air. To estimate emissions of sulfur dioxide, VOC, CO, and PM, the maximum hourly heat input capacity was multiplied by AP-42 factors (March, 1998). An estimate of nitrogen oxides was provided by the vendor. All emission rates are based on maximum capacity and continuous operation.

Specific Conditions

70. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by burning only natural gas as fuel at this source. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-26	Car Bottom Furnace	PM <sub>10</sub>	0.1	0.2
		PM <sub>2.5</sub>	0.1	0.2
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.2
		CO	0.5	1.9
		NO <sub>x</sub>	1.5	6.6

71. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by burning only natural gas as fuel at this source. [Reg.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
SN-26	Car Bottom Furnace	PM	0.1	0.2
		HAPs	0.01	0.05

72. Visible emissions from this source shall not exceed 5% opacity as measured by EPA Reference Method 9. Compliance shall be demonstrated by burning only natural gas as fuel at this source. [Reg.19.705 and 40 C.F.R. § 52 Subpart E]

SN-14 and SN-29  
Caster Steam Exhaust Nos. 1 and 2

Source Description

After the temperature and composition of the molten steel is adjusted at the vacuum degassers, the molten steel is transferred to the continuous caster (SN-06). The molten steel is poured from the ladle into a tundish, which funnels the molten steel into a mold. The steel solidifies as it passes through the water-cooled mold, providing immediate cooling of the outer skin. At this point, the center of the steel is still molten. The continuous caster produces round bars. Emissions from the caster are captured by the canopy hood and ducted to the melt shop baghouses (SN-01, SN-12). Exhausts from the caster cooling zones and caster hot saws are released to the atmosphere through a vent (SN-14) and (SN-29).

Specific Conditions

73. The permittee shall not exceed the emission rates set forth in the following table.  
[Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
14	Caster Steam Exhaust No. 1	PM <sub>10</sub>	0.3	0.8
		PM <sub>2.5</sub>	0.3	0.8
29	Caster Steam Exhaust No. 2	PM <sub>10</sub>	1.3	5.6
		PM <sub>2.5</sub>	1.3	5.6

74. The permittee shall not exceed the emission rates set forth in the following table.  
[Reg.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
14	Caster Steam Exhaust No. 1	PM	0.5	0.8
29	Caster Steam Exhaust No. 2	PM	1.3	5.6

75. Visible emissions from sources SN-14 and 29 shall not exceed 20% opacity as measured by EPA reference method 9. [Reg.19.503 and 40 C.F.R. § 52 Subpart E]

SN-30  
 Natural Gas Fired Boiler

Source Description

MacSteel utilizes a boiler to provide process steam and heat to the mill. The boiler has a maximum heat input capacity of 53 MMBtu/hr which is supplied by natural gas combustion. The boiler has one exhaust stack, identified as SN-30. This source is subject to 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units*.

Specific Conditions

76. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 79. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-30	Natural Gas Fired Boiler	PM <sub>10</sub>	0.4	1.8
		PM <sub>2.5</sub>	0.4	1.8
		SO <sub>2</sub>	0.1	0.2
		VOC	0.3	1.3
		CO	4.5	19.5
		NO <sub>x</sub>	5.3	23.2

77. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 79. [Reg.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
SN-30	Natural Gas Fired Boiler	PM	0.4	1.8
		HAPs	0.1	0.5

78. Visible emissions from this source shall not exceed 5% opacity as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 79. [Reg.18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
79. The permittee shall only fire pipeline quality natural gas at this source. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]



Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

80. The permittee shall comply with all applicable provisions of 40 CFR Part 60, Subpart A – General Provisions and Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*. Applicable provisions of Subpart Dc include, but are not limited to the following:
- a. Pursuant to § 60.48(c)(a), the owner or operator shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup. This notification shall include the design heat input capacity of the boiler and identification of fuels (natural gas only) to be combusted in the affected facility.
  - b. Pursuant to §§ 60.48(c)(g) and (i), records of the type and amount of fuel combusted each calendar month must be kept for SN-30. These records shall be kept on site for two years following the date of such records.

[Reg.19.304 and 40 C.F.R. § 60 Subpart Dc]

SN-31  
 Lime Storage Silo System

Source Description

This source includes 3 lime storage silos controlled with bin vent filters.

Specific Conditions

81. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions 19 and 84, and Plantwide Condition 5. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-31	Lime Storage Silo System	PM <sub>10</sub>	0.1	0.2
		PM <sub>2.5</sub>	0.1	0.2

82. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 84 and Plantwide Condition 5. [Reg.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
SN-31	Lime Storage Silo System	PM	0.1	0.2

83. The visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 84. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Limit	Regulatory Citation
31	5%	Reg.18.501

84. The permittee shall conduct weekly observations of the opacity from this source. These observations shall be conducted by a person familiar with the facility's visible emissions. If the permittee detects visible emissions in excess of the limit set forth in the above Specific Condition, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements by performing a reading in accordance with EPA Method 9. The permittee shall maintain

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

records of all observations, the cause of any visible emissions and the corrective action taken. The permittee must keep these records on site and make them available to Department personnel upon request. [Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN-33, 34, 35, and 36

Emergency Diesel Engines

Source Description

Sources SN-33, 34, and 35 are 300 hp diesel fired emergency engines. Source SN-36 is a 1,300 hp diesel fired emergency engine.

Specific Conditions

85. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition 88 through 96. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
33	Emergency Diesel Engine	PM <sub>10</sub>	0.7	0.2
		PM <sub>2.5</sub>	0.7	0.2
		SO <sub>2</sub>	0.7	0.2
		VOC	0.7	0.2
		CO	2.0	0.5
		NO <sub>x</sub>	9.3	2.4
34	Emergency Diesel Engine	PM <sub>10</sub>	0.7	0.2
		PM <sub>2.5</sub>	0.7	0.2
		SO <sub>2</sub>	0.7	0.2
		VOC	0.7	0.2
		CO	2.0	0.5
		NO <sub>x</sub>	9.3	2.4
35	Emergency Diesel Engine	PM <sub>10</sub>	0.7	0.2
		PM <sub>2.5</sub>	0.7	0.2
		SO <sub>2</sub>	0.7	0.2
		VOC	0.7	0.2
		CO	2.0	0.5
		NO <sub>x</sub>	9.3	2.4
36	Emergency Diesel Engine	PM <sub>10</sub>	1.0	0.3
		PM <sub>2.5</sub>	1.0	0.3
		SO <sub>2</sub>	16.0	4.0
		VOC	1.0	0.3
		CO	7.2	1.8
		NO <sub>x</sub>	31.2	7.8

86. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific

Condition 88 through 96. [Reg.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
33	Emergency Diesel Engine	PM HAPs	0.7 0.01	0.2 0.01
34	Emergency Diesel Engine	PM HAPs	0.7 0.01	0.2 0.01
35	Emergency Diesel Engine	PM HAPs	0.7 0.01	0.2 0.01
36	Emergency Diesel Engine	PM HAPs	1.0 0.01	0.3 0.01

87. The opacity from the Emergency Diesel Engines, SN-33, SN-34, SN-35, and SN-36 shall not exceed 20%, as measured by EPA Reference Method 9. [Reg.19.503 and 40 C.F.R. § 52 Subpart E]
88. The permittee shall not operate any single Emergency Diesel Engine, SN-33, SN-34, SN-35, and SN-36 more than 500 hours in any consecutive 12 month period. The permittee shall maintain records of the hours of operation of each generator each month. These records shall be updated by the 15<sup>th</sup> day of the month following the month that the records represent, kept on site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
89. The permittee must meet the following maintenance requirements for the Emergency Diesel Engines, SN-33, SN-34, SN-35, and SN-36: Change the oil and filter every 500 hours of operation or annually, whichever comes first; inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, which ever comes first, and replace as necessary. [Reg.19.304 and 40 C.F.R. § 63 Subpart ZZZZ]
90. The permittee must for the Emergency Diesel Engines, SN-33, SN-34, SN-35, and SN-36, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [Reg.19.304 and 40 C.F.R. § 63 Subpart ZZZZ]
91. The permittee is to comply with the operating limitations of 40 CFR Part 60, Subpart ZZZZ that apply at all times and maintain any affected source including any associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. [Reg.19.304 and 40 C.F.R. § 63 Subpart ZZZZ]

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

92. The permittee must maintain the Emergency Diesel Engines, SN-33, SN-34, SN-35, and SN-36, according to the manufacturer's emission-related written instructions or develop their own maintenance plan according to 40 C.F.R. § 63.6625(e). [Reg.19.304 and 40 C.F.R. § 63 Subpart ZZZZ]
93. The permittee must install on each of the Emergency Diesel Engines, SN-33, SN-34, SN-35, and SN-36, a non-resettable hour meter. [Reg.19.304 and 40 C.F.R. § 63 Subpart ZZZZ]
94. The permittee may utilize an oil analysis program in order to extend the specified oil change requirements in Specific Condition 89. This analysis program shall be conducted as required in 40 C.F.R. § 63.6625(i). [Reg.19.304 and 40 C.F.R. § 63 Subpart ZZZZ]
95. The permittee may operate the Emergency Diesel Engines, SN-33, SN-34, SN-35, and SN-36, 100 hours per year for maintenance and readiness checks. The permittee may operate the generators 50 hours per year in non-emergency situations as outlined in §63.6640(f)(4). Those 50 hours must be included in the 100 hours for maintenance and readiness checks. There is no limit on emergency operation due to Subpart ZZZZ. The operation limit in Specific Condition 88 still applies. [Reg.19.304 and 40 C.F.R. § 63 Subpart ZZZZ]
96. The permittee shall submit reports as outlined in 40 C.F.R. § 63.6650. [Reg.19.304 and 40 C.F.R. § 63 Subpart ZZZZ]

SN-37  
Roadway Emissions

Source Description

This source represents paved and unpaved roadway emissions from the facility.

Specific Conditions

97. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be shown by application of dust suppressant as necessary to control dust emissions. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
SN-37	Roadway Emissions	PM <sub>10</sub>	3.8	11.2
		PM <sub>2.5</sub>	0.5	1.3

98. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be shown by application of dust suppressant as necessary to control dust emissions. [Reg.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
SN-37	Roadway Emissions	PM	4.4	12.6

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

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

## **SECTION V: COMPLIANCE PLAN AND SCHEDULE**

Gerdau MacSteel Inc. will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.



## SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Reg.19.704, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Reg.19.410(B) and 40 C.F.R. § 52 Subpart E]
3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Division of Environmental Quality or within 180 days of permit issuance if no date is specified. The permittee must notify the Division of Environmental Quality of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Division of Environmental Quality within sixty (60) calendar days after completing the testing. [Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
4. The permittee must provide:
  - a. Sampling ports adequate for applicable test methods;
  - b. Safe sampling platforms;
  - c. Safe access to sampling platforms; and
  - d. Utilities for sampling and testing equipment.

[Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Reg.19.303 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Reg. 26 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

7. Unless otherwise specified in the permit, approval to construct any new major stationary source or a major modification subject to 40 C.F.R. § 52.21 shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Division of Environmental Quality may extend the 18-month period upon a satisfactory showing that an extension is justified. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]
8. The permittee shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the production limit increase as requested in the permit application for 0693-AOP-R13 and that is emitted by any emissions unit identified in 40 CFR Part 52.21(r)(6)(i)(b); and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit. [Regulation 19, §19.705 and §19.901; 40 CFR Part 52.21(r)(6)(iii); A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311; and 40 CFR Part 70.6]
9. The permittee shall submit a report to the Administrator if the annual emissions, in tons per year, from the as a result of the production limit increase as requested in the permit application for 0693-AOP-R11, exceed the baseline actual emissions (as documented and maintained pursuant to 40 CFR Part 52.21(r)(6)(i)(c)), by a significant amount (as defined in paragraph 40 CFR Part 52.21(b)(23)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to 40 CFR Part 52.21(r)(6)(i)(c). Such report shall be submitted to the Administrator within 60 days after the end of such year. The report shall contain the following:
  - a. The name, address and telephone number of the major stationary source;
  - b. The annual emissions as calculated pursuant to 40 CFR Part 52.21(r)(6)(iii); and
  - c. Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

[Regulation 19, §19.705 and §19.901; 40 CFR Part 52.21(r)(6)(v); A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311; and 40 CFR Part 70.6]

## SECTION VII: INSIGNIFICANT ACTIVITIES

The Division of Environmental Quality deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and Regulation 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 (*insert application date*). [Reg.26.304 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Description	Category
Kerosene Tank (500 gal)	A-3
Used (waste) Oil Tank (1,500 gal)	A-3
2 Used (waste) Oil Tanks (5,000 gal each)	A-3
Diesel Fuel Tank (10,000 gal)	A-3
Diesel Fuel Tank (2,000 gal)	A-3
Diesel Fuel Tank (500 gal)	A-3
2 Petroleum Resin Tanks (5,000 gal each)	A-3
Petroleum Resin Tank (1,500 gal)	A-3
Cationic Polymer Tank (2,200 gal)	A-3
Lab Etch Room	A-5
SPARCS Cutting Enclosure	A-7
Outdoor Slicing/Cutting	A-7
Scale Water Cooling Tower	A-13
Clean Water Cooling Tower #1	A-13
Clean Water Cooling Tower #2	A-13
Caster Water Cooling Tower	A-13
EMS Water Cooling Tower	A-13
Rolling Mill Operations	A-13
Hot Saw for Rolled Product	A-13
Ladle Refractory Reline	A-13
Tundish Refractory Reline	A-13

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

Description	Category
Scrap Handling	A-13
Raw Material Handling	A-13
Parts Washers	A-13
Scale Pits	A-13
Settling Ponds	A-13

## SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 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 Regulation 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 which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 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. [40 C.F.R. § 70.6(b)(2)]
2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 C.F.R. § 70.6(a)(2) and Reg.26.701(B)]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Division of Environmental Quality takes final action on the renewal application. The Division of Environmental Quality will not necessarily notify the permittee when the permit renewal application is due. [Reg.26.406]
4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 C.F.R. § 70.6(a)(1)(ii) and Reg.26.701(A)(2)]
5. The permittee must maintain the following records of monitoring information as required by this permit.
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses performed;
  - c. The company or entity performing the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

[40 C.F.R. § 70.6(a)(3)(ii)(A) and Reg.26.701(C)(2)]

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 C.F.R. § 70.6(a)(3)(ii)(B) and Reg.26.701(C)(2)(b)]
7. The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. The first report due after issuance of the initial Title V permit shall contain six months of data and each report thereafter shall contain 12 months of data. The report shall contain data for all monitoring requirements in effect during the reporting period. If a monitoring requirement is not in effect for the entire reporting period, only those months of data in which the monitoring requirement was in effect are required to be reported. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Reg.26.2 must certify all required reports. The permittee will send the reports electronically using <https://eportal.adeq.state.ar.us> or mail them to the address below:

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

[40 C.F.R. § 70.6(a)(3)(iii)(A) and Reg.26.701(C)(3)(a)]

8. The permittee shall report to the Division of Environmental Quality all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
  - a. For all upset conditions (as defined in Reg.19.601), the permittee will make an initial report to the Division of Environmental Quality by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
    - i. The facility name and location;
    - ii. The process unit or emission source deviating from the permit limit;
    - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
    - iv. The date and time the deviation started;

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

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

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

[Reg.19.601, Reg.19.602, Reg.26.701(C)(3)(b), and 40 C.F.R. § 70.6(a)(3)(iii)(B)]

- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 C.F.R. § 70.6(a)(5), Reg.26.701(E), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. § 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 C.F.R. § 70.6(a)(6)(i) and Reg.26.701(F)(1)]
- 11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 C.F.R. § 70.6(a)(6)(ii) and Reg.26.701(F)(2)]
- 12. The Division of Environmental Quality may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of

- planned changes or anticipated noncompliance does not stay any permit condition. [40 C.F.R. § 70.6(a)(6)(iii) and Reg.26.701(F)(3)]
13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 C.F.R. § 70.6(a)(6)(iv) and Reg.26.701(F)(4)]
  14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Division of Environmental Quality may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 C.F.R. § 70.6(a)(6)(v) and Reg.26.701(F)(5)]
  15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 C.F.R. § 70.6(a)(7) and Reg.26.701(G)]
  16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 C.F.R. § 70.6(a)(8) and Reg.26.701(H)]
  17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 C.F.R. § 70.6(a)(9)(i) and Reg.26.701(I)(1)]
  18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Division of Environmental Quality specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 C.F.R. § 70.6(b) and Reg.26.702(A) and (B)]
  19. Any document (including reports) required by this permit pursuant to 40 C.F.R. § 70 must contain a certification by a responsible official as defined in Reg.26.2. [40 C.F.R. § 70.6(c)(1) and Reg.26.703(A)]
  20. The permittee must allow an authorized representative of the Division of Environmental Quality, upon presentation of credentials, to perform the following: [40 C.F.R. § 70.6(c)(2) and Reg.26.703(B)]
    - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;



- b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
- 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Division of Environmental Quality. All compliance certifications required by this permit must include the following: [40 C.F.R. § 70.6(c)(5) and Reg.26.703(E)(3)]
  - a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The compliance status;
  - c. Whether compliance was continuous or intermittent;
  - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
  - e. Such other facts as the Division of Environmental Quality may require elsewhere in this permit or by § 114(a)(3) and § 504(b) of the Act.
- 22. Nothing in this permit will alter or affect the following: [Reg.26.704(C)]
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with § 408(a) of the Act; or
  - d. The ability of EPA to obtain information from a source pursuant to § 114 of the Act.
- 23. This permit authorizes only those pollutant emitting activities addressed in this permit. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Division of Environmental Quality

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.

[Reg.18.314(A), Reg.19.416(A), Reg.26.1013(A), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Division of Environmental Quality approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:

- a. Such a request does not violate a federal requirement;
- b. Such a request is temporary in nature;
- c. Such a request will not result in a condition of air pollution;
- d. The request contains such information necessary for the Division of Environmental Quality to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
- e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
- f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Reg.18.314(B), Reg.19.416(B), Reg.26.1013(B), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Division of Environmental Quality approval. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:

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

Gerdau MacSteel Inc.  
Permit #: 0693-AOP-R13  
AFIN: 66-00274

[Reg.18.314(C), Reg.19.416(C), Reg.26.1013(C), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

27. Any credible evidence based on sampling, monitoring, and reporting may be used to determine violations of applicable emission limitations. [Reg.18.1001, Reg.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

# **Arkansas Department of Environmental Quality**



## **CONTINUOUS EMISSION MONITORING SYSTEMS CONDITIONS**

Revised August 2004

## PREAMBLE

These conditions are intended to outline the requirements for facilities required to operate Continuous Emission Monitoring Systems/Continuous Opacity Monitoring Systems (CEMS/COMS). Generally there are three types of sources required to operate CEMS/COMS:

1. CEMS/COMS required by 40 CFR Part 60 or 63,
2. CEMS required by 40 CFR Part 75,
3. CEMS/COMS required by ADEQ permit for reasons other than Part 60, 63 or 75.

These CEMS/COMS conditions are not intended to supercede Part 60, 63 or 75 requirements.

- Only CEMS/COMS in the third category (those required by ADEQ permit for reasons other than Part 60, 63, or 75) shall comply with SECTION II, MONITORING REQUIREMENTS and SECTION IV, QUALITY ASSURANCE/QUALITY CONTROL.
- All CEMS/COMS shall comply with Section III, NOTIFICATION AND RECORDKEEPING.

## SECTION I

### DEFINITIONS

**Continuous Emission Monitoring System (CEMS)** - The total equipment required for the determination of a gas concentration and/or emission rate so as to include sampling, analysis and recording of emission data.

**Continuous Opacity Monitoring System (COMS)** - The total equipment required for the determination of opacity as to include sampling, analysis and recording of emission data.

**Calibration Drift (CD)** - The difference in the CEMS output reading from the established reference value after a stated period of operation during which no unscheduled maintenance, repair, or adjustments took place.

**Back-up CEMS (Secondary CEMS)** - A CEMS with the ability to sample, analyze and record stack pollutant to determine gas concentration and/or emission rate. This CEMS is to serve as a back-up to the primary CEMS to minimize monitor downtime.

**Excess Emissions** - Any period in which the emissions exceed the permit limits.

**Monitor Downtime** - Any period during which the CEMS/COMS is unable to sample, analyze and record a minimum of four evenly spaced data points over an hour, except during one daily zero-span check during which two data points per hour are sufficient.

**Out-of-Control Period** - Begins with the time corresponding to the completion of the fifth, consecutive, daily CD check with a CD in excess of two times the allowable limit, or the time corresponding to the completion of the daily CD check preceding the daily CD check that results in a CD in excess of four times the allowable limit and the time corresponding to the completion of the sampling for the RATA, RAA, or CGA which exceeds the limits outlined in Section IV. Out-of-Control Period ends with the time corresponding to the completion of the CD check following corrective action with the results being within the allowable CD limit or the completion of the sampling of the subsequent successful RATA, RAA, or CGA.

**Primary CEMS** - The main reporting CEMS with the ability to sample, analyze, and record stack pollutant to determine gas concentration and/or emission rate.

**Relative Accuracy (RA)** - The absolute mean difference between the gas concentration or emission rate determined by the CEMS and the value determined by the reference method plus the 2.5 percent error confidence coefficient of a series of tests divided by the mean of the reference method tests of the applicable emission limit.

**Span Value** - The upper limit of a gas concentration measurement range.



## SECTION II

### MONITORING REQUIREMENTS

- A. For new sources, the installation date for the CEMS/COMS shall be no later than thirty (30) days from the date of start-up of the source.
- B. For existing sources, the installation date for the CEMS/COMS shall be no later than sixty (60) days from the issuance of the permit unless the permit requires a specific date.
- C. Within sixty (60) days of installation of a CEMS/COMS, a performance specification test (PST) must be completed. PST's are defined in 40 CFR, Part 60, Appendix B, PS 1-9. The Department may accept alternate PST's for pollutants not covered by Appendix B on a case-by-case basis. Alternate PST's shall be approved, in writing, by the ADEQ CEM Coordinator prior to testing.
- D. Each CEMS/COMS shall have, as a minimum, a daily zero-span check. The zero-span shall be adjusted whenever the 24-hour zero or 24-hour span drift exceeds two times the limits in the applicable performance specification in 40 CFR, Part 60, Appendix B. Before any adjustments are made to either the zero or span drifts measured at the 24-hour interval the excess zero and span drifts measured must be quantified and recorded.
- E. All CEMS/COMS shall be in continuous operation and shall meet minimum frequency of operation requirements of 95% up-time for each quarter for each pollutant measured. Percent of monitor down-time is calculated by dividing the total minutes the monitor is not in operation by the total time in the calendar quarter and multiplying by one hundred. Failure to maintain operation time shall constitute a violation of the CEMS conditions.
- F. Percent of excess emissions are calculated by dividing the total minutes of excess emissions by the total time the source operated and multiplying by one hundred. Failure to maintain compliance may constitute a violation of the CEMS conditions.
- G. All CEMS measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive fifteen minute period unless more cycles are required by the permit. For each CEMS, one-hour averages shall be computed from four or more data points equally spaced over each one hour period unless more data points are required by the permit.
- H. All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- I. When the pollutant from a single affected facility is released through more than one point, a CEMS/COMS shall be installed on each point unless installation of fewer systems is approved, in writing, by the ADEQ CEM Coordinator. When more than one CEM/COM is used to monitor emissions from one affected facility the owner or operator shall report the results as required from each CEMS/COMS.



### SECTION III

#### NOTIFICATION AND RECORD KEEPING

- A. When requested to do so by an owner or operator, the ADEQ CEM Coordinator will review plans for installation or modification for the purpose of providing technical advice to the owner or operator.
- B. Each facility which operates a CEMS/COMS shall notify the ADEQ CEM Coordinator of the date for which the demonstration of the CEMS/COMS performance will commence (i.e. PST, RATA, RAA, CGA). Notification shall be received in writing no less than 15 days prior to testing. Performance test results shall be submitted to the Department within thirty days after completion of testing.
- C. Each facility which operates a CEMS/COMS shall maintain records of the occurrence and duration of start up/shut down, cleaning/soot blowing, process problems, fuel problems, or other malfunction in the operation of the affected facility which causes excess emissions. This includes any malfunction of the air pollution control equipment or any period during which a continuous monitoring device/system is inoperative.
- D. Except for Part 75 CEMs, each facility required to install a CEMS/COMS shall submit an excess emission and monitoring system performance report to the Department (Attention: Air Division, CEM Coordinator) at least quarterly, unless more frequent submittals are warranted to assess the compliance status of the facility. Quarterly reports shall be postmarked no later than the 30th day of the month following the end of each calendar quarter. Part 75 CEMs shall submit this information semi-annually and as part of Title V six (6) month reporting requirement if the facility is a Title V facility.
- E. All excess emissions shall be reported in terms of the applicable standard. Each report shall be submitted on ADEQ Quarterly Excess Emission Report Forms. Alternate forms may be used with prior written approval from the Department.
- F. Each facility which operates a CEMS/COMS must maintain on site a file of CEMS/COMS data including all raw data, corrected and adjusted, repair logs, calibration checks, adjustments, and test audits. This file must be retained for a period of at least five years, and is required to be maintained in such a condition that it can easily be audited by an inspector.
- G. Except for Part 75 CEMs, quarterly reports shall be used by the Department to determine compliance with the permit. For Part 75 CEMs, the semi-annual report shall be used.

## SECTION IV

### QUALITY ASSURANCE/QUALITY CONTROL

- A. For each CEMS/COMS a Quality Assurance/Quality Control (QA/QC) plan shall be submitted to the Department (Attn.: Air Division, CEM Coordinator). CEMS quality assurance procedures are defined in 40 CFR, Part 60, Appendix F. This plan shall be submitted within 180 days of the CEMS/COMS installation. A QA/QC plan shall consist of procedure and practices which assures acceptable level of monitor data accuracy, precision, representativeness, and availability.
- B. The submitted QA/QC plan for each CEMS/COMS shall not be considered as accepted until the facility receives a written notification of acceptance from the Department.
- C. Facilities responsible for one, or more, CEMS/COMS used for compliance monitoring shall meet these minimum requirements and are encouraged to develop and implement a more extensive QA/QC program, or to continue such programs where they already exist. Each QA/QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:
  - 1. Calibration of CEMS/COMS
    - a. Daily calibrations (including the approximate time(s) that the daily zero and span drifts will be checked and the time required to perform these checks and return to stable operation)
  - 2. Calibration drift determination and adjustment of CEMS/COMS
    - a. Out-of-control period determination
    - b. Steps of corrective action
  - 3. Preventive maintenance of CEMS/COMS
    - a. CEMS/COMS information
      - 1) Manufacture
      - 2) Model number
      - 3) Serial number
    - b. Scheduled activities (check list)
    - c. Spare part inventory
  - 4. Data recording, calculations, and reporting
  - 5. Accuracy audit procedures including sampling and analysis methods
  - 6. Program of corrective action for malfunctioning CEMS/COMS
- D. A Relative Accuracy Test Audit (RATA), shall be conducted at least once every four calendar quarters. A Relative Accuracy Audit (RAA), or a Cylinder Gas Audit (CGA), may be conducted in the other three quarters but in no more than three quarters in succession. The RATA should be conducted in accordance with the applicable test procedure in 40 CFR Part 60 Appendix A and calculated in accordance with the applicable performance specification in 40 CFR Part 60 Appendix B. CGA's and RAA's should be conducted and the data calculated in accordance with the procedures outlined on 40 CFR Part 60 Appendix F.



If alternative testing procedures or methods of calculation are to be used in the RATA, RAA or CGA audits prior authorization must be obtained from the ADEQ CEM Coordinator.

E. Criteria for excessive audit inaccuracy.

**RATA**

All Pollutants except Carbon Monoxide	> 20% Relative Accuracy
Carbon Monoxide	> 10% Relative Accuracy
All Pollutants except Carbon Monoxide	> 10% of the Applicable Standard
Carbon Monoxide	> 5% of the Applicable Standard
Diluent (O <sub>2</sub> & CO <sub>2</sub> )	> 1.0 % O <sub>2</sub> or CO <sub>2</sub>
Flow	> 20% Relative Accuracy

**CGA**

Pollutant	> 15% of average audit value or 5 ppm difference
Diluent (O <sub>2</sub> & CO <sub>2</sub> )	> 15% of average audit value or 5 ppm difference

**RAA**

Pollutant	> 15% of the three run average or > 7.5 % of the applicable standard
Diluent (O <sub>2</sub> & CO <sub>2</sub> )	> 15% of the three run average or > 7.5 % of the applicable standard

- F. If either the zero or span drift results exceed two times the applicable drift specification in 40 CFR, Part 60, Appendix B for five consecutive, daily periods, the CEMS is out-of-control. If either the zero or span drift results exceed four times the applicable drift specification in Appendix B during a calibration drift check, the CEMS is out-of-control. If the CEMS exceeds the audit inaccuracies listed above, the CEMS is out-of-control. If a CEMS is out-of-control, the data from that out-of-control period is not counted towards meeting the minimum data availability as required and described in the applicable subpart. The end of the out-of-control period is the time corresponding to the completion of the successful daily zero or span drift or completion of the successful CGA, RAA or RATA.
- G. A back-up monitor may be placed on an emission source to minimize monitor downtime. This back-up CEMS is subject to the same QA/QC procedure and practices as the primary CEMS. The back-up CEMS shall be certified by a PST. Daily zero-span checks must be performed and recorded in accordance with standard practices. When the primary CEMS goes down, the back-up CEMS may then be engaged to sample, analyze and record the emission source pollutant until repairs are made and the primary unit is placed back in service. Records must be maintained on site when the back-up CEMS is placed in service, these records shall include at a minimum the reason the primary CEMS is out of service, the date and time the primary CEMS was out of service and the date and time the primary CEMS was placed back in service.

## Appendix B

**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 paragraphs (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/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(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 paragraph (a) of this section are not subject to the sulfur dioxide (SO<sub>2</sub>) 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) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not subject by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject by this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

**§ 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.

*Cogeneration steam generating unit* means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

*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) or 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).

*Dry flue gas desulfurization technology* means a SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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.

*Wet flue gas desulfurization technology* means an SO<sub>2</sub> 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 SO<sub>2</sub>.

*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]

**§ 60.42c Standard for sulfur dioxide (SO<sub>2</sub>).**

(a) Except as provided in paragraphs (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 SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> 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 SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (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 SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO<sub>2</sub> emission rate (80 percent reduction); nor



(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility is 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 SO<sub>2</sub> emissions limit or the 90 percent SO<sub>2</sub> 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 SO<sub>2</sub> emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 50 percent (0.50) of the potential SO<sub>2</sub> emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> 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 SO<sub>2</sub> reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) 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 SO<sub>2</sub> 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/hr) 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.

(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 SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/MMBtu) heat input; 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 SO<sub>2</sub> in excess of the following:

(1) The percent of potential SO<sub>2</sub> emission rate or numerical SO<sub>2</sub> 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/hr); 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:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E<sub>s</sub> = SO<sub>2</sub> emission limit, expressed in ng/J or lb/MMBtu heat input;

K<sub>a</sub> = 520 ng/J (1.2 lb/MMBtu);

K<sub>b</sub> = 260 ng/J (0.60 lb/MMBtu);

K<sub>c</sub> = 215 ng/J (0.50 lb/MMBtu);

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

H<sub>c</sub> = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO<sub>2</sub> emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:



(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO<sub>2</sub> emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO<sub>2</sub> control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) 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 paragraphs (h)(1), (2), or (3) 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 facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) The SO<sub>2</sub> 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]

**§ 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/hr) 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/hr) 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 can combust coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) 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.

(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/hr) 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 paragraph (e)(1) 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/hr) 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) 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, 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 SO<sub>2</sub> 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]

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

(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) 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 SO<sub>2</sub>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 paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO<sub>2</sub>emission limits under §60.42c is based on the average percent reduction and the average SO<sub>2</sub>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 SO<sub>2</sub>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 appendix A of this part are used to determine the hourly SO<sub>2</sub>emission rate ( $E_{ho}$ ) and the 30-day average SO<sub>2</sub>emission rate ( $E_{ao}$ ). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate  $E_{ao}$  when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted  $E_{ho}$  ( $E_{ho,o}$ ) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted  $E_{ao}$  ( $E_{ao,o}$ ). The  $E_{ho,o}$  is computed using the following formula:

$$E_{ho,o} = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

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

$E_{ho}$  = Hourly SO<sub>2</sub>emission rate, ng/J (lb/MMBtu);

$E_w$  = SO<sub>2</sub>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 appendix A of this part, ng/J (lb/MMBtu). The value  $E_w$  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  $E_w$  if the owner or operator elects to assume  $E_w = 0$ .

$X_k$  = 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  $SO_2$  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  $SO_2$  emission rate is computed using the following formula:

$$\%P_s = 100 \left( 1 - \frac{\%R_g}{100} \right) \left( 1 - \frac{\%R_f}{100} \right)$$

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 appendix A 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  $E_{a,o}$  from paragraph (e)(1) of this section and an adjusted average  $SO_2$  inlet rate ( $E_{a,i,o}$ ) using the following formula:

$$\%R_{g,o} = 100 \left( 1 - \frac{E_{a,o}}{E_{a,i,o}} \right)$$

Where:

$\%R_{g,o}$  = Adjusted  $\%R_g$ , in percent;

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

$E_{a,i,o}$  = Adjusted average  $SO_2$  inlet rate, ng/J (lb/MMBtu).

(ii) To compute  $E_{hiO}$ , an adjusted hourly  $SO_2$  inlet rate ( $E_{hiO}$ ) is used. The  $E_{hiO}$  is computed using the following formula:

$$E_{hiO} = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

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

$E_{hi}$  = Hourly  $SO_2$  inlet rate, ng/J (lb/MMBtu);

$E_w$  =  $SO_2$  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 appendix A of this part, ng/J (lb/MMBtu). The value  $E_w$  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  $E_w$  if the owner or operator elects to assume  $E_w = 0$ ; 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  $SO_2$  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  $SO_2$  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  $SO_2$  emissions data in calculating % $P_s$  and  $E_{ho}$  under paragraphs (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<sub>s</sub> or E<sub>h</sub> pursuant to paragraphs (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 appendix A of this part 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 appendix A of this part 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 only if 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 (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) 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 appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O<sub>2</sub> or CO<sub>2</sub> 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 appendix 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 paragraph (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 paragraph (c)(7) 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 §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B 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 O<sub>2</sub>(or CO<sub>2</sub>) 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) After July 1, 2010 or after Method 202 of appendix M of part 51 has been revised to minimize artifact measurement and notice of that change has been published in

the Federal Register, whichever is later, for condensable PM emissions, Method 202 of appendix M of part 51 shall be used; and

(iii) For O<sub>2</sub> (or CO<sub>2</sub>), 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 Audits 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 appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) After July 1, 2011, within 90 days after the date of completing each performance evaluation required by paragraph (c)(11) of this section, the owner or operator of the affected facility must either submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main> or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243-01; RTP, NC 27711.

(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/hr).

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

**§ 60.46c Emission monitoring for sulfur dioxide.**

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO<sub>2</sub> emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations at the outlet of the SO<sub>2</sub> control device (or the outlet of the steam generating unit if no SO<sub>2</sub> 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 SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations at both the inlet and outlet of the SO<sub>2</sub> control device.

(b) The 1-hour average SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 appendix B of this part.

(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 SO<sub>2</sub> CEMS at the inlet to the SO<sub>2</sub> control device shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub> emission rate of the fuel combusted, and the span value of the SO<sub>2</sub> CEMS at the outlet from the SO<sub>2</sub> control device shall be 50 percent of the maximum estimated hourly potential SO<sub>2</sub> 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 SO<sub>2</sub> CEMS at the outlet from the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub> emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub> emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub> emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) 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 to 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 SO<sub>2</sub> 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 appendix A of this part may be used in lieu of CEMS to measure SO<sub>2</sub> at the inlet or outlet of the SO<sub>2</sub> control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO<sub>2</sub> and CO<sub>2</sub> 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 paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) 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 paragraphs (c), (d), (e), (f), and (g) 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) and that is not required to install a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to install 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 and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. If during the initial 60 minutes of observation all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent, the observation period may be reduced from 3 hours to 60 minutes.

(1) Except as provided in paragraph (a)(2) and (a)(3) 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 paragraph (a) of this section according to the applicable schedule in paragraphs (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;

(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;

(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

(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 30 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 30 calendar days according to the requirements in §60.45c(a)(8).

(ii) If no visible emissions are observed for 30 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 appendix B of this part. 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 SO<sub>2</sub> 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, SO<sub>2</sub>, 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 §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 paragraph (e) 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) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part is not required to operate a COMS.

(g) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority is not required to operate a COMS. 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.

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

**§ 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 paragraphs (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 paragraphs (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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> or diluent (O<sub>2</sub> or CO<sub>2</sub>) 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 appendix B of this 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 paragraph (f)(1), (2), (3), 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 paragraphs (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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 C

**Subpart AAa—Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983**

Source: 49 FR 43845, Oct. 31, 1984, unless otherwise noted.

**§ 60.270a Applicability and designation of affected facility.**

(a) The provisions of this subpart are applicable to the following affected facilities in steel plants that produce carbon, alloy, or specialty steels: electric arc furnaces, argon-oxygen decarburization vessels, and dust-handling systems.

(b) The provisions of this subpart apply to each affected facility identified in paragraph (a) of this section that commences construction, modification, or reconstruction after August 17, 1983.

**§ 60.271a Definitions.**

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

*Argon-oxygen decarburization vessel* (AOD vessel) means any closed-bottom, refractory-lined converter vessel with submerged tuyeres through which gaseous mixtures containing argon and oxygen or nitrogen may be blown into molten steel for further refining.

*Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other conditions that result in increases in particulate loadings. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

*Capture system* means the equipment (including ducts, hoods, fans, dampers, etc.) used to capture or transport particulate matter generated by an electric arc furnace or AOD vessel to the air pollution control device.

*Charge* means the addition of iron and steel scrap or other materials into the top of an electric arc furnace or the addition of molten steel or other materials into the top of an AOD vessel.

*Control device* means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by an electric arc furnace or AOD vessel.

*Direct-shell evacuation control system* (DEC system) means a system that maintains a negative pressure within the electric arc furnace above the slag or metal and ducts emissions to the control device.

*Dust-handling system* means equipment used to handle particulate matter collected by the control device for an electric arc furnace or AOD vessel subject to this subpart. For the purposes of this subpart, the dust-handling system shall consist of the control device dust hoppers, the dust-conveying equipment, any central dust storage equipment, the dust-treating equipment (e.g., pug mill, pelletizer), dust transfer equipment (from storage to truck), and any secondary control devices used with the dust transfer equipment.

*Electric arc furnace (EAF)* means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. For the purposes of this subpart, an EAF shall consist of the furnace shell and roof and the transformer. Furnaces that continuously feed direct-reduced iron ore pellets as the primary source of iron are not affected facilities within the scope of this definition.

*Heat cycle* means the period beginning when scrap is charged to an empty EAF and ending when the EAF tap is completed or beginning when molten steel is charged to an empty AOD vessel and ending when the AOD vessel tap is completed.

*Meltdown and refining period* means the time period commencing at the termination of the initial charging period and ending at the initiation of the tapping period, excluding any intermediate charging periods and times when power to the EAF is off.

*Melting* means that phase of steel production cycle during which the iron and steel scrap is heated to the molten state.

*Negative-pressure fabric filter* means a fabric filter with the fans on the downstream side of the filter bags.

*Positive-pressure fabric filter* means a fabric filter with the fans on the upstream side of the filter bags.

*Refining* means that phase of the steel production cycle during which undesirable elements are removed from the molten steel and alloys are added to reach the final metal chemistry.

*Shop* means the building which houses one or more EAF's or AOD vessels.

*Shop opacity* means the arithmetic average of 24 observations of the opacity of emissions from the shop taken in accordance with Method 9 of appendix A of this part.

*Tap* means the pouring of molten steel from an EAF or AOD vessel.

*Tapping period* means the time period commencing at the moment an EAF begins to pour molten steel and ending either three minutes after steel ceases to flow from an EAF, or six minutes after steel begins to flow, whichever is longer.



[49 FR 43845, Oct. 31, 1984, as amended at 64 FR 10110, Mar. 2, 1999; 70 FR 8532, Feb. 22, 2005]

**§ 60.272a Standard for particulate matter.**

(a) On and after the date of which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an EAF or an AOD vessel any gases which:

(1) Exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf);

(2) Exit from a control device and exhibit 3 percent opacity or greater; and

(3) Exit from a shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the dust-handling system any gases that exhibit 10 percent opacity or greater.

**§ 60.273a Emission monitoring.**

(a) Except as provided under paragraphs (b) and (c) of this section, a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this subpart.

(b) No continuous monitoring system shall be required on any control device serving the dust-handling system.

(c) A continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) is not required on any modular, multi-stack, negative-pressure or positive-pressure fabric filter if observations of the opacity of the visible emissions from the control device are performed by a certified visible emission observer; or on any single-stack fabric filter if visible emissions from the control device are performed by a certified visible emission observer and the owner installs and continuously operates a bag leak detection system according to paragraph (e) of this section. Visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the melting and refining period. All visible emissions observations shall be conducted in accordance with Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In that case, the Method 9 observations must be made for the site of highest opacity that directly relates to the cause



(or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the emission limit specified in §60.272a(a).

(d) A furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of shop opacity are performed by a certified visible emission observer as follows: Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.

(e) A bag leak detection system must be installed and continuously operated on all single-stack fabric filters if the owner or operator elects not to install and operate a continuous opacity monitoring system as provided for under paragraph (c) of this section. In addition, the owner or operator shall meet the visible emissions observation requirements in paragraph (c) of this section. The bag leak detection system must meet the specifications and requirements of paragraphs (e)(1) through (8) of this section.

(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger.)

(3) The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to paragraph (e)(4) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(4) For each bag leak detection system required by paragraph (e) of this section, the owner or operator shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (i) through (v) of this paragraph (e)(4). For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:



- (i) Installation of the bag leak detection system;
  - (ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;
  - (iii) Operation of the bag leak detection system including quality assurance procedures;
  - (iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and
  - (v) How the bag leak detection system output shall be recorded and stored.
- (5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
- (6) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in paragraphs (e)(6)(i) and (ii) of this section.
- (i) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under paragraphs (e)(4) of this section.
  - (ii) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under paragraph (c) of this section and the alarm on the bag leak detection system does not sound, the owner or operator shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.
- (7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber.
- (8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (f) For each bag leak detection system installed according to paragraph (e) of this section, the owner or operator shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided for under paragraph (g) of this section, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:



(1) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

(2) Sealing off defective bags or filter media;

(3) Replacing defective bags or filter media or otherwise repairing the control device;

(4) Sealing off a defective baghouse compartment;

(5) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

(6) Shutting down the process producing the particulate emissions.

(g) In approving the site-specific monitoring plan required in paragraph (e)(4) of this section, the Administrator or delegated authority may allow owners or operators more than 3 hours to alleviate specific conditions that cause an alarm if the owner or operator identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

[49 FR 43845, Oct. 31, 1984, as amended at 54 FR 6672, Feb. 14, 1989; 64 FR 10111, Mar. 2, 1999; 70 FR 8532, Feb. 22, 2005]

**§ 60.274a Monitoring of operations.**

(a) The owner or operator subject to the provisions of this subpart shall maintain records of the following information:

(1) All data obtained under paragraph (b) of this section; and

(2) All monthly operational status inspections performed under paragraph (c) of this section.

(b) Except as provided under paragraph (e) of this section, the owner or operator subject to the provisions of this subpart shall check and record on a once-per-shift basis the furnace static pressure (if DEC system is in use, and a furnace static pressure gauge is installed according to paragraph (f) of this section) and either: check and record the control system fan motor amperes and damper position on a once-per-shift basis; install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring device(s) shall have an



accuracy of  $\pm 10$  percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The Administrator may require the owner or operator to demonstrate the accuracy of the monitoring device(s) relative to Methods 1 and 2 of appendix A of this part.

(c) When the owner or operator of an affected facility is required to demonstrate compliance with the standards under §60.272a(a)(3) and at any other time that the Administrator may require (under section 114 of the CAA, as amended) either: the control system fan motor amperes and all damper positions, the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to paragraph (b) of this section. The owner or operator may petition the Administrator for reestablishment of these parameters whenever the owner or operator can demonstrate to the Administrator's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period. Operation at other than baseline values may be subject to the requirements of §60.276a(c).

(d) Except as provided under paragraph (e) of this section, the owner or operator shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system ( *i.e.* , pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

(e) The owner or operator may petition the Administrator to approve any alternative to either the monitoring requirements specified in paragraph (b) of this section or the monthly operational status inspections specified in paragraph (d) of this section if the alternative will provide a continuous record of operation of each emission capture system.

(f) Except as provided for under §60.273a(d), if emissions during any phase of the heat time are controlled by the use of a DEC system, the owner or operator shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of  $\pm 5$  mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

(g) Except as provided for under §60.273a(d), when the owner or operator of an EAF controlled by a DEC is required to demonstrate compliance with the standard under



§60.272a(a)(3), and at any other time the Administrator may require (under section 114 of the Clean Air Act, as amended), the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required under paragraph (f) of this section. The owner or operator may petition the Administrator for reestablishment of the pressure whenever the owner or operator can demonstrate to the Administrator's satisfaction that the EAF operating conditions upon which the pressures were previously established are no longer applicable. The pressure determined during the most recent demonstration of compliance shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the Administrator to be unacceptable operation and maintenance of the affected facility.

(h) During any performance test required under §60.8, and for any report thereof required by §60.276a(f) of this subpart, or to determine compliance with §60.272a(a)(3) of this subpart, the owner or operator shall monitor the following information for all heats covered by the test:

- (1) Charge weights and materials, and tap weights and materials;
- (2) Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and the pressure inside an EAF when direct-shell evacuation control systems are used;
- (3) Control device operation log; and
- (4) Continuous opacity monitor or Method 9 data.

[49 FR 43845, Oct. 31, 1984, as amended at 64 FR 10111, Mar. 2, 1999; 65 FR 61758, Oct. 17, 2000; 70 FR 8533, Feb. 22, 2005]

**§ 60.275a Test methods and procedures.**

(a) During performance tests required in §60.8, the owner or operator shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector, unless the amount of dilution is separately determined and considered in the determination of emissions.

(b) When emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner or operator shall use either or both of the following procedures during a performance test (see also §60.276a(e)):

- (1) Determine compliance using the combined emissions.
- (2) Use a method that is acceptable to the Administrator and that compensates for the emissions from the facilities not subject to the provisions of this subpart.

(c) When emission from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart, the owner or operator shall demonstrate compliance with §60.272(a)(3) based on emissions from only the affected facility(ies).

(d) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(e) The owner or operator shall determine compliance with the particulate matter standards in §60.272a as follows:

(1) Method 5 shall be used for negative-pressure fabric filters and other types of control devices and Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf) and, when a single EAF or AOD vessel is sampled, the sampling time shall include an integral number of heats.

(2) When more than one control device serves the EAF(s) being tested, the concentration of particulate matter shall be determined using the following equation:

$$c_{st} = \frac{\sum_{i=1}^n (c_{si} Q_{sdi})}{\sum_{i=1}^n Q_{sdi}}$$

where:

$c_{st}$ =average concentration of particulate matter, mg/dscm (gr/dscf).

$c_{si}$ =concentration of particulate matter from control device "i", mg/dscm (gr/dscf).

n=total number of control devices tested.

$Q_{sdi}$ =volumetric flow rate of stack gas from control device "i", dscm/hr (dscf/hr).

(3) Method 9 and the procedures of §60.11 shall be used to determine opacity.

(4) To demonstrate compliance with §60.272a(a) (1), (2), and (3), the Method 9 test runs shall be conducted concurrently with the particulate matter test runs, unless inclement weather interferes.

(f) To comply with §60.274a (c), (f), (g), and (h), the owner or operator shall obtain the information required in these paragraphs during the particulate matter runs.



(g) Any control device subject to the provisions of the subpart shall be designed and constructed to allow measurement of emissions using applicable test methods and procedures.

(h) Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner or operator may use any of the following procedures during a performance test:

(1) Base compliance on control of the combined emissions;

(2) Utilize a method acceptable to the Administrator that compensates for the emissions from the facilities not subject to the provisions of this subpart, or;

(3) Any combination of the criteria of paragraphs (h)(1) and (h)(2) of this section.

(i) Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart, determinations of compliance with §60.272a(a)(3) will only be based upon emissions originating from the affected facility(ies).

(j) Unless the presence of inclement weather makes concurrent testing infeasible, the owner or operator shall conduct concurrently the performance tests required under §60.8 to demonstrate compliance with §60.272a(a) (1), (2), and (3) of this subpart.

[49 FR 43845, Oct. 31, 1984, as amended at 54 FR 6673, Feb. 14, 1989; 54 FR 21344, May 17, 1989; 65 FR 61758, Oct. 17, 2000]

**§ 60.276a Recordkeeping and reporting requirements.**

(a) Records of the measurements required in §60.274a must be retained for at least 2 years following the date of the measurement.

(b) Each owner or operator shall submit a written report of exceedances of the control device opacity to the Administrator semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.

(c) Operation at a furnace static pressure that exceeds the value established under §60.274a(g) and either operation of control system fan motor amperes at values exceeding  $\pm 15$  percent of the value established under §60.274a(c) or operation at flow rates lower than those established under §60.274a(c) may be considered by the Administrator to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the Administrator semiannually.

(d) The requirements of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.

(e) When the owner or operator of an EAF or AOD is required to demonstrate compliance with the standard under §60.275 (b)(2) or a combination of (b)(1) and (b)(2) the owner or operator shall obtain approval from the Administrator of the procedure(s) that will be used to determine compliance. Notification of the procedure(s) to be used must be postmarked at least 30 days prior to the performance test.

(f) For the purpose of this subpart, the owner or operator shall conduct the demonstration of compliance with §60.272a(a) of this subpart and furnish the Administrator a written report of the results of the test. This report shall include the following information:

- (1) Facility name and address;
- (2) Plant representative;
- (3) Make and model of process, control device, and continuous monitoring equipment;
- (4) Flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;
- (5) Rated (design) capacity of process equipment;
- (6) Those data required under §60.274a(h) of this subpart;
  - (i) List of charge and tap weights and materials;
  - (ii) Heat times and process log;
  - (iii) Control device operation log; and
  - (iv) Continuous opacity monitor or Method 9 data.
- (7) Test dates and test times;
- (8) Test company;
- (9) Test company representative;
- (10) Test observers from outside agency;



(11) Description of test methodology used, including any deviation from standard reference methods;

(12) Schematic of sampling location;

(13) Number of sampling points;

(14) Description of sampling equipment;

(15) Listing of sampling equipment calibrations and procedures;

(16) Field and laboratory data sheets;

(17) Description of sample recovery procedures;

(18) Sampling equipment leak check results;

(19) Description of quality assurance procedures;

(20) Description of analytical procedures;

(21) Notation of sample blank corrections; and

(22) Sample emission calculations.

(g) The owner or operator shall maintain records of all shop opacity observations made in accordance with §60.273a(d). All shop opacity observations in excess of the emission limit specified in §60.272a(a)(3) of this subpart shall indicate a period of excess emission, and shall be reported to the administrator semi-annually, according to §60.7(c).

(h) The owner or operator shall maintain the following records for each bag leak detection system required under §60.273a(e):

(1) Records of the bag leak detection system output;

(2) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(3) An identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

[49 FR 43845, Oct. 31, 1984, as amended at 54 FR 6673, Feb. 14, 1989; 64 FR 10111, Mar. 2, 1999; 65 FR 61758, Oct. 17, 2000; 70 FR 8533, Feb. 22, 2005]



## Appendix D

## SUBCHAPTER C—AIR PROGRAMS (CONTINUED)

### PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

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

##### WHAT THIS SUBPART COVERS

Sec.

63.6580 What is the purpose of subpart ZZZZ?

63.6585 Am I subject to this subpart?

63.6590 What parts of my plant does this subpart cover?

63.6595 When do I have to comply with this subpart?

##### EMISSION LIMITATIONS

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

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

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

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

63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

##### GENERAL COMPLIANCE REQUIREMENTS

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

##### TESTING AND INITIAL COMPLIANCE REQUIREMENTS

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

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

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

63.6615 When must I conduct subsequent performance tests?

63.6620 What performance tests and other procedures must I use?

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

63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

##### CONTINUOUS COMPLIANCE REQUIREMENTS

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

63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

##### NOTIFICATION, REPORTS, AND RECORDS

63.6645 What notifications must I submit and when?

63.6650 What reports must I submit and when?

63.6655 What records must I keep?

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

##### OTHER REQUIREMENTS AND INFORMATION

63.6665 What parts of the General Provisions apply to me?

63.6670 Who implements and enforces this subpart?

63.6675 What definitions apply to this subpart?

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

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

TABLE 2A TO SUBPART ZZZZ OF PART 63—EMISSION LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND COMPRESSION IGNITION STATIONARY RICE >500 HP AND NEW AND RECONSTRUCTED 4SLB STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

TABLE 2B TO SUBPART ZZZZ OF PART 63—OPERATING LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND COMPRESSION IGNITION STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS, EXISTING NON-EMERGENCY COMPRESSION IGNITION STATIONARY RICE >500 HP, AND NEW AND RECONSTRUCTED 4SLB BURN STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

TABLE 2C TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING COMPRESSION IGNITION STATIONARY RICE LOCATED AT MAJOR SOURCES OF HAP EMISSIONS

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

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

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

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

TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS AND OPERATING LIMITATIONS

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

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

#### Subpart AAAAA—National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants

##### WHAT THIS SUBPART COVERS

- 63.7080 What is the purpose of this subpart?
- 63.7081 Am I subject to this subpart?
- 63.7082 What parts of my plant does this subpart cover?
- 63.7083 When do I have to comply with this subpart?

##### EMISSION LIMITATIONS

- 63.7090 What emission limitations must I meet?

##### GENERAL COMPLIANCE REQUIREMENTS

- 63.7100 What are my general requirements for complying with this subpart?

##### TESTING AND INITIAL COMPLIANCE REQUIREMENTS

- 63.7110 By what date must I conduct performance tests and other initial compliance demonstrations?

- 63.7111 When must I conduct subsequent performance tests?

- 63.7112 What performance tests, design evaluations, and other procedures must I use?

- 63.7113 What are my monitoring installation, operation, and maintenance requirements?

- 63.7114 How do I demonstrate initial compliance with the emission limitations standard?

##### CONTINUOUS COMPLIANCE REQUIREMENTS

- 63.7120 How do I monitor and collect data to demonstrate continuous compliance?

- 63.7121 How do I demonstrate continuous compliance with the emission limitations standard?

##### NOTIFICATIONS, REPORTS, AND RECORDS

- 63.7130 What notifications must I submit and when?

- 63.7131 What reports must I submit and when?

- 63.7132 What records must I keep?

- 63.7133 In what form and for how long must I keep my records?

##### OTHER REQUIREMENTS AND INFORMATION

- 63.7140 What parts of the General Provisions apply to me?

- 63.7141 Who implements and enforces this subpart?

- 63.7142 What are the requirements for claiming area source status?

- 63.7143 What definitions apply to this subpart?

TABLE 1 TO SUBPART AAAAA OF PART 63—EMISSION LIMITS

TABLE 2 TO SUBPART AAAAA OF PART 63—OPERATING LIMITS

TABLE 3 TO SUBPART AAAAA OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITS

TABLE 4 TO SUBPART AAAAA OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS

TABLE 5 TO SUBPART AAAAA OF PART 63—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS

TABLE 6 TO SUBPART AAAAA OF PART 63—PERIODIC MONITORING FOR COMPLIANCE WITH OPACITY AND VISIBLE EMISSIONS LIMITS

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

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

#### Subpart BBBBB—National Emission Standards for Hazardous Air Pollutants for Semiconductor Manufacturing

##### WHAT THIS SUBPART COVERS

- 63.7180 What is the purpose of this subpart?
- 63.7181 Am I subject to this subpart?



## Environmental Protection Agency

Pt. 63

63.7182 What parts of my facility does this subpart cover?

63.7183 When do I have to comply with this subpart?

### EMISSION STANDARDS

63.7184 What emission limitations, operating limits, and work practice standards must I meet?

### COMPLIANCE REQUIREMENTS

63.7185 What are my general requirements for complying with this subpart?

63.7186 By what date must I conduct performance tests or other initial compliance demonstrations?

63.7187 What performance tests and other compliance procedures must I use?

63.7188 What are my monitoring installation, operation, and maintenance requirements?

### APPLICATIONS, NOTIFICATIONS, REPORTS, AND RECORDS

63.7189 What applications and notifications must I submit and when?

63.7190 What reports must I submit and when?

63.7191 What records must I keep?

63.7192 In what form and how long must I keep my records?

### OTHER REQUIREMENTS AND INFORMATION

63.7193 What parts of the General Provisions apply to me?

63.7194 Who implements and enforces this subpart?

63.7195 What definitions apply to this subpart?

TABLE 1 TO SUBPART BBBBB OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS

TABLE 2 TO SUBPART BBBBB OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART BBBBB

## Subpart CCCCC—National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks

### WHAT THIS SUBPART COVERS

63.7280 What is the purpose of this subpart?

63.7281 Am I subject to this subpart?

63.7282 What parts of my plant does this subpart cover?

63.7283 When do I have to comply with this subpart?

### EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

63.7290 What emission limitations must I meet for capture systems and control devices applied to pushing emissions?

63.7291 What work practice standards must I meet for fugitive pushing emissions if I

have a by-product coke oven battery with vertical flues?

63.7292 What work practice standards must I meet for fugitive pushing emissions if I have a by-product coke oven battery with horizontal flues?

63.7293 What work practice standards must I meet for fugitive pushing emissions if I have a non-recovery coke oven battery?

63.7294 What work practice standard must I meet for soaking?

63.7295 What requirements must I meet for quenching?

63.7296 What emission limitations must I meet for battery stacks?

### OPERATION AND MAINTENANCE REQUIREMENTS

63.7300 What are my operation and maintenance requirements?

### GENERAL COMPLIANCE REQUIREMENTS

63.7310 What are my general requirements for complying with this subpart?

### INITIAL COMPLIANCE REQUIREMENTS

63.7320 By what date must I conduct performance tests or other initial compliance demonstrations?

63.7321 When must I conduct subsequent performance tests?

63.7322 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

63.7323 What procedures must I use to establish operating limits?

63.7324 What procedures must I use to demonstrate initial compliance with the opacity limits?

63.7325 What test methods and other procedures must I use to demonstrate initial compliance with the TDS or constituent limits for quench water?

63.7326 How do I demonstrate initial compliance with the emission limitations that apply to me?

63.7327 How do I demonstrate initial compliance with the work practice standards that apply to me?

63.7328 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

### CONTINUOUS COMPLIANCE REQUIREMENTS

63.7330 What are my monitoring requirements?

63.7331 What are the installation, operation, and maintenance requirements for my monitors?

63.7332 How do I monitor and collect data to demonstrate continuous compliance?

63.7333 How do I demonstrate continuous compliance with the emission limitations that apply to me?



- 63.7334 How do I demonstrate continuous compliance with the work practice standards that apply to me?
- 63.7335 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?
- 63.7336 What other requirements must I meet to demonstrate continuous compliance?

#### NOTIFICATIONS, REPORTS, AND RECORDS

- 63.7340 What notifications must I submit and when?
- 63.7341 What reports must I submit and when?
- 63.7342 What records must I keep?
- 63.7343 In what form and how long must I keep my records?

#### OTHER REQUIREMENTS AND INFORMATION

- 63.7350 What parts of the General Provisions apply to me?
- 63.7351 Who implements and enforces this subpart?
- 63.7352 What definitions apply to this subpart?

TABLE 1 TO SUBPART CCCCC OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART CCCCC

### Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

#### WHAT THIS SUBPART COVERS

- 63.7480 What is the purpose of this subpart?
- 63.7485 Am I subject to this subpart?
- 63.7490 What is the affected source of this subpart?
- 63.7491 Are any boilers or process heaters not subject to this subpart?
- 63.7495 When do I have to comply with this subpart?

#### EMISSION LIMITS AND WORK PRACTICE STANDARDS

- 63.7499 What are the subcategories of boilers and process heaters?
- 63.7500 What emission limits, work practice standards, and operating limits must I meet?

#### GENERAL COMPLIANCE REQUIREMENTS

- 63.7505 What are my general requirements for complying with this subpart?
- 63.7506 Do any boilers or process heaters have limited requirements?
- 63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?

#### TESTING, FUEL ANALYSES, AND INITIAL COMPLIANCE REQUIREMENTS

- 63.7510 What are my initial compliance requirements and by what date must I conduct them?
- 63.7515 When must I conduct subsequent performance tests or fuel analyses?
- 63.7520 What performance tests and procedures must I use?
- 63.7521 What fuel analyses and procedures must I use?
- 63.7522 Can I use emission averaging to comply with this subpart?
- 63.7525 What are my monitoring, installation, operation, and maintenance requirements?
- 63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?

#### CONTINUOUS COMPLIANCE REQUIREMENTS

- 63.7535 How do I monitor and collect data to demonstrate continuous compliance?
- 63.7540 How do I demonstrate continuous compliance with the emission limits and work practice standards?
- 63.7541 How do I demonstrate continuous compliance under the emission averaging provision?

#### NOTIFICATIONS, REPORTS, AND RECORDS

- 63.7545 What notifications must I submit and when?
- 63.7550 What reports must I submit and when?
- 63.7555 What records must I keep?
- 63.7560 In what form and how long must I keep my records?

#### OTHER REQUIREMENTS AND INFORMATION

- 63.7565 What parts of the General Provisions apply to me?
- 63.7570 Who implements and enforces this subpart?
- 63.7575 What definitions apply to this subpart?

TABLE 1 TO SUBPART DDDDD OF PART 63—EMISSION LIMITS AND WORK PRACTICE STANDARDS

TABLE 2 TO SUBPART DDDDD OF PART 63—OPERATING LIMITS FOR BOILERS AND PROCESS HEATERS WITH PARTICULATE MATTER EMISSION LIMITS

TABLE 3 TO SUBPART DDDDD OF PART 63—OPERATING LIMITS FOR BOILERS AND PROCESS HEATERS WITH MERCURY EMISSION LIMITS AND BOILERS AND PROCESS HEATERS THAT CHOOSE TO COMPLY WITH THE ALTERNATIVE TOTAL SELECTED METALS EMISSION LIMITS

TABLE 4 TO SUBPART DDDDD OF PART 63—OPERATING LIMITS FOR BOILERS AND PROCESS HEATERS WITH HYDROGEN CHLORIDE EMISSION LIMITS

## Environmental Protection Agency

Pt. 63

TABLE 5 TO SUBPART DDDDD OF PART 63—  
PERFORMANCE TESTING REQUIREMENTS

TABLE 6 TO SUBPART DDDDD OF PART 63—  
FUEL ANALYSIS REQUIREMENTS

TABLE 7 TO SUBPART DDDDD OF PART 63—ES-  
TABLISHING OPERATING LIMITS

TABLE 8 TO SUBPART DDDDD OF PART 63—  
DEMONSTRATING CONTINUOUS COMPLIANCE

TABLE 9 TO SUBPART DDDDD OF PART 63—RE-  
PORTING REQUIREMENTS

TABLE 10 TO SUBPART DDDDD OF PART 63—  
APPLICABILITY OF GENERAL PROVISIONS TO  
SUBPART DDDDD

APPENDIX A TO SUBPART DDDDD—METHOD-  
OLOGY AND CRITERIA FOR DEMONSTRATING  
ELIGIBILITY FOR THE HEALTH-BASED COM-  
PLIANCE ALTERNATIVES

### Subpart EEEEE—National Emission Stand- ards for Hazardous Air Pollutants for Iron and Steel Foundries

#### WHAT THIS SUBPART COVERS

- 63.7680 What is the purpose of this subpart?  
63.7681 Am I subject to this subpart?  
63.7682 What parts of my foundry does this  
subpart cover?  
63.7683 When do I have to comply with this  
subpart?

#### EMISSIONS LIMITATIONS

- 63.7690 What emissions limitations must I  
meet?

#### WORK PRACTICE STANDARDS

- 63.7700 What work practice standards must I  
meet?

#### OPERATION AND MAINTENANCE REQUIREMENTS

- 63.7710 What are my operation and mainte-  
nance requirements?

#### GENERAL COMPLIANCE REQUIREMENTS

- 63.7720 What are my general requirements  
for complying with this subpart?

#### INITIAL COMPLIANCE REQUIREMENTS

- 63.7730 By what date must I conduct per-  
formance tests or other initial compli-  
ance demonstrations?  
63.7731 When must I conduct subsequent  
performance tests?  
63.7732 What test methods and other proce-  
dures must I use to demonstrate initial  
compliance with the emissions limita-  
tions?  
63.7733 What procedures must I use to estab-  
lish operating limits?  
63.7734 How do I demonstrate initial compli-  
ance with the emissions limitations that  
apply to me?  
63.7735 How do I demonstrate initial compli-  
ance with the work practice standards  
that apply to me?

- 63.7736 How do I demonstrate initial compli-  
ance with the operation and maintenance  
requirements that apply to me?

#### CONTINUOUS COMPLIANCE REQUIREMENTS

- 63.7740 What are my monitoring require-  
ments?  
63.7741 What are the installation, operation,  
and maintenance requirements for my  
monitors?  
63.7742 How do I monitor and collect data to  
demonstrate continuous compliance?  
63.7743 How do I demonstrate continuous  
compliance with the emissions limita-  
tions that apply to me?  
63.7744 How do I demonstrate continuous  
compliance with the work practice  
standards that apply to me?  
63.7745 How do I demonstrate continuous  
compliance with the operation and main-  
tenance requirements that apply to me?  
63.7746 What other requirements must I  
meet to demonstrate continuous compli-  
ance?  
63.7747 How do I apply for alternative moni-  
toring requirements for a continuous  
emissions monitoring system?

#### NOTIFICATIONS, REPORTS, AND RECORDS

- 63.7750 What notifications must I submit  
and when?  
63.7751 What reports must I submit and  
when?  
63.7752 What records must I keep?  
63.7753 In what form and for how long must  
I keep my records?

#### OTHER REQUIREMENTS AND INFORMATION

- 63.7760 What parts of the General Provisions  
apply to me?  
63.7761 Who implements and enforces this  
subpart?

#### DEFINITIONS

- 63.7765 What definitions apply to this sub-  
part?

TABLE 1 TO SUBPART EEEEE OF PART 63—AP-  
PLICABILITY OF GENERAL PROVISIONS TO  
SUBPART EEEEE

### Subpart FFFFF—National Emission Stand- ards for Hazardous Air Pollutants for In- tegrated Iron and Steel Manufacturing Facilities

#### WHAT THIS SUBPART COVERS

- 63.7780 What is the purpose of this subpart?  
63.7781 Am I subject to this subpart?  
63.7782 What parts of my plant does this  
subpart cover?  
63.7783 When do I have to comply with this  
subpart?



## EMISSION LIMITATIONS

- 63.7790 What emission limitations must I meet?

## OPERATION AND MAINTENANCE REQUIREMENTS

- 63.7800 What are my operation and maintenance requirements?

## GENERAL COMPLIANCE REQUIREMENTS

- 63.7810 What are my general requirements for complying with this subpart?

## INITIAL COMPLIANCE REQUIREMENTS

- 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?
- 63.7821 When must I conduct subsequent performance tests?
- 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?
- 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?
- 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with the operating limits?
- 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?
- 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

## CONTINUOUS COMPLIANCE REQUIREMENTS

- 63.7830 What are my monitoring requirements?
- 63.7831 What are the installation, operation, and maintenance requirements for my monitors?
- 63.7832 How do I monitor and collect data to demonstrate continuous compliance?
- 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?
- 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?
- 63.7835 What other requirements must I meet to demonstrate continuous compliance?

## NOTIFICATIONS, REPORTS, AND RECORDS

- 63.7840 What notifications must I submit and when?
- 63.7841 What reports must I submit and when?
- 63.7842 What records must I keep?
- 63.7843 In what form and how long must I keep my records?

## OTHER REQUIREMENTS AND INFORMATION

- 63.7850 What parts of the General Provisions apply to me?
- 63.7851 Who implements and enforces this subpart?
- 63.7852 What definitions apply to this subpart?
- TABLE 1 TO SUBPART FFFFFF OF PART 63—EMISSION AND OPACITY LIMITS
- TABLE 2 TO SUBPART FFFFFF OF PART 63—INITIAL COMPLIANCE WITH EMISSION AND OPACITY LIMITS
- TABLE 3 TO SUBPART FFFFFF OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION AND OPACITY LIMITS
- TABLE 4 TO SUBPART FFFFFF OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART FFFFFF

**Subpart GGGGG—National Emission Standards for Hazardous Air Pollutants: Site Remediation**

## WHAT THIS SUBPART COVERS

- 63.7880 What is the purpose of this subpart?
- 63.7881 Am I subject to this subpart?
- 63.7882 What site remediation sources at my facility does this subpart affect?
- 63.7883 When do I have to comply with this subpart?

## GENERAL STANDARDS

- 63.7884 What are the general standards I must meet for each site remediation with affected sources?
- 63.7885 What are the general standards I must meet for my affected process vents?
- 63.7886 What are the general standards I must meet for my affected remediation material management units?
- 63.7887 What are the general standards I must meet for my affected equipment leak sources?
- 63.7888 How do I implement this rule at my facility using the cross-referenced requirements in other subparts?

## PROCESS VENTS

- 63.7890 What emissions limitations and work practice standards must I meet for process vents?
- 63.7891 How do I demonstrate initial compliance with the emissions limitations and work practice standards for process vents?
- 63.7892 What are my inspection and monitoring requirements for process vents?
- 63.7893 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for process vents?

## Environmental Protection Agency

Pt. 63

### TANKS

- 63.7895 What emissions limitations and work practice standards must I meet for tanks?
- 63.7896 How do I demonstrate initial compliance with the emissions limitations and work practice standards for tanks?
- 63.7897 What are my inspection and monitoring requirements for tanks?
- 63.7898 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for tanks?

### CONTAINERS

- 63.7900 What emissions limitations and work practice standards must I meet for containers?
- 63.7901 How do I demonstrate initial compliance with the emissions limitations and work practice standards for containers?
- 63.7902 What are my inspection and monitoring requirements for containers?
- 63.7903 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for containers?

### SURFACE IMPOUNDMENTS

- 63.7905 What emissions limitations and work practice standards must I meet for surface impoundments?
- 63.7906 How do I demonstrate initial compliance with the emissions limitations and work practice standards for surface impoundments?
- 63.7907 What are my inspection and monitoring requirements for surface impoundments?
- 63.7908 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for surface impoundments?

### SEPARATORS

- 63.7910 What emissions limitations and work practice standards must I meet for separators?
- 63.7911 How do I demonstrate initial compliance with the emissions limitations and work practice standards for separators?
- 63.7912 What are my inspection and monitoring requirements for separators?
- 63.7913 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for separators?

### TRANSFER SYSTEMS

- 63.7915 What emissions limitations and work practice standards must I meet for transfer systems?
- 63.7916 How do I demonstrate initial compliance with the emissions limitations and

work practice standards for transfer systems?

- 63.7917 What are my inspection and monitoring requirements for transfer systems?
- 63.7918 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for transfer systems?

### EQUIPMENT LEAKS

- 63.7920 What emissions limitations and work practice standards must I meet for equipment leaks?
- 63.7921 How do I demonstrate initial compliance with the emissions limitations and work practice standards for equipment leaks?
- 63.7922 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for equipment leaks?

### CLOSED VENT SYSTEMS AND CONTROL DEVICES

- 63.7925 What emissions limitations and work practice standards must I meet for closed vent systems and control devices?
- 63.7926 How do I demonstrate initial compliance with the emissions limitations and work practice standards for closed vent systems and control devices?
- 63.7927 What are my inspection and monitoring requirements for closed vent systems and control devices?
- 63.7928 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for closed vent systems and control devices?

### GENERAL COMPLIANCE REQUIREMENTS

- 63.7935 What are my general requirements for complying with this subpart?
- 63.7936 What requirements must I meet if I transfer remediation material off-site to another facility?
- 63.7937 How do I demonstrate initial compliance with the general standards?
- 63.7938 How do I demonstrate continuous compliance with the general standards?

### PERFORMANCE TESTS

- 63.7940 By what date must I conduct performance tests or other initial compliance demonstrations?
- 63.7941 How do I conduct a performance test, design evaluation, or other type of initial compliance demonstration?
- 63.7942 When must I conduct subsequent performance tests?
- 63.7943 How do I determine the average VOHAP concentration of my remediation material?
- 63.7944 How do I determine the maximum HAP vapor pressure of my remediation material?



## CONTINUOUS MONITORING SYSTEMS

- 63.7945 What are my monitoring installation, operation, and maintenance requirements?
- 63.7946 How do I monitor and collect data to demonstrate continuous compliance?
- 63.7947 What are my monitoring alternatives?

## NOTIFICATIONS, REPORTS, AND RECORDS

- 63.7950 What notifications must I submit and when?
- 63.7951 What reports must I submit and when?
- 63.7952 What records must I keep?
- 63.7953 In what form and how long must I keep my records?

## OTHER REQUIREMENTS AND INFORMATION

- 63.7955 What parts of the General Provisions apply to me?
- 63.7956 Who implements and enforces this subpart?
- 63.7957 What definitions apply to this subpart?
- TABLE 1 TO SUBPART GGGGG OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS
- TABLE 2 TO SUBPART GGGGG OF PART 63—CONTROL LEVELS AS REQUIRED BY §63.7895(A) FOR TANKS MANAGING REMEDIATION MATERIAL WITH A MAXIMUM HAP VAPOR PRESSURE LESS THAN 76.6 kPa
- TABLE 3 TO SUBPART GGGGG OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART GGGGG

**Subpart HHHHH—National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing**

## WHAT THIS SUBPART COVERS

- 63.7980 What is the purpose of this subpart?
- 63.7985 Am I subject to the requirements in this subpart?
- 63.7990 What parts of my plant does this subpart cover?

## COMPLIANCE DATES

- 63.7995 When do I have to comply with this subpart?

## EMISSION LIMITS, WORK PRACTICE STANDARDS, AND COMPLIANCE REQUIREMENTS

- 63.8000 What are my general requirements for complying with this subpart?
- 63.8005 What requirements apply to my process vessels?
- 63.8010 What requirements apply to my storage tanks?
- 63.8015 What requirements apply to my equipment leaks?
- 63.8020 What requirements apply to my wastewater streams?
- 63.8025 What requirements apply to my transfer operations?

- 63.8030 What requirements apply to my heat exchange systems?

## ALTERNATIVE MEANS OF COMPLIANCE

- 63.8050 How do I comply with emissions averaging for stationary process vessels at existing sources?
- 63.8055 How do I comply with a weight percent HAP limit in coating products?

## NOTIFICATIONS, REPORTS, AND RECORDS

- 63.8070 What notifications must I submit and when?
- 63.8075 What reports must I submit and when?
- 63.8080 What records must I keep?

## OTHER REQUIREMENTS AND INFORMATION

- 63.8090 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
- 63.8095 What parts of the General Provisions apply to me?
- 63.8100 Who implements and enforces this subpart?
- 63.8105 What definitions apply to this subpart?

- TABLE 1 TO SUBPART HHHHH OF PART 63—EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR PROCESS VESSELS
- TABLE 2 TO SUBPART HHHHH OF PART 63—EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR STORAGE TANKS
- TABLE 3 TO SUBPART HHHHH OF PART 63—REQUIREMENTS FOR EQUIPMENT LEAKS
- TABLE 4 TO SUBPART HHHHH OF PART 63—EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR WASTEWATER STREAMS
- TABLE 5 TO SUBPART HHHHH OF PART 63—EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR TRANSFER OPERATIONS
- TABLE 6 TO SUBPART HHHHH OF PART 63—REQUIREMENTS FOR HEAT EXCHANGE SYSTEMS
- TABLE 7 TO SUBPART HHHHH OF PART 63—PARTIALLY SOLUBLE HAZARDOUS AIR POLLUTANTS
- TABLE 8 TO SUBPART HHHHH OF PART 63—SOLUBLE HAZARDOUS AIR POLLUTANTS
- TABLE 9 TO SUBPART HHHHH OF PART 63—REQUIREMENTS FOR REPORTS
- TABLE 10 TO SUBPART HHHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART HHHHH

**Subpart IIIII—National Emission Standards for Hazardous Air Pollutants: Mercury Emissions From Mercury Cell Chlor-Alkali Plants**

## WHAT THIS SUBPART COVERS

- 63.8180 What is the purpose of this subpart?
- 63.8182 Am I subject to this subpart?
- 63.8184 What parts of my plant does this subpart cover?

Environmental Protection Agency

Pt. 63

63.8186 When do I have to comply with this subpart?

EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

63.8190 What emission limitations must I meet?

63.8192 What work practice standards must I meet?

OPERATION AND MAINTENANCE REQUIREMENTS

63.8222 What are my operation and maintenance requirements?

GENERAL COMPLIANCE REQUIREMENTS

63.8226 What are my general requirements for complying with this subpart?

INITIAL COMPLIANCE REQUIREMENTS

63.8230 By what date must I conduct performance tests or other initial compliance demonstrations?

63.8232 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits?

63.8234 What equations and procedures must I use for the initial compliance demonstration?

63.8236 How do I demonstrate initial compliance with the emission limitations and work practice standards?

CONTINUOUS COMPLIANCE REQUIREMENTS

63.8240 What are my monitoring requirements?

63.8242 What are the installation, operation, and maintenance requirements for my continuous monitoring systems?

63.8243 What equations and procedures must I use to demonstrate continuous compliance?

63.8244 How do I monitor and collect data to demonstrate continuous compliance?

63.8246 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

63.8248 What other requirements must I meet?

NOTIFICATIONS, REPORTS, AND RECORDS

63.8252 What notifications must I submit and when?

63.8254 What reports must I submit and when?

63.8256 What records must I keep?

63.8258 In what form and how long must I keep my records?

OTHER REQUIREMENTS AND INFORMATION

63.8262 What parts of the General Provisions apply to me?

63.8264 Who implements and enforces this subpart?

63.8266 What definitions apply to this subpart?

TABLE 1 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—DESIGN, OPERATION, AND MAINTENANCE REQUIREMENTS

TABLE 2 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—REQUIRED INSPECTIONS

TABLE 3 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—REQUIRED ACTIONS FOR LIQUID MERCURY SPILLS AND ACCUMULATIONS AND HYDROGEN AND MERCURY VAPOR LEAKS

TABLE 4 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—REQUIREMENTS FOR MERCURY LIQUID COLLECTION

TABLE 5 TO SUBPART IIIII OF PART 63—REQUIRED ELEMENTS OF FLOOR-LEVEL MERCURY VAPOR MEASUREMENT AND CELL ROOM MONITORING PLANS

TABLE 6 TO SUBPART IIIII OF PART 63—EXAMPLES OF TECHNIQUES FOR EQUIPMENT PROBLEM IDENTIFICATION, LEAK DETECTION AND MERCURY VAPOR MEASUREMENTS

TABLE 7 TO SUBPART IIIII OF PART 63—REQUIRED ELEMENTS OF WASHDOWN PLANS

TABLE 8 TO SUBPART IIIII OF PART 63—REQUIREMENTS FOR CELL ROOM MONITORING PROGRAM

TABLE 9 TO SUBPART IIIII OF PART 63—REQUIRED RECORDS FOR WORK PRACTICE STANDARDS

TABLE 10 TO SUBPART IIIII OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART IIIII

Subpart JJJJ—National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing

WHAT THIS SUBPART COVERS

63.8380 What is the purpose of this subpart?

63.8385 Am I subject to this subpart?

63.8390 What parts of my plant does this subpart cover?

63.8395 When do I have to comply with this subpart?

EMISSION LIMITATIONS

63.8405 What emission limitations must I meet?

63.8410 What are my options for meeting the emission limitations?

GENERAL COMPLIANCE REQUIREMENTS

63.8420 What are my general requirements for complying with this subpart?

63.8425 What do I need to know about operation, maintenance, and monitoring plans?

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

63.8435 By what date must I conduct performance tests?



- 63.8440 When must I conduct subsequent performance tests?
- 63.8445 How do I conduct performance tests and establish operating limits?
- 63.8450 What are my monitoring installation, operation, and maintenance requirements?
- 63.8455 How do I demonstrate initial compliance with the emission limitations?

#### CONTINUOUS COMPLIANCE REQUIREMENTS

- 63.8465 How do I monitor and collect data to demonstrate continuous compliance?
- 63.8470 How do I demonstrate continuous compliance with the emission limitations?

#### NOTIFICATIONS, REPORTS, AND RECORDS

- 63.8480 What notifications must I submit and when?
- 63.8485 What reports must I submit and when?
- 63.8490 What records must I keep?
- 63.8495 In what form and for how long must I keep my records?

#### OTHER REQUIREMENTS AND INFORMATION

- 63.8505 What parts of the General Provisions apply to me?
- 63.8510 Who implements and enforces this subpart?
- 63.8515 What definitions apply to this subpart?
- TABLE 1 TO SUBPART JJJJJ OF PART 63—EMISSION LIMITS
- TABLE 2 TO SUBPART JJJJJ OF PART 63—OPERATING LIMITS
- TABLE 3 TO SUBPART JJJJJ OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS
- TABLE 4 TO SUBPART JJJJJ OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS
- TABLE 5 TO SUBPART JJJJJ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITS AND OPERATING LIMITS
- TABLE 6 TO SUBPART JJJJJ OF PART 63—REQUIREMENTS FOR REPORTS
- TABLE 7 TO SUBPART JJJJJ OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART JJJJJ

### Subpart KKKKK—National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing

#### WHAT THIS SUBPART COVERS

- 63.8530 What is the purpose of this subpart?
- 63.8535 Am I subject to this subpart?
- 63.8540 What parts of my plant does this subpart cover?
- 63.8545 When do I have to comply with this subpart?

#### EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

- 63.8555 What emission limitations and work practice standards must I meet?
- 63.8560 What are my options for meeting the emission limitations and work practice standards?

#### GENERAL COMPLIANCE REQUIREMENTS

- 63.8570 What are my general requirements for complying with this subpart?
- 63.8575 What do I need to know about operation, maintenance, and monitoring plans?

#### TESTING AND INITIAL COMPLIANCE REQUIREMENTS

- 63.8585 By what date must I conduct performance tests?
- 63.8590 When must I conduct subsequent performance tests?
- 63.8595 How do I conduct performance tests and establish operating limits?
- 63.8600 What are my monitoring installation, operation, and maintenance requirements?
- 63.8605 How do I demonstrate initial compliance with the emission limitations and work practice standards?

#### CONTINUOUS COMPLIANCE REQUIREMENTS

- 63.8615 How do I monitor and collect data to demonstrate continuous compliance?
- 63.8620 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

#### NOTIFICATIONS, REPORTS, AND RECORDS

- 63.8630 What notifications must I submit and when?
- 63.8635 What reports must I submit and when?
- 63.8640 What records must I keep?
- 63.8645 In what form and for how long must I keep my records?

#### OTHER REQUIREMENTS AND INFORMATION

- 63.8655 What parts of the General Provisions apply to me?
- 63.8660 Who implements and enforces this subpart?
- 63.8665 What definitions apply to this subpart?
- TABLE 1 TO SUBPART KKKKK OF PART 63—EMISSION LIMITS
- TABLE 2 TO SUBPART KKKKK OF PART 63—OPERATING LIMITS
- TABLE 3 TO SUBPART KKKKK OF PART 63—WORK PRACTICE STANDARDS
- TABLE 4 TO SUBPART KKKKK OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS
- TABLE 5 TO SUBPART KKKKK OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

Environmental Protection Agency

Pt. 63

TABLE 6 TO SUBPART KKKKK OF PART 63—  
CONTINUOUS COMPLIANCE WITH EMISSION  
LIMITATIONS AND WORK PRACTICE STAND-  
ARDS

TABLE 7 TO SUBPART KKKKK OF PART 63—RE-  
QUIREMENTS FOR REPORTS

TABLE 8 TO SUBPART KKKKK OF PART 63—AP-  
PLICABILITY OF GENERAL PROVISIONS TO  
SUBPART KKKKK

**Subpart LLLLL—National Emission Standards  
for Hazardous Air Pollutants: Asphalt  
Processing and Asphalt Roofing Manu-  
facturing**

**WHAT THIS SUBPART COVERS**

- 63.8680 What is the purpose of this subpart?  
63.8681 Am I subject to this subpart?  
63.8682 What parts of my plant does this  
subpart cover?  
63.8683 When must I comply with this sub-  
part?

**EMISSION LIMITATIONS**

- 63.8684 What emission limitations must I  
meet?

**GENERAL COMPLIANCE REQUIREMENTS**

- 63.8685 What are my general requirements  
for complying with this subpart?

**TESTING AND INITIAL COMPLIANCE  
REQUIREMENTS**

- 63.8686 By what date must I conduct per-  
formance tests or other initial compli-  
ance demonstrations?  
63.8687 What performance tests, design eval-  
uations, and other procedures must I  
use?  
63.8688 What are my monitoring installa-  
tion, operation, and maintenance re-  
quirements?  
63.8689 How do I demonstrate initial compli-  
ance with the emission limitations?

**CONTINUOUS COMPLIANCE REQUIREMENTS**

- 63.8690 How do I monitor and collect data to  
demonstrate continuous compliance?  
63.8691 How do I demonstrate continuous  
compliance with the operating limits?

**NOTIFICATIONS, REPORTS, AND RECORDS**

- 63.8692 What notifications must I submit  
and when?  
63.8693 What reports must I submit and  
when?  
63.8694 What records must I keep?  
63.8695 In what form and how long must I  
keep my records?

**OTHER REQUIREMENTS AND INFORMATION**

- 63.8696 What parts of the General Provisions  
apply to me?  
63.8697 Who implements and enforces this  
subpart?

- 63.8698 What definitions apply to this sub-  
part?

TABLE 1 TO SUBPART LLLLL OF PART 63—  
EMISSION LIMITATIONS

TABLE 2 TO SUBPART LLLLL OF PART 63—OP-  
ERATING LIMITS

TABLE 3 TO SUBPART LLLLL OF PART 63—RE-  
QUIREMENTS FOR PERFORMANCE TESTS

TABLE 4 TO SUBPART LLLLL OF PART 63—INI-  
TIAL COMPLIANCE WITH EMISSION LIMITA-  
TIONS

TABLE 5 TO SUBPART LLLLL OF PART 63—  
CONTINUOUS COMPLIANCE WITH OPERATING  
LIMITS

TABLE 6 TO SUBPART LLLLL OF PART 63—RE-  
QUIREMENTS FOR REPORTS

TABLE 7 TO SUBPART LLLLL OF PART 63—AP-  
PLICABILITY OF GENERAL PROVISIONS TO  
SUBPART LLLLL

**Subpart MMMMM—National Emission  
Standards for Hazardous Air Pollutants:  
Flexible Polyurethane Foam Fabrica-  
tion Operations**

**WHAT THIS SUBPART COVERS**

- 63.8780 What is the purpose of this subpart?  
63.8782 Am I subject to this subpart?  
63.8784 What parts of my plant does this  
subpart cover?  
63.8786 When do I have to comply with this  
subpart?

**EMISSION LIMITATIONS**

- 63.8790 What emission limitations must I  
meet?

**GENERAL COMPLIANCE REQUIREMENTS**

- 63.8794 What are my general requirements  
for complying with this subpart?

**TESTING AND INITIAL COMPLIANCE  
REQUIREMENTS**

- 63.8798 By what date must I conduct per-  
formance tests or other initial compli-  
ance demonstrations?  
63.8800 What performance tests and other  
procedures must I use to demonstrate  
compliance with the emission limit for  
flame lamination?  
63.8802 What methods must I use to dem-  
onstrate compliance with the emission  
limitation for loop slitter adhesive use?  
63.8806 How do I demonstrate initial compli-  
ance with the emission limitations?

**CONTINUOUS COMPLIANCE REQUIREMENTS**

- 63.8810 How do I monitor and collect data to  
demonstrate continuous compliance?  
63.8812 How do I demonstrate continuous  
compliance with the emission limita-  
tions?



**§ 63.6580**

**NOTIFICATIONS, REPORTS, AND RECORDS**

- 63.8816 What notifications must I submit and when?
- 63.8818 What reports must I submit and when?
- 63.8820 What records must I keep?
- 63.8822 In what form and how long must I keep my records?

**OTHER REQUIREMENTS AND INFORMATION**

- 63.8826 What parts of the General Provisions apply to me?
- 63.8828 Who implements and enforces this subpart?
- 63.8830 What definitions apply to this subpart?

TABLE 1 TO SUBPART MMMMM OF PART 63—EMISSION LIMITS

TABLE 2 TO SUBPART MMMMM OF PART 63—OPERATING LIMITS FOR NEW OR RECONSTRUCTED FLAME LAMINATION AFFECTED SOURCES

TABLE 3 TO SUBPART MMMMM OF PART 63—PERFORMANCE TEST REQUIREMENTS FOR NEW OR RECONSTRUCTED FLAME LAMINATION AFFECTED SOURCES

TABLE 4 TO SUBPART MMMMM OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITS

TABLE 5 TO SUBPART MMMMM OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITS AND OPERATING LIMITS

TABLE 6 TO SUBPART MMMMM OF PART 63—REQUIREMENTS FOR REPORTS

TABLE 7 TO SUBPART MMMMM OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART MMMMM

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

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

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

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

**WHAT THIS SUBPART COVERS**

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

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart

**40 CFR Ch. I (7–1–10 Edition)**

also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

**§ 63.6585 Am I subject to this subpart?**

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

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

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]



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

This subpart applies to each affected source.

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

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

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

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

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and recon-

struction is commenced on or after December 19, 2002.

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

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of § 63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of § 63.6645(h) and the requirements of §§ 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source of HAP emissions; an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions; an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE; an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE; an existing



compression ignition emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing spark ignition emergency or limited use stationary RICE; an existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; or an existing stationary residential, commercial, or institutional emergency stationary RICE located at an area source of HAP emissions, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP, a stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010]

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

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you



must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in § 63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010]

#### EMISSION AND OPERATING LIMITATIONS

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

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs

using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

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

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



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

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

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

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

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

[75 FR 9675, Mar. 3, 2010]

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

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and

procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

[75 FR 9675, Mar. 3, 2010]

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

If you own or operate an existing non-emergency CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 9675, Mar. 3, 2010]

#### GENERAL COMPLIANCE REQUIREMENTS

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

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control



equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010]

#### TESTING AND INITIAL COMPLIANCE REQUIREMENTS

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

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

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a

major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

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

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

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

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



## § 63.6612

and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008]

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

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

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010]

## 40 CFR Ch. I (7-1-10 Edition)

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

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

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

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.

(c) [Reserved]

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

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

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

Where:

$C_i$  = concentration of CO or formaldehyde at the control device inlet,

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

R = percent reduction of CO or formaldehyde emissions.

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

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

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

Where:

$F_o$  = Fuel factor based on the ratio of oxygen volume to the ultimate  $\text{CO}_2$  volume produced by the fuel at zero percent excess air.

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

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

$F_c$  = Ratio of the volume of  $\text{CO}_2$  produced to the gross calorific value of the fuel from Method 19,  $\text{dsm}^3/\text{J}$  ( $\text{dscf}/10^6 \text{ Btu}$ ).

(ii) Calculate the  $\text{CO}_2$  correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{\text{co}_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

$X_{\text{co}_2}$  =  $\text{CO}_2$  correction factor, percent.

5.9 = 20.9 percent  $\text{O}_2$  - 15 percent  $\text{O}_2$ , the defined  $\text{O}_2$  correction value, percent.

(iii) Calculate the  $\text{NO}_x$  and  $\text{SO}_2$  gas concentrations adjusted to 15 percent  $\text{O}_2$  using  $\text{CO}_2$  as follows:

$$C_{\text{adj}} = C_d \frac{X_{\text{co}_2}}{\% \text{CO}_2} \quad (\text{Eq. 4})$$

Where:

$\% \text{CO}_2$  = Measured  $\text{CO}_2$  concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the

petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally (e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower



values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accuracy in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010]

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

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO<sub>2</sub> at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to

the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in § 63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in § 63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in § 63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in § 63.8.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at



an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

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

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

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

(h) If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after

which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

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

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010]

**§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?**

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

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the



results of the initial compliance demonstration according to the requirements in § 63.6645.

#### CONTINUOUS COMPLIANCE REQUIREMENTS

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

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

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

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission lim-

itation applicable to your stationary RICE.

(c) [Reserved]

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

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

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new emergency stationary RICE with a site rating of more than



500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the engine according to the conditions described in paragraphs (f)(1) through (4) of this section.

(1) For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

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

(3) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(4) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout,

such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(4), as long as the power provided by the financial arrangement is limited to emergency power.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010]

#### NOTIFICATIONS, REPORTS, AND RECORDS

##### § 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following:

(1) An existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary CI RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary CI RICE less than 100 HP, an existing stationary emergency CI RICE, or an existing stationary CI RICE that is not subject to any numerical emission standards.

(b) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP



located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with § 63.6590(b), your notification should include the information in § 63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to § 63.10(d)(2).

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010]

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

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.



(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in § 63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

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

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.

The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.



(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent

to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

#### § 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in § 63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.



## Environmental Protection Agency

§ 63.6665

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE:

(1) An existing stationary CI RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency CI RICE.

(3) An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation,

and the time the engine was operated as part of demand response.

(1) An existing emergency stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

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

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

(a) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

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

## OTHER REQUIREMENTS AND INFORMATION

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

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary



RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

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

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in § 63.6600 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in § 63.6610(b).

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

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

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

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

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

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

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

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

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



(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i).

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

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

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

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

*Emergency stationary RICE* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. 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. Stationary CI ICE used for peak shaving are not considered emergency stationary ICE. Stationary CI ICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under § 63.6640(f). Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. All other emergency stationary RICE must comply with the requirements specified in § 63.6640(f).

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

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

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

*Gasoline* means any fuel sold in any State for use in motor vehicles and



motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

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

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

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

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

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

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

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

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

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

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources,

even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated.

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

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

*Non-selective catalytic reduction (NSCR)* means an add-on catalytic nitrogen oxides (NO<sub>x</sub>) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO<sub>x</sub>, CO, and volatile organic compounds (VOC) into CO<sub>2</sub>, nitrogen, and water.

*Oil and gas production facility* as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage



source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

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

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

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

*Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in § 63.760(a) may be used.

For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to § 63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to § 63.1270(a)(2).

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

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

*Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure  $C_3H_8$ .

*Residential/commercial/institutional emergency stationary RICE* means an emergency stationary RICE used in residential establishments such as homes or residences, commercial establishments such as office buildings, hotels, or stores, or institutional establishments such as medical centers, research centers, and institutions of higher education.

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

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

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

*Spark ignition* means relating to either: A gasoline-fueled engine; or any other type of engine a spark plug (or other sparking device) and with operating characteristics significantly

similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

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

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

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

*Storage vessel with the potential for flash emissions* means any storage ves-

sel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

*Subpart* means 40 CFR part 63, subpart ZZZZ.

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

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

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010]

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

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE at 100 percent load plus or minus 10 percent:

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

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

[75 FR 9679, Mar. 3, 2010]



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

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

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

[73 FR 3607, Jan. 18, 2008]

TABLE 2A TO SUBPART ZZZZ OF PART 63—EMISSION LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND COMPRESSION IGNITION STATIONARY RICE >500 HP AND NEW AND RECONSTRUCTED 4SLB STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

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

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE .....	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O <sub>2</sub> . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O <sub>2</sub> until June 15, 2007.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
2. 4SLB stationary RICE .....	a. Reduce CO emissions by 93 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O <sub>2</sub> .	
3. CI stationary RICE .....	a. Reduce CO emissions by 70 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O <sub>2</sub> .	

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

[75 FR 9680, Mar. 3, 2010]

TABLE 2B TO SUBPART ZZZZ OF PART 63—OPERATING LIMITATIONS FOR NEW AND RECONSTRUCTED 2SLB AND COMPRESSION IGNITION STATIONARY RICE >500 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS, EXISTING NON-EMERGENCY COMPRESSION IGNITION STATIONARY RICE >500 HP, AND NEW AND RECONSTRUCTED 4SLB BURN STATIONARY RICE ≥250 HP LOCATED AT A MAJOR SOURCE OF HAP EMISSIONS

As stated in §§63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and existing, new and reconstructed compression ignition stationary RICE:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and  b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. <sup>1</sup>
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst.	Comply with any operating limitations approved by the Administrator.

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

[75 FR 9680, Mar. 3, 2010]

TABLE 2C TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING COMPRESSION IGNITION STATIONARY RICE LOCATED AT MAJOR SOURCES OF HAP EMISSIONS

As stated in §§63.6600 and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE:

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



## Environmental Protection Agency

## Pt. 63, Subpt. ZZZZ, Table 2d

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
5. Non-Emergency, non-black start CI > 500 HP.	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	

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

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

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

[75 FR 9681, Mar. 3, 2010]

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

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission and operating limitations for existing compression ignition stationary RICE:

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

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

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



[75 FR 9681, Mar. 3, 2010]

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

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

For each . . .	Complying with the requirement to . . .	You must . . .
1. 2SLB and 4SLB stationary RICE with a brake horsepower >500 located at major sources and new or reconstructed CI stationary RICE with a brake horsepower >500 located at major sources.	Reduce CO emissions and not using a CEMS.	Conduct subsequent performance tests semiannually. <sup>1</sup>
2. 4SRB stationary RICE with a brake horsepower ≥5,000 located at major sources.	Reduce formaldehyde emissions . . . . .	Conduct subsequent performance tests semiannually. <sup>1</sup>
3. Stationary RICE with a brake horsepower >500 located at major sources.	Limit the concentration of formaldehyde in the stationary RICE exhaust.	Conduct subsequent performance tests semiannually. <sup>1</sup>
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE.	Limit or reduce CO or formaldehyde emissions.	Conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are limited use stationary RICE.	.....	Conduct subsequent performance tests every 8,760 hrs or 5 years, whichever comes first.

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

[75 FR 9682, Mar. 3, 2010]

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

As stated in §§ 63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE for existing sources:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE.	a. Reduce CO emissions.	i. Measure the O <sub>2</sub> at the inlet and outlet of the control device; and  ii. Measure the CO at the inlet and the outlet of the control device.	(1) Portable CO and O <sub>2</sub> analyzer..  (1) Portable CO and O <sub>2</sub> analyzer..  (1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i).	(a) Using ASTM D6522–00 (2005)* (incorporated by reference, see § 63.14). Measurements to determine O <sub>2</sub> must be made at the same time as the measurements for CO concentration. (a) Using ASTM D6522–00 (2005)*,b (incorporated by reference, see § 63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O <sub>2</sub> dry basis. (a) Sampling sites must be located at the inlet and outlet of the control device.
2. 4SRB stationary RICE.	a. Reduce formaldehyde emissions.	i. Select the sampling port location and the number of traverse points; and ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and  iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005).  (1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for formaldehyde concentration. (a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

## Environmental Protection Agency

## Pt. 63, Subpt. ZZZZ, Table 5

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	iv. Measure formaldehyde at the inlet and the outlet of the control device.  i. Select the sampling port location and the number of traverse points; and  ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and  iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and  iv. Measure formaldehyde at the exhaust of the stationary RICE; or  v. Measure CO at the exhaust of the stationary RICE.	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348-03 <sup>a</sup> , provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.  (1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i).  (1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (2005).  (1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03.  (1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348-03 <sup>a</sup> , provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.  (1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005) <sup>a</sup> , Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.  (a) If using a control device, the sampling site must be located at the outlet of the control device.  (a) Measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde concentration. (a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration. (a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.  (a) CO concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour longer runs.

<sup>a</sup>You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

<sup>b</sup>You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

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

[75 FR 9682, Mar. 3, 2010]

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

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

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS.	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions and not using oxidation catalyst.	<ul style="list-style-type: none"> <li>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</li> <li>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and</li> <li>ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and</li> <li>iii. You have recorded the approved operating parameters (if any) during the initial performance test.</li> </ul>
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions, and using a CEMS.	<ul style="list-style-type: none"> <li>i. You have installed a CEMS to continuously monitor CO and either O<sub>2</sub> or CO<sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and</li> <li>ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and</li> <li>iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.</li> </ul>
4. 4SRB stationary RICE >500 HP located at a major source.	a. Reduce formaldehyde emissions and using NSCR.	<ul style="list-style-type: none"> <li>i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and</li> <li>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and</li> <li>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</li> </ul>
5. 4SRB stationary RICE >500 HP located at a major source.	a. Reduce formaldehyde emissions and not using NSCR.	<ul style="list-style-type: none"> <li>i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and</li> <li>ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and</li> <li>iii. You have recorded the approved operating parameters (if any) during the initial performance test.</li> </ul>
6. Stationary RICE >500 HP located at a major source.	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR.	<ul style="list-style-type: none"> <li>i. The average formaldehyde concentration, corrected to 15 percent O<sub>2</sub>, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and</li> <li>ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and</li> <li>iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</li> </ul>



For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
7. Stationary RICE >500 HP located at a major source.	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
8. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source.	a. Reduce CO or formaldehyde emissions.	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source.	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[75 FR 9684, Mar. 3, 2010]

TABLE 6 TO SUBPART ZZZZ OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS AND OPERATING LIMITATIONS

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

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

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source.	a. Reduce CO emissions and using a CEMS.	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. 4SRB stationary RICE >500 HP located at a major source.	a. Reduce formaldehyde emissions and using NSCR.	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. 4SRB stationary RICE >500 HP located at a major source.	a. Reduce formaldehyde emissions and not using NSCR.	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake HP ≥5,000 located at a major source.	Reduce formaldehyde emissions .....	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved.*
7. Stationary RICE >500 HP located at a major source.	Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR.	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit*; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. Stationary RICE >500 HP located at a major source.	Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit*; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing stationary CI RICE not subject to any numerical emission limitations.	a. Work or Management practices . . . . .	iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test. i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary RICE >500 HP that are not limited use stationary RICE, except 4SRB >500 HP located at major sources.	a. Reduce CO or formaldehyde emissions; or. b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.
11. Existing limited use stationary RICE >500 HP that are limited use CI stationary RICE.	a. Reduce CO or formaldehyde emissions; or. b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.

\*After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semi-annual performance tests.

[75 FR 9685, Mar. 3, 2010]

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

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

You must submit a(n) . . .	The report must contain . . .	You must submit the report . . .
1. Compliance report . . . . .	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in § 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), the information in § 63.6650(e); or	i. Semiannually according to the requirements in § 63.6650(b)(1)–(5) for engines that are not limited use stationary CI RICE subject to numerical emission limitations; and ii. Annually according to the requirements in § 63.6650(b)(6)–(9) for engines that are limited use stationary CI RICE subject to numerical emission limitations.  i. Semiannually according to the requirements in § 63.6650(b).



## Pt. 63, Subpt. ZZZZ, Table 8

## 40 CFR Ch. I (7–1–10 Edition)

You must submit a(n) . . .	The report must contain . . .	You must submit the report . . .
2. Report .....	<p>c. If you had a malfunction during the reporting period, the information in § 63.6650(c)(4).</p> <p>a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and</p> <p>b. The operating limits provided in your Federally enforceable permit, and any deviations from these limits; and</p> <p>c. Any problems or errors suspected with the meters.</p>	<p>i. Semiannually according to the requirements in § 63.6650(b).</p> <p>i. Annually, according to the requirements in § 63.6650.</p> <p>i. See item 2.a.i.</p> <p>i. See item 2.a.i.</p>

[75 FR 9687, Mar. 3, 2010]

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

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

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.1 .....	General applicability of the General Provisions.	Yes.	
§ 63.2 .....	Definitions .....	Yes .....	Additional terms defined in § 63.6675.
§ 63.3 .....	Units and abbreviations .....	Yes.	
§ 63.4 .....	Prohibited activities and circumvention.	Yes.	
§ 63.5 .....	Construction and reconstruction .....	Yes.	
§ 63.6(a) .....	Applicability .....	Yes.	
§ 63.6(b)(1)–(4) .....	Compliance dates for new and reconstructed sources.	Yes.	
§ 63.6(b)(5) .....	Notification .....	Yes.	
§ 63.6(b)(6) .....	[Reserved]		
§ 63.6(b)(7) .....	Compliance dates for new and reconstructed area sources that become major sources.	Yes.	
§ 63.6(c)(1)–(2) .....	Compliance dates for existing sources.	Yes.	
§ 63.6(c)(3)–(4) .....	[Reserved]		
§ 63.6(c)(5) .....	Compliance dates for existing area sources that become major sources.	Yes.	
§ 63.6(d) .....	[Reserved]		
§ 63.6(e) .....	Operation and maintenance .....	No.	
§ 63.6(f)(1) .....	Applicability of standards .....	No.	
§ 63.6(f)(2) .....	Methods for determining compliance	Yes.	
§ 63.6(f)(3) .....	Finding of compliance .....	Yes.	
§ 63.6(g)(1)–(3) .....	Use of alternate standard .....	Yes.	
§ 63.6(h) .....	Opacity and visible emission standards.	No .....	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i) .....	Compliance extension procedures and criteria.	Yes.	
§ 63.6(j) .....	Presidential compliance exemption .....	Yes.	
§ 63.7(a)(1)–(2) .....	Performance test dates .....	Yes .....	Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3) .....	CAA section 114 authority .....	Yes.	
§ 63.7(b)(1) .....	Notification of performance test .....	Yes .....	Except that § 63.7(b)(1) only applies as specified in § 63.6645.
§ 63.7(b)(2) .....	Notification of rescheduling .....	Yes .....	Except that § 63.7(b)(2) only applies as specified in § 63.6645.
§ 63.7(c) .....	Quality assurance/test plan .....	Yes .....	Except that § 63.7(c) only applies as specified in § 63.6645.
§ 63.7(d) .....	Testing facilities .....	Yes.	
§ 63.7(e)(1) .....	Conditions for conducting performance tests.	No. ....	Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620.

## Environmental Protection Agency

## Pt. 63, Subpt. ZZZZ, Table 8

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.7(e)(2) .....	Conduct of performance tests and reduction of data.	Yes .....	Subpart ZZZZ specifies test methods at § 63.6620.
§ 63.7(e)(3) .....	Test run duration .....	Yes.	
§ 63.7(e)(4) .....	Administrator may require other testing under section 114 of the CAA.	Yes.	
§ 63.7(f) .....	Alternative test method provisions .....	Yes.	
§ 63.7(g) .....	Performance test data analysis, recordkeeping, and reporting.	Yes.	
§ 63.7(h) .....	Waiver of tests .....	Yes.	Subpart ZZZZ contains specific requirements for monitoring at § 63.6625.
§ 63.8(a)(1) .....	Applicability of monitoring requirements.	Yes .....	
§ 63.8(a)(2) .....	Performance specifications .....	Yes.	
§ 63.8(a)(3) .....	[Reserved]		
§ 63.8(a)(4) .....	Monitoring for control devices .....	No.	
§ 63.8(b)(1) .....	Monitoring .....	Yes.	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS). Subpart ZZZZ does not require COMS. Except that subpart ZZZZ does not require COMS. Except for § 63.8(e)(5)(ii), which applies to COMS.
§ 63.8(b)(2)-(3) .....	Multiple effluents and multiple monitoring systems.	Yes.	
§ 63.8(c)(1) .....	Monitoring system operation and maintenance.	Yes.	
§ 63.8(c)(1)(i) .....	Routine and predictable SSM .....	Yes.	
§ 63.8(c)(1)(ii) .....	SSM not in Startup Shutdown Malfunction Plan.	Yes.	
§ 63.8(c)(1)(iii) .....	Compliance with operation and maintenance requirements.	Yes.	
§ 63.8(c)(2)-(3) .....	Monitoring system installation .....	Yes.	
§ 63.8(c)(4) .....	Continuous monitoring system (CMS) requirements.	Yes .....	
§ 63.8(c)(5) .....	COMS minimum procedures .....	No .....	
§ 63.8(c)(6)-(8) .....	CMS requirements .....	Yes .....	
§ 63.8(d) .....	CMS quality control .....	Yes.	
§ 63.8(e) .....	CMS performance evaluation .....	Yes .....	
		Except that § 63.8(e) only applies as specified in § 63.6645.	
§ 63.8(f)(1)-(5) .....	Alternative monitoring method .....	Yes .....	
§ 63.8(f)(6) .....	Alternative to relative accuracy test ...	Yes .....	
§ 63.8(g) .....	Data reduction .....	Yes .....	
§ 63.9(a) .....	Applicability and State delegation of notification requirements.	Yes.	Except that § 63.9(b)(3) is reserved.
§ 63.9(b)(1)-(5) .....	Initial notifications .....	Yes .....	
		Except that § 63.9(b) only applies as specified in § 63.6645.	
§ 63.9(c) .....	Request for compliance extension .....	Yes .....	
§ 63.9(d) .....	Notification of special compliance requirements for new sources.	Yes .....	
§ 63.9(e) .....	Notification of performance test .....	Yes .....	
§ 63.9(f) .....	Notification of visible emission (VE)/opacity test.	No .....	
§ 63.9(g)(1) .....	Notification of performance evaluation	Yes .....	
§ 63.9(g)(2) .....	Notification of use of COMS data .....	No .....	
§ 63.9(g)(3) .....	Notification that criterion for alternative to RATA is exceeded.	Yes .....	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.9(h)(1)–(6)	Notification of compliance status	Except that § 63.9(g) only applies as specified in § 63.6645. Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved. Except that § 63.9(h) only applies as specified in § 63.6645.
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.10(a)	Administrative provisions for record-keeping/reporting.	Yes.	
§ 63.10(b)(1)	Record retention	Yes.	
§ 63.10(b)(2)(i)–(v)	Records related to SSM	No.	
§ 63.10(b)(2)(vi)–(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA.	Yes	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	
§ 63.10(c)	Additional records for sources using CEMS.	Yes	Except that § 63.10(c)(2)–(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports.	No.	
§ 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports.	Yes.	Except that § 63.10(e)(3)(i) (C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of Information	Yes.	

[75 FR 9688, Mar. 3, 2010]

### Subpart AAAAA—National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants

SOURCE: 69 FR 416, Jan. 5, 2004, unless otherwise noted.

#### WHAT THIS SUBPART COVERS

#### § 63.7080 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for lime manufacturing plants. This subpart also es-

tablishes requirements to demonstrate initial and continuous compliance with the emission limitations.

#### § 63.7081 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a lime manufacturing plant (LMP) that is a major source, or that is located at, or is part of, a major source of hazardous air pollutant (HAP) emissions, unless the LMP is located at a kraft pulp mill, soda pulp mill, sulfite pulp mill, beet sugar manufacturing plant, or only processes sludge containing calcium



## Appendix E

## Environmental Protection Agency

§ 63.10681

Citation	Subject	Applies to subpart wwwww	Explanation
§ 63.6(c)(2), (5)	Compliance dates for CAA section 112(f) standards and for area sources that become major.	No.	
§ 63.6(c)(3)–(4)	[Reserved].		
§ 63.6(d)	[Reserved].		
§ 63.6(e)–(h)	Alternative nonopacity emission standard.	No.	
§ 63.6(i)–(j)	Compliance extension	Yes.	
§ 63.7	Performance testing requirements.	No.	
§ 63.8	Monitoring requirements	No.	
§ 63.9(a)	Applicability and initial notifications addressees.	Yes.	
§ 63.9(b)	Initial notifications	No.	
§ 63.9(c)	Request for extension of compliance.	Yes.	
§ 63.9(d)–(j)	Other notifications	No.	
§ 63.10(a)(1)–(2)	Recordkeeping and reporting requirements, applicability.	Yes.	
§ 63.10(a)(3)–(4)	General information	Yes.	
§ 63.10(a)(5)–(7)	Recordkeeping and reporting requirements, reporting schedules.	No.	
§ 63.10(b)(1)	Retention time	Yes.	
§ 63.10(b)(2)–(f)	Recordkeeping and reporting requirements.	No.	
§ 63.11	Control device requirements	No.	
§ 63.12	State authority and delegations	Yes.	
§§ 63.13–63.16	Addresses, incorporations by Reference, availability of information, performance track provisions.	Yes.	

## Subpart XXXXX [Reserved]

**Subpart YYYYY—National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities**

SOURCE: 72 FR 74111, Dec. 28, 2007, unless otherwise noted.

## APPLICABILITY AND COMPLIANCE DATES

**§ 63.10680 Am I subject to this subpart?**

(a) You are subject to this subpart if you own or operate an electric arc furnace (EAF) steelmaking facility that is an area source of hazardous air pollutant (HAP) emissions.

(b) This subpart applies to each new or existing affected source. The affected source is each EAF steelmaking facility.

(1) An affected source is existing if you commenced construction or reconstruction of the affected source on or before September 20, 2007.

(2) An affected source is new if you commenced construction or reconstruction of the affected source after September 20, 2007.

(c) This subpart does not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act (CAA).

(d) If you own or operate an area source subject to this subpart, you must have or obtain a permit under 40 CFR part 70 or 40 CFR part 71.

**§ 63.10681 What are my compliance dates?**

(a) Except as provided in paragraph (b) of this section, if you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart by no later than June 30, 2008.

(b) If you own or operate an existing affected source, you must achieve compliance with opacity limit in § 63.10686(b)(2) or (c)(2) by no later than December 28, 2010 if you demonstrate to the satisfaction of the permitting

authority that additional time is needed to install or modify emission control equipment.

(c) If you start up a new affected source on or before December 28, 2007, you must achieve compliance with the applicable provisions of this subpart by no later than December 28, 2007.

(d) If you start up a new affected source after December 28, 2007, you must achieve compliance with the applicable provisions of this subpart upon startup of your affected source.

#### STANDARDS AND COMPLIANCE REQUIREMENTS

#### § 63.10685 What are the requirements for the control of contaminants from scrap?

(a) *Chlorinated plastics, lead, and free organic liquids.* For metallic scrap utilized in the EAF at your facility, you must comply with the requirements in either paragraph (a)(1) or (2) of this section. You may have certain scrap at your facility subject to paragraph (a)(1) of this section and other scrap subject to paragraph (a)(2) of this section provided the scrap remains segregated until charge make-up.

(1) *Pollution prevention plan.* For the production of steel other than leaded steel, you must prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, you must prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. You must submit the scrap pollution prevention plan to the permitting authority for approval. You must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. You must keep a

copy of the plan onsite, and you must provide training on the plan's requirements to all plant personnel with materials acquisition or inspection duties. Each plan must include the information in paragraphs (a)(1)(i) through (iii) of this section:

(i) Specifications that scrap materials must be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.

(ii) A requirement in your scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel.

(iii) Procedures for determining if the requirements and specifications in paragraph (a)(1) of this section are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.

(iv) The requirements of paragraph (a)(1) of this section do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. These exempted materials must be identified in the pollution prevention plan.

(2) *Restricted metallic scrap.* For the production of steel other than leaded steel, you must not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, you must not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. This restriction does not apply to any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead



components, chlorinated plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if you meet the requirements in paragraph (b)(3) of this section.

(b) *Mercury requirements.* For scrap containing motor vehicle scrap, you must procure the scrap pursuant to one of the compliance options in paragraphs (b)(1), (2), or (3) of this section for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, you must procure the scrap pursuant to the requirements in paragraph (b)(4) of this section for each scrap provider, contract, or shipment. You may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

(1) *Site-specific plan for mercury switches.* You must comply with the requirements in paragraphs (b)(1)(i) through (v) of this section.

(i) You must include a requirement in your scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

(ii) You must prepare and operate according to a plan demonstrating how your facility will implement the scrap specification in paragraph (b)(1)(i) of this section for removal of mercury switches. You must submit the plan to the permitting authority for approval. You must operate according to this plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permitting authority may change the approval status of the plan upon 90-days written notice based upon the semiannual compliance report or other information. The plan must include:

(A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switch-

es have been removed and the need to ensure the proper management of the mercury switches removed from that scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;

(B) Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;

(C) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and

(D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (b)(1)(ii)(C) of this section).

(iii) You must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to your facility during the previous year and the basis for the estimate. The permitting authority may request documentation or additional information at any time.

(iv) You must establish a goal for each scrap provider to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under paragraph (b)(1) of this section may require only the removal of convenience light switch mechanisms, the permitting authority will credit all



documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.

(v) For each scrap provider, you must submit semiannual progress reports to the permitting authority that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph (b)(1)(ii)(A) of this section. This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The permitting authority may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

(2) *Option for approved mercury programs.* You must certify in your notification of compliance status that you participate in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. If you purchase motor vehicle scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under paragraph (b)(2) of this section unless and until the Administrator disapproves the program (in part or in whole) under paragraph (b)(2)(iii) of this section.

(i) The program includes outreach that informs the dismantlers of the

need for removal of mercury switches and provides training and guidance for removing mercury switches;

(ii) The program has a goal to remove at least 80 percent of mercury switches from the motor vehicle scrap the scrap provider processes. Although a program approved under paragraph (b)(2) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and

(iii) The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.

(iv) You must develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.

(A) The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

(B) You must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the



need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.

(C) You must conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

(3) *Option for specialty metal scrap.* You must certify in your notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

(4) *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in paragraphs (b)(1) through (3) of this section, you must certify in your notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

(c) *Recordkeeping and reporting requirements.* In addition to the records required by § 63.10, you must keep records to demonstrate compliance with the requirements for your pollution prevention plan in paragraph (a)(1) of this section and/or for the use of only restricted scrap in paragraph (a)(2) of this section and for mercury in paragraphs (b)(1) through (3) of this section as applicable. You must keep records documenting compliance with paragraph (b)(4) of this section for scrap that does not contain motor vehicle scrap.

(1) If you are subject to the requirements for a site-specific plan for mercury under paragraph (b)(1) of this section, you must:

(i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the es-

timated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and

(ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted inspections or taken other means of corroboration as required under paragraph (b)(1)(ii)(C) of this section. You may include this information in the semiannual compliance reports required under paragraph (c)(3) of this section.

(2) If you are subject to the option for approved mercury programs under paragraph (b)(2) of this section, you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If you purchase motor vehicle scrap from a broker, you must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.

(3) You must submit semiannual compliance reports to the Administrator for the control of contaminants from scrap according to the requirements in § 63.10(e). The report must clearly identify any deviation from the requirements in paragraphs (a) and (b) of this section and the corrective action taken. You must identify which compliance option in paragraph (b) of this section applies to each scrap provider, contract, or shipment.

**§ 63.10686 What are the requirements for electric arc furnaces and argon-oxygen decarburization vessels?**

(a) You must install, operate, and maintain a capture system that collects the emissions from each EAF (including charging, melting, and tapping operations) and argon-oxygen



decarburization (AOD) vessel and conveys the collected emissions to a control device for the removal of particulate matter (PM).

(b) Except as provided in paragraph (c) of this section, you must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:

(1) Exit from a control device and contain in excess of 0.0052 grains of PM per dry standard cubic foot (gr/dscf); and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.

(c) If you own or operate a new or existing affected source that has a production capacity of less than 150,000 tons per year (tpy) of stainless or specialty steel (as determined by the maximum production if specified in the source's operating permit or EAF capacity and maximum number of operating hours per year), you must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:

(1) Exit from a control device and contain particulate matter (PM) in excess of 0.8 pounds per ton (lb/ton) of steel. Alternatively, the owner or operator may elect to comply with a PM limit of 0.0052 grains per dry standard cubic foot (gr/dscf); and

(2) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.

(d) Except as provided in paragraph (d)(6) of this section, you must conduct performance tests to demonstrate initial compliance with the applicable emissions limit for each emissions source subject to an emissions limit in paragraph (b) or (c) of this section.

(1) You must conduct each PM performance test for an EAF or AOD vessel according to the procedures in § 63.7 and 40 CFR 60.275a using the following test methods in 40 CFR part 60, appendices A-1, A-2, A-3, and A-4:

(i) Method 1 or 1A of appendix A-1 of 40 CFR part 60 to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of

the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A-1 of 40 CFR part 60 to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B of appendix A-3 of 40 CFR part 60 to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference—see § 63.14) as an alternative to EPA Method 3B.

(iv) Method 4 of appendix A-3 of 40 CFR part 60 to determine the moisture content of the stack gas.

(v) Method 5 or 5D of appendix A-3 of 40 CFR part 60 to determine the PM concentration. Three valid test runs are needed to comprise a PM performance test. For EAF, sample only when metal is being melted and refined. For AOD vessels, sample only when the operation(s) are being conducted.

(2) You must conduct each opacity test for a melt shop according to the procedures in § 63.6(h) and Method 9 of appendix A-4 of 40 CFR part 60. When emissions from any EAF or AOD vessel are combined with emissions from emission sources not subject to this subpart, you must demonstrate compliance with the melt shop opacity limit based on emissions from only the emission sources subject to this subpart.

(3) During any performance test, you must monitor and record the information specified in 40 CFR 60.274a(h) for all heats covered by the test.

(4) You must notify and receive approval from the Administrator for procedures that will be used to determine compliance for an EAF or AOD vessel when emissions are combined with those from facilities not subject to this subpart.

(5) To determine compliance with the PM emissions limit in paragraph (c) of this section for an EAF or AOD vessel in a lb/ton of steel format, compute the process-weighted mass emissions ( $E_p$ ) for each test run using Equation 1 of this section:

$$E_p = \frac{C \times Q \times T}{P \times K} \quad (\text{Eq. 1})$$

Where:



## Environmental Protection Agency

§ 63.10690

$E_p$  = Process-weighted mass emissions of PM, lb/ton;  
 $C$  = Concentration of PM or total metal HAP, gr/dscf;  
 $Q$  = Volumetric flow rate of stack gas, dscf/hr;  
 $T$  = Total time during a test run that a sample is withdrawn from the stack during steel production cycle, hr;  
 $P$  = Total amount of metal produced during the test run, tons; and  
 $K$  = Conversion factor, 7,000 grains per pound.

(6) If you own or operate an existing affected source that is subject to the emissions limits in paragraph (b) or (c) of this section, you may certify initial compliance with the applicable emission limit for one or more emissions sources based on the results of a previous performance test for that emissions source in lieu of the requirement for an initial performance test provided that the test(s) were conducted within 5 years of the compliance date using the methods and procedures specified in paragraph (d)(1) or (2) of this section; the test(s) were for the affected facility; and the test(s) were representative of current or anticipated operating processes and conditions. Should the permitting authority deem the prior test data unacceptable to demonstrate compliance with an applicable emissions limit, the owner or operator must conduct an initial performance test within 180 days of the compliance date or within 90 days of receipt of the notification of disapproval of the prior test, whichever is later.

### OTHER INFORMATION AND REQUIREMENTS

#### § 63.10690 What parts of the General Provisions apply to this subpart?

(a) You must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as provided in Table 1 of this subpart.

(b) The notification of compliance status required by § 63.9(h) must include each applicable certification of compliance, signed by a responsible official, in paragraphs (b)(1) through (6) of this section.

(1) For the pollution prevention plan requirements in § 63.10685(a)(1): "This facility has submitted a pollution prevention plan for metallic scrap selec-

tion and inspection in accordance with § 63.10685(a)(1)";

(2) For the restrictions on metallic scrap in § 63.10685(a)(2): "This facility complies with the requirements for restricted metallic scrap in accordance with § 63.10685(a)(2)";

(3) For the mercury requirements in § 63.10685(b):

(i) "This facility has prepared a site-specific plan for mercury switches in accordance with § 63.10685(b)(1)";

(ii) "This facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator in accordance with § 63.10685(b)(2)" and has prepared a plan demonstrating how the facility participates in the EPA-approved program in accordance with § 63.10685(b)(2)(iv);

(iii) "The only materials from motor vehicles in the scrap charged to an electric arc furnace at this facility are materials recovered for their specialty alloy content in accordance with § 63.10685(b)(3) which are not reasonably expected to contain mercury switches"; or

(iv) "This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with § 63.10685(b)(4)."

(4) This certification of compliance for the capture system requirements in § 63.10686(a), signed by a responsible official: "This facility operates a capture system for each electric arc furnace and argon-oxygen decarburization vessel that conveys the collected emissions to a PM control device in accordance with § 63.10686(a)".

(5) If applicable, this certification of compliance for the performance test requirements in § 63.10686(d)(6): "This facility certifies initial compliance with the applicable emissions limit in § 63.10686(a) or (b) based on the results of a previous performance test in accordance with § 63.10686(d)(6)".

(6) This certification of compliance for the monitoring requirements in § 63.10686(e), signed by a responsible official: "This facility has developed and submitted proposed monitoring information in accordance with 40 CFR part 64".



**§ 63.10691 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by the EPA or a delegated authority such as a State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that Agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (6) of this section.

(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g).

(2) Approval of an alternative opacity emissions standard under § 63.6(h)(9).

(3) Approval of a major change to test methods under § 63.7(e)(2)(ii) and (f). A "major change to test method" is defined in 40 CFR 63.90.

(4) Approval of major change to monitoring under 40 CFR 63.8(f). A "major change to monitoring" is defined in 40 CFR 63.90.

(5) Approval of a major change to recordkeeping/reporting under 40 CFR 63.10(f). A "major change to recordkeeping/reporting" is defined in 40 CFR 63.90.

(6) Approval of a program for the removal of mercury switches under § 63.10685(b)(2).

**§ 63.10692 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act, in § 63.2, and in this section as follows:

*Argon-oxygen decarburization (AOD) vessel* means any closed-bottom, refractory-lined converter vessel with submerged tuyeres through which gaseous mixtures containing argon and oxygen

or nitrogen may be blown into molten steel for further refining.

*Capture system* means the equipment (including ducts, hoods, fans, dampers, etc.) used to capture or transport emissions generated by an electric arc furnace or argon-oxygen decarburization vessel to the air pollution control device.

*Chlorinated plastics* means solid polymeric materials that contain chlorine in the polymer chain, such as polyvinyl chloride (PVC) and PVC copolymers.

*Control device* means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by an electric arc furnace or argon-oxygen decarburization vessel.

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

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emissions limitation or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emissions limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Electric arc furnace (EAF)* means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. An electric arc furnace consists of the furnace shell, roof, and the transformer.

*Electric arc furnace (EAF) steelmaking facility* means a steel plant that produces carbon, alloy, or specialty steels using an EAF. This definition excludes EAF steelmaking facilities at steel foundries and EAF facilities used to produce nonferrous metals.

*Free organic liquids* means material that fails the paint filter test by EPA Method 9095B, (revision 2, dated November 1994) (incorporated by reference—see § 63.14) after accounting for water using a moisture determination



test by ASTM Method D2216-05 (incorporated by reference—see §63.14). If, after conducting a moisture determination test, if any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains *free organic liquids*.

*Leaded steel* means steel that must meet a minimum specification for lead content (typically 0.25 percent or more) and for which lead is a necessary alloy for that grade of steel.

*Mercury switch* means each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a vehicle.

*Motor vehicle* means an automotive vehicle not operated on rails and usually operated with rubber tires for use on highways.

*Motor vehicle scrap* means vehicle or automobile bodies, including automobile body hulks, that have been processed through a shredder. *Motor ve-*

*hicle scrap* does not include automobile manufacturing bundles, or miscellaneous vehicle parts, such as wheels, bumpers or other components that do not contain mercury switches.

*Nonferrous metals* means any pure metal other than iron or any metal alloy for which an element other than iron is its major constituent by percent in weight.

*Scrap provider* means the person (including a broker) who contracts directly with a steel mill to provide scrap that contains motor vehicle scrap. Scrap processors such as shredder operators or vehicle dismantlers that do not sell scrap directly to a steel mill are not *scrap providers*.

*Specialty steel* means low carbon and high alloy steel other than stainless steel that is processed in an argon-oxygen decarburization vessel.

*Stainless steel* means low carbon steel that contains at least 10.5 percent chromium.

TABLE 1 TO SUBPART YYYYY OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART YYYYY

As required in §63.10691(a), you must comply with the requirements of the NESHA General Provisions (40 CFR part 63, subpart A) shown in the following table.

Citation	Subject	Applies to subpart YYYYY?	Explanation
§63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)–(a)(12), (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e), §63.1(a)(5), (a)(7)–(a)(9), (b)(2), (c)(3), (c)(4), (d).	Applicability .....	Yes.	
§63.2 .....	Reserved .....	No.	
§63.3 .....	Definitions .....	Yes.	
§63.4 .....	Units and Abbreviations .....	Yes.	
§63.5 .....	Prohibited Activities and Circumvention.	Yes.	
§63.6(a), (b)(1)–(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1), (e)(3)(i), (e)(3)(iii)–(e)(3)(ix), (f), (g), (h)(1), (h)(2), (h)(5)–(h)(9), (i), (j).	Preconstruction Review and Notification Requirements.	Yes.	
§63.7 .....	Compliance with Standards and Maintenance Requirements.	Yes.	
§63.8(a)(1), (a)(2), (b), (c), (d), (e), (f)(1)–(5), (g).	Reserved .....	No.	
§63.8(a)(3) .....	Applicability and Performance Test Dates.	Yes.	
§63.8(a)(4) .....	Monitoring Requirements .....	Yes .....	Requirements apply if a COMS or CEMS is used.
§63.8(c)(4) .....	[Reserved] .....	No.	
§63.8(f)(6) .....	Additional Monitoring Requirements for Control Devices in §63.11.	No.	
	Continuous Monitoring System Requirements.	Yes .....	Requirements apply if a COMS or CEMS is used.
	RATA Alternative .....	Yes .....	Requirements apply if a CEMS is used.

Citation	Subject	Applies to subpart YYYYY?	Explanation
§ 63.9(a), (b)(1), (b)(2), (b)(5), (c), (d), (f), (g), (h)(1)–(h)(3), (h)(5), (h)(6), (i), (j).	Notification Requirements .....	Yes.	
§ 63.9(b)(3), (h)(4) .....	Reserved .....	No.	
§ 63.9(b)(4) .....	Recordkeeping and Reporting Requirements.	No.	
§ 63.10(a), (b)(1), (b)(2)(i)–(v), (b)(2)(xiv), (b)(3), (c)(1), (c)(5)–(c)(8), (c)(10)–(c)(15), (d), (e)(1)–(e)(4), (f).		Yes .....	Additional records for CMS in § 63.10(c) (1)–(6), (9)–(15), and reports in § 63.10(d)(1)–(2) apply if a COMS or CEMS is used.
§ 63.10(b)(2)(xiii) .....	CMS Records for RATA Alternative.	Yes .....	Requirements apply if a CEMS is used.
§ 63.10(c)(2)–(c)(4), (c)(9) .....	Reserved .....	No.	
§ 63.11 .....	Control Device Requirements ....	No.	
§ 63.12 .....	State Authority and Delegations	Yes.	
§§ 63.13–63.16 .....	Addresses, Incorporations by Reference, Availability of Information, Performance Track Provisions.	Yes.	

### Subpart ZZZZ—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

SOURCE: 73 FR 252, Jan. 2, 2008, unless otherwise noted.

#### APPLICABILITY AND COMPLIANCE DATES

#### § 63.10880 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an iron and steel foundry that is an area source of hazardous air pollutant (HAP) emissions.

(b) This subpart applies to each new or existing affected source. The affected source is each iron and steel foundry.

(1) An affected source is existing if you commenced construction or reconstruction of the affected source before September 17, 2007.

(2) An affected source is new if you commenced construction or reconstruction of the affected source on or after September 17, 2007. If an affected source is not new pursuant to the preceding sentence, it is not new as a result of a change in its compliance obligations pursuant to § 63.10881(d).

(c) On and after January 2, 2008, if your iron and steel foundry becomes a major source as defined in § 63.2, you must meet the requirements of 40 CFR part 63, subpart EEEEE.

(d) This subpart does not apply to research and development facilities, as

defined in section 112(c)(7) of the Clean Air Act.

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

(f) If you own or operate an existing affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's metal melt production for calendar year 2008. If the metal melt production for calendar year 2008 is 20,000 tons or less, your area source is a small foundry. If your metal melt production for calendar year 2008 is greater than 20,000 tons, your area source is a large foundry. You must submit a written notification to the Administrator that identifies your area source as a small foundry or a large foundry no later than January 2, 2009.

(g) If you own or operate a new affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's annual metal melting capacity at startup. If the annual metal melting capacity is 10,000 tons or less, your area source is a small foundry. If the annual metal melting capacity is greater than 10,000 tons, your area source is a large